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An Application of Asset Based Community Development Approach: A Case Study from Rural Community in Egypt

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Abstract

Many communities in Egypt, specifically the rural areas, are unquestionably distressed places as a result of the major economic and political shifts that have occurred over the past few years. Strategies of community development are currently viewed as the radical remedy for poverty related problems. In Egypt, community development strategies are usually driven from traditional approaches including charity, needs and rights based approaches which focus on basic needs like shelters and food. These approaches have proved a deficiency orientation as they ignore the structural causes of poverty and address symptoms only. In response to these shortages came an alternative capacity focused practice called asset based community development (ABCD) approach. The case in this research is that ABCD could offer a coherent strategy of sustainable development in poor communities in Egypt. Based on that, the main objectives of the research is to study the application of ABCD approach in rural areas, and in turn present a customized ABCD approach derived from the international guidelines and the Egyptian experience. In order to fulfill these objectives, case studies from the rural communities in Egypt that adopts ABCD approach were extensively studied mostly through qualitative research methods. The analysis and the findings of the current research are most relevant to developing countries and to those emerging from state capitalism and centrally planned economies. The results of the research give substantial contribution in understanding and identifying the ABCD approach. Thus, a possible way is paved to generalize this bottom up development strategy over poor communities.

Keywords: Asset based, community development, rural communities, developing countries, Egypt

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Introduction

Many communities in Egypt, specifically the rural areas, are unquestionably distressed and poor places as a result of the major economic and political shifts that have occurred over the past few years. According to the Central Agency for Public Mobilization and Statistics (CAPMAS)¹, Egypt's poverty rate has increased, reaching 26.3% for the year 2013 compared with 25.2% in 2011. However, a lot of other inveterate factors can contribute enormously to this statement including isolation, unemployment, lack of education and deteriorated health services. Poverty is continuously increasing, particularly in rural areas of Upper Egypt. Although poverty exists in all governorates, the incidence of poverty in urban governorates, such as Cairo, Giza and Alexandria, is minimal when compared to the rural ones. Poverty rates in rural areas constitute 42% of the total Egyptian population in comparison to 7% in urban cities (El-Tawila et al, 2013). One of the main differences between rural and urban Egypt is access to public infrastructure. Inhabitants of rural areas, unlike their urban peers, rarely have access to electricity, water or sewage system (Nagi, 2001). Even within rural areas, poverty rate differ from one governorate to another; rural areas of Upper Egypt are much more impoverished than in Lower Egypt. For instance, three governorates in Upper Egypt - Assiut, Al-Minya and Suhaj - have 794 villages where impoverished people constitute 82% of the total number of poor people in the countryside (CAPMAS, 2012).

Many solutions have been proposed to eradicate poverty according to different causes and consequences of poverty. Adams and Page (2003) stated that solving societal problems especially those pertained to education and medical care could mitigate poverty related problems. While Olivares and Santos (2009) argued that launching small enterprises, and supplying the poor with loans and planned frameworks could serve as a feasible solution for poverty. Some countries provide monthly allowance to fresh graduates and unemployed citizens as an attempt to protect them from poverty. And others suggested that poverty could be diminished through decreasing the wages gap, providing food security and eradicating illiteracy (Fahmy, 2004). Nevertheless, most of the solutions embrace one or more concepts of community development approaches. Therefore, strategies of community development are currently viewed as the radical and proper remedy for poverty related problems.

The community development field emerged with the goal of addressing and alleviating poverty in low-income and minority communities around the world. This goal was set up upon the realization of the strong relation between poverty and underdevelopment (Vidal, 1997). Community development involves several processes where community members come together and take collaborative actions to achieve economic, social, environmental and cultural wellbeing of the community (Buckley, 1999). Consequently, these collective actions exert positive feedback on poverty reduction (Ndirangu et al, 2007). Since spending on the poor is not only equity enhancing but promotes development and economic growth as well, various approaches of community development have been emerged and are continuously changing to palliate poverty related problems (fig.1). Eradication of poverty and community development became more interdependent goals after they were

¹ CAPMAS is the official statistical agency of Egypt that collects, processes, analyzes, and disseminates all statistical data and the Census.

highlighted by United Nations (UN, 2000) as goals number one and eight respectively in the millennium development goals (MDGs)² (Khadka, 2012). As a result, the concept of community development in accordance with the concept of poverty became intertwined and passed through various stages of remodeling.

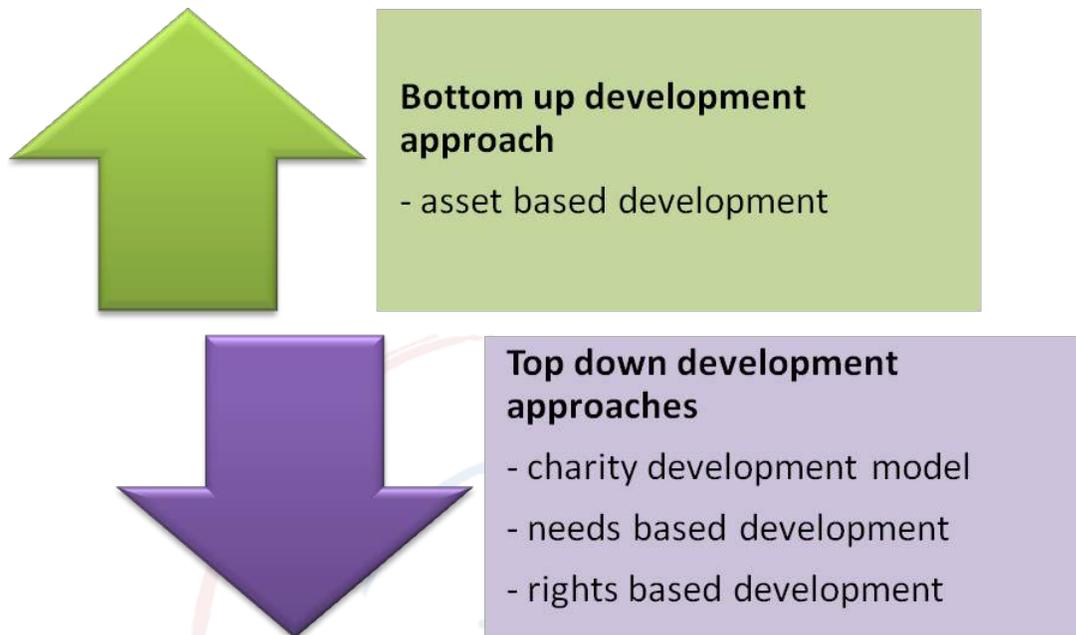


Figure 1: Different approaches of community development

Most of the traditional approaches to development are externally-focused mechanisms that have been adopted extensively to eradicate poverty and accomplish the MDGs. The implications of such approaches cannot be discounted; nevertheless, it is associated with some limitations which hinder its ability to address policies and regulations that could make radical change (Uvin, 2007). Long term problems like poverty cannot be solved by such approaches alone, and can often be exacerbated by the influx of external resources. The strategy of traditional approaches views the community as a set of needs and problems. This forces the community leaders to distort the shape of their communities, highlight problems and deficiencies, and hide capacities and strengths. Leaders are acknowledged on how many resources are attracted to the community, not on how self-reliant the community has become (Marglin, 2008). This strategy denies the basic community wisdom, discourages people from participating in higher community development level, and community members start to feel powerless, and see themselves as people with special needs that can only met by outsiders. In other words, they convert to be clients rather than citizen (Keeble and Meisel, 2006). Furthermore, focusing on resources based on needs or rights directs the benefits to suppliers rather than the needy community members (McKnight and Kretzmann, 1997).

Traditional approaches generally require outside expertise, funding and resources which ensure the local perception that only outside experts can provide real help and are capable of solving their problems. They also create a wall between lower income

² The Millennium Development Goals (MDGs) are eight international development goals that were established following the Millennium Summit of the United Nations in 2000, and aim to eradicate poverty, combat diseases, and achieve education and gender equality.

communities and the rest of society; make local groups deal more with external parties than with individuals in their own communities, and eventually weaken the social bond within communities (Roehlkepartain, 2005). Reliance upon needs identification as the solely way to determine the deserved community could be destructive to community well-being; it ensures endless cycle of dependence as problems must be worse than the previous year for the fund to be renewed. Further, the way of determination of the deserved community is questionable. It is corrupted with subjectivity because outsiders are responsible to judge the importance of certain community needs which they are not fully aware of them (Keeble, 2006). Traditional strategy can guarantee only survival, but can never lead to serious change or community development as it keeps the image of the philanthropic and the needy, and the needs of the poor are only met when resources are available (Boyd et al, 2008).

In response to these excessively shortage based methodologies came an alternative capacity focused practice called asset based community development approach. Asset Based Community Development approach (ABCD) has attracted the attention of community development academics and practitioners as an alternative strategy for development in urban and rural communities. It was created by John McKnight and Jody Kretzmann at the Institute for Policy Research at Northwestern University, in 1993. They outlined an alternative approach to the externally-focused approaches used by governments and international organizations to develop poor communities (Mathie and Cunningham, 2003). ABCD is a bottom-up development strategy that conveys a set of approaches for sustainable development of communities. Asset based approaches recognize and build on a combination of the human, social and physical capital that exists within local communities. They offer a set of concepts for identifying and enhancing the protective factors which help individuals and communities maintain and enhance their public value even when faced with adverse life circumstances. Asset based approaches can complement public services and traditional methods for improving and creating public value (McKnight and Kretzmann, 1993). As an approach to development, it depends on the principle that the recognition of qualities, natural resources, gifts and assets of members and communities is more accepted to motivate constructive activity for change than a single concentration on needs, deficiencies and problems. Seeing the glass half-full and half empty is not to deny the real deficits that a community confronts, than to stimulate a positive charge on how every single part has a value, and can contribute in significant approaches to community development (Mathie and Cunningham, 2003).

Following this approach is a set of methods, called ABCD process (fig.2), that have been used as a platform to compile beginners communities around common framework, to facilitate communication as well as sorting some ideas on mapping the capabilities of the community (Boyd et al, 2008).



Figure 2: Conceptual framework of the steps of ABCD process as defined by McKnight and Kretzmann

The ABCD process could be conceptualized as a strategy for sustainable community driven development. Accordingly, the united nation assembly is preparing to issue the Sustainable Development Goals (SDGs)³, which will build upon the MDGs to help in driving the implementation of sustainable development. The proposal covers a broad range of sustainable development issues including ending poverty and hunger, improving health and education and making cities more sustainable (Ferreira, 2012). ABCD is quite known among developmental organizations in Egypt; nevertheless, it is not incorporated in their development activities. Several international and national development organizations such as COSPE Egypt⁴ and CDS⁵ employ ABCD term and its equivalent concepts of sustainability, empowerment and participation on their websites. Despite this, their development programs utilize the traditional approaches to development and very few organizations adopt ABCD approach.

³ One of the main outcomes of the Rio+20 Conference was the agreement by United Nations to launch a process to develop a set of Sustainable Development Goals (SDGs).

<http://sustainabledevelopment.un.org/?menu=1300>

⁴ COSPE Egypt is part of COSPE, an international non-profit organization founded in Italy in 1983 operating in the field of international cooperation development and human rights.

<http://www.cospe-egypt.org/about-cospe-egypt>

⁵ The Center for Development Services (CDS) is an employee-owned development entrepreneurial venture that uses innovative approaches to mobilize technical and financial support for development endeavors in Egypt and the Middle East. <http://www.cds-mena.org/site/index.php>

Research objectives

The case in this research is that ABCD could offer a coherent strategy of innovative and sustainable development practice in local and poor communities in Egypt. Based on that, the main objectives of the research is to comprehensively study the application of ABCD approach in rural areas, and in turn determine whether it is possible to replicate the approach in similar communities or not. Moreover, the research aims to present a customized ABCD approach to Egypt derived from the international guidelines of ABCD and the Egyptian ABCD experience. Thus, a possible way is paved to generalize this bottom up development strategy all over distressed communities in Egypt. Another purpose for this research is to fill in the gap that was found in the literature about studying and documentation of community development approaches in Egypt and about the scarcity of English language research. Filling in these gaps will prevent the recurrent incidence of previous mistakes, highlight the learned lesson of the preceding trials, form data base for community development work, and will give a chance for future community developers to build upon former experiences.

Research Methodology

The research was designed to explore the processes, outcomes, and faced challenges of asset based development approach in the rural communities. Hence, a new era could be established to sustainable development. The Egyptian Society for Endogenous Development (ESED)⁶ -a non-governmental organization that adopts ABCD approach in community development projects- was chosen to achieve the research objectives. As ABCD approach is considered to be a collective social behavior, data gathering depended mainly on qualitative research methods. The methods used typically focused on meanings, views, and perceptions, where participants' description of their situation is highly valued.

Purposive sampling strategy was pursued in choosing the participants; preliminary criteria relevant to the research objectives were predetermined to guide the selection process. The selection criteria enclosed: all participants should have at least three years experience and should be currently working in community development field, the ratio between pioneers and novices should be 1:1, and diversity in educational background, social level, and affiliated sector should be taken into consideration as much as possible. The participants' number was not fixed prior to data collection, and the number of interviews was determined during the collection process on the basis of theoretical saturation.

Nine in-depth interviews were conducted with both community developers and beneficiaries of development programs. Community developers working in private, governmental and NGOs sectors were interviewed. Moreover, the interviewed participants were of different demographics and diverse backgrounds (table 1).

Moreover, a focus group discussion was conducted with the community developers of The ESED. This variation is valuable as it allows triangulation and ensures validity and reliability of data. Interviews questions were designed to elicit a vivid picture of the participant's perspective on the ABCD approach and the current status of

⁶ The Egyptian Society for Endogenous Development website: <http://www.egy-com.org/>

community development in Egypt. The questions were prospectively semi structured to let interviewees talk freely, and probing questions were asked if the discussion skewed to unneeded direction. All interviews and the focus group discussion were held after the IRB⁷ approval (fig 3), and were based at the location of the interviewees either in Cairo or in Al-Minya. The interviews were communicated in Arabic, then translated, analyzed and interpreted in English by myself. Before conducting the interviews, all participants were informed about the research through the informed consent (fig 4).

Additionally, a case study approach guided the documentation of the research objectives. Al-Kayat is located at Upper Egypt, Shamma at the west and Kafr Al-Arab is located in Lower Egypt; this gave insights about application of ABCD approach in different cultures and contexts. This variation was intended to extrapolate the finding to a lot of number of communities as much as possible; however, more research is essential for generalization of the data. The analysis and the findings of the current research are most relevant to developing countries and to those emerging from capitalism, political instability and centralization such as Egypt.

The logo for 'iafor' is centered on the page. It consists of the lowercase letters 'iafor' in a light blue, sans-serif font. The text is surrounded by several overlapping, semi-transparent circular arcs in shades of blue and red, creating a dynamic, circular graphic effect.

⁷ An institutional review board (IRB), is a committee that has been formally designated to approve, monitor, and review biomedical and behavioral research involving humans.

CASE #2014-2015-21



To: Alyaa Farouk Ahmed Hessin
Cc: Mariez Wasfi
From: Atta Gebril, Chair of the IRB
Date: Nov 9 , 2014
Re: Approval of study

This is to inform you that I reviewed your revised research proposal entitled "An application of asset based community development approach: a case study from rural community in Egypt," and determined that it required consultation with the IRB under the "expedited" heading. As you are aware, the members of the IRB suggested certain revisions to the original proposal, but your new version addresses these concerns successfully. The revised proposal used appropriate procedures to minimize risks to human subjects and that adequate provision was made for confidentiality and data anonymity of participants in any published record. I believe you will also make adequate provision for obtaining informed consent of the participants.

Please note that IRB approval does not automatically ensure approval by CAPMAS, an Egyptian government agency responsible for approving some types of off-campus research. CAPMAS issues are handled at AUC by the office of the University Counsellor, Dr. Amr Salama. The IRB is not in a position to offer any opinion on CAPMAS issues, and takes no responsibility for obtaining CAPMAS approval.

This approval is valid for only one year. In case you have not finished data collection within a year, you need to apply for an extension.

Thank you and good luck.

A handwritten signature in black ink that reads "Atta Gebril".

Dr. Atta Gebril
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A logo consisting of a yellow square on the left and a dark blue rectangle on the right.

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Figure 3: The IRB approval



Documentation of Informed Consent for Participation in Research Study

Project Title: *An application of asset based community development approach: a case study from rural community in Egypt*

Principal Investigator: *Alyaa Farouk Ahmed Hessin, 01001347903, alyaafh@aucegypt.edu*

*You are being asked to participate in a research study. The purpose of the research is to extensively study the asset based community development approach in the Egyptian context. Thus, a possible way could be paved to generalize this bottom up development strategy all over distressed communities in Egypt, and the findings may be published, presented, or both. The expected duration of your participation is three days.

The procedures of the research will be as follows Asset based community development is a set of approaches for sustainable development of communities. They are based on the concept of building on what communities have, focusing on the positives and strengths, and regardless of the extent of poverty of these communities have. This statement provides a sense of security to the poor and marginalized communities in Egypt.

Based on that, the ABCD approach needs to be extensively studied in the Egyptian context. Thus, a possible way could be paved to generalize this bottom up development strategy all over distressed communities in Egypt. The current research aims to: deeply understand the implementation of ABCD approach in the Egyptian environment; address the suitable ABCD tools for the Egyptian culture that used to identify and mobilize community assets; analyze all negative and positive aspects and challenges of ABCD methodology; and to develop a practical guide for future applications of ABCD approach in Egypt.

This research will help a lot in understanding and identifying the ABCD approach in Egyptian communities. It will disclose different ways of exploring and mobilizing community assets, and will serve to develop a directory for further implementation of sustainable community development approach ABCD approach in Egypt.

*There will not be certain risks or discomforts associated with this research.

*There will be benefits to you from this research. Potential benefits to participants could be summarized in the possibility of replicating their experience in other communities, documenting their trials, and exposure to international experiences.

*The information you provide for purposes of this research is confidential. All interviews recording and handouts will be kept confidential, and the data will be analyzed and interpreted by myself in a way that informants will not be identified.

* Questions about the research, my rights, or research-related issues should be directed to (Alyaa Farouk Ahmed Hessin) at (01001347903).

*Participation in this study is voluntary. Refusal to participate will involve no penalty or loss of benefits to which you are otherwise entitled. You may discontinue participation at any time without penalty or the loss of benefits to which you are otherwise entitled.

Printed Name

Signature

Date

Figure 4: The informed consent

Table 1: Data about the participants to the interviews and the focus group discussion

Code	Status (community developer/ beneficiary)	Demography	Years of experience	Pioneer/ novice	Educational background	Working sector
IDI01	Community developer	Urban	6	P	Engineering	NGO
IDI02	Community developer	Urban	4	N	Engineering	NGO
IDI03	Community developer	Urban	8	P	Business	NGO
FGD4	Community developer	Urban	3	N	Vocational	NGO
	Community developer	Rural	7	P	Engineering	NGO
	Community developer	Rural	6	P	Business	NGO
	Community developer	Urban	3	N	Business	NGO
	Community developer	Urban	4	N	Business	NGO
IDI5	Beneficiary & community developer	Rural	15	P	Islamic studies	Private
IDI6	Beneficiary & community developer	Rural	5	N	Islamic studies	Public
IDI8	Beneficiary	Rural	4	N	Vocational	NGO
IDI9	Beneficiary	Rural	6	P	Vocational	NGO
IDI10	Community developer	Urban	4	N	Pharmacy	Private
IDI11	Community developer	Urban	10	P	Engineering	Public

Findings and Discussion

The research discloses that the process of ESED composed of well defined six steps (fig 5); however, it changes slightly from one project to another according to the circumstances of the community.



Figure 5: Conceptual framework to the steps of the Egyptian approach to development in rural communities of Egypt

Step 1: Determination of the location

Determination of the location differs from one project to another. For instance, reports from international organizations like United Nations and World Bank about poor villages in Egypt usually act as a solid guide in the selection process. Sometimes ESED conducts a comprehensive field study to select the village, and in other cases the village is offered as a part of other company social corporate responsibility. Three conditions should be existed in each village to be selected. The village should be poor, contains assets, and accessible. Poverty and assets availability are two consistent factors that cannot be separated. If the village is poor and has no assets, the project will have nothing to build upon and cannot be operated. Vice versa, if the village is not poor and has assets then the core value for the development and poverty eradication is lost and no need for the project.

Step 2: Exploring community assets

Discovering community assets could be subdivided into two successive stages. Stage one encompasses selection of the team members (team no.1). The members should be from diverse backgrounds and professions. Social, administrative, technical and psychological skills should be represented within the team. Furthermore, they should be reputable, and have former experience in community development projects. All team members settle in the community for months (determined according to the nature and complexity of the project but usually not less than three months); as they

try to join the villagers in their daily activities. Creating a robust relation between the team and the villagers will transfer the process organically to stage two which involves conducting a comprehensive field study. The principal objective of this study is to identify all the natural, physical and social assets that could be mobilized; in line with, understanding the power relations and gender sensitive issues, and realizing norms, culture and key personnel within the community. Usually, the team begins with formal visits to the community leaders to introduce the project then continued with storytelling tool to elicit the needed information from community members.

Step 3: Preparation for mobilization of assets

This step is a transition state between the idea of the project and its actual implementation; it includes three phases that could be done in different order according to the requirements of the project. It usually starts with conducting scientific research; in which community developers integrate their technical and scientific backgrounds to turn the neglected community assets into profitable resource. After reaching a satisfactory point in the scientific research phase, the planning phase starts. The planning phase embraces doing a detailed feasibility study and a generic project plan, which identify the time plan, financial plan, resource plan and the benefit risk ratio of the project. A communication plan, that determines various entities and institutions that would help in the execution of the project, usually follows the project plan.

The final phase in step 3 involves formation of team no.2 and steering committee of the project. Members of team no.2 are community developers selected from the ESED; and their role is to ensure the implementation of the project and the compliance to the plan. They are not only responsible for facilitating day to day activities and overcoming problems, but also building trust and social relations with the community members. Selection of the steering committee members is also done in this phase. It is composed of individuals from the community, which were previously recognized by ESED members as natural leaders. They are individuals who have strong passion about the cause, appreciated status among villagers and have good reputation. They are insiders; therefore, they are able to successfully lead and open the way for team no.2 throughout the project.

Step 4: Implementation of assets mobilization

Mobilization of community assets composed of several activities. First of all, the technology that was done in the labs is transferred to the community. However, it is not blindly transferred without modifications; instead, it is customized to suit the village circumstances and the villagers' skills. This involves replacement of sophisticated devices with simple instrument that community members can readily operate, and taking into consideration the environmental conditions of the village (fig.6). A pilot experiment is then done, and the final product is subjected to certain tests to ensure compliance with the quality standards and its validation.

After meeting the requirements, a training program is given to the villagers to familiarize them with the process, instructions and the instruments. Ultimately, the project progresses to large scale production. In certain projects, female villagers played a successful role in actuating the project and controlling the turnover problem.



Figure 6: Examples to the simplified devices that are used at Al-Kayat village

Step 5: Empowering the community

This step involves finding an entity to take over the project. The objective of this step is to ensure the sustainability of the project through proper management of community members. It begins when ESED members observe that their domination over the project become unnecessary for its existence. The interpretation of the observation differs from one project to another according to the surrounding circumstances of the community. In certain cases, a grass root organization, which is already exist, manage the project and exploit it revenues in performing its charity activities.

Step 6: Independence of the project

Certain proceedings are performed to prepare for leaving the community; an agreement that shapes the future communications between the community and ESED is settled. This conveys that part of the project revenues will be used by ESED for further development projects, and a representative of ESED will be a member in the project association that will be established at the end of the project.

Each step in both processes (ESED and McKnight) was carefully scrutinized for its activities and objectives. Although little differences exist in the terminology and the order of the steps, numerous similarities have been realized in the contents of each step and the undertaken activities. As Kretzmann and McKnight process is global, it concentrates more on the conceptual frame work upon which ABCD approach is operated, and less on the practical steps that should be implemented. The research uncovered no evidence that the involved community developers have learned about ABCD approach; nevertheless, ESED development process addresses the two aspects carefully. It highlights the conceptual framework of ABCD approach and the functional steps efficiently. Moreover, it gives additional insights for location determination and the post mobilization stage. Therefore, the aforementioned discussion reveals that ABCD approach to development is conducted and could be adopted in rural communities of Egypt.

ABCD outcomes in rural communities of Egypt

Implementation of the ABCD approach leads to mobilizing natural and physical assets. This affects positively the economy of the community, and the wellbeing of its members. ABCD approach does not seek external help; it depends on utilizing the resources and positive aspects within the community to achieve sustainable economic development (Pinkett, 2000). The concept of development of the local economy is extensively utilized in the studied rural communities of Egypt. Al-Kayat village has 25,000 palms which naturally produce dates and palm fronds. In Shammas village, utilizing ABCD approach changed the non edible fig to delicious jam that was locally exported. The products of the projects are sold, and the revenues are used to improve community services including infrastructure, education, healthcare or any needs. This simple process activates economic self-reliance of community members, and creates sustainable local economy for the marginalized communities. ABCD, as a strategy for sustainable economic development, makes communities less dependent on the state economy and the government services.

Another outcome that was realized from adopting ABCD approach is generating numerous job opportunities. According to world development report (2013), development happens through jobs. Creating job opportunities is capable of decreasing the unemployment rate which in turn, increases the productivity and fortifies the local economy of the community. Job vacancies decreases crime rate, immigration rate and psychological disturbances associated with unemployment. The natural assets of the community are sustainable; therefore, the opportunities created through adopting ABCD approach is sustainable ones. Stabilized jobs provide regular income that can enhance living standards of the workers and give better access to education and healthcare services.

The importance of social cohesion in any community development work cannot be overstated; it can inevitably lead to success or failure of the project (Perkins et al, 2004). Due to its tribal structure, rural communities in Egypt suffer from social conflict and in some cases religious conflict. Moreover, political conflict has been arisen due to the current political instability. ABCD approach depends on the assets of community members so they feel that externals have nothing to give them; instead, they only help them to exploit their assets. Adopting ABCD approach connects the interests of community members; it enables them to have a common background and unifies them around a shared vision. Moreover, it leads to establish new networks of relationships between conflicted parties. For instance, the steering committee of Al-Kayat project contains members from disputed families, yet they agree on supporting the project and find a way to communicate with each other successfully. Hence, ABCD approach is able to strengthen and extend networks of relationships, and in turn, foster social cohesion in rural communities of Egypt.

A central theme of ABCD approach is the relocation of power to communities (Mathie and Cunningham, 2003), this was obviously recognized in the studied rural communities of Egypt. Empowerment of community members was not only realized from their speeches, but also appeared through their body language and facial expressions.

ABCD approach achieves empowerment through awareness, participation and capacity building of community members. Informing community members about their assets puts aside the idea of 'philanthropic and needy' that is associated with other development approaches. Community members have a feeling of richness and enhanced self esteem. Awareness also decreases the reliance on external agencies and eliminates the concept of 'only outsiders can help'. Moreover, the active participation of community members in all the steps of ABCD process, increase the self confidence and resident involvement. Empowerment of community members through ABCD approach turns them from clients to citizens.

Challenges of ABCD in rural communities of Egypt

Asset based approach holds a great promise to achieve development in distressed communities of Egypt. However, its actual implementation encompasses numerous challenges that would need further research as ABCD initiatives are done in the future. The challenges appeared gives useful insights about the common challenges that could face ABCD approach in rural communities of Egypt.

Lack of trust is one of the major challenges that encounter ABCD approach in rural communities. This returns to the fact that members of these communities have been deceived several times by externals, who tend to use the human and natural resources for their own interests, and never consider community interests. Exploring of community assets is done through casual discussions between community members and community developers. Lack of trust hinders the occurrence of this effective communication, and could eventually lead to termination of the project if not overcome.

Culture difference is another challenge that faces ABCD approach. It refers to a set of behaviors, habits, roles, traditions and norms that apply to a particular community. Each village in Egypt has its unique culture that could be completely different from the neighboring village. The success of a development project in a certain community does not refer to its spontaneous success in different communities. Understanding the culture of the community before implementing ABCD approach to development is crucial to achieve development. Moreover, inefficient interpretation to the culture within the community inevitably leads to failure of the project. Understanding the culture is an ongoing process that starts with step one and continues throughout the ABCD process. However, team no.2 often takes over the responsibility of understanding the community culture and in turn adapting the steps of ABCD process to perfectly fit in the culture.

Most of rural communities in Egypt suffer from social conflict. Reasons for social conflict differ from one area to another. For instance, rural communities in Upper Egypt contain religious conflict while rural communities in Lower Egypt experience political conflict. In addition, the tribal structure of rural communities in the West is the reason behind the social conflict. Regardless of the reason, ABCD approach cannot function in social conflict. Conflict is associated with disruption of power, and ABCD approach need the collective power of all community members to achieve development. Resolving the original cause of the social conflict is impossible. Instead, creating a common objective upon which community members agree is the path to unify the warring parties.

The idea of endogenous development is an alien concept to the members of rural communities. Community members tend to act as passive consumers in development projects. Development concept for them is all about gaining some services from the outsiders without minimal participation. Here is the challenge; community developers should modulate the concept of development from passive clients to active citizens. Moreover, the involvement of the community developers should be thoughtful to avoid induction of dependency.

Reasons for success

While studying the implementation of ABCD approach in rural communities of Egypt, certain factors have been realized for its great contribution in the success of the approach. Utilization of storytelling tool could be considered a factor for success of ABCD approach in rural communities of Egypt. It is based on concluding the community needs from the stories narrated by community members. In ABCD approach, it is conducted to know about the physical, natural and human assets of the community. In addition, it creates a friendly environment between community developers and community members, and facilitates the social acceptability of the project.

The characteristics of community developers who employ ABCD approach in rural communities of Egypt are a major factor for success. All of them have a passion to implement concrete achievements and a great sense of responsibility towards distressed communities in Egypt. They work in a horizontal hierarchy with team spirit, and conduct weekly meetings to discuss the status of the projects. Moreover, they never share their personal, religious or political views among the community members. Community developers try to be objective as much as possible and always envision endogenous development as their ultimate goal.

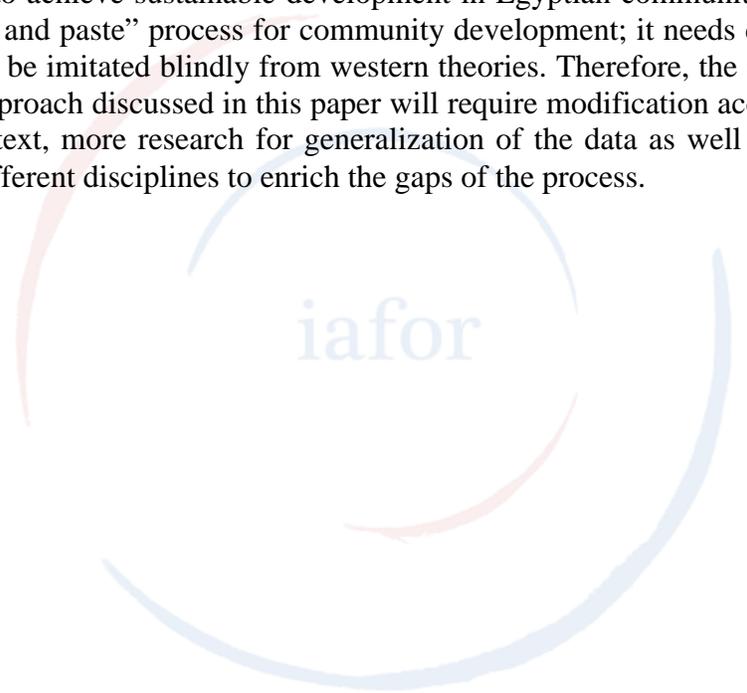
Certain considerations should be kept in mind to achieve success of ABCD approach in rural communities of Egypt. First, community developers are very careful about power relations; they always start to conduct meetings with community leader before members. They are fully oriented with gender sensitive issues among different communities. Second, community developers incorporate the key personnel of the community in the steering committee to ensure their loyalty throughout the project; and in turn, the success of the project. Community developers never initiate a project until previous projects and peers experiences have been carefully examined.

Conclusions

By outlining ABCD process and unpacking its steps and outcomes, the research has served to position ABCD approach as a promising strategy to achieve development and eradicate poverty in rural communities of Egypt. In accordance with that, the research highlighted few limitations to ABCD approach that should be considered when applying in similar settings. The asset based approach to development builds upon strengths and resources that already exist within a community. Therefore, an extremely poor community with no assets cannot embrace ABCD approach. Moreover, creating a strong relationship between community developers and community members is one of the main pillars upon which ABCD process is employed. This could lead to personalization of projects in some cases; and community members refuse to facilitate the process except in the presence of certain community developers whom they trust. Despite the fact that ABCD approach aims to

reduce the level of external dependency that is associated with other approaches, it still depends on outsiders help to undertake the development initiative. Overdone involvement of outsiders could lead to external reliance in some cases. In addition, sustainable development -which is the ultimate goal of ABCD approach- needs external fund to be initiated and long period of time to be maintained.

Despite its limitations, the ABCD approach was proved to be capable of bringing development and alleviate poverty in rural communities of Egypt. It views community as a source of positive energy and of self-sufficiency that can ensure social justice and inclusiveness, and is able to manage changes. However, the efficacy of the ABCD does not only depend on the approach itself, but also on how the organizations, individuals and practitioners incorporate it in communities. Besides, establishing and maintaining social cohesion among community members is fundamental to achieve sustainable development in Egyptian communities. ABCD is a not a “copy and paste” process for community development; it needs customization and could not be imitated blindly from western theories. Therefore, the application of the ABCD approach discussed in this paper will require modification according to the time and context, more research for generalization of the data as well as borrowing ideas from different disciplines to enrich the gaps of the process.

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References

Acharya, B. R. (2008). Dimension of Rural Development in Nepal. *Dhaulagiri Journal of Sociology and Anthropology*, 2, 181-192.

Adams Jr, R. H., & Page, J. (2003). Poverty, inequality and growth in selected Middle East and North Africa countries, 1980–2000. *World Development*, 31(12), 2027-2048.

Aigner, S., Raymond, V., & Smidt, L. (2002). “Whole community organizing” for the 21st century. *Community Development*, 33(1), 86-106.

Assaad, R., & Rouchdy, M. (1999). *Poverty and poverty alleviation strategies in Egypt* (Vol. 22). The American University in Cairo Press.

Bernstein, H. (1971). Modernization theory and the sociological study of development. *The Journal of Development Studies*, 7(2), 141-160.

Bhattachan, K. B. (1997). People/Community-based development strategy in Nepal. *Development practices in Nepal*, 100-148.

Bhattachan, K. B. (2003). Indigenous nationalities and minorities of Nepal. *London: Minority Rights Group International*. Retrieved from October, 29, 2007.

Buckley, R. P. (1999). International capital flows, economic sovereignty and developing countries. *YB Int'l Fin. & Econ. L.*, 4, 17.

CAPMAS central agency for public mobilization and statistics, retrieved on 01/11/2014 from http://al-shorfa.com/en_GB/articles/meii/features/2012/09/21/feature-02 Central Bank of

Egypt (March 2013), <http://www.cbe.org.eg/NR/rdonlyres/FC987D68-4925-448E-A768->

Dhakal, T. Nath. (2006). *NGOs in livelihood improvement : Nepalese experience*. New Delhi: Adroit Publishers.

El-Tawila, S., Gadalla, M., & Ali, E. (2013). Income Poverty and Inequality in

Egypt's Poorest Villages. *The World Bank and Social Contract Center, Experts' Group Meeting, May 27th, Cairo, Egypt*.

Fahmy, N. (2004). A culture of poverty or the poverty of a culture? Informal settlements and the debate over the state-society relationship in Egypt. *The Middle East Journal*, 58(4), 1-15.

Ferreira, V. F. (2012). The future we want. *Journal of the Brazilian Chemical Society*, 23(5), 795-796.

Foot, J., & Hopkins, T. (2010). *A glass half-full: how an asset approach can improve community health and well-being*. Great Britain Improvement and Development Agency.

- Foster-Fishman, P. G., Fitzgerald, K., Brandell, C., Nowell, B., Chavis, D., & Van Egeren, L. A. (2006). Mobilizing residents for action: The role of small wins and strategic supports. *American journal of community psychology*, 38(3-4), 143-152.
- Gordon, D. (2005, December). Indicators of Poverty & Hunger. In *Expert Group meeting on youth development indicators* (pp. 12-14).
- Hunter, S. (2012). *Beyond Charity: The Rights-Based Approach in Theory and*. Boston University
- Keeble, S., & Meisel, J. (2006). Asset-Based Community Development: A Literature Review. *Department of Sociology, Humboldt State University*.
- Khadka, R. (2012). Switching Gears: From Needs to Assets Based Approach to Community Development in Nepal. *OIDA International Journal of Sustainable Development*, 3(11), 81-88.
- King, G., Keohane, R. O., & Verba, S. (1994). *Designing social inquiry: Scientific inference in qualitative research*. Princeton University Press.
- Kong, E. (2008). The development of strategic management in the non-profit context: Intellectual capital in social service non-profit organizations. *International Journal of Management Reviews*, 10(3), 281-299.
- Korten, D. C. (1980). Community organization and rural development: A learning process approach. *Public administration review*, 480-511.
- Kretzmann, J. P., & McKnight, J. (1993). *Building communities from the inside out* (pp. 2-10). Center for Urban Affairs and Policy Research, Neighborhood Innovations Network.
- Mack, N., Woodsong, C., MacQueen, K. M., Guest, G., & Namey, E. (2005). *Qualitative research methods: a data collectors field guide*.
- Marglin, S. A. (2008). *The dismal science: How thinking like an economist undermines community*. Harvard University Press.
- Mathie, A., & Cunningham, G. (2003). From clients to citizens: Asset-based community development as a strategy for community-driven development. *Development in Practice*, 13(5), 474-486.
- McKnight, J. L., & Kretzmann, J. P. (1997). Mapping Community Chapter 10 Capacity. *Community organizing and community building for health*, 157.
- Ministry of Finance, Financial Monthly (Cairo, January 2013); Economist Intelligence Unit, Country Report: Egypt (London, January 2013)
- Ndirangu, M., Perkins, H., Yadrick, K., West, J. R., Bogle, M. L., Avis-Williams, A., ... & Connell, C. L. (2007). Conducting needs assessment using the comprehensive

participatory planning and evaluation model to develop nutrition and physical activity interventions in a rural community in the Mississippi Delta. *Progress in community health partnerships: research, education, and action*, 1(1), 41-48.

Olivares, M., & Santos, S. (2009). *Market solutions in poverty: the role of microcredit in development countries with financial restrictions* (No. 2009/12).

Perkins, D. D., Crim, B., Silberman, P., & Brown, B. B. (2004). Community development as a response to community-level adversity: Ecological theory and research and strengths-based policy. *KI Maton, CJ Schellenbach, BJ Leadbeater, BJ and AL Solarz, AL (Eds.). Investing in Children, Youth, Families, and Communities: Strengths-Based Research and Policy. Washington, DC: American Psychological Association.*

Pinkett, R. D. (2000). Bridging the digital divide: Sociocultural constructionism and an asset-based approach to community technology and community building. In *81st Annual Meeting of the American Educational Research Association (AERA), New Orleans, LA* (pp. 24-28).

Poverty, A. (2001). World Development Report 2000/2001. *Ravi Kanbur and Nora Lustig, Eds.*

Randal, D. (2000) Community revitalization. Unpublished paper, Massachusetts Institute of Technology

Rubin, H. J. (2000). *Renewing hope within neighborhoods of despair: The community-based development model*. SUNY Press.

United Nations, (2000). Millennium development goals report. Retrieved 10/10/2014 at 07:00 pm from <http://www.undp.org/content/undp/en/home/mdgoverview.html>

World food program, (2013). The Status of Poverty and Food Security in Egypt: Analysis and Policy Recommendations. Retrieved 10/10/2014 at 08:00 pm from <http://www.wfp.org/content/egypt-status-poverty-food-security-analysis-policy-recommendations-may-2013>

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Exploring the Mediating Role of Employee Motivation in the Relationship Between Post-Selection Human Resource Management (HRM) Practices and Organizational Performance

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Abstract

The purpose of this cross-sectional study was to explore the mediating role of employee motivation in the relationship between post-selection Human Resource Management (HRM) practices (training & development, performance evaluation system, career development system, extrinsic and intrinsic rewards) and perceived performance of Islamic Banks operating in Pakistan. This study was based on primary data collected from 200-employees of different Islamic banks in Pakistan by distributing structured and reliable questionnaires. The demographic profile of respondents was diversified in terms of their grade, age, experience, education. Pearson correlation statistical technique was applied on collected data and results revealed that training & development($r = .829$), performance evaluation system($r = .752$), career development system($r = .666$), extrinsic rewards($r = .921$), intrinsic rewards($r = .852$) and employee motivation($r = .722$) have strong positive association with perceived performance of Islamic banks in Pakistan. Results of hierarchical regression analysis supported that post-selection HRM practices have positive impact on perceived organizational performance and employee motivation acts as mediator in the relationship between post-selection HRM practices and perceived organizational performance. The proper implementation of post-selection HRM practices makes employee motivated that resulted in improved organizational performance. Management of Islamic banks desiring optimum return and performance should pay special attention to need-based training programs, fair and merit based performance appraisal system, development of progressive career paths, performance-based extrinsic and intrinsic rewards management. While making HRM policies, employee motivation should be given paramount importance as the results of contemporary studies supported that it is the major contributing factor of higher organizational performance.

Keywords: Post-Selection Human Resource Management Practices, Employee Motivation, Perceived Organizational Performance, Islamic Banking Sector of Pakistan.

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1. Introduction

In the present age of competition, human resources are considered as a unique asset of organization and critical tool to achieve competitive advantage over the rivals. HRM practices help the organization to accomplish organizational goals i.e. profitability, shareholder's wealth maximization, considerable return on assets/equity, operational efficiency and customer services excellence. Realizing this fact, various organizations are adopting best pre-selection and post-selection HRM practices to survive and capture more market share in the competitive world. The prime objective of HRM is to ensure accomplishment of organizational goals by developing motivated & talented workforce through imparting need-based training. Accomplishment of organizational success is possible with well managed post-selection HRM practices like proper employees' training, fair performance evaluation system, better career progression opportunities, performance-based rewards management and motivating employees through provision of intrinsic or extrinsic rewards.

Ulrich (1997) explained that in order to grasp and attain benefit from new opportunities, effective HRM system is prerequisite and critical system of organization. Sett (2004) described that South Asian economy has been globalized therefore to compete in global competition, best HRM practices like skill oriented training & development programs, justified performance evaluation, career progression, better rewards management are being implemented by the organizations. There are lots of definitions of HRM, some of authors explained that HRM as a personnel management including activities like fulfilling demand/supply of labor in the short run. HRM activities like job analysis/design, human resource budgeting, hiring of competent employee, imparting training, succession planning, job rotation, performance appraisal of employee, career progression, succession planning, performance based rewards management are not performed by personnel manager. Storey (1987) recommended for treating HR like other factors of production i.e. material resource. Legge (1995) clarified the concept of HRM by differentiating between human resource and material resource and argued that human resource is most important resource of organization and should be given due importance as compared to other economic resource. Guest (1997) focusing on competitive advantage approach argued that human resource should be treated as a distinctive resource and highlighted the importance of HRM for attaining competitive advantage by leadership, motivation and through training & development. Based on range of definitions in literature, important functions of HRM includes job design/analysis, forecasting the demand/supply of human resource, technical and skill oriented training, job rotation, performance assessment, succession planning, career progression, employee motivation, extrinsic & intrinsic rewards management, developing motivated & well trained and competent HR base to accomplish strategic and operational objectives of organization.

Choi (2010) studied the effect of HRM practices on financial performance of organization, productivity of employees and their turnover and concluded that financial performance of organization and productivity of employees can be improved by effective HRM. The implementation of HRM practices in organization also helps to reduce employee turnover and retention of motivated workforce. Fombrun et al. (1984) recommended that HRM system must be designed according to the vision and mission of organization and described that HRM comprises of merit-oriented selection(hiring of most suitable candidates), employees' performance assessment,

performance based rewards management, developing sound HR base through imparting proper training, retention and motivation of employees in organization for achieving optimal level of organizational performance. Beer et al. (1984) described that human resources are strategic assets required to acquire competitive advantage and core functions of HRM are hiring/placing the right people for the right job, imparting training to successfully perform job's objective, evaluation of employees' performance. Ulrich and Lake (1990) argued that through development of sound HRM system, organizations can grasp the opportunities and acquire competitive advantage. Pfeffer (1998) highlighted the importance of HRM by introducing the human equation focusing on people as key stimulus of profitability and described that organizational profitability can be improved by effective HRM.

Whitener (2001) using hierarchical regression analysis investigated mediating role of organizational commitment in the relationship between HRM practices and organizational performance and supported that best HRM practices improves employees' commitment towards accomplishment of organizational goals and have positive impact on organizational performance. Arthur (1992) conducted study to discover the effect of HRM practices on firm performance and found positive correlation between them and viewed that HRM practices increase organizational performance many fold. Huselid et al. (1997) conceptualized two dimensions of HRM i.e. strategic and technical dimensions. Former focuses on alignment and compatibility of HRM practices with mission and vision of organization and latter concentrates on proper implementation of HRM practices resulting improvement in operational efficiency and sustainable competitive advantage.

As far as financial services sector is concerned, banks are striving hard for sound HRM system therefore banks have established HRM department/wing/group to achieve organizational objectives i.e. profitability through retention of skilled & motivated human resources. On the basis of literature review, HRM practices are categorized as follows:

1. Pre-selection HRM practices
2. Selection practices
3. Post-selection HRM practices.

Job design, job description, job specification, HR budgeting are pre-selection practices. Selection practices involve activities relating to job offering, receipt of application from the potential candidates, screening test, interviews and medical tests. Post-selection HRM practices which are related to imparting training to the employees, fair evaluation of employees' performance, crystal clear career paths, intrinsic & extrinsic rewards management and employee motivation. HRM practices are affected by external factors i.e. workplace justice, workers unions, safety and health and international influences owing to rapid globalizations. Broadly speaking HRM is a process through which employees of organization are effectively and efficiently managed by imparting proper and need-based training, transparent and merit-oriented assessment of employees' performance, well designed rewards management system, promoting employees, career progression, succession planning and psychological motivation. HRM is based on the rationally designed policies and procedures and guidelines.

Exploring the influence of post-selection HRM practices on organizational performance in different developing countries is important domain of research. In the past, numbers of studies have been conducted to explore the impact of HRM practices on firm's performance, employee turnover, employee motivation and employee performance in an international setting. However, in Pakistan, this segment of research is under ignorance and there is high need to investigate the effect of post-selection HRM practices on organizational performance in order to provide crystal clear guidelines to HRM policy makers.

Islamic Banks operating in Pakistan have recorded remarkable growth and network of their branches is being expanded nationwide day-by-day to capture more market share and provide better quality customer services. Due to expanded network of branches and outreach, hiring of large number of employees has been made therefore these banks are presently facing challenges in the domain of post-selection HRM practices. In 2008, On the basis of growth estimates provided by Islamic banks in Pakistan, State Bank of Pakistan (SBP) forecasted significant growth in deposits, financing and HR requirement of Islamic Banking (IB) sector of Pakistan. As per SBP Islamic Banking Bulletin July-September 2012, five exclusively Islamic banks are functioning in Pakistan and number of Islamic Banks is increasing with the passage of time that reflects growth potential of Islamic banking sector of Pakistan and lots of conventional banks have also established Islamic banking branches viewing the profitability potential of this niche.

By way of exploring the mediating role of employee motivation in the relationship between post- selection HRM practices and perceived performance of Islamic banks operating in Pakistan, the findings of this study is very helpful for management of Islamic Banks to choose the best post-selection HRM policies. The objective of this cross-sectional study is as follows:

1. To examine the influence of post-selection HRM practices (well designed employees' training & development programs, fair and justified employees' performance evaluation, well structured career development/ progression system, performance based extrinsic rewards & intrinsic rewards) on perceived performance of Islamic Banks operating in Pakistan.
2. To explore the mediating role of employee motivation in the relationship between post-selection HRM practices (well designed employees' training & development programs fair, justified employees' performance appraisal system, well structured career development/progression system, performance-based extrinsic & intrinsic rewards management) and perceived performance of Islamic Banks operating in Pakistan.

2. Review of Literature

2.1. Post-Selection HRM Practices and Organizational Performance

Delery & Doty (1996) studied the impact of recruitment & selection center, skill-oriented training & development programs, career progression, justified performance rating system, job involvement, employee engagement and performance-based rewards management on performance of strategic business units and found that implementation of HRM practices in an effective manner maximizes profitability of businesses. According to Beer et al. (1984), HRM department of organization is

responsible for hiring the right person for the right task, defining and matching job description with job specifications, employees' development through imparting future-oriented training, transparent and unbiased performance evaluation, career progression, succession planning, motivating employee, retention of talented workforce and compensating employee according to their job ranking/grading. Bartel (1994) studied that how the implementation of post-selection practices affect performance of enterprises and concluded that organizations which have adopted best HRM practices was performing successfully and had competitive advantage over peers lacking effective HRM system. Becker (1996) studied 740-companies and expressed that organization which was implementing HRM practices produced optimum performance as compared to those which lacks in implementation of HRM practices. Peter & David (2001) studying the effect of High Performance Work System (HPWS) on employee performance supported that organization can increase its productivity by adopting HRM practices and HPWS are positively associated with organizational performance. Wan et al. (2002) by performing regression analysis concluded that existence of HRM practices in an organization has significant positive impact on productivity of business. Purcell et al. (2003) discovered that well managed HRM practices and accomplishment of organizational goals have positive associations. Deepak et al. (2003) explained that through HPWS, performance of organization can be boost up many times. According to Singh (2004), recruitment, merit-based selection and fair performance evaluation, skill-oriented training & development programs, employee motivation, justified compensation system have significant positive impact on perceived organizational performance. Teseema et al. (2006) investigated effect of post-selection HRM practices like training & development programs, merit-based promotion, performance-based compensation, employee communication on perceived employee performance and found that positive relationship exists between these HRM practices and perceived employee performance mediating to organizational performance. Katou (2008) described that organizational performance is positively correlated with selection through merit-oriented rigorous process, performance-based compensation, training & development of employees to make them skillful, unbiased performance evaluation and employee motivation. Shahzad et al. (2008) studied the relationship between compensation, performance appraisal, promotion practices and organization performance and found it positive. Using correlation analysis technique, Budhwar et al. (2010) found that post-selection HRM practices like fair and transparent rewards system and employee participation positively correlates with performance of organization.

The extensive study of literature reveals that post-selection practices i.e. need-based and future-oriented training & development programs, fair performance evaluation of employees, career progression, performance-based extrinsic & intrinsic rewards system were tested by the researchers to investigate the impact of these post-selection practices on organizational outcome. On the basis of literature review, following post-selection practices were used in this study to examine their influence on perceived organization performance.

1. Training & development
2. Performance evaluation system
3. Career development system
4. Extrinsic rewards
5. Intrinsic rewards

2.2. Training & Development and Organizational Performance

To perform assigned task effectively, employees need to go through proper training and development courses conducted by trained employees Baldwin & Padgett (1994). Training is an important exercise helpful to achieve organizational goals i.e. sustainable competitive advantages over competitors and grasp significant market share Barney, (1995). In this contemporary competitive world, human resource is considered as most important organizational resource and strategic HRM is pivotal to attain competitive advantage. Imparting proper training is best HRM practice which significantly contributes in achievement of organizational goals Dobson & Tosh, (1998). Proper training leads to high organizational efficiency and effectiveness Noe, (1986). Organizations which invest on training have competitive advantage over organizations lacking trained and skilled workforce. Training expenses should be considered as an investment as it gives favorable results and maximum output Elangovan & Karakowsky, (1999).

Training is very important for improvement of employee's skills. To attain sustainable competitive advantage, organization depends on skilled workforce and product development to grasp more market share and improving profitability Booth & Snower, (1996). Management of organization assesses effectiveness of training & development programs through comparing the costs of conducting training programs and contribution of skill-oriented training programs into organizational productivity Elangovan & Karakowsky, (1999). Organizations are conducting extensive training of employees for their development and achieving strategic position over competitors and improved level of performance Brown, (2005). In the contemporary study, training & development is considered as predictor of perceived performance of Islamic banks operating in Pakistan.

H₁: Well designed employees' training & development programs are positively correlated with perceived performance of Islamic banks operating in Pakistan.

2.3. Performance Evaluation System and Organizational Performance

By using performance rating system, organizations can develop desired employee attitudes and behavior. The performance of employees evaluated to provide feedback to them and indentify the training gaps owing to which employees failed to perform up to the desired level. Fair and transparent performance assessment motivates workforce to work more with zeal and zest for accomplishment of organizational objectives Singh, (2004). The objective of performance appraisal system is to determine productivity level of an employee as well as find out the way through which productivity level of non-performer can be improved. Justified performance assessment is also instrument used to decide the compensation of employees and plays a role of motivator for the hardworking employees. Performance appraisal system first defines job objectives and performance measures of employees and then guides them the way through which these agreed objectives can be accomplished by them. Under performance rating system, employees who achieved their job objectives are rewarded for meeting the performance standards. Different techniques for measuring performance are being used by the organization to conduct this post-selection HRM practice. Each employee in organization is given performance targets and subsequently employee's performance is measured in relation to assigned performance target. Under 360-degree performance appraisal, feedback regarding employee's performance is obtained from all stakeholders to have fair and transparent

performance appraisal of employees. Performance appraisal of employee is sometimes mismanaged and biased. If the performance appraisal system is based on subjective measures then this system leads to dissatisfaction and frustration among the employees. Subjective performance appraisal is based on judgment of appraiser and ignores objectives of job holders Ebrahim, et al. (2005). Wan et al. (2002) explained that if performance appraisal is based on merit & transparency then motivation level of employees will improve and ultimately organizational performance will be affected positively due to motivated workforce. Sels et al. (2003) described that fair performance evaluation enhances productivity and motivates workforce to effectively contribute in the organizational performance. Principles of managerial accountability require existence of performance appraisal system.

H₂: Fair and justified employees' performance evaluation system is positively associated with perceived performance of Islamic banks operating in Pakistan.

2.4. Career Development System and Organizational Performance

Career Development System is formal system that shows clear track of career progression and employee development. It provides awareness to employees regarding career opportunities, work experience, professional education, timing and progression steps to achieve a specific career goal Hall et al. (1986). Career development is progressive steps through which job holder recognizes his values and acquires interesting assignment compatible with his or her skills, education, and experience. Greenhaus, (1987). Career progression system & succession planning depends on the ability of organization to provide its employees more responsibility and better career position. Martin et al. (2001). If the career progressive system exists in organization then organizations prefer internal hiring/ job placement rather than external hiring to fill the vacant position. These organizations give preference to in-house talent by matching their skills, professional experiences with the requirement and job specification of job offering. Career development is an ongoing exercise connected with HRM structures and hierarchy of organization having positive impact on organizational performance. Leibowitz et al. (1988). The study of literature enables us to propose the following.

H₃: The existence of well structured career development/progression system has positive impact on perceived performance of Islamic banks in Pakistan.

2.5. Extrinsic & Intrinsic Rewards and Organizational Performance

Provision of monetary or non monetary rewards motivates workforce and motivated employees do maximum efforts to positively contribute in organizational performance. Lawler, (1971); Milkovich & Newman, (1996). Intrinsic and extrinsic rewards are very helpful to keep employee motivated, retention of talented workers, increased satisfaction, and improved performance of employee, low turnover and develop employee's loyalty. Now-a-days equity based compensation plan i.e. provision of shares to employee are being used by the organization for compensating the staff against their optimum performance. Melissa, (2004). Equity based rewards are very important tool to give a sense of ownership to employees and boost up the organizational productivity. Chih-Ying, (2003). Performance based bonus system are used to motivate employees to work hard towards achievement of organizational

objectives & competitive advantages over the rival. Pfeffer, (1994). Results of numerous studies supported that intrinsic and extrinsic rewards are positive contributor towards accomplishment of organizational goals and improved organizational performance. Gerhart & Milkovich, (1992); Milkovich & Boudreau, (1998); Gomez-Mejia, (1998). Many researchers concluded that intrinsic and extrinsic rewards lead to employee motivation and thereby high performance of organization. Employee motivation is highly dependent on extrinsic and intrinsic rewards. March & Simon, (1966); Weinert, (1998). Bau & Dowling (2007) conducted study of large and small scale organizations to investigate about association between reward system and organizational life cycle. They described that large organization having skilled workforce had better extrinsic and intrinsic rewards as compared to small organizations with less trained and skilled employees.

Intrinsic rewards have become part and parcel of compensation now-a-days. Employee performance is directly proportional to increasing rewards. Soon Yew et al. (2008). Results of various studies revealed that as compared to extrinsic rewards, intrinsic rewards are most effective instrument to achieve desired level of employee motivation. After conducting research

in the cement industry of Pakistan, Qureshi et al. (2009) concluded that extrinsic and intrinsic rewards are positively correlated with the organizational performance. Rewards provided on the basis of fair performance evaluation are motivational tool helpful to get enhanced productivity. In present competitive world, organizations are implementing the philosophy i.e. low performance low rewards or vice versa. The critical issue being faced by the HR Manager is motivation and retention of employee. As compared to other HRM techniques, rewards are most effective tool for motivating the employees. Carraher et al. (2006) advocated that effective reward system is essential to retain talented workforce. Performance based rewards enhance level of motivation resulting optimum organizational performance whereas ill-managed reward system causes dissatisfaction and deteriorated performance. Reio & Callahan (2004) concluded that both extrinsic and intrinsic rewards are source of employee motivation and higher productivity. Deeprose (1994) explained that organizational success is dependent on employee motivation. Through psychological rewards & recognition programs, employees can be motivated and their performance can be improved. Motivated employees lead to improved organizational performance. Both Intangible rewards like appreciation, empowerment and recognition etc. and extrinsic rewards like pay, fringe benefits, bonuses and promotion etc are vital for employee motivation and maximum organizational performance. Andrew (2004) expressed that better rewards system and recognition of employee's performance are prerequisite to employee motivation. According to Ajila & Abiola (2004), intrinsic rewards are intangible or psychological rewards like employee's inner satisfaction, appreciation of seniors, job autonomy and recognition while extrinsic rewards are tangible in nature like pay, fringe benefits, bonuses and promotions etc. Filipkowski & Johnson (2008) found negative relationship between job insecurity, poor reward management and employee commitment as well as organizational performance.

H₄: Performance based extrinsic rewards have positive impact on the perceived performance of Islamic banks operating in Pakistan.

H₅: Performance based intrinsic rewards are positively associated with the perceived performance of Islamic banks operating in Pakistan.

2.6. Employee motivation and post-selection HRM practices.

Motivation is psychological force that directs employees' behavior towards achievement of organizational goals i.e. better customer services, improved productivity. Kreitner & Kinicki, (1995). Entwistle (1987) explained that motivational factors enhanced the employee performance as well as organizational performance. Organization can only synergize its performance if its employees are satisfied & well-motivated to work. Jones & George (2008) explained motivation as psychological factor that directs an individual's behavior in an organization towards positive contribution into organizational productivity. In contemporary world, organizations are providing monetary and non-monetary rewards to its employee in order to keep them motivated which are precondition for optimum organizational performance. Mitchell, (1973). According to Porter, (1982), motivated employees are prime factor to attain desired level of performance as motivated workforce makes all possible efforts to perform up to the mark. Mitchell, (1982) described that employee motivation is driving force of employees' behavior resulting high level of employee productivity and increased organizational performance. Motivation energizes the workforce and directs their behavior towards optimum performance to achieve personal as well as organizational objectives. Meyer & Becker, (2004); Tung, (1981). Minner, Ebrahimi, & Watchel, (1995) described that employee motivation consists of needs and incentives. Maslow theory of motivation described that five needs of human being are 1) Physiological i.e. food, water etc. 2) safety i.e. job security and fearless 3) social i.e. friendship and belongingness 4) self-esteem i.e. recognition 5) self-actualization (knows himself and self-identification). Alderfer's ERG theory categorized Maslow's five human needs into three groups. 1) Existence i.e. physiological, safety needs 2) relatedness i.e. social 3) growth i.e. self-esteem and self-actualization. Employees' motivation depends upon expectancy, instrumentality and valence. Expectancy means employees' expectation of rewards that forces him to show high level of performance. Instrumentality means reliable relationship between provision of rewards on satisfactory performance and valence means value or importance of rewards in employee's mind.

Oosthuizen, (2001) described that prime function of HRM is to keep employees motivated towards their work and positively affects employee attitude in way that they work with full zeal and zest for achievement of organizational goals i.e. output maximization and optimum productivity. La Motta, (1995) explained that employee performance is dependent on skills, ability, education, experience to perform assigned task and more importantly level of motivation. Freedman, (1978) described that better rewards management and employee recognition programs motivates employees to meet the optimum performance standards. Employees' recognition programs boost up their self-esteem and vigor to work with full potential which is positively influenced organizational performance. Csikszentmihalyi, (1990) viewed that when the employees are motivated then they put their maximum efforts to perform up to the desired level. Organizations used employees' recognition programs and revised compensation package to get their employees more motivated towards work. La Motta, (1995).

In contemporary competitive environment, motivated workforce has synergized impact on the organizational goals, business objectives, productivity and performance. Recognition and communication programs have positive influence on employee motivation. Morris, (2004). After studying various organizations, Bull (2005) pointed out that provision of incentives and recognition of employee are causal

factor of motivation at workplace that drives employee’s behavior towards accomplishment of enterprise’s objective. Ali & Ahmed (2009) studied interrelationship of performance based reward management, employee recognition programs, employee motivation and organizational performance. Results of study revealed that financial or non-financial rewards, recognition of employees’ achievement and appreciation of line-manager are positively correlated with motivation level of employee and improve organizational performance. After reviewing relevant literature, following hypotheses were formed.

H₆: Employee Motivation will play mediating role in the relationship between need-based and future oriented training & development programs and perceived performance of Islamic banks in Pakistan.

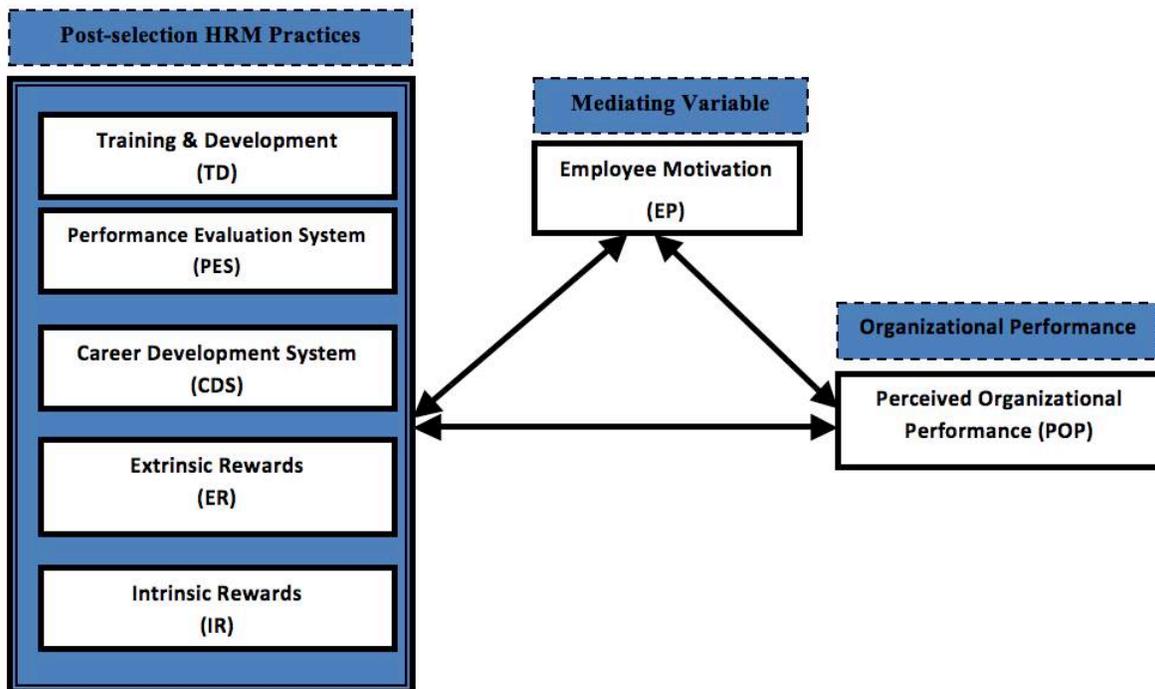
H₇: Employee Motivation will intervene in the relationship between fair and justified employees’ performance assessment system and perceived performance of Islamic banks in Pakistan.

H₈: Employee Motivation will act as mediator between well designed career development system and perceived performance of Islamic banks in Pakistan.

H₉: Employee Motivation will mediate the relationship between performance based extrinsic rewards and perceived performance of Islamic banks in Pakistan.

H₁₀: Employee Motivation will mediate the relationship between intrinsic rewards and perceived performance of Islamic banks in Pakistan.

Theoretical Framework of Research:



In this cross-sectional study, Training & Development (TD), Performance Evaluation System (PES), Career Development System (CDS), Extrinsic Rewards (ER) and Intrinsic Rewards (IR) are independent variables. Employee Motivation (EP) is mediating variable and one dependent variable is Perceived Organizational Performance (POP).

3. Materials and Methods

This cross-sectional study was based on primary data. Primary data on five independent variables, mediating and dependent variable were collected from officers/managers and executives working in Islamic banks operating in Pakistan through distribution of structured questionnaire. Convenient sampling technique used to obtain responses from targeted respondents and avoiding any outlier effect on the results. Keeping in view the cost of collecting primary data, sample size was consisted of 200 targeted respondents residing in big cities of Pakistan i.e. Faisalabad, Lahore, Islamabad and Karachi.

To examine the meditational role of employee motivation in the relationship between post-selection HRM practices and perceived performance of organization, scale/instrument used in this study was developed on the basis of questions/items used by Curtis et al. (2009), Tahir Maqsood (2010), Zaman et al. (2011) for measuring the independent variables i.e. post selection HRM practices, employee motivation i.e. intervening variable and dependent variable i.e. perceived performance of Islamic banks in Pakistan. For checking inter-questions consistency and reliability of instrument, Cronbach's alpha reliability coefficients of each variable were computed by using SPSS (statistical package for social sciences). According to Cuieford, (1965), Cronbach alpha value above then 0.70 ($\alpha > 0.70$) shows that scale/measure of variable used to collect data is reliable and internal consistency exists between items/questions considered to measure variable. Cronbach's alpha reliability coefficients of each variable were above than 0.7 reflecting inter-item consistency of scale used to measure the variable.

In order to collect primary data, structured questionnaires were distributed among the targeted respondents by personally visiting the branches of the Islamic Banks or through surface mail/ email where the branches located out of station or in remote area. Questionnaire was designed on the basis of five points Likert scale with following options of responses. 5 = strongly agree, 4 = agree, 3 =neutral, 2 = disagree 1 = strongly disagree. Questionnaire was comprised of two parts, first part was designed to obtain information regarding demographics profile of respondents i.e. gender, age, experience, grade, type of job and bank whereas second part was designed to collect information regarding post-selection HRM practices, employee motivation and perceived performance of organization.

The information regarding demographic variables was collected through distribution of structured questionnaires to the targeted respondents. Out of 200 respondents, 171 were male respondents i.e. 85.50 % of total respondents. However female respondents were 29 representing 14.50 % of total sample. Majority of respondents' age were between 30-40 years. Out of 200 respondents, 129 respondents' age was up to 40-years i.e. 64.5 % of total respondents. This shows that management of Islamic banks

preferred to hire young talented and energetic graduates. Most of respondents possessed 16-years of schooling i.e. 94% of total respondents. Out of 200, 31 respondents were graduates but having reasonable banking experience. 6% respondents possessed 18 or above years of schooling representing presence of highly qualified employees in Islamic Banks. 61.5% of total respondents possessed 2-5 years banking experience. 29.5% of respondents were having above 5-years experience i.e. middle or top management. Out of 200 respondents, 18-respondents possessed up to 2-years indicating hiring of fresh graduates for establishing sound HR base. 93% of respondents were working into private sector Islamic banks showing presence of large number of private Islamic banks in Pakistan. Majority of respondents were officer i.e. 69 % of total respondents. 31% of respondents are managers or executives. Most of respondents were permanent/regular employees of Islamic banks operating in Pakistan. However the collected data were also representing presence of contractual employees in Islamic banks. The collected data were analyzed by using descriptive statistics, correlation and multiple regression techniques and hierarchical regression analysis. SPSS was used to process and analyze data by applying aforesaid statistical techniques.

4. Results

4.1. Descriptive Statistics and Correlation Analysis

As per recommendations of Baron and Kenny (1986), before testing the mediating role of intervening variable in the relationship between predictors and outcome, we have to first prove correlation between independent variables, mediating variable and dependent variable therefore Pearson correlation statistical technique was applied on the data to check the association among post-selection HRM practices (TD,PES,CDS,ER and IR), perceived organizational performance and employee motivation before carrying out the hierarchical regression analysis. Correlation coefficients of each variable showed positive association amongst all variables. Training & Development ($r = .829$), Performance Evaluation System ($r = .752$), Career Development System ($r = .666$), Extrinsic Rewards ($r = .921$) and Intrinsic Rewards ($r = .852$) and employee motivation ($r = .722$) have strong positive association with Perceived Performance of Islamic banks in Pakistan at the significant at the 0.01 level. Mean and standard deviation of each variable supported that effective implementation of post-selection HRM practices have positive impact on perceived organizational performance.

Table 4.1: Descriptive Statistics, Pearson Correlation & Cronbach’s Alpha Coefficients

Variable Name	Mean	S.D	1	2	3	4	5	6	7
Training & Development	3.85	0.79	1	0.86					
Performance Evaluation System	3.45	0.67	0.41	1	0.75				
Career Development System	3.70	0.90	0.70	0.14	1	0.85			
Extrinsic Rewards	3.89	0.65	0.72	0.72	0.51	1	0.75		
Intrinsic Rewards	4.00	0.77	0.65	0.57	0.64	0.79	1	0.84	
Employee Motivation	3.95	0.81	0.73	0.35	0.67	0.63	0.49	1	0.92
Perceived Organizational Performance	4.65	0.91	0.82	0.75	0.66	0.92	0.85	0.72	1

Notes: Correlation is significant at the 0.01 level (2-tailed). N= 200

Values in bold font represent Cronbach’s alpha reliability coefficients of each variable.

4.2. Hierarchical Regression Analysis for Testing the Mediation Effect

To estimate the effect of post-selection HRM practices (TD, PES, CDS, ER and IR) on perceived performance of Islamic banks in Pakistan and to explore that whether employee motivation mediates the relationship between post-selection HRM practices and perceived organizational performance or not, Hierarchical regression analysis was performed through SPSS and produced following results.

Table 4.2: Hierarchical Regression Analysis

Step	Dependent Variable	Independent Variables	Beta	t-Value	Sig.	F-Value	R-Square	Results
1	POP	TD	0.256	12.205	.000	1401.615	0.972	H₁ Accepted
		PES	0.341	17.726	.000			H₂ Accepted
		CDS	0.205	10.228	.000			H₃ Accepted
		ER	0.266	10.016	.000			H₄ Accepted
		IR	0.145	6.536	.000			H₅ Accepted
2	POP	TD	0.225	10.940	.000	1321.751	0.976	H₆ Accepted
		PES	0.330	18.114	.000			H₇ Accepted
		CDS	0.158	7.493	.000			H₈ Accepted
		ER	0.230	8.870	.000			H₉ Accepted
		IR	0.182	8.229	.000			H₁₀ Accepted
		EM	0.095	5.081	.000			

Step 1.

POP = A + β₁ X₁ + β₂ X₂ + β₃ X₃ + β₄ X₄ + β₅ X₅ + U....Multiple Regression Equation
 Perceived Organizational Performance= Intercept + Coefficient (Training & Development) + Coefficient (Performance Evaluation System) + Coefficient (Career Development System) + Coefficient (Extrinsic Rewards) + Coefficient (Intrinsic Rewards) + U

$$POP = A + 0.256(TD) + 0.341(PES) + 0.205(CDS) + 0.266(ER) + 0.145(IR)$$

Coefficients of independent variables shows that Training & Development ($\beta_1=.256$, Sig. = .000), Performance Evaluation System ($\beta_2=.341$, Sig. = .000), Career Development System ($\beta_3=.205$, Sig. = .000), Extrinsic Rewards ($\beta_4=.266$, Sig.= .000) and Intrinsic Rewards ($\beta_5=.145$, Sig.= .000) have positive impact upon dependent variable Perceived Organizational Performance at substantial significance level. Coefficient of determination i.e. R^2 Value (0.972) of research model indicates independent variables are significantly contributing towards change in dependent variable. It is proved that post-selection HRM practices (TD, PES, CDS, ER and IR) have positive impact on perceived performance of organization therefore related hypotheses was accepted.

Step 2.

$$POP = A + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \beta_4 X_4 + \beta_5 X_5 + \beta_m(\text{Employee Motivation}) + U$$

Where β_m = Coefficient of mediating variable (Employee Motivation)

$$POP = A + 0.225(TD) + 0.330(PES) + 0.158(CDS) + 0.230(ER) + 0.182(IR) + 0.095(EM)$$

Result of Hierarchical Regression Analysis reveals that Employee Motivation ($\beta_m = 0.095$, Sig. = .000) have positive impact upon Perceived Organizational Performance. The inclusion of mediating variable in the regression equation intervened in the aforesaid proved relationship between post-selection HRM practices and perceived organizational performance. The change in value of coefficient of Training & Development ($\beta_1 = 0.256$, Sig. 0.000 to $\beta_1 = 0.225$, Sig. 0.000), Performance Evaluation System ($\beta_2 = 0.341$, Sig. 0.000 to $\beta_2 = 0.330$, Sig. 0.000), Career Development System ($\beta_3 = 0.205$, Sig. 0.000 to $\beta_3 = 0.158$, Sig. 0.000), Extrinsic Rewards ($\beta_4 = 0.266$, Sig. 0.000 to $\beta_4 = 0.230$, Sig. 0.000) and Intrinsic Rewards ($\beta_5 = 0.145$, Sig. 0.000 to $\beta_5 = 0.182$, Sig. 0.000) were observed due to inclusion of intervening variable in regression equation shown at step-1. As the value of R-Square increased from 0.972 to 0.976 therefore it is proved that employee motivation plays mediating role in the relationship between post-selection HRM practices.

5. Discussion

On the basis of result, it can be generalized that need-based training programs, merit oriented and transparent performance evaluation system, clear career paths and succession planning, performance based rewards management increase productivity and employee performance resulting accomplishment of organizational goals. Regression analysis showed that variation in perceived performance of Islamic banks was explained by post-selection HRM practices. Training & Development is an expansive activity but results of present study proved that need-based & technical trainings programs help to boost organizational performance. In contemporary world, successful organizations consider training expenses as investment having higher return in shape of improved customer services, profitability or other financial indicators. Through imparting proper training, talented and skilled workforce base can be developed. The presence of trained workforce in organization enhances the productivity of employees and helpful to attain competitive advantage over rivals. Skilled employees are prerequisite to accomplish the organizational goals i.e. improved customer services and profit maximization etc.

Fair and transparent performance evaluation system is major contributing factor of organizational performance. Merit-based performance evaluation system motivates

employees and thereby improves the organizational performance. Performance evaluation based on transparency, employee feedback and clear performance objectives positively correlates with the perceived organizational performance. Biased and unjustified performance appraisal system causes dissatisfaction among well performing employees and ultimately adversely affected the organizational performance. Results showed that performance appraisal based on transparency, merit and performance based promotions, clear performance objectives has positive relationship with perceived performance of Islamic banks.

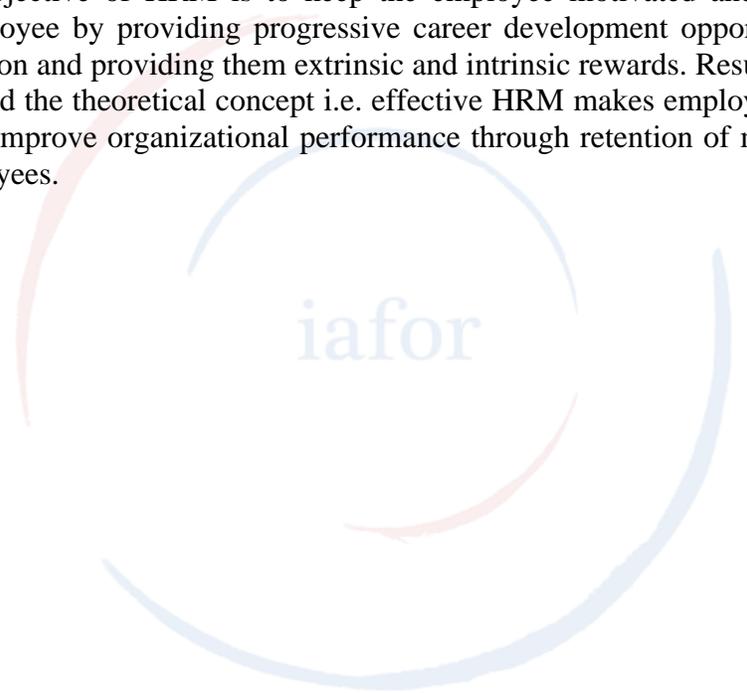
Career Development System is positively correlated with perceived performance of Islamic banks in Pakistan provided that it is based on well defined career paths, transparent internal hiring, succession planning and equal employment opportunity. Results of study also revealed that if the rewards & incentives are not based on performance then it creates dissatisfaction among the devoted employee that caused adverse impact on the organizational performance. Performance-based rewards motivate the employee to achieve organizational goals. The results of present study are consistent with the finding of previous studies conducted in the same domain by other researchers. (Huselid, 1995; Wan, et al. 2002; Patrick, et al. 2003; Sels, et al. 2003; Singh, 2004; Katou, 2008; Tahir Masood, 2010).

The extensive study of literature reveals that considering the mediating role of employee motivation, the impact of post-selection HRM practices on perceived performance in the Islamic Banking sector of Pakistan was not investigated by the researchers. The limitation of previous studies has been addressed in the current study by exploring the intervening role of employee motivation in the relationship between post-selection HRM practices and performance of Islamic banks operating in Pakistan and results of current study proved that employee motivation is major contributory factor of organizational performance. Present study empirically highlighted the importance of post-selection HRM practices by defining their positive impact on organizational performance as proved by econometric techniques applied on the collected data.

Researchers are recommended to overcome the following limitation while conducting research on the same area in future. Due to resource constraint, sample size consisted of 200-respondents was taken to empirically investigate the inter-relationship between post-selection HRM practices on perceived performance of Islamic banks therefore sample size can be increased for more generalization of findings in the future. Post-selection HRM practices like training & development, performance evaluation system, career development system, intrinsic and extrinsic rewards and employee motivation were tested in this research. The impact of other post-selection practices like job rotation, employee participation etc. and pre-selection practices like job design, job description, job specification and HR budgeting etc. leading to performance maximization may be investigated to provide guidelines to HR policy makers and enrich the literature on the subject. Researchers may investigate the effect of post-selection HRM practices on organizational financial performance by using profitability ratios i.e. gross profit ration, net income ratio, return on equity/assets, dividend/earnings per share as financial indicators of organization.

6. Conclusion:

This study empirically shows that implementation of post-selection HRM practices leads to employee motivation and thereby improved organizational performance. Islamic banks desiring optimum return and performance should pay special attention to need-based training programs, fair performance appraisal system, development of progressive career paths, better extrinsic and intrinsic rewards management. Management of Islamic Banks in Pakistan should have to devise the policies and procedures to evaluate the effectiveness of post-selection HRM practices and its contribution towards accomplishment of strategic goals and improving the profitability of banks. While making HRM policies, employee motivation should be given due importance by the management as the results of contemporary studies revealed that it is the major contributing factor of higher organizational performance. The major objective of HRM is to keep the employee motivated and retention of talented employee by providing progressive career development opportunity within the organization and providing them extrinsic and intrinsic rewards. Results of present study endorsed the theoretical concept i.e. effective HRM makes employee motivated and helps to improve organizational performance through retention of motivated and skilled employees.

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References

Arthur, (1992). The Link between Business Strategy and Industrial Relations Systems in American Steel Minimills, *Industrial and Labor Relations Review*, 45(4), 488-506.

Andrew and Kent. (2007). The impact of perceived leadership behaviors on satisfaction, commitment and motivation: An expansion of the multidimensional model of leadership, *International Journal of Coaching Science*, 1(1), p 35-56.

Ajila and Abiola. (2004). Influence of Rewards on Workers Performance in an Organization, *Journal of Social Science*, 8(1), pp.7-12

Ali, R., & Ahmed, M. S. (2009). The impact of reward and recognition programs on employee's motivation and satisfaction: an empirical study. *International Review of Business Research Papers*, 5(4), 270-279.

Boselie, Paauwe and Richardson, (2004). Human Resource Management, Institutionalization and Organizational Performance: A Comparison of Hospitals, Hotels and Local Government, *Erim Report Series Research in Management*.

Beer, Bert, Paul Mills & Walton, (1984). Managing Human Assets, *HBR New York*
Bartel. (1994). Productivity gains from the implementation of Employee Training Programs. *Journal of Industrial Relations*, 33, 411-125.

Becker, B.M, & B. Gerhart, (1996). The impact of Human Resources Management on Organizational Performance: Progress and Prospects. *Academy of Management Journal*, 39, 779-801.

Budhwar & Katou, (2010). Causal Relationship between HRM policies and Organizational Performance: Evidence from the Greek Manufacturing Sector. *European Management Journal* 28, 25-39.

Baldwin, T.T. & M.Y. Padgett, (1994). Management Development: A Review and Commentary, *Key Reviews in Managerial Psychology (New York: Wiley)*, 270–320.

Barney, J. (1991). Firm Resources and Sustained Competitive Advantage, *Journal of Management*, 17, 99-129.

Brown, P.B. (2005). The evolving role of Strategic Management Development, *Journal of Management Development*, 24, 209–222.

Baron M. Reuben & David A. Kenny. (1986). 'The Moderator- Mediator Variable Distinction in Social Psychological Research: Conceptual, Strategic and Statistical Considerations', *Journal of Personality and Social Psychology*, 1986, Vol. 51, No. 6, 1173-1182

Bau F & J.M. Dowling, (2007). An Empirical Study of Reward and Incentive Systems in German Entrepreneurial Firms, *Schmalenbach Business Review*, 59, 160-175.

Bull, I. H. F. (2005). The relationship between job satisfaction and organizational commitment amongst high school teachers in disadvantaged areas in the Western Cape. *published Masters Dissertation. Cape Town: University of the Western Cape.*

Cuieford, J.P. (1965). *Fundamental Statistics in Psychology and Education*, McGraw-Hill, New York, NY.

Choi, Jin Nam, (2010). The Effects of Human Resource Development Investment and Learning Practices on Innovative Performance of Organizations, *The Institute for Research on Labor and Employment Retrieved from: <http://www.escholarship.org/uc/item/6cw286pv>.*

Chand, S., J.T. Delaney & M.A. Huselid, (1996). The impact of Human Resource Management Practices on perceptions of Organizational Performance. *Academy of Management Journal*, 39, 949–69.

Catherine R. Curtis, Randall S. Upchurch & Denver E. Severt (2009): Employee Motivation and Organizational Commitment: A Comparison of Tipped and Non-tipped Restaurant Employees, *International Journal of Hospitality & Tourism Administration*, 10:3, PP-253-269

Chih-Ying Chen, (2003). Investment Opportunities and the Relation between Equity Value and Employees' Bonus, *Journal of Business Finance & Accounting*, 30(7).

Carraher, R, Gibson, A. & Buckley R (2006). Compensation in the Baltic and the USA, Baltic, *Journal of Management Vol. 1*, pp 7-23.

Csikszentmihalyi, M. (1990). *Flow: the psychology of optimal experience*. New York: Harper & Row. Reviewed by Steve Krett.

Delery, J.E., & D.H. Doty., (1996). Modes of theorizing in Strategic Human Resource Management: Tests of universalistic, contingency, and configurational performance predictions, *Academy of Management Journal*, 39, 802–835.

Deepak K.D., P.G. James, M.W. & Patrick, (2003). HRM and Firm Productivity: Does industry matter?. *National Academy of Management Meetings, Seattle, WA.*

Dobson, P.C., & M. Tosh, (1998). Creating a learning organization: Training and Development in British Steel's universal beam mill. *Total Quality Management*, 9(4/5), 566-570.

Deeprise, D. (1994). How to recognize and reward employees? *New York: AMACOM.*

Elangovan, A. R. & L. Karakowsky, (1999). The role of trainee and environmental factors in transfer of training: an exploratory framework, *Leadership and Organization Development Journal*, 20, 268–275.

Ebrahim Soltani, Robert van der Meer, Terry M. Williams (2005). A Contrast of HRM and TQM Approaches to Performance Management: Some Evidence, *British Journal of Management*, 16, .211–23

Fombrun, C.J., N.M. Tichy, & M.A. Devanna, (1984) *Strategic Human Resource Management, HBR, New York.*

Filipkowski, M. and Johnson, C. M. (2008). Comparisons of Performance and Job Insecurity in Union and Nonunion Sites of a Manufacturing Company, *Journal of Organizational Behavior Management, Vol.28, No.4, pp.218 – 237.*

Freedman, M. S. (1978). Some Determinants of Compensation Decisions. *The Academy of Management, 21*397-409.

Guest, D.E., (1997). Human resource management and performance: A review and research agenda. *International Journal of Human Resource Management, 8*, 263–276.

Gerhart, B., & G.T. Milkovich, (1992). Employee compensation: Research and practice. In *Handbook of industrial and organizational psychology, Palo Alto, CA: Consulting Psychologists Press.*

Gomez-Mejia, L., & V.T. Wellbourne, (1988). Compensation strategy: An overview and future steps, *Human Resource Planning, 11*, 173–89.

Huselid, M A, S.E. Jackson, & R.S. Schuler, (1997) Technical and strategic human resource management effectiveness as determinants of firm performance, *Academy of Management Journal, 40*(1) 171–88.

Huselid, M.A. (1995). The impact of Human Resource Management Practices on Turnover, Productivity, and Corporate Financial Performance, *Academy of Management Journal, 38*, 635–72.

Hall, D.T., & Associates (1986). *Career development in organizations. San Francisco: Jossey-Bass Publishers*

John Purcell, (2003). *Understanding the People and Performance Link, Unlocking the Black Box (CIPD)*

Jeffrey H. Greenhaus, Saroj Parasuraman & Wayne Wormley (Mar., 1990), Effects of Race on Organizational Experiences, Job Performance Evaluations, and Career Outcomes, *The Academy of Management Journal, 33*,(1), 64-86

Jones, G. & George, J. (2008). *Contemporary Management. 5th ed, McGraw Hill/Irwin, the United States of America.*

Kreitner, R., & Kinicki, A. 1992. *Organizational Behavior. USA: Richard D. Irwin Inc.*

Legge, K. (1995). *Human Resource Management: Rhetorics and realities. Macmillan Business Journal.*

Lawler, EE 111. (1971). *Pay and Organizational Effectiveness: A Psychological View. New York McGraw-Hill.*

Leibowitz, Z.B., C. Farren, & B.L. Kaye, (1986). Designing Career Development Systems. *San Francisco: Jossey-Bass Publishers.*

La Motta, T. (1995). Recognition: The quality way. *New York: Quality Resources.*

Martin, A.F., F.P. Romero, C.R. Valle, & S.L. Dolan, (2001). Corporate Business Strategy, Career Management and Recruitment: Do Spanish firms adhere to contingency model? *Career Development International*, 6(3), 149-155.

Milkovich, G.T, & J.M. Newman, (1996). Compensation (5th ed.). *Homewood, IL: Irwin.*

Melissa, B. Frye (2004). Equity based compensation for employees: firm performance and Determinants, *The Journal of Financial Research*, 27(1), 31-54.

Milkovich, T.G. & W.J. Boudreau, (1998). *Human Resource Management. 8th edn. Boston: Irwin*

March, James G. & Herbert A. Simon (1966), Organizations, *New York: Wiley and Sons.*

Mitchell, T. R. (1973). 'Motivation and Participation: An Integration'. *The Academy of Management Review*

Mitchell, T. R. (1982). Motivation: New Directions for Theory, Research, and Practice. *The Academy of Management Review*

Morris, M. (2004). The public school as workplace: The principal as a key element in teacher satisfaction. *Los Angelis California University.*

Meyer, J. P., & Becker, T. E. (2004). Employee Commitment and Motivation: A Conceptual Analysis and Integrative Model, *Journal of Applied Psychology*, 89(6), 991-1007.

Miner, J.B., Ebrahimi, B., & Wachtel, J.M. (1995). How deficiency in management contributes to the United States' competitiveness problem and what can be done about it? *Journal of Human Resource Management*

Noe, R.A. (1986). Trainees' attributes and attitude: Neglected influence on training effectiveness, *Academy of Management Review*, 11, 736-749.

Oosthuizen, T. F .J. (2001). Motivation influencing worker performance in a technical division of Telkom SA. *ActaCommerci*, 1, 19-30.

Peter Cappelli & David Neumark, (2001) Do 'High Performance' Work Practices Improve Establishment-Level Outcomes? *Industrial and Labor Relations Review.*

Pfeffer, J. (1994). Competitive advantage through people: unleashing the power of workforce, *Harvard Business School Press.*

Porter, L.W., (1982). Employees organization linkages. *New York: Academic Press.*

Qureshi M.I., T. Shams & R. Kashif, (2009). Relationship between Rewards and Employees Performance. *Journal of Business & Policy Research*

Qureshi M.T., R.I. Mohammad, & H.T. Syed (2007), Impact of human resource management practices on organizational performance in Pakistan, *Journal of Business & Policy Research*, 3(2), 128-138.

Reio, G, T. & Callahon, J. L. (2004). Affect, Curiosity, and socialization-related Learning; a path analysis of antecedents to job performance, *Journal of Business and Psychology*, Vol.19, pp3-22.

Sett, P.K., (2004). Human Resource Management and Firm Level Restructuring: The South Asian Drama, *Research and Practice in Human Resource Management*, 12(1), 1-33.

Storey, J. (1987). Developments in the management of human resources: An interim report. Warwick Papers in Industrial Relations, 17. *IRRU, School of Industrial and Business Studies, University of Warwick*.

Singh, K. (2004). 'Impact of HR practices on perceived firm performance in India'. *Asia Pacific Journal of Human Resources* 42(3) 301-317.

Shahzad, K., S. Bashir, & I.M. Ramay (2008), Impact of HR Practices on Perceived Performance of University Teachers in Pakistan, *International Review of Business Research Papers*, 4, 2 pp. 302-315.

Sels, (2003). How HRM affects corporate financial performance: Evidence from Belgian SMEs. *Working paper Steunpunt*.

SoonYew J, LaiKuan, K.Z.H. Hussin, & J. Kamaruzaman, (2008). The Influence of Employee Benefits towards Organizational Commitment, *Asian Journal of Social Science*.

Singh, K. (2004). 'Impact of HR practices on perceived firm performance in India'. *Asia Pacific Journal of Human Resources* 42(3) 301-317.

Tahir Masood (2010), Impact of Human Resource Management (HRM) Practices on Organizational Performance: A mediating role of employee performance. *PhD thesis at Mohammad Ali Jinnah University, Islamabad*.

Teseema, M. & J. Soeters, (2006). Challenges and prospects of HRM in developing countries: testing the HRM-performance link in Eritrean civil service, *International Journal of Human Resource Management*, 17(1), 86-105.

Tung, L. R. (1981). 'Patterns of Motivation in Chinese Industrial Enterprises'. *The Academy of Management Review*, 6(3), 481-489.

Ulrich, D. & D. Lake, (1990). Organisational Capability: Competing from the inside/out., *New York: Wiley*.

Ulrich, D. (1997). Measuring human resources: An overview of practice and a prescription for results, *Human Resource Management* 36(3),303-20

Whitener, E.M. (2001). Do "high commitment" human resource practices affect employee commitment? A cross-level analysis using hierarchical linear modeling, *Journal of Management*, 27, 515-535.

Wan D., V. C. Kok, & Huat, (2002). Strategic Human Resource Management and Organizational Performance in Singapore, *Compensation and Benefits Review Saranac*, 34(4), 33

Weinert, Ansfried B. (1998). Organisations psychologie, *Weinheim: Psychologie Verlags Union*.

Youndt, M., S., Snell, J., Dean, & D. Lepak, (1996). Human resource management, manufacturing strategy, and firm performance. *Academy of Management Journal*, 39, 836-866.

Zaman K., Hafiza N. S., Shah S. S., Jamsheed H. (2011). 'Relationship between Rewards and Employee's Motivation in the Non-Profit Organizations of Pakistan'. *Business Intelligence Journal*, - July, 2011 Vol.4 No.2, PP-327-334

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Mean Girls in the Legal Workplace

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Abstract

This quantitative study examined relationships between perceptions of aggression, workplace incivility, and job satisfaction among legal professional women. Microaggressions Theory and Relational Aggression Theory provided the theoretical frame work for this study. Perceptions of higher levels of direct and indirect aggression from others were significantly associated with greater workplace incivility towards others and with lower job satisfaction.

Study results provide empirical evidence of direct and indirect Mean Girl behavior in the legal workplace and highlight the negative consequences of Mean Girl behavior. Demonstrating microaggressions and relational aggression in the legal workplace support the theoretical framework. Present findings imply that reducing Mean Girl behavior may be necessary to foster a healthy and ethical legal workplace for all, based on decency and positive exchange. While this study was correlational in nature, so cause and effect cannot be determined, present findings suggest that Mean Girl behavior may lead to increasing levels of workplace incivility and lower levels of job satisfaction in the legal workplace.

Keywords: workplace incivility, relational aggression, microaggressions, Mean Girls, legal workplace, bullying

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Introduction

Workplace incivility is a growing problem, but little is known regarding Mean Girl behavior in the legal workplace. Further, little is known regarding the detrimental effects of Mean Girl behavior on job satisfaction in the legal workplace.

The subject of Mean Girls (Dolan & Oliver, 2009), or woman-to-woman workplace incivility, has only recently appeared in the literature because these behaviors can be subtle and often go unnoticed. For the purposes of the study, "Mean Girls" refers to adult women whose acts of "gender microaggressions" (Sue, 2010, p. 15) against other women that "result in harmful psychological consequences and create disparities" (Sue, 2010, p. 15).

Sue (2010) posited that Mean Girl microaggressions include insulting, slighting, or discrediting an individual, and perpetrators of microaggressions are largely unconscious of their offense. Perpetrators of microaggressions act on their victims both purposefully and invisibly. Anyone can commit microaggressions acts: a coworker, supervisor, neighbor, or friend. Microaggressions are a transformation from the Mean Girl on the school playground to the Mean Girl in the workplace. The actions produce psychological injury to the targets and bystanders. Not realizing the injury, microaggressions foster workplace incivility that can be just as injurious to bystanders who witness these behaviors as it is to the victim who is the target of the microaggressions. In this way, Mean Girl behavior can lead to an increase in workplace incivility and a lowering of job satisfaction.

In the legal workplace, Mean Girl behavior can be used to demonstrate the power a senior female attorney has over a first year female attorney. When treatment is flagrant, brazen, and unashamed, it can be expressed in sexual harassment, physical abuse, biased hiring practices, or exposing women to a hostile, male-dominated workplace. Dellasega (2005) asserted that women who commit aggressions against their coworkers are struggling for power, and ultimately the Queen Bee among them is unwavering in her pursuit to acquire and maintain power. In the legal workplace, power is the means by which a woman can leverage her ability to become the Queen Bee by using subtle tactics such as not including team members in conference calls or meetings to destroy the confidence of another woman on the same team in an effort to become visible to leadership while she moves toward partnership, and Mean Girl behavior is one means of obtaining power. For these reasons, Mean Girls can be "constantly on the offense in her interactions with peers, launching preemptive strikes that she believes will protect or further her interests" (Dellasega, 2005, p. 31).

Gender workplace incivility in organizations produces unwanted occupational consequences. With costs mounting, workplace incivility can drain an organization's profits (Workplace Bullying Institute, 2010). Because workplace incivility produces negative behaviors and a toxic environment, it results in occupational annoyances that can lower morale and job satisfaction (Workplace Bullying Institute, 2010). Disability claims and occupational stress are examples of how gender workplace incivility can affect organizations' earnings. Eighty-four percent of human resource professionals surveyed stated their firms' experienced increased hostility as a result of frustration and anger (Flynn, 1998). With increased workloads and a shortage of employees, organizational leaders must service clients in more cost-effective ways, which

increases competition among women in many industries, including law. It is therefore reasonable to conjecture that this competition can potentially lead to Mean Girl behaviors, increased workplace incivility, and declining job satisfaction among females in the legal workplace.

Problem Statement

It is important to examine Mean Girl behavior in the legal workplace and how higher levels of Mean Girl behavior might be associated with greater levels of workplace incivility and lower job satisfaction. However, no published studies to date have used quantitative survey methodology to examine Mean Girl behavior in the legal workplace or whether Mean Girl behavior may be associated with the level of job satisfaction in female legal workers.

Background

Andersson and Pearson (1999) began a discourse on the workplace incivility paradigm, explaining that incivility includes brazen, impolite, and uncivil acts that encroach upon civil principles. Andersson and Pearson (1999) hypothesized that perpetrators, victims, and eyewitnesses of incivility are not able to discern uncivil behavior as being distinctly and purposefully harmful. Victims and observers might believe that incivility is a part of the process of coping with daily hassles (Pearlin & Lieberman, 1979, p. 220). Incivility, then, is a process rather than a single event (Andersson & Pearson, 1999) that is not readily detectable by perpetrators or victims.

Relational aggression is a new research phenomenon that has materialized in the past 10 years. Gossiping, starting rumors, and talking behind another's back with the intent to harm are behaviors that, while not new, have particular relevance to "female aggression" (Glynn, 2009, p. 2). Achieving status among peers in adolescence is the motivation for these acts. Nevertheless, among adult women, the tendency to be insensitive or ambivalent to all types of women has intensified, resulting in unresolved anxiety, frustration, annoyance, and residual hurt. Conversely, female aggression is not a new phenomenon. Little girls first meet the Mean Girl when they learn about Cinderella and her stepsisters. Women of all ages are familiar with the Mean Girl archetype on the page, on the screen, and in real life (Glynn, 2009).

Literature Review

Because Mean Girls are skilled at relational aggressive behavior, their actions become more difficult to interpret. Mean Girls employing covert or "relational indirect aggression" (Dolan & Oliver, 2009, p. 2) against other women is increasing. Women are perpetrating workplace incivility toward each other more than men are perpetrating workplace incivility toward women. Björkqvist et al. (1994) observed that women are capable of acting aggressively, but they choose a variety of methods of aggression (or, but they choose methods of aggression that are different as compared to men). Mean Girl incivility is one way that legal professional women can and do assert their power over other women.

Mean Girl incivility encourages women to engage in unkind exchanges while remaining affable and approachable. The more socially adept a woman is, the better she is at engaging in Mean Girl incivility in a discrete way. Two central theories posited to explain Mean Girl behavior are Microaggression Theory and Relational Aggression Theory.

Microaggressions Theory

Sue et al. (2007) defined microaggressions as daily acts of verbal abuse, gossiping, and spreading rumors verbally and behaviorally demean individuals. Sue et al. (2007) theorized that, in most incidents of microaggressions, perpetrators are not cognizant of the fact that they have participated in an exchange that humiliates the recipient of the

Women are often believed to be the more nurturing sex because women are taught to express compassion more easily than men (Seppala, 2013). However, when women compete with each other in the workplace, they may not be nurturing toward each other. Cortina et al (2002), studied employees in the court system and concluded that women's coping is more widespread than men and may be a reflection of their more serious incidents of misconduct. Chief Justice Warren Burger (1991) stated that manners, good behavior, decency, and civility stop lawsuits from becoming battles and help to keep an organized society from falling apart. Mean Girl microaggressions are the opposite of manners, good behavior, decency, and civility, and can thereby bring incivility to the workplace.

Relational Aggression Theory

According to Crick et al., relational aggression is “a manipulation of social relationships . . . [that] can include gossip and rumors” (as cited in Hoover et al., 2008, p. 2329). Relational aggression is behavior intended to hurt someone by harming his or her relationships with others (Crick & Grotpeter, 1995). Relational aggression is not typical bullying, either physical or verbal, but a more subtle form of aggression that uses relationships to damage or manipulate others.

Relational aggression is a specific type of bullying primarily used by women (Crothers et al., 2009). Crothers et al. (2009) put forth that relational aggression—also known as social aggression and indirect aggression (Björkqvist et al., 1992)—is reflective of both overt and covert behaviors designed to harm another through the exploitation of a relationship (Remillard & Lamb, 2005). Relational aggression includes behaviors intended to threaten friendships or relationships, or, more specifically, behaviors that contribute to the loss of friendship or social connection through social isolation or alienation (Crothers, Schreiber, Field, & Kolbert, 2009), which is how Mean Girls mistreat other women in the workplace.

According to Relational Aggression Theory, Mean Girl microaggression behavior perpetrated by adult women is the same behavior exhibited by young girls (Crothers et al., 2009). However, some literature indicates that, while relational aggression is common to girls in middle and high school, they are not born this way; rather, they learn to behave this way when exposed to relational aggressive behaviors of other women (Dellasega, 2005). Relational aggression can therefore be the mimicking of behaviors witnessed in female power struggles, expressed as a variety of emotionally hurtful behaviors, including socially aggressive behaviors, gossiping, social exclusion, social isolation and social alienation, talking about someone, and stealing friends or romantic partners (Crothers, et al. 2009). As women age, engaging in relational aggression can become routine (Valen, 2011). Older women can be and are just as competitive and mean as young women and a woman's responses to situations and fundamental personality don't always improve with age (Valen, 2011). Sutton et al.

(1999) found that using direct methods declines with age in women, while using relational aggression as an indirect method of bullying increases with age.

Some scholars maintain that women who commit relational aggression are not purposefully undermining their victims (Björkqvist et al., 1994; Björkqvist, Lagerspetz, & Kaukiainen, 1992; Sutton, Smith, & Swettenham, 1999; Valen, 2011). Rather, these researchers suggest that some women unintentionally demonstrate preferences for other women or behaviors. However, women who use relational aggression in the workplace instead of using their talent's to compliment the strengths (or diminish the deficiencies) of work teams would rather find ways to form obscure turf wars among other women (Björkqvist et al., 1994; Björkqvist, Lagerspetz, & Kaukiainen, 1992). These forms of bullying and manipulation can be subtle, as Rayner, (2007) found that social intelligence is correlated with indirect forms of bullying, such as not including someone in an e-mail list, but not with physical or overt verbal bullying. Given that workplace incivility between Mean Girls is relational indirect bullying (Björkqvist et al., 1994; Björkqvist, Lagerspetz, & Kaukiainen, 1992; Rayner, 2007), researchers cannot overlook that the context of the skills used is "largely based on an ability to understand or manipulate the minds of others—a 'theory of mind', or social cognition. Consequently, there are reasons for assuming that a successful bully "will in fact have superior theory of mind" (Sutton et al., 1999, p. 120). The application of these social cognitive skills validate the theory that indirect relational aggression is a key method for one female to acquiring power over another female in the workplace.

While Microaggression Theory and Relational Aggression Theory can potentially explain the reasons for Mean Girl behavior in the professional organizations, no studies to date have used quantitative survey methodology to examine the relationship between Mean Girl behavior, workplace incivility, and job satisfaction in the legal workplace. The present study was specifically designed to fill this important gap in the published literature.

Purpose of the Study

The purpose of this study was to use quantitative survey methodology to explore whether Mean Girl treatment of women by other women in the legal workplace is associated with greater workplace incivility and lower levels of job satisfaction.

Hypotheses

Based on a review of the published literature, the following hypotheses were tested, each stated in null hypothesis form:

Null Hypothesis 1: There is no relationship between Mean Girl behavior and job satisfaction.

Null Hypothesis 2: There is no relationship between workplace incivility and job satisfaction.

Null Hypothesis 3: There is no relationship between Mean Girl behavior and workplace incivility.

Methods

Participants

One hundred sixty legal professional women logged on to the survey website, and 129 sufficiently complete the survey to be included for testing the study hypotheses ($N = 129$). Women in this study were from across the United States, averaged 45 years of age ($SD = 11$; range: 25 to 70), and included female associates, partners, paralegals and administrative staff from law firms, legal corporations, governmental agencies, and legal nonprofit organizations in metropolitan cities within the USA. Workplace demographics are displayed in Table 1 and personal demographic are provided in Table 2 (note that some frequencies add to $<100\%$ due to missing data).



Workplace Demographics	<i>n</i>	%
Employment Status		
Employed, 1-19 hours per week	5	3.9
Employed, 20-30 hours per week	5	3.9
Employed, 31-39 hours per week	28	21.9
Employed, 40 or more hours per week	82	64.1
Not employed, looking for work	5	3.9
Not employed, not looking for work	1	0.8
Retired	2	1.6
Job title		
Attorney	33	25.8
Legal secretary	33	25.8
Paralegal	26	20.3
Office services	1	0.8
Other	35	27.3
Industry role		
Upper management	1	0.8
Middle management	15	11.7
Junior management	8	6.3
Administrative staff	25	19.5
Support staff	37	28.9
Trained professional	21	16.4
Skilled laborer	1	0.8
Consultant	1	0.8
Self-employed	6	4.7
Other	13	10.2
Organization type		
Public sector	33	25.8
Private sector	80	62.5
Not-for-profit	10	7.8
Unknown	2	1.6
Other	3	2.3
Organization annual budget (in U.S. dollars)		
Less than \$1 million	14	11
\$1 Million to \$10 million	12	9.4
\$10 Million to \$100 million	11	8.7
\$100 Million to \$500 million	8	6.3
Over \$1 billion	6	4.7
Unknown	71	55.9
Would rather not say	5	3.9
Occupation		
Management	3	2.3
Business and financial operations	5	3.9
Architecture and engineering	2	1.6
Life, physical, and social sciences	1	0.8
Community and social services	1	0.8
Legal	96	74.4
Education, training, and library	4	3.1
Arts, design, entertainment, sports, and media	1	0.8
Health care and technical	1	0.8
Personal care and services	1	0.8
Office and administrative support	7	5.4
Other	7	5.4

Table 1: Workplace Demographics

Personal Demographics		<i>n</i>	%
Primary language			
English		127	99.2
Spanish		1	0.8
Education level			
High school or equivalent		7	5.5
Vocational/technical school (2-year degree)		11	8.6
Some college		23	18
Bachelor's degree		31	24.2
Master's degree		17	13.3
Doctoral degree		2	1.6
Professional degree (MD, JD)		37	28.9
Race			
American Indian or Native Alaskan		2	1.6
Asian		3	2.3
Black		35	27.3
Hispanic		6	4.7
Native Hawaiian or Other Pacific Islander		1	0.8
White		78	60.9
Other		3	2.3

Table 2: Personal Demographics

Measures

Workplace Incivility Scales

The Workplace Incivility Scales (WIS) of Cortina, Magley, Williams, and Langhout (2001) is a seven-item measure of the effects of incivility descriptions of psychological well-being and job satisfaction, using a response scale ranging from 0 (*not at all*) to 4 (*very often*). Higher scores suggest more severe experiences of workplace incivility. The WIS has strong internal reliability (Cronbach's alpha = .85) (Cortina, Magley, Williams, & Langhout, 2001).

Aggression Questionnaire (Buss & Perry, 1992)

The Aggression Questionnaire (AQ) of Buss and Perry (1992) is a 29 item aggression measure that uses a response scale that ranges from 1 (Extremely uncharacteristic of me) to 5 (Extremely characteristic of me). The AQ includes subscales for Physical Hostility (AQ-P), Verbal Aggression (AQ-VA), and Hostility (AQ-H). The AQ has acceptable internal reliability, including Cronbach's alphas of .83 for the total AQ, as well as .85 for AQ-P, .72 for AQ-VA, and .77 for AQ-H.

Direct and Indirect Aggression Scale

The Direct and Indirect Aggression Scale (DIAS) of Björkqvist et al. (1992) includes a seven-item subscale for verbal aggression (DIAS-VA) and a 12-item subscale for indirect aggression (DIAS-IA), using a response interface that ranges from 0 (not at all) to 4 (very often). The DIAS has acceptable internal reliability, including Cronbach's alphas of .75 for the DIAS-VA and .83 for the DIAS-IA (Björkqvist et al., 1992).

Michigan Organizational Assessment Questionnaire Job Satisfaction Subscale

The Michigan Organizational Assessment Questionnaire Job Satisfaction Subscale (MOAQ-JSS) of Cammann et al. (1979) is a three-item measure of global job satisfaction using a response scale ranging from 1 (*strongly disagree*) to 7 (*strongly agree*) expressing extent to which each of three statements characterized their work: “All in all, I am satisfied with my job,” “In general I like working here,” and “In general, I don’t like my job” (reverse coded; Miner-Rubino & Cortina, 2007, p. 1254). Cammann et al. (1979) used meta-analysis to determine that the MOAQ-JSS has strong face validity and construct validity, while Bowling and Hammond (2008) determined that the MOAQ-JSS is a reliable and construct-valid measure of job satisfaction.

Overt-Covert Aggression Scale

The Overt-Covert Aggression Scale (OCAS) of Kaukiainen et al. (1997) includes 21 items rated on a 4-point scale (0 = *never* to 3 = *very often*), expressing the extent to which participants had (a) observed aggression among others in their workplace and (b) experienced exposure to aggression as targets (Kaukiainen et al. 1997). The OCAS Cronbach’s alpha internal reliability range from .86 to .90 for observed aggression and from .76 to .89 for self-experienced aggression (Kaukiainen et al., 1997; Kaukiainen et al., 2001).

The logo for 'iafor' is centered on the page. It consists of the lowercase letters 'iafor' in a light blue, sans-serif font. The text is surrounded by several overlapping, semi-transparent circular arcs in shades of blue and red, creating a stylized, circular graphic effect.

Procedures

Permissions and recruitment

Permission and approval were obtained Walden University IRB (Approval No. 08-12-13-0128905) prior to data collection. Participants were recruited by contacting law firm administrators, human resource managers, and office managers requesting permission to distribute surveys via e-mail to the women in the firm. The electronic invitation was also posted to professional networking groups on LinkedIn and Yahoo such as Legal Secretaries Group, Law and Legal Jobs, DC Legal Secretaries, NALS (National Association of Legal Secretaries), and eLegal Support. Survey links were also sent to attorneys in nonprofit, government, and private sectors. Potential participants received a pre-notice e-mail introducing the survey, followed by an e-mail with the survey link (via <http://www.Psychdata.com>). A follow-up reminder e-mail sent two weeks later.

Data collection

Participants completed the online survey using their preferred computer with internet access. By clicking the link in the recruitment email, participants were taken directly to the survey webpage. The first page of the survey was the informed consent page, which provided an overview of the study and informed participants of their rights. If participants clicked the 'agree' button, providing informed consent to participate, formal data collection began. Participants who declined to the informed consent provision were taken to the "thank you" page at the end of the survey. Data collection typically took less than 30 minutes.

Data Management

Data were downloaded from the psychdata.com website using a password. Data were checked for errors and scored in Microsoft Excel software prior to analysis in SPSS statistical software (IBM Corp., Armonk, NY).

Design and Analysis

The survey employed a cross-sectional design. Data descriptives included the mean, standard deviation, minimum, and maximum scores for each measured variable. Hypotheses were tested using Pearson's correlation ("r") at the $p < .05$ threshold for statistical significance.

Results

Measured Variable Descriptives

Measured Variable Descriptives are displayed in Table 3. Workplace incivility averaged 0.89 on the WIS, corresponding to experiencing incivility “once or twice” in the last year. DIAS averaged .60, indicating that participants seldom experience workplace aggression. Aggression Questionnaire averaged 1.78, roughly corresponding to the indication that self-reported aggression was “somewhat uncharacteristic of me.” MOAQ scores averaged 5.18 on the 1-to-7 scale, indicating moderate job satisfaction.

Variable	N	M	SD	Min	Max
Workplace incivility (WIS)	127	.89	.76	0.00	2.75
Direct & indirect aggression (DIAS)	127	.60	.58	0.00	2.39
Self-reported aggression (OACS)	117	1.78	.41	1.10	3.17
Job satisfaction (MOAQ)	128	5.18	1.79	1.00	7.00

Table 3: Workplace Incivility, Job Satisfaction, Direct and Indirect Aggression in Workplace, and Self-reported Aggression Descriptives

Hypothesis testing

Table 4 shows that workplace incivility, direct and indirect aggression in the workplace, and self-reported aggression were each significantly ($p < .01$) correlated with job satisfaction in the negative direction, such that the greater the Mean Girl behavior, the lower the job satisfaction. Age was significantly correlated with job satisfaction such that older legal workers had higher job satisfaction. Length of time with current employer and in current position were not significantly related to job satisfaction.

Null Hypothesis 1 was rejected because there was a significant relationship between Mean Girl behavior and job satisfaction. Job satisfaction (MOAQ) was significantly correlated with the DIAS measure of direct and indirect aggression ($r = -.26$, $p < .01$) and the OCAS measure of self-reported aggression ($r = -.30$, $p < .001$) (Table 4). These correlations were negative in direction, indicating that the greater the Mean Girl behavior, the lower the job satisfaction. Note that the significant negative correlation between self-reported aggression (OACS) and job satisfaction (MOAQ) indicates that Mean Girl behavior is correlated with lower job satisfaction, whether the Mean Girl behavior is given or received.

Measured Variable	1	2	3	4	5	6
1. Workplace incivility (WIS)						
2. Job satisfaction (MOAQ)	-.42*					
3. Direct & indirect aggression (DIAS)	.54*	-.26*				
4. Self-reported aggression (OCAS)	.43*	-.30*	.33*			
5. Age	.06	.24*	.24*	-.004		
6. Length of time with current employer	.15	.11	-.002	.05	.43*	
7. Length of time in current position	.13	.02	-.10	-.02	.38*	.76*

Table 4: Correlation Matrix for Hypothesis Testing

* = statistically significant, $p < .05$.

Null Hypothesis 2 was rejected because there was a significant relationship between workplace incivility and job satisfaction. Job satisfaction (MOAQ) was significantly correlated with the WIS measure of workplace incivility ($r = -.42, p < .001$) (Table AA). This correlation was negative in direction, indicating that the greater the workplace incivility, the lower the job satisfaction.

Null Hypothesis 3 was rejected because there was a significant relationship Mean Girl behavior and workplace incivility. The WIS measure of workplace incivility was significantly correlated with the DIAS measure of direct and indirect aggression ($r = +.54, p < .001$) and the OCAS measure of self-reported aggression ($r = +.43, p < .001$) (Table AA). These correlations were positive in direction, indicating that the greater the Mean Girl behavior (direct and indirect aggression and the self-reported aggression), the greater the workplace incivility.

Discussion

The aim of this study was to fill the gap in existing literature regarding the effects of Mean Girl behavior and workplace incivility on job satisfaction in the legal workplace.

Whether real or perceived, women are likely to report mistreatment by other legal professional women with relational aggression and are experiencing incidents of this conduct with regularity, making legal environments inhospitable for some women (Chen, 2009). The growing frequency of tensions among women in the legal profession is a cause for concern (Chen, 2009). Some scholars may assert that the outward anger expressed by women cannot affect society. However, I found that relationships are consistent with the expectations that originated from the hypothetical descriptions proposed and the existing work on relational aggression and focused on two assertions: (a) workplace incivility, self-reported Mean Girl behavior, and Mean Girl behavior from others at work are positively related and (b) these constructs related to lower levels of job satisfaction.

In this study, a negative relationship between Mean Girl behavior incidents and lower levels of job satisfaction among female legal professionals was measured. This study represents the first known quantitative study examining of Mean Girl behavior and workplace incivility concurrently with job satisfaction in female legal professionals. Further, this study described the rates of aggression in the legal workplace

Implications

To provide women with a support system, organizational leaders must treat workplace incivility and Mean Girl behavior like a business problem. Education, workshops, and interventions are necessary, and organizational leaders must address the loss of productivity and absenteeism. Loss of revenue and talent because of workplace incivility and Mean Girl behavior must become an ongoing discussion in organization boardrooms.

Women in the workplace need training to “depersonalize conflict” (Rikleen, 2009, p. 1) an idea that is gaining popularity. Women tend to be more compassionate than men and more in tune with their own and others’ feelings (Beutel & Marini, 1995), which may be an advantage when dealing with the human intricacies of the workplace. The alternate side is that when women take things too personally when challenged or

criticized, they are prone to reacting with excessive aggression. That is when Mean Girl behavior can affect organizational accord. Relational aggression is devious, misleading, and covert. When boys fight on the playground, the aggressor acknowledges punching the other boy. The boy receiving the punch will either retaliate and punch back or do nothing, but initiation of the conflict is clear. Conversely, a Mean Girl will tell another girl she can borrow her blouse, admire her while wearing it, and tell other girls she cannot imagine someone wearing such an ugly blouse. Relational aggression is indirect; it is a cycle of gossiping, spreading rumors, and talking behind someone's back. Offenders know how to escape exposure, so they can walk away from being responsible and avoid owning their behavior, and the victim cannot take revenge. Women who are targets of this behavior are powerless to do anything about it.

Threatening another woman's career because she has power in the situation is another way that female-to-female workplace incivility and relational aggression diminish a women's self-esteem and job satisfaction. Intervention becomes an obligatory component in the prevention of relational aggression. Workshops on gender differences and communication are critical to the intervention process. The study findings indicated the participation of human resource managers, senior management, and employees, for example, is essential to ensure the safety of all women in organizational settings in which they can learn acceptance for one another and develop healthy relationships in the process.

Women must learn to define themselves and their interactions with other women, not in terms of treating another female civilly but in terms of treating another human being civilly. McClure (2003) noted, "Women must learn how to speak with conviction and decency" (p. 1) and called this civilized assertiveness. McClure contended civilized assertiveness "purports the importance of equality, which entails defining oneself not in female terms but in human terms" (p. 1). To define oneself in human terms versus female terms makes way for civility at the most basic level. The Golden Rule of doing unto others must prevail to achieve organizational harmony.

The indication that considerable numbers of professional legal women responded to this study is an example that the topic of microaggressions by Mean Girls is significant and necessitates a reexamination of the essential concepts of relational aggression. Women do not have to like one another, but being decent to other people is not a female experience but a human experience. Organizational leaders must be sensitive to Mean Girl behavior because social media can serve as a means to transmit the impact of communication and bad behavior on an organization's image to the world and exemplifies how quickly people can place an organization's reputation at risk.

With a pervasive sociocultural enigma such as relational aggression, it can be challenging to determine where to initiate change in terms of looking for solutions. Industrial and organizational psychologists play an important role in educating organizational leaders about relational aggression. Relational aggression serves as an assault against a women's reputation and both diminishes and demeans simultaneously. Relational aggression affects women's health, well-being, and self-esteem. Self-confidence-building exercises and a focus on communication skills are

necessary for victims of relational aggression. Workshops can educate women on how to confront, manage, and release their feelings of envy and jealousy.

Limitations

The present study sample was limited to female workers in law firms, legal corporations, and legal nonprofit organizations in metropolitan cities within the USA, including included female associates, partners, and nonlegal female staff such as paralegals and administrative staff. It is therefore unclear whether present results generalize beyond American legal workers to other industries or legal workers in other countries.

All study data came from self-report, with no objective measures of third-party reports. While self-report was appropriate for the present investigation, self-report provides the opportunity to deceive, and people could have exercised deception (Anastasi & Urbina, 1997).

Areas for Future Research

The present study should be replicated with larger, more diverse samples, including other industries and organizations beyond the legal workplace. Contrasting male and female behavior may prove fruitful in providing a better understanding of Mean Girl behavior. Third-party reports and objective measures, such as complaints filed with Human Resource departments, could be used to validate self-report measures. Further, future research should include assessments to examine stress, microaggressions, and relational aggression, as well as the relationship between Mean Girl behavior, worker productivity, and worker retention. Lastly, future research should explore the effects of training on reducing Mean Girl behavior in the legal workplace.

Conclusion

This study of 129 female legal professionals demonstrated how Mean Girl behavior is associated with workplace incivility and lower levels of job satisfaction in the legal workplace. Combined, findings of the present study highlight the detrimental effect of Mean Girl behavior in the legal workplace.

References

- Anastasi, A., & Urbina, S. (1997). *Psychological testing* (7th ed.) New Jersey: Prentice Hall.
- Andersson, L. M., & Pearson, C. M. (1999, July 1). Tit for tat? The spiraling effect of incivility in the workplace. *Academy of Management Review*, *24*, 452-471. doi:10.5465/AMR.1999.2202131
- Beutel, A. M., & Marini, M. M. (1995). Gender and values. *American sociological review*, 436-448.
- Björkqvist, K. (1994). Sex differences in physical, verbal, and indirect aggression: A review of recent research. *Sex Roles*, *30*, 177-188. doi:03600025/94/0200-0177S07
- Björkqvist, K., Lagerspetz, K. M., & Peltonen, T. (1992). Do girls manipulate and boys fight: Developmental trends in regard to direct and indirect aggression. *Aggressive Behaviour*, *18*, 117-127. doi:10.1007/978-1-4757-9116-7_6
- Björkqvist, K., Osterman, K., & Kaukiainen, A. (2000). Social intelligence – empathy = aggression? *Aggression and Violent Behavior*, *5*, 339-351. Retrieved from <http://www.journals.elsevier.com/aggression-and-violent-behavior/>
- Bowling, N. A., & Hammond, G. D. (2008). A meta-analytic examination of the construct validity of the Michigan Organizational Assessment Questionnaire Job Satisfaction Subscale. *Journal of Vocational Behavior*, *73*, 63-77. doi:10.1016/j.jvb.2008.01.004
- Buss, A. H., & Perry, M. (1992). The aggression questionnaire. *Journal of Personality and Social Psychology*, *63*, 452-459. doi:10.1037/0022-3514.63.3.452
- Cammann, C., Fichman, M., Jenkins, D., & Klesh, J. (1979). The Michigan organizational assessment questionnaire. Unpublished manuscript, University of Michigan, Ann Arbor.
- Cammann, C., Fichman, M., Jenkins, G. D., & Klesh, J. (1983). Michigan organizational assessment questionnaire. In S. E. Seashore (Ed.), *Assessing organizational change: A guide to methods, measures, and practices* (pp. 71-138). New York, NY: Wiley.
- Chen, V. (2009, April 30). The end of sisterhood. *The American Lawyer*. Retrieved from <http://amlawdaily.typepad.com/amlawdaily/2009/04/the-end-of-sisterhood.html>
- Cortina, L. M., Lonsway, K. A., Magley, V. J., Freeman, L. V., Collinsworth, L. L., Hunter, M., & Fitzgerald, L. F. (2002). What's gender got to do with it? Incivility in the federal courts. *Law and Social Inquiry*, *27*(2), 235-270
- Cortina, L. M., & Magley, V. J. (2009). Patterns and profiles of response to incivility in the workplace. *Journal of Occupational Health Psychology*, *14*, 277-288. doi:10.1037/a0014934

Cortina, L. M., Magley, V. J., Williams, J. H., & Langhout, R. D. (2001). Incivility in the workplace: Incidence and impact. *Journal of Occupational Health Psychology, 6*, 64-80. doi:10.1037/1076-8998.6.1.64

Crick, N. R., & Grotpeter, J. K. (1996). Children's treatment by peers: Victims of relational and overt aggression. *Development and Psychopathology, 8*, 367-380. doi:10.1111/j.1467-8624.1996.tb01860.x

Crothers, L. M., Lipinski, J., & Minutolo, M. C. (2009). Cliques, rumors, and gossip by the water cooler: Female bullying in the workplace. *Psychologist-Manager Journal, 12*, 97-110. doi:10.1080/10887150902886423

Crothers, L. M., Schreiber, J. B., Field, J. E., & Kolbert, J. B. (2009). Development and measurement through confirmatory factor analysis of the Young Adult Social Behavior Scale (YASB): An assessment of relational aggression in adolescence and young adulthood. *Journal of Psychoeducational Assessment, 27*, 17-28.

Dellasega, C. (2005). *Mean Girls grown up*. Hoboken, NJ: Wiley.

Dolan, C., & Oliver, F. (2009). How to stop "Mean Girls" in the workplace [Web blog post]. Retrieved from <http://blogs.hbr.org/2009/10/how-to-stop-mean-girls-in-the/>

Flynn, G. (1998). Why Employees Are So Angry. *Workforce*, September 1998, Vol. 77, No. 9, pp. 26-33

Glynn, N. (2009). *Deconstructing the Mean Girl: Who is she?* (Doctoral dissertation). Available from ProQuest Dissertations and Theses database. (UMI No. 305176949)

Kaukiainen, A., Salmivalli, C., Lagerspetz, K.M.J., Lahtinen, A., and Kostamo, A. (1997) Overt-Covert Aggression Scale (OCAS), Turku, Finland, Department of Psychology, University of Turku.

Kaukiainen, A., Salmivally, C., Bjorqvist, K., Osterman, K., Lahtinen, A., Kostamo, A., and Lagerspetz, K. (2001) Overt and covert aggression in work settings in relation to the subjective well-being of employees, *Aggressive Behavior, 27*, 360 – 371.

McClure, J. S. (2003). *Civilized assertiveness for women: Communication with backbone—not bite*. Denver, CO: Albion Street Press.

Minor-Rubino, K., & Cortina, L. M. (2007). Sexual orientation harassment in the workplace: When do observers intervene?. *Journal of Applied Psychology, 92*, 1254-1269. doi:10.1037/0021-9010.92.5.1254

Pearlin, L.I. and Lieberman, M.A. (1979). Social sources of emotional distress. *Res. Commun. Of Ment. Health 1*:217-48, p. 220

Pearson C. M., Andersson, L. M., & Porath C. L. (2000). Assessing and attacking workplace incivility. *Organizational Dynamics, 29*, 123-137. doi:10.1016/S0090-2616(00)00019-X

Pearson, C., Andersson, L., & Wegner, J. (2001). When workers flout convention: A study of workplace incivility. *Human Relations*, 54, 1387-1419. doi:10.1177/00187267015411001

Pearson, C. M., & Porath, C. L. (2009). *The cost of bad behavior: How incivility is damaging your business and what to do about it*. New York, NY: Penguin Group.

Rayner, C. (2007). Preparing for dignity: Tackling indignity at work. In S. C. Bolton (Ed.), *Dimensions of dignity at work* (pp. 175-188). Oxford, UK: Routledge.

Remillard, A. M., & Lamb, S. (2005). Adolescent girls' coping with relational aggression. *Sex Roles*, 304, 221-229.

Rikleen, L. (2009). *Ending the gauntlet: Removing barriers to women's success in the law*. New York, NY: Thomson West Professional.

Ringrose, J. (2006). A new universal Mean Girl: Examining the discursive construction and social regulation of a new feminine pathology. *Feminism & Psychology*, 16, 405-424. doi:10.1177/0959353506068747

Rumbelow, H. (2011, January 5). Are we all just Mean Girls at heart? *Times of London*. Retrieved from <http://www.thetimes.co.uk>

Seppala, E.M. (2013). Feeling It: Are Women Really More Compassionate? *Psychology Today*

Sue, D. W. (2010). *Microaggressions in everyday life: Race, gender, and sexual orientation*. Hoboken, NJ: Wiley.

Sue, D. W., Capodilupo, C. N., Torino, C. M., Holder, J. M., Bucceri, G. C., Holder, A. M., . Esquilin, M. (2007). Racial microaggressions in everyday life: Implications for clinical practice. *American Psychologist*, 62(4), 271-286. doi:10.1037/0003-066X.62.4.271

Sutton, J., Smith, P. K., & Swettenham, J. (1999). Bullying and 'theory of mind': A critique of the 'social skills deficit' view of anti-social behaviour. *Social Development*, 8, 117-127. doi:10.1111/1467-9507.00083

Valen, K. (2011). *The twisted sisterhood*. New York, NY: Ballantine Books.

Workplace Bullying Institute. (2013). Results of the 2010 and 2007 WBI U.S. Workplace Bullying Survey. Retrieved from <http://www.workplacebullying.org/>

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***Psychological Well-Being and Bullying/Victimization
Among Adolescents from Polygamous and Monogamous Families in Saudi Arabia***

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Abstract

Family structure is an important context for children's upbringing. Polygamy is a type of marriage that affects the structure of the family. This research investigated the impact of polygamy (one man married to more than one wife) on adolescents in Saudi Arabia. The research aims were to investigate differences between adolescents from polygamous and monogamous families in the following variables: psychological well-being (self-esteem, satisfaction with life, depression) and bullying/ victimization.

Participants were a total of 98 students from schools in Riyadh City; 49 students from polygamous families and 49 students from monogamous families (71 boys, 27 girls; mean age = 15.36 years). Questionnaires and tests to measure demographic variables, self-esteem, satisfaction with life, depression, bullying, and victimization were administered in schools. All tests have been previously validated for use in Saudi Arabia.

The results found statistically significant differences between participants from polygamous and monogamous families in all dependent variables. Adolescents from monogamous families reported higher self-esteem and satisfaction with life than adolescents from polygamous families. Also, adolescents from polygamous families had higher depression, bullying and victimization scores than adolescents from monogamous families.

Conclusions were that polygamy had negative effects on the psychological well-being (self-esteem, satisfaction with life, depression) and behaviour (bullying) of Saudi adolescents.

Keywords: polygamy, polygamous family, adolescents, psychological well-being, depression, bullying.

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Introduction

Polygamy occurs in several forms. The most common form of polygamy is polygyny. This occurs when a man has more than one wife at the same time. Polygamy is permitted in various countries in the Middle East, Asia and Africa, although not practised by all. Factors affecting the occurrence of polygamy include cultural, social, economic, political and religious factors (Al-Krenawi, 2014; Al-Shamsi, & Fulcher, 2005). In Saudi society, polygamy is practised more than in other Middle Eastern societies (Alkhateep, 2007; Al Sharfi, 2009). The reasons for men to be polygamous are similar in Middle Eastern societies. In Saudi society, economic revolution through the last 30 years has played a role in the prevalence of polygamous relationships, in addition to social and cultural factors which support polygamy (Ymani, 2008; Al-Seef, 2008). Polygyny is permitted in Islamic Sharia law for particular circumstances which are related to women's health such as chronic disease and infertility, also to protect widows and single women (Farahat, 2002). However, Al-Seef (2008) stressed that men tend to be polygamous without respecting these conditions, so that polygamy is considered one of the main causes for divorce.

Most psychological research on polygamy has focussed on the adults rather than children in the family, particularly the wives (Al-Krenawi & Graham, 2006; Shepard, 2012). Research on the wives in polygynous marriages has found negative effects on their mental health which may have an effect on their children (Abbo, Ekblad, Waako, Okello, Muhwezi & Musisi, 2008; Al-Krenawi and Graham, 2006; Shepard, 2012). Also, Shepard (2012) summarized the findings of 22 studies on the mental health of women in polygynous marriages that found a higher prevalence of somatization, depression, anxiety, hostility, psychoticism, psychiatric disorder, reduced life satisfaction, reduced marital satisfaction, problematic family functioning and low self-esteem. Al-Krenawi (2014) and Al-Krenawi, Slonim-Nevo & Graham (2006) reported negative effects of polygamy on men's family functioning which could have negative effects on children. Also polygamous fathers are often absent from the daily lives of their children because the father's time and resources are divided between wives and the children of each wife.

Studies of adolescents in polygynous families have found that they have poorer mental health than those in monogamous families (Al-Krenawi, Graham & Slonim-Nevo, 2002). AlSharfi, Pfeffer and Miller (2015) summarised the results of research that compared children and adolescents from polygamous and monogamous families. Children and adolescents from polygamous families were found to have more mental health problems, more social problems and lower academic achievement than those from monogamous families.

Elbedour, Onwuegbuzie, Caridine & Abu-Saad (2002) discussed several reasons why polygamous family structures might have negative effects on children. These tended to focus on the negative effects on the entire family system. Polygamy affects the relationship between marriage partners as well as the relationship between parents (especially the father) and children. The effects of poor relationships between polygamous marriage partners were found to negatively affect adolescents by Al-Shamsi & Fulcher (2005). They found that adolescents of first wives had low self-esteem and showed symptoms of depression because of the continuous conflict between their parents (Al-Shamsi & Fulcher, 2005). Also, the negative effects of

polygyny on mothers and the effects of these on their children were discussed by Elbedour et al (2002). In addition, Cherian (1994) suggested that polygamy weakens the parent-child bond which results in reduced emotional satisfaction and security for the child.

Family problems such as poor cohesion, economic difficulties, father absence and emotional distance are more prevalent in polygamous families (Al-Krenawi & Slonim-Nevo, 2006; Elbedour et al, 2002; Elbedour, Abu-Bader, Onwuegbuzie, Abu-Rabia, El-Aassam, 2006; Al-Krenawi, Slonim-Nevo, 2008). Father absence has been found to affect behavioural problems such as aggression, addiction, and sexuality among adolescents from polygamous families (Al-Samaree, 2002). Studies of Saudi families with absent fathers (through divorce or death) have found father absence to have negative effects on the psychological well-being of children, including behavioural problems and bullying (Aldarmeki, 2001; Al-Krenawi, 2014; Almuhareb, 2003; Alsamaree, 2002; Alseef, 2008; Alsharfi, 2009; Elbedour, et al 2003; Lamb, 2010). As the father in Saudi society is the authority figure in the family, father availability is important for shaping adolescents' behaviour.

Although there have been many studies of the role of parents and the family in child and adolescent development, there have been few studies of adolescents growing up in polygamous families. According to Al-Krenawi (2014), rates of polygamy remain stable and are increasing in some societies. There is a need for more research on children and adolescents in polygamous family contexts. Therefore this study will investigate the effects of polygamy on adolescents by comparing two types of family structure (polygamous and monogamous) in Saudi Arabia.

The research aims were to investigate differences between adolescents from polygamous and monogamous families in the following variables: self-esteem, satisfaction with life, depression, and bullying. Also, as polygamy affects men and women differently (Al-Krenawi, 2014), the research aimed to compare boys and girls from polygamous and monogamous families.

Method

Participants

Participants were 98 students, 71 boys and 27 girls; 49 students were from polygamous families and 49 from monogamous families in Riyadh. The mean age for participants was 15.04 years and the age range was 13 – 18 years. Participants were sampled by using two types of selection. Participants from polygamous families were selected through teachers' identification. Adolescents from monogamous families (in the same age ranges as those from polygamous families) were sampled randomly from school registers.

Materials

A demographic questionnaire asked questions about age, gender, father's income and occupation, mother's occupation, number of siblings, whether child of first or second wife, and time spent with father. Measures of Self-Esteem (Rosenberg, 1979), Satisfaction with Life scale (Diener et al, 1985), depression (Lovibond & Lovibond, 1985) and a Bullying questionnaire to measure bullying and victimization (Abu-

Khazal, 2009) were used. All questionnaires have been published and validated for use with Arab adolescents and were considered to be culturally relevant instruments. All materials prepared in English were translated and back-translated into Arabic for use in Saudi Arabia. Also, consent forms, information sheets and debrief sheets for teachers, parents and participants were provided.

Psychometric properties of the instruments were calculated for this sample using Cronbach alpha to show the internal consistency. For self-esteem alpha = .72, for satisfaction with life alpha = .74, for depression alpha = .87, for bullying alpha = .96, for victimization of bullying alpha = .97.

Scoring procedure

Each item in the self-esteem scale was scored on a 4 point scale with higher scores showing higher self-esteem. Each item in the Satisfaction with Life scale was scored using a 7 point scale with higher scores showing more satisfaction with life. Items in the depression scale were scored on a 4 point scale with higher scores showing more depression. Items on the bullying and victimization scales were scored using 5 point scales with higher scores indicating more bullying and more victimization.

Procedure

After the researcher received the consent forms from the parents, principals, and students, the questionnaires and tests were administered in two sessions by the researcher to avoid tiring the participants. For the girls' school, school counsellors administered the questionnaires for cultural reasons.

Ethics

The ethics of this study were approved by the University of Lincoln School of Psychology Research and Ethics Committee and AL-Baha University. Also, permission was given from the Saudi Cultural Attaché and Education management. Parents gave written consent. Participants were informed that they do not have to participate if they do not want to, that they do not have to answer every question and that they can withdraw from the research at any time and withdraw their results up to two weeks later.

Results

Parents' education, employment and income

Education levels for fathers were as follows. For polygamous fathers: not school educated, n = 18; less than high school, n = 15; high school, n = 4; bachelor degree, n = 11, postgraduate, n = 1. For monogamous fathers: not school educated, n = 4; less than high school, n = 17; high school n = 17; bachelor degree, n = 11, postgraduate, n = 0. There were more uneducated polygamous fathers than polygamous fathers and more monogamous fathers had completed high school. These differences between polygamous and monogamous fathers were statistically significant; $\chi^2(4) = 18.08, p = .001$.

There were no statistically significant differences between polygamous and monogamous mothers in terms of education. The majority had not been school educated. For polygamous mothers: not school educated, n = 25; less than high school, n = 12; high school, n = 7; bachelor degree, n = 5, postgraduate, n = 0. For

monogamous mothers, not school educated, $n = 20$; less than high school, $n = 14$; high school $n = 6$; bachelor degree, $n = 9$, postgraduate, $n = 0$.

There were no statistically significant differences between polygamous and monogamous fathers for employment. The majority of fathers were employed; 47 polygamous fathers and 46 monogamous fathers were employed. Also the majority of mothers in both groups were not employed; 43 mothers from polygamous families and 38 mothers from monogamous families were not employed. Polygamous families had lower incomes than monogamous families ($p < 0.02$).

Adolescents from polygamous families reported that their father was present in the home for fewer days (mean = 3.55 days, $SD = 2.06$) than those from monogamous families (mean = 6.41 days, $SD = 1.39$). This difference was statistically significant; $t(96) = 8.027, p < 0.001$.

Self-esteem, satisfaction with life, depression, bullying and victimization comparisons

A series of two-way between subjects analysis of variance tests were used to analyse the effect of family structure and gender on self-esteem, satisfaction with life, depression, bullying and victimization.

Self-Esteem: Figure 1 shows that mean scores for the adolescents from monogamous families were higher for Self- Esteem. A significant effect for family structure was found; $F(1, 94) = 8.097, p = .005$. The effect of gender was not significant and there was no significant interaction between family structure and gender.

Satisfaction with Life: Adolescents from monogamous families were more satisfied with life than adolescents from polygamous families (Figure 1); $F(1, 94) = 3.975, p < 0.05$. There was no significant difference between boys and girls and no significant interaction between family structure and gender.

Depression: Adolescents from polygamous families had higher depression scores than those from monogamous families; $F(1, 94) = 32.136, p < 0.001$ (see Figure 1). There was no significant difference between boys and girls and no significant interaction between family structure and gender.

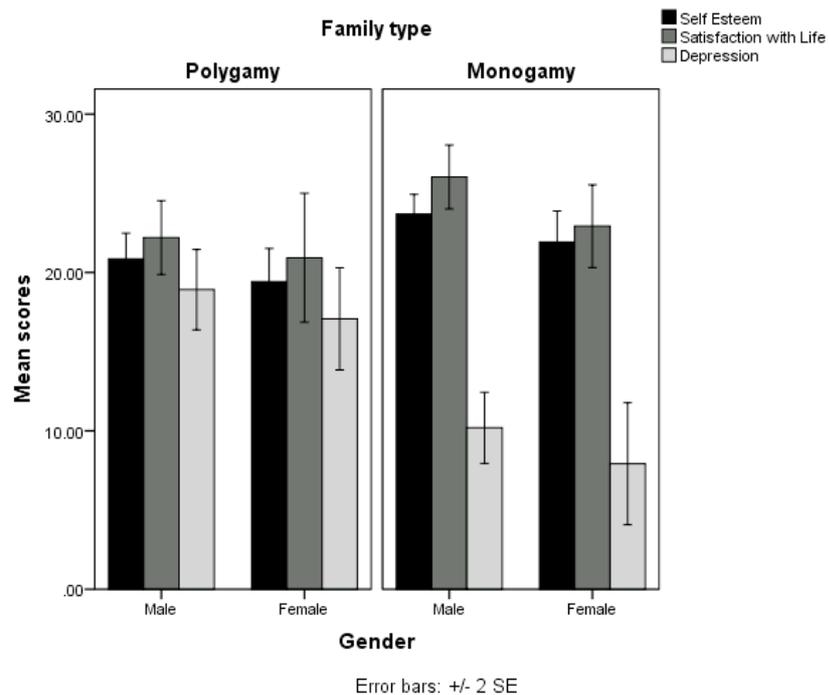


Figure 1: Mean scores for Self-Esteem, Satisfaction with Life and Depression for boys and girls from polygamous and monogamous families

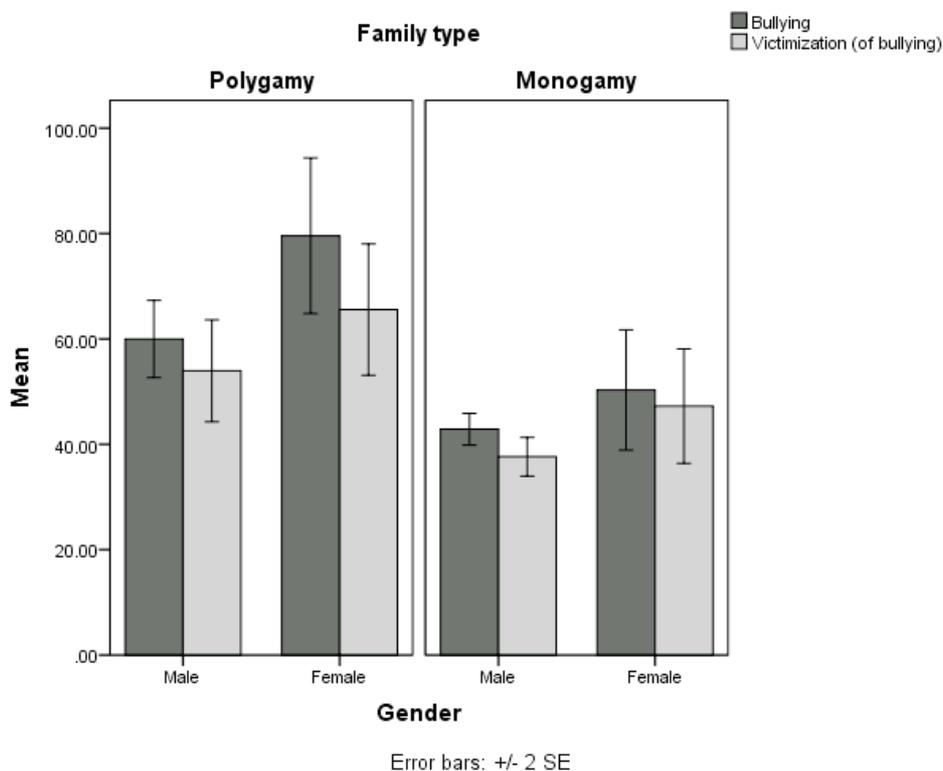


Figure 2: Mean scores for bullying and victimization for boys and girls in polygamous and monogamous families

Bullying: Adolescents from polygamous families reported higher mean sores for bullying than adolescents from monogamous families (see Figure 2); $F(1, 94) = 29.175, p < 0.001$. Also, girls had higher scores than boys; $F(1, 94) = 9.924, p = 0.002$. There was no significant interaction between family type and gender.

Victimization (of bullying): Participants from polygamous families reported more victimization than those from monogamous families; $F(1, 94) = 12.587, p < 0.001$ (see Figure 2). Girls had higher scores than boys $F(1, 94) = 4.722, p < 0.05$. There was no significant interaction between family structure and gender.

Discussion

The results of this study found that adolescents from polygamous families had poorer self-esteem, poorer satisfaction with life and higher scores on the depression scale than adolescents from monogamous families. Also, adolescents from polygamous families had higher rates of bullying behaviour and higher rates of being a victim of bullying than adolescents from monogamous families.

In this study, it was found that polygynous fathers were less educated than monogamous fathers and had lower incomes. Several previous studies showed similar findings. Previous research found that polygamous parents were less educated than monogamous parents and struggled more with economic difficulties which had negatively affected their family life (Al-Krenawi, Graham, & Al-Krenawi, 1997; Al-Krenawi, Graham & Slonim-Nevo, 2002; Al-Krenawi & Lightman, 2000; Al-Krenawi & Slonim-Nevo, 2008; Al-Shamsi & Fulcher, 2005). However, there was no significant difference for mothers in level of education which differs from the results of some previous researchers (Al-Krenawi et al, 1997; Al-Shamsi & Fulcher, 2005).

This study found that Saudi adolescents from polygamous families had poorer self esteem than those from monogamous families. Previous research has found inconsistent results for self-esteem; some researchers have found no statistically significant differences between adolescents from polygamous and monogamous families for self-esteem (Al-Krenawi & Slonim-Nevo, 2008). However, other researchers have found statistically significant differences. For example, Riaz (1996) claimed that adolescents from polygamous families reported lower scores for self esteem. Also Al-Krenwai et al (2002) found that adolescents from polygamous families suffered from negative beliefs toward themselves.

Scores on the depression scale were found to be lower for adolescents from polygamous families compared to those from monogamous families. Similar results were obtained by Al-Krenawi et al (2002) and Al-Krenawi et al (2008). However, Elbedour et al (2007) and Hamdan et al (2009) did not find significant differences between adolescents from polygamous and monogamous families. More research is needed to investigate these findings and whether other mediating variables affect self-esteem and depression differences.

Satisfaction with life was found to be poorer among adolescents from polygamous families and those from monogamous families. This supports previous research by Al-Krenawi et al (2006) who found that adolescents from polygamous families have

negative attitudes toward practicing polygamy as result of family conflicts and mental health problems.

This study is one of the first to compare rates of bullying among adolescents from polygamous and monogamous family structures. The results indicated that there are higher rates of bullying behavior and victimization (from bullying) among adolescents from polygamous families than those from monogamous families for both girls and boys. Interestingly, this study found that girls reported higher rates of bullying and victimization than boys. Also girls from polygamous families had the highest rates of bullying and victimization. Reasons for this result are not clear because the sample size for girls was quite small. This result needs to be replicated with a larger sample.

This is one of the first studies of the psychological effects of the polygamous family structure on Saudi adolescents. The results are similar to those from other cultural contexts, especially studies done in other Arab cultural contexts (Al-Krenawi, 2014). One of the strengths of this research is that standardised tests were used. The bullying and victimization questionnaire was designed for use by Arab students. The other tests used had previously been validated for use with Arabic or Middle Eastern samples. Also, the psychometric properties (internal consistency) of the instruments for this sample were tested and internal consistency was good. For tests designed in the English language, back-translation was used.

Limitations of this study are that the sample size was not large enough to investigate the effects of other mediating variables, such as family income, family size, family conflicts, and father absence. Elbedour et al (2002) stated that research on the effects of polygamy on children and adolescents tends to rely on family structure as a variable without taking into account other variables such as family relationships. Further research is needed to investigate the variables that might explain the negative outcomes for adolescents in polygamous families.

Conclusion

Monogamous and polygamous families in Saudi Arabia were found to have different parental education levels and income which may have an effect on adolescents. Also, fathers in polygamous families spent less time with their children than fathers in monogamous families. The polygynous family structure had a negative effect on the psychological well-being (self-esteem, satisfaction with life, depression) and behavior problems (bullying) of Saudi adolescents. Further research is needed to investigate the roles of several mediating variables on the polygamous families in Saudi society and other societies which practice polygamy.

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References

- Abbo, C., Ekblad, S., Waako, P., Okello, E., Muhwezi, W., & Musisi, S (2008). Psychological distress and associated factors among the attendees of traditional healing practices in Jinja and Iganga districts, Eastern Uganda: a cross-sectional study. *International Journal of Mental Health Systems*, 2(1), 16. doi:10.1186/1752-4458-2-16.
- Al Darmeki, F. (2001). Amutazawejat aqal ekteaban mn gyrehen. *Al Mawadda Journal*, 24, 26-26.
- Al Khateep, S. (2007). *Family sociology*. Saudi Arabia, Riyadh. Alshaghry library.
- Al-Krenawi, A. (2014). *Psychosocial impact of polygamy in the Middle East*. New York: Springer.
- Al-Krenawi, A. & Graham, J. R. (2006). A comparison of family functioning, life and marital satisfaction, and mental health of women in polygamous and monogamous marriages. *International Journal of Social Psychiatry*, 52(1), 5-17.
- Al-Krenawi, A., Graham, J., Al-Krenwai, S. (1997). Social Work Practice with Polygamous Families. *Child and Adolescent Social Work Journal*, 14(6), 445-458.
- Al-Krenawi, A., Graham, J. R., & Ben-Shimol-Jacobsen, S. (2006). Attitudes toward and Reasons for polygamy differential by gender and age among Bedouin-Arab of the Negev. *International Journal of Mental Health*, 35(1), 46-61.
- Al-Krenawi, A., Graham, J., Slonim-Nevo, V. (2002). Mental health aspects of Arab Israeli Adolescents from polygamous versus monogamous families. *The Journal of Social Psychology*, 142(4), 446-460.
- Al-Krenawi, A., & Lightman, E. S. (2000). Learning achievement, social adjustment, and Family conflict among Bedouin-Arab children from Polygamous and monogamous Families. *The Journal of Social Psychology*, 140(3), 345-355.
- Al-Krenawi, A., Slonim-Nevo, V., & Graham, J. R. (2006). Polygyny and its impact on the psychological well-being of husbands. *Journal of Comparative Family Studies*, 3 (45), 173-189.
- Al-Krenawi, A., Slonim-Nevo, V. (2006). Psychosocial and familial functioning of children from polygamous and monogamous families. *The Journal of Social Psychology*, 148(2), 745-764.
- Al-Krenawi, A., & Slonim-Nevo, V. (2008). Psychosocial and familial functioning of children from polygamous and monogamous families. *The Journal of Social Psychology*, 148(6), 745-764.
- Al-Muhareb, N. (2003). Parenting absence and aggression, depression symptoms. *Menoufia University Faculty of Arts Journal*, 52, 311-350.

- Abu Khazal, M. (2009). Bullying and association with loneliness, social support. *Jordan Journal of Educational Sciences*, 5 (2), 89-113.
- AL-Seef, M. (2008). Familystudy.[Online] Available: http://news.bbc.co.uk/hi/arabic/newS/newside_1305_000/1305844.stm. (Accessed: 10/12/2013).
- Al Samraee, B. (2002). Taaddalzawajat.[Online] Available from: <http://www.khayma.co/sa-marra/arabi-arabic/waivesinislam.htm>. (Accessed: 15/12/2013).
- Al-Shamsi, M., & Fulcher, L. (2005). The impact of polygamy on United Arab Emirates' first wives and their children. *International Journal of Child & Family Welfare*, 1, 46-55.
- AL-Sharfi, M. (2009). Impact of father absence on gender identity disorder and social competence. Masters thesis. College of Education. King Saud University. Riyadh.
- AL-Sharfi, M., Pfeffer, K. & Miller, K. (2015). The effects of polygamy on children and adolescents: a systematic review. Paper submitted for publication.
- Cherian, V.I. (1994). Corporal punishment and academic achievement of Xhosa children from polygamous and monogamous families. *The Journal of Social Psychology*, 134(3), 387-389.
- Diener, E., Emmons, R. A., Larsen, R. J., & Griffin, S. (1985). The Satisfaction with Life Scale. *Journal of Personality Assessment*, 49, 71-75.
- Elbedour, S., Onwuegbuzie, A. J., Caridine, C., & Abu-Saad, H. (2002). The effect of polygamous marital structure on behavioral, emotional, and academic adjustment in children: A comprehensive review of literature. *Child and Family Psychology Review*, 5(4), 555-271.
- Elbedour, S., Bart., William., Hektner., Joel. (2003). Intelligence and family marital structure: The case of adolescents from monogamous and polygamous families among Bedouin-Arabs in Israel. *The Journal of Social Psychology*, 143(1), 95-110.
- Elbedour, S., Abu-Bader, S., Onwuegbuzie, A., Abu-Rabia, A., El-Aassam, S. (2006). The scope of sexual, physical, and psychological abuse in a Bedouin-Arab community of female adolescents: The interplay of racism, urbanization, polygamy, family honor, and the social marginalization of women. *Child Abuse & Neglect*, 30, 215-229.
- Elbedour, S., Bart, W., Hektner, J. (2007). The relationship between Monogamous / Polygamous family structure and the mental health of Bedouin- Arab adolescents. *Journal of Adolescence*, 30, 213-230.
- Farahat, K.(2002). *Polygamy in the religions*. Dar-ALafagh. Cairo.
- Hamdan, S., Auerbach, J., & Apter, A. (2009). Polygamy and mental health of adolescents. *European Child & Adolescent Psychiatry*, 18(12), 755-760.

Lamb, M.E. (ed). (2010). *The role of the father in child development. 5th ed.* Hoboken, NJ: John Wiley & Sons.

Lovibond, S. H., & Lovibond, P. F. (1995b). *Manual for the Depression Anxiety Stress Scales.* Sydney, Australia: Psychology Foundation.

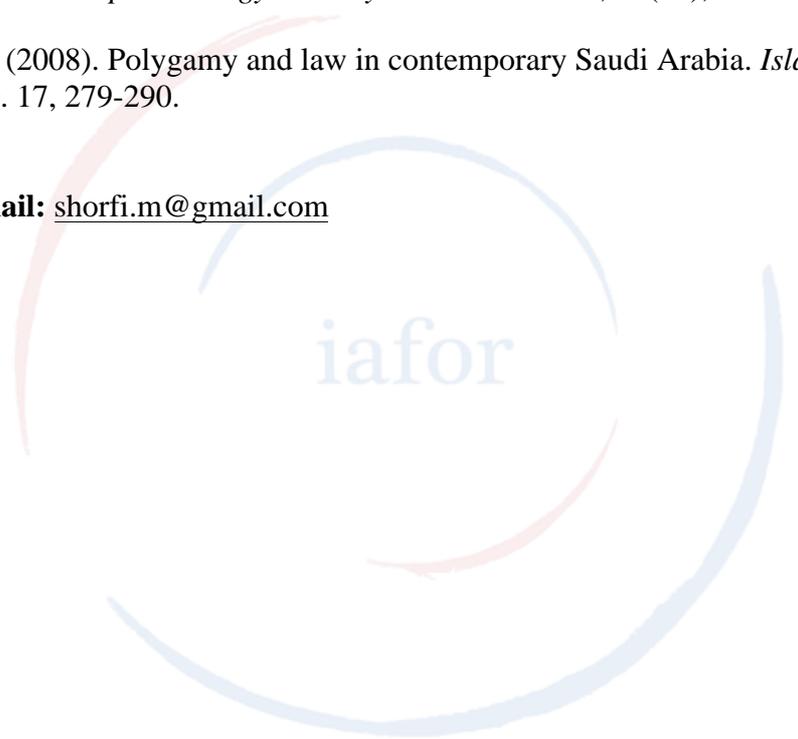
Riaz, M.(1996). Self-esteem of adolescents: A comparison of monogamous and polygamous families. *Pakistani Journal of Psychological Research. 1.*, (1-2) , 21-30.

Rosenberg, M. (1965). *Society and the adolescent self-image.* Princeton, NJ: Princeton University Press.

Shepard, L. D. (2012). The impact of polygamy on women's mental health: A systematic review. *Epidemiology and Psychiatric Sciences, 22*(01), 47- 62.

Yamani, M. (2008). Polygamy and law in contemporary Saudi Arabia. *Islamic Law and Society. 17*, 279-290.

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Self Efficacy and Locus of Control as Predictors of Prosocial Behaviour and Organizational Commitment among a Sample of Nigerian Nurses

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Abstract

There are lot of negative perceptions people have about nurses' prosocial behaviour and organizational commitment. However, only few researchers have taken time to investigate this. Therefore, this study sets to investigate and confirm if this is actually true and to establish the influence of self efficacy and locus of control. To achieve this, a well structured questionnaire was administered to 200 nurses that were selected using simple random sampling technique. These participants were from Ondo state, Nigeria. They comprised of 52 (27.5%) males and 137 (72.5%) females. Two hypotheses were tested using 2X2 ANOVA. Results of the first hypothesis showed that the main effect of self efficacy on prosocial behaviour [F (1,185) =21.420, P<0.01] and organizational commitment [F (1,185) =9.548, p < 0.01] were significant. However, the main effect of locus of control on both prosocial behavior and organizational commitment were not significant. Also, the interaction effects of self efficacy and locus of control on prosocial behavior and organizational commitment were not significant. This implies that nurses who have higher self efficacy would be more committed to the organization and would engage more in prosocial behaviour. It was recommended that organizational management need to create work environment and personnel systems in which nurses personal dispositions such as self efficacy and locus of control can thrive because this will lead individual nurses to harmonize their personal need with the organizational goals. This then increases their commitment to the organization and improves their prosocial behaviour.

Keywords: Self efficacy, locus of control, organization, commitment, prosocial behaviour, nurses

INTRODUCTION

Over several years, impressive amount of researches efforts have been channeled toward understanding the nature, antecedents, and consequences of organizational commitment and prosocial behaviour. Organizational commitment has been defined as a psychological state that binds an employee to an organization, thereby reducing the incidence of turnover (Allen & Meyer, 1990), and as a mindset that takes different forms and binds an individual to a course of action that is of relevance to a particular target (Meyer & Herscovitch, 2001).

In general, people tend to exhibit different behaviour which can be as a result of one factor or the other and this behaviour can be normal or abnormal, beneficial or otherwise. One of the behaviour exhibited by people to one another is helping behaviour (prosocial behaviour). Prosocial behaviour encompasses voluntary helping acts that the society values, with the intention of promoting harmonious relations and benefiting another as opposed oneself (Vaughan & Hogg, 2005). Prosocial activities are any conducted or planned action to help other people without expecting anything in return (Afolabi, 2013). Does personality affect helping behaviour? Attention here was focused on two areas of personality: self efficacy and locus of control.

Self efficacy could be one of the major contributors to individual prosocial behaviour. Self efficacy is defined as an individual's perceived capability in performing necessary tasks to achieve goals (Bandura, 1997).

Another variable that is of great importance to this study is locus of control. Locus of control refers to the extent to which individuals believe that they can control events that affect them. Understanding of the concept was developed by Rotter in 1954, and has since become an aspect of personality studies. A person's "locus" (Latin for "place" or "location") is conceptualized as either internal (the person believes they can control their life) or external (meaning they believe that their decisions and life are controlled by environmental factors which they cannot influence, or by chance or fate).

In the Nigerian context, fostering prosocial behaviour and organizational commitments among workers has become imperative for the nursing personnel because nurses who have a low sense of helping others and are not committed to their workplace are likely to put less effort in the working place as compared to workers with high levels of helping and commitment. High self efficacy and internal locus of control are some of the very important factors which help to foster prosocial behaviour and organizational commitment among nurses.

SELF EFFICACY AND ORGANISATIONAL COMMITMENT

Literature on the relationship between self-efficacy and organizational commitment supports the notion that self-efficacy is an important determinant of organizational commitment. Sinha, Talwar, and Rajpal (2002) explored the relationship between organizational commitments and self-efficacy among 167 managers of Tata Engineering and Locomotive Company, in India. The results revealed that organizational commitment was positively related with self-efficacy. Similarly, Hurter (2008) found that professional commitment (which is conceptually similar to the organizational commitment) was positively related with self-efficacy. As per the findings of the aforementioned studies, the first hypothesis of the present study suggests that self-efficacy would have a significant effect on organizational commitment.

LOCUS OF CONTROL AND ORGANISATIONAL COMMITMENT

Spector (1988) described work locus of control as a personality variable. He defined it as "a generalized expectancy that rewards, reinforcements or outcomes in life are controlled either by one's own action (internality) or other forces (externality)". He explains that in organizational settings, rewards or outcomes include promotion, favourable circumstances, salary increases and general career advancement. Studies relating work locus of control to organizational commitment are scarce. Coleman, Irving, and Cooper (1999) conducted a study on the relationship between work locus of control and organizational commitment. Research findings by Kinicki and Vecchio (1994) reported that individuals with external locus of control are likely to be less committed to their organization than those with internal locus of control.

Locus of control is also associated with affective commitment, such that individuals with internal locus of control report higher levels of affective commitment than those with external locus of control (Coleman, Irving, & Cooper, 1999). Research done two decades also shows that organizational commitment was found to be positively related to internal locus of control (Luthans, Baack & Taylor, 1987).

Research on locus of control has revealed significant differences between internals and externals in their propensity to influence others and attitudes towards social influence (Elangovan & Xie, 1999). It is likely that persons with an internal locus of control may need fewer enactive mastery experiences to improve efficacy perceptions and performance (Gist, 1987). The effect of locus of control on the performance of high-level managers was significantly stronger than its impact on the performance of lower-level managers (Frucot & Shearon, 1991). Locus of control is the extent to which individuals attribute the events in their lives to actions or forces beyond their control (Adeyemi-Bello, 2003). Coleman, Irving & Cooper (1999) argues that externals are more likely to perceive that they have fewer employment alternatives than internals, which could, in turn, lead externals to develop continuance commitment to their organizations.

The importance of organizational commitment has resulted in a large research literature that has attempted to identify various sources of commitment (Knudsen, 2003). Locus of control significantly predicted both leader-member exchange and organizational commitment (Kinicki & Vecchio, 1994) even more important since it is considered as the driving force behind an organizations performance (Ahmad & Bakar, 2003). Positive responses of individuals affected by organizational change are conceptualized in terms of perceptions of both higher levels of commitment to the

change itself and stronger commitment to the organization (Fedor, Caldwell & Herold, 2006). It has been positively associated with behaviors supporting the goals of an organization and with organizational rewards (Shore, Barksdale & Shore, 1995). Organizations that wish to enhance the commitment of their employees should strive for congruence between organizational rewards and important work values of their members (Elizur & Koslowsky, 2001).

SELF-EFFICACY AND PROSOCIAL BEHAVIOR

Researchers have found significant associations between some personality variables and prosocial behaviors across different contexts (Carlo, Eisenberg, Troyer, Switzer & Speer, 1991). It is clear that the specific characteristics of situations play a major role in determining how people react to others in need. A number of these investigators are quite skeptical about the role of personality variables. Some have offered reasons why personality factors might not be as closely related to prosocial behavior as we might expect (Latane & Darley, 1970).

Alessandri, Caprara, Eisenberg and Steca (2009) stated that certain people are more inclined than others to enact behaviors that benefit others. For example people are not likely to devote energy toward prosocial behavior which may involve both sacrifices and costs, unless they believe they are able to both master the emotions associated with the recognition of others' needs and establish suitable relationships and actions favorable to meet those needs (Caprara, Alessandro, di Giunta, Panerai, & Eisenberg, 2010). In line with this reasoning, individual differences in self efficacy beliefs in expressing positive emotions, managing negative emotions (emotional self efficacy), and interpersonal self-efficacy beliefs (i. e. social self-efficacy beliefs and empathic self-efficacy beliefs) have been found to account for significant portions of the variability in psychosocial functions, including prosociality (Caprara et al., 2010; Caprara, Alessandro, & Eisenberg, 2011).

Among behaviorally oriented self-efficacy beliefs, the perceived capability to sense another person's feelings and to respond empathetically to others' distress and misfortune (empathic self-efficacy) has shown the highest correlation with prosociality (Alessandri et al., 2009; Caprara & Steca, 2007; Caprara, Alessandri & Eisenberg, 2011) and is clearly critical for promoting successful adaption and well-being (Di Giunta, Eisenberg, Kupfer, Steca, Carlo & Caprara, 2010).

LOCUS OF CONTROL AND PROSOCIAL BEHAVIOR

A study done by Midlarsky and Midlarsky (1973) has shown that an internal locus of control facilitates helping behavior. In their study they told male subjects that they were participating in an armed forces research project to develop tests for selecting pilots. Each subject worked with someone who was really an assistance of the experimenter. Each pair was told that if one finishes the task before the other, one can help his partner. In essence, Midlarsky & Midlarsky (1973) found that internally oriented subjects were more likely to help their partners than were external subjects. Those who believe in themselves or own abilities rather than luck or fate hold more positive attitude toward oneself (Phares, Ritchie & Davis, 1968).

The focus of this present study is to explore the influence of self efficacy and locus of control on organizational commitment among nurses. Therefore, the general purpose of this study is to determine if self efficacy and locus of control will have significant effect on organizational commitment and prosocial behaviour of nurses in Nigeria.

Thus, the following hypotheses were formulated and tested:

1. There would be main and interaction effects of self efficacy and locus of control on organizational commitment among nurses.
2. There would be main and interaction effects of self efficacy and locus of control on prosocial behavior among nurses.

METHOD

Design

The research design used for this study is a factorial design. The first independent variable is self-efficacy which is sub-divided into two levels; high self-efficacy and low self-efficacy. The second independent variable is locus of control and this is divided into two levels; internal locus of control and external locus of control. The two independent variables were tested to examine their main and interactive effect on the dependent variables: prosocial behaviour and organizational commitment.

Participants

Two hundred (200) sets of questionnaires were distributed in ten hospitals in Ondo state and one hundred and eighty nine (189) were completed and returned, yielding a response rate of 94.5%. The population for this study was nurses. The sample of nurses was male 52(27.5%) and female 137 (72.5%). The age ranges are 20-30 years were 118 (62.4%), 31-40 years were 29 (15.3%), 41-60years were 29 (15.3%) and 61 years and above were 13 (6.9%). The total number of participants is 189. Simple random selection was used to select the participants. They are from different departments i.e. emergency, radiology, male/female/surgical wards, paediatrics, antenatal ward and general out-patient.

Instrument

The instrument used in gathering information from participants was a questionnaire. The questionnaire comprised of five sections. Section A of the questionnaire extracts the participants' *socio-demographic information* such as age, sex, educational qualification, religion and marital status. The section B of the questionnaire measured self-efficacy. The instrument used is *General Self-Efficacy* by Schwarzer and Jerusalem (1995). It is a 10-item scale which is scored on a 4-point Likert format with

response options ranging from not at all (1) to exactly true (4). The author reported a Cronbach alpha ranging from .76 to .90. The new reliability coefficient for the present study is .772. Sample items in the scale include: 'I can always manage to solve difficult problems if I try hard enough', 'I can usually handle whatever comes my way'. Section C of the questionnaire measured *locus of control*. The scale used in measuring this was the locus of control scale developed by Rotter (1966). It is a 13-item scale which is scored on a forced-choice alternative format with response options between internal and external. The scale has high reliability; test-retest reliability coefficient of .61 and Cronbach's alpha of 0.85. The new reliability for this scale in this study is .615. Sample items in the scale includes: 'Many of the unhappy things in people's lives are partly due to back luck', 'People's misfortunes result from the mistakes they make, what happens to me is my own doing', 'Sometimes I feel that I don't have enough control over the direction my life is taking'. Section D of the questionnaire measured *prosocial behaviour*. It is a 12-item scale developed by Afolabi (2013) and is scored on a 5-point likert format with response format ranging from strongly disagree (1) to strongly agree (5). Sample items in the scale include; I enjoy helping others. I am generous because I share the little I have with others. The scale has a test-retest reliability of 0.77 and split half reliability of 0.72. The reliability for this scale in this study is .637.

Finally, section E of the questionnaire measured *organizational commitment*. It is a 15-items scale developed by Mowday, Steers and Porter. (1979). The scale taps three areas: 1. A strong belief in and acceptance of the organization's goals and values, 2. A willingness to exact considerable effort on behalf of the organization, and 3. A strong desire to maintain membership in the organization. Responses to each of the items was scored on a 7-point Likert scale with response format ranging from strongly disagree (1) to strongly agree (7). The following items are scored in reverse: 3, 7, 9, 12 and 15. The author reported a Cronbach alpha coefficient of .729 for the scale. The new reliability for this scale in this study .743. Sample items in the scale include: 'I am willingly to put in a great deal of effort beyond that normally expected in order to help this organization to be successful', 'I am proud to tell others that I am part of this organization'.

Procedure

A letter of introduction of the Researchers was presented to the Head of Nursing Services (HNS) to explain the purpose of the research and confidentiality of the respondents as required. It was after the approval that the administration of the questionnaire commenced with the assistance of the nurses instructed by the Matron/Head of Nursing Services (HNS) for each of the hospitals selected. The authors thereafter visited the respondents at their respective wards/offices and requested them to assist in filling the questionnaire. The participants had the opportunity to clarify and ask questions regarding any of the items that seem ambiguous especially section C of the questionnaire on locus of control. The data collection took close to a month.

Data Analysis

In this research, Pearson Product Moment Correlation was used to determine the level and direction of the relationship among the variables studied. The hypotheses stated were analyzed using 2x2 Analysis of Variance.

Table 1: Summary of Multiple Correlation Showing the Relationship among the Study Variables.

Variables	Mean	SD	1	2	3	4	5	6	7	8	9
1. Age	-	-	1								
2. Gender	-	-	-	1							
3. Marital Status	-	-	-	-	1						
4. Religion	-	-	-	-	-	1					
5. Educational Qualification	-	-	-	-	-	-	1				
6. Self-Efficacy	31.02	4.83	-.13	.03	-.10	-.13	.10	1			
7. Locus of Control	5.58	2.42	.08	.00	-.13	-.10	.00	-.02	1		
8. Prosocial Behaviour	49.04	5.17	-.05	.11	-.19**	-.05	.05	.24**	-.10	1	
9. Organizational Commitment	64.12	10.22	-.06	-.01	-.13	-.14	-.10	.21**	.05	.30**	1

** $p < 0.01$, * $p < 0.05$, $N=289$

It was also shown in the table that organizational commitment has significant (positive) relationships with self efficacy [$r(287) = 0.21$, $p < 0.01$] and prosocial behaviour [$r(287) = 0.30$, $p < 0.01$]. It then implied that there is an increase in nurses' self efficacy there tends to be an increase in their level of prosocial behaviour and organizational commitment. The relationship between locus of control and prosocial behavior was not significant [$r(287) = -0.10$, $p > 0.05$] just as organizational commitment had no significant relationship with locus of control [$r(287) = 0.05$, $p > 0.05$]. This implies that employees' locus of control does not correlate with neither their prosocial behavior nor organizational commitment.

For the formulated hypotheses, 2 X 2 ANOVA was employed while descriptive statistical analysis indicating the mean and standard deviation between the variables of the study was utilized. They are presented below.

Table 2: Mean and Standard Deviation Showing the Effect of Self Efficacy and Locus of Control on Organizational Commitment.

Self Efficacy	Locus of Control	Mean	Std. Deviation	N
Low	Internal	62.56	8.926	39
	External	60.03	7.839	36
	Total	61.35	8.462	75
High	Internal	64.65	10.546	54
	External	67.12	11.145	60
	Total	65.95	10.888	114
Total	Internal	63.77	9.902	93
	External	64.46	10.568	96
	Total	64.12	10.224	189

The table indicated that individuals high in self efficacy [M= 65.95; SD =10.89] scored higher on measure of organizational commitment compared to those low in self efficacy [M= 61.35; SD= 8.46]. Individuals with external locus of control [M= 64.46; SD= 10.57] and also scored higher on organizational commitment than those with internal locus of control [M= 63.77; SD= 9.90].

Furthermore, a 2 X 2 ANOVA was carried out to confirm if the observed differences were significant to establish hypothesis 1.

Table 3: Summary of 2X2 ANOVA showing the effect of Self Efficacy and Locus of Control on Organizational Commitment

SOURCE	SS	DF	MS	F	P
Self Efficacy (SE)	949.649	1	949.649	9.548	< .01
Locus of Control (LOC)	.052	1	.052	.001	> .05
SE X LOC	282.701	1	282.701	2.842	> .05
Error	18401.060	185	99.465		
Total	19652.201	188			

The result revealed that self efficacy had significant effect on organizational commitment [$F(1,185) = 9.548, p < 0.01$] such that individuals with high self efficacy have higher organizational commitment. The findings therefore confirmed the observed differences noted in Table 3 above. The effects of locus of control and the interaction between self efficacy and locus of control on organizational commitment were not significant.

The test of hypothesis 2 was preceded by summary of the means, standard deviations among variables of study as presented in Table 4.

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Table 4: Mean and Standard Deviation Showing Self Efficacy and Locus of Control on Prosocial Behaviour.

Self Efficacy	Locus of Control	Mean	Std. Deviation	N
Low	Internal	47.41	5.720	39
	External	46.67	4.623	36
	Total	47.05	5.201	75
High	Internal	51.37	4.700	54
	External	49.43	4.601	60
	Total	50.35	4.728	114
Total	Internal	49.71	5.486	93
	External	48.40	4.778	96
	Total	49.04	5.167	189

Table 4 shows that individuals high in self efficacy [M=50.35; SD=4.73] scored higher on measure of prosocial behavior compared to those low in self efficacy [M=47.05; SD=5.20]. Also, individuals with internal locus of control [M=49.71; SD=5.49] scored higher on prosocial behavior compared to those with external locus of control [M=48.40; SD=4.78].

Table 5: Summary of 2 X 2 ANOVA Showing the Influence of Self Efficacy and Locus of Control on Prosocial Behaviour.

Source	Ss	df	MS	F	P
Self efficacy	510.695	1	510.695	21.420	< .01
Locus of Control	81.100	1	81.100	3.402	> .05
Self Efficacy * Locus of Control	16.075	1	16.075	.674	> .05
Error	4410.762	185	23.842		
Total	5019.661	188			

The result in table 5 revealed that self efficacy had a significant effect on prosocial behavior

[F (1,185) =21.420, P<0.01]. This implies that self efficacy has a significant effect on their prosocial behaviour within their working environment. Individuals with high self efficacy have higher Prosocial behaviour. The main effects of locus of control including the interaction between self efficacy and locus of control were not significant. Thus hypothesis 2 was partially confirmed.

DISCUSSION

This study was conducted to examine how self-efficacy and locus of control affect prosocial behavior and organizational commitment among nurses in Ondo state. Two hypotheses were formulated and tested in the study.

The first hypothesis which stated that there would be main and interaction effects of self efficacy and locus of control on organizational commitment among nurses was partially confirmed. The result indicated that self-efficacy had a significant main effect on organizational commitment among nurses. This is in support of Sinha, Talwar, and Rajpal (2002) findings that stated that organizational commitment was positively related with self efficacy. This study is also consistent with that of Hurter (2008) who found that professional commitment (which is conceptually similar to the organizational commitment) was positively related with self efficacy. This implied that self-efficacy significantly predict organizational commitment such that an increase in individuals' self efficacy will bring about an increase in the individual's organizational commitment. The main effect of locus of control was not significant.

The findings of this research greatly oppose the outcome of several studies reviewed. It negate the study of Kinicki and Vecchio (1994) who reported that individuals with external locus of control are likely to be less committed to their organization than those with internal locus of control. This finding is not also in line with that of Luthans, Baack, & Taylor, 1987 which reported that organizational commitment was positively related to internal locus of control. It is not also in line with the study that reported that locus of control is associated with affective commitment, such that individuals with internal locus of control report higher levels of affective commitment than those with external locus of control (Coleman, Irving, & Cooper 1999). The result did not also show that there was any interaction effects of self efficacy and locus of control on organizational commitment among nurses. The result indicated that self efficacy and locus of control did not interact to affect organizational commitment among nurses.

The result of analyzing the second hypothesis showed that there was a significant main effect of self-efficacy on prosocial behaviour among nurses. This finding is consistent with those of Jakob, Carina, Eric & Ann-Charlotte, (2012) findings that stated that self-efficacy had a positive significant correlation with prosocial behaviour. Emotional self efficacy and interpersonal self-efficacy beliefs (i.e., social self-efficacy beliefs and empathic self-efficacy beliefs) have been found to account for significant portions of the variability in psychological functions, including prosociality (Caprara e.t al. 2010; Caprara & Steca, 2007; Caprara, Alessandri, & Eisenberg, 2011). This study is also in support of Alessandri et al., 2009's findings which showed that empathic self-efficacy has the highest correlation with prosociality. This implied that individuals' self efficacy would affect their prosocial behaviour. Therefore, the hypothesis was partially confirmed.

The result also showed that locus of control had no significant influence on prosocial behaviour among nurses. This finding contradict the study done by Midlarsky and Midlarsky (1973) which shown that an internal locus of control facilitates helping behaviour. Also the findings that those who believe in themselves rather than luck or fate hold more positive attitude toward oneself (Phares, Ritchie & Davis, 1968). This implies that nurses' behave prosocially irrespective of their locus of control.

Finally, there were no interaction effects of self efficacy and locus of control on prosocial behaviour among nurses. This showed that self efficacy and locus of control did not have significant interaction to affect prosocial behaviour among nurses.

Conclusion

This study investigated the effects of self-efficacy and locus of control on organizational commitment and prosocial behaviour among a sample of Nigerian nurses. It showed that self-efficacy had a main effect on organizational commitment and prosocial behaviour. However, locus of control had no significant effects on prosocial behaviour and organizational commitment. Also, self-efficacy and locus of control had no interaction effects on prosocial behaviour and organizational commitment.

It was discovered in this study that locus of control is not enough to cause any significant effect on the level of nurses' prosocial behaviour and organizational commitment except possibly with the joint influence of many other variables like job satisfaction, religiosity and other demographic and environmental variables. Therefore, high organizational commitment and prosocial behaviour among nurses to some extent depends on their self-efficacy but can't be depended on their locus of control. The practical implication of this finding is that nurses with high self-efficacy tend to engage in prosocial behaviour and get more committed to their organization while locus of control does not determine neither their levels of prosocial behaviour nor organizational commitment.

Recommendations

In view of the findings of this research, the following recommendations are offered for future research and organizational intervention efforts.

Organizational management need to create work environment and personnel systems in which nurses personal dispositions such as self efficacy and locus of control can thrive because this will lead individual nurses to harmonize their personal need with the organizational goals. This will then increase their commitment to the organization and improve their prosocial behaviour.

Also other researches are required to determine other factors that can predict prosocial behaviour and organizational commitment of nurses across many situations aside from factors examined in this present study. This should include a larger sample size with observations made across many professions and organizations.

Limitations of the Study

This study may not be generalized because of the limited number of participants involved in the research study. One of the qualities of a good research is the number of participants. The higher the number of participants, the more valid the research work will be. Another limitation of this study is that self-efficacy and locus of control are the only variables examined to know their effects on organizational commitment and Prosocial behaviour. The study did not include other variables that can contribute to helping behaviour and organizational commitment among nurses.

References

- Adeyemi-Bello, T. (2005). The impact of leader characteristics on the performance of organizational members an exploratory study. *Work Study*, 52, 286-289.
- Afolabi, O.A. (2013). Roles of personality types, emotional intelligence and gender differences on prosocial behavior. *Psychological Thought*, 6 (1), 124-139.
- Ahmad, Z.K., & Bakar, A.R. (2003).The association between organizational commitment among white collar workers in Malaysia. *International Journal of Training And Development*, 7, 166-185.
- Alessandri, G., Caprara, G. V., Eisenberg, N. & Steca, P. (2009). Reciprocal relations among self-efficacy beliefs and prosociality across time. *Journal of Personality*, 77, 1229-1259.
- Allen, N. J., & Meyer, J. P. (1990). The measurement and antecedents of affective, continuance and normative commitment to the organization. *Journal of Occupational Psychology*, 63, 1-18.
- Bandura, A. (1997). *Self-efficacy: The exercise of control*. New York: W.H .Freeman.
- Batson, C. Daniel., Early, Shannon, & Salvarani, Giovanni. (1997). Perspective taking:Imagining how another feels versus imagining how you would feel. *Personality and Social Psychology Bulletin*, 23: 751 - 758.
- Caprara, G. V., Alessandri, G., di Giunta, L., Panerai, L. & Eisenberg, N. (2010). The contribution of agreeableness and self-efficacy beliefs to prosociality. *European Journal of Personality*, 24, 36 - 55.
- Caprara, G. V., Alessandri, G. & Eisenberg, N. (2011, September 26). Prosociality: The Contribution of traits, values, and self-efficacy beliefs. *Journal of Personality and Social Psychology*. Advance online publication. doi: 10.1037/a0025626.
- Caprara, G. V. & Steca, P. (2007). Prosocial agency: The contribution of values and self-efficacy beliefs to prosocial behavior across ages. *Journal of Social and Clinical Psychology*, 26: 218–239.
- Carlo, G., Eisenberg, N., Troyer, D., Switzer, G &Speer, A.L. (1991). The altruism personality: In what context is it apparent? *Journal of Personality and Social Psychology*. 61, 450-458.
- Coleman, D. F., Irving, G.P., & Cooper, C.L. (1999). Another look at the locus of control, organizational commitment relationship; it depends on the form of commitment. *Journal of Organizational Behaviour*, 20 (6): 995-1001.
- Di Giunta, L., Eisenberg, N., Kupfer, A., Steca, P. T. Carlo, G. & Caprara, G. V. (2010). Assessing perceived empathic and social self-efficacy across countries. *European Journal of Psychological Assessment*, 26: 77 - 86.

- Elangovan, R.A., & Xie, L.J. (1999). Effects of perceived power of supervisor on subordinate stress and motivation: The moderating role of subordinate characteristics. *Journal of Organizational Behavior*, Vol. 20, pp. 359-375.
- Elizur, D., & Koslowsky, M. (2001). Values and organizational commitment. *International Journal of Manpower*, 22, 593-599.
- Fedor, B. D., Caldwell, S. & Herold, M.D. (2006). The effects of organizational changes on employee commitment: A multilevel investigation. *Personnel Psychology*, 59, 1-29.
- Frucot, V., & Shearon, T.W. (1991). Budgetary participation, locus of control, and Mexican managerial performance and job satisfaction. *The Accounting Review*, 66, 80-99.
- Gist, E.M. (1987). Self-Efficacy: Implications for organizational behavior and human resource management. *Academy of Management Review*, 12, 472-485.
- Hurter, N. (2008). *The role of self efficacy in employee commitment*. Unpublished M.Sc project, University of Pretoria, South Africa.
- Jakob, E, Carina, L, Eric, M.H & Ann-Charlotte, A.W (2012). Who cares about others? Empathic self-efficacy as an antecedent of prosocial behaviour. Malardalen: Malardalen University Press.
- Kinicki, J.A. & Vecchio, P.R. (1994). Influences on the quality of supervisor-subordinate relations: The role of time-pressure, organizational commitment and locus of control. *Journal of Organizational Behavior*, 15, 75-82.
- Knudsen, J.S. (2003). Down sizing survival: The experience of work and organizational commitment. *Sociological Inquiry*, 73, 265-83.
- Latane, B., & Darley, J.M. (1970). *The unresponsive bystander: Why doesn't he help?* New York: Appleton – Century–Crofts.
- Luthans, F., Baack, D., & Taylor, L. (1987). Organizational commitment: Analysis of antecedents. *Human relations*, 40 (4), 219-236.
- Meyer, J. P., & Herscovitch, L. (2001). Commitment in the workplace: Toward a general model. *Human Resource Management Review*, 11(3), 299-326.
- Midlarsky, E. & Midlarsky, M. (1973). Some determinants of aiding under experimentally stress. *Journal of Personality*, 41, 305-327.
- Mowday, R.T., Steers, R.M. & Porter, L.W. (1979). The measurement of organisational commitment. *Journal of Vocational Behaviour*, 14, 224-247.
- Phares, E.J., Ritchie, E.D. & Davis, W.L. (1968). Internal-External control and reaction to threat. *Journal of Personality and Social Psychology*, 10, 402-405.

Rotter, J.B. (1954). *Social learning and clinical psychology*. Englewood Cliffs. NJ: Prentice-Hall

Schwarzer, R., & Jerusalem, M. (1995). Generalized Self-Efficacy scale. In J. Weinman, S. Wright, & M. Johnston, *Measures in health psychology: A user's portfolio. Causal and control beliefs* (pp. 35-37). Windsor, UK: NFER-NELSON.

Shore, M.L., Barksdale, K. & Shore, H.T., (1995). Managerial Perceptions of Employee Commitment to the Organization. *The Academy of Management Journal*, 38, 1593-1615.

Sinha, P. S., Talwar, T., & Rajpal, R. (2002). Co-relational study of organizational commitment, self-efficacy and psychological barriers to technological change. *Psychologia*, 45(3), 176- 183. <http://dx.doi.org/10.2117/psysoc.2002.176>.

Spector, P.E. (1988). Development of the work locus of control scale. *Journal of Occupational Psychology*, 61, 335-340.

Vaughan, G, & Hogg, M. (2005). *Social Psychology* (4th edition). London: Prentice-Hall.

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Job Stress and Occupational Burnout among Police Personnel: Moderating Roles of Gender and Marital Status

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Abstract

Previous studies on occupational burnout among police personnel did not pay enough attention to how gender and marital status may influence the connection between job stress and occupational burnout, especially in Nigeria; where cultural beliefs direct gender and marital issues in relation to work. This study, therefore, investigated the extent to which gender and marital status moderate the relationship between job stress and occupational burnout. Participants were 213 police personnel (male = 120; female = 93) selected from 10 urban and 10 semi-urban police divisions in Nigeria. Their ages ranged between 20 and 64 years ($M_{age}=38.15$ years; $SD=10.0$). Results revealed that job stress significantly predicted occupational burnout such that increase in job stress led to increase in the level of occupational burnout ($\beta=.37$, $p<.001$). Gender moderated the effects of job stress on occupational burnout in such a way that job stress tended to result in higher level of occupational burnout in female than in male police personnel [$\Delta R^2=.08$, $F(4, 212)=13.76$, $p<.001$]. Similarly, marital status moderated the relationship between job stress and occupational burnout; such that police personnel who were married tended to report higher level of occupational burnout in the presence of job stress than those who were single [$\Delta R^2=.09$, $F(5, 212)=12.82$, $p<.001$]. Implications for gender sensitivity and family supportiveness were discussed.

Keywords: Job stress, burnout, gender, police, Nigeria

INTRODUCTION

Occupational burnout, which refers to the extent to which employees experience emotional, physical exhaustion and reduced personal accomplishment (Maslach & Schaufeli 1993), has been associated with job stress (Iroegbu & Nwaogwugwu, 2012), especially in human service occupations such as police and health care (Ogungbamila, 2013; Xie, Wang & Chen, 2011). Concern about health of police personnel has dominated the focus of research in recent time (Ogungbamila, 2013). The concern may be connected with the fact that occupational burnout is not only injurious to the employees but also the individuals who are recipients of their services (Xie *et al.*, 2011). Occupational burnout may, therefore, adversely affect the functionality of police personnel in investigating, detecting, and managing crime, especially in Nigeria; where inadequate facilities hamper effective policing (Brownson, 2012; Chinwokwu, 2012).

Inadequate facilities and operational demands are two of the major sources of stress for police personnel (Amaranto, Steinberg, Castellano & Mitchell, 2003; Shane, 2010). Lazarus and Folkman (1984) defined job stress as a psychological state that results from perceived negative and threatening imbalance between employees' job condition and their psychological resources for dealing with the situation. Job stress may be more pronounced among police personnel in Nigeria because of the acute shortage of police personnel compared with the population of citizens they serve. According to Human Rights Watch (2010), the estimated 311,675 police personnel in Nigeria, as at 2008, were securing over 160 million citizens. Based on the United Nation's benchmark of 1 police to 400 citizens, Osuji (2012) submitted that there was a short-fall of 70,600 police personnel in Nigeria.

The negative imbalance in the police-citizen ratio in Nigeria may be a source of job stress to the employees (Ogungbamila, 2014b; Roberts & Levenson, 2001) because the shortfall in police personnel may culminate in work over-load and occupational burnout for the remaining employees (Ogungbamila, 2013), especially for female and married employees (Hallman, Thomsson, Burell, Lisspers & Setterlind, 2003). Previous studies (e.g. Wiese, Rothmann & Storm, 2003; Xie *et al.*, 2011) reported a strong positive connection between job stress and occupational burnout.

Gender and marital differences in job stress and occupational burnout have also been documented (Hall *et al.*, 2003). However, the roles of gender and marital status in the connection between job stress and occupational burnout have not been adequately investigated, especially among police personnel in Nigeria. An investigation of this research lacuna is important because of the social and cultural responsibilities associated with gender and marriage in Nigeria. For example, female employees who are married are expected to balance the family obligations with their job roles. The challenges associated with coping with work and family responsibilities may be more pronounced among employees who do not receive adequate social support from spouse, relative, and house help that may help in making up for their inadequacies in fulfilling their family obligations (Ogungbamila, 2014a). There is, therefore, the need to investigate the extent to which gender and marital status moderate the relationship between job stress and occupational burnout among police personnel.

Previous studies have reported gender differences in employees' perception of job-related stress; with females reporting higher level of job-related stress than males

(Meško, Videmšek, Štihec, Meško-Štok & Karpljuk, 2010; Rubina, Sadaf & Masood, 2011). Gender differences in perception of job-related stress may be associated with the gender differences in stress coping strategies. Males tend to adopt problem-focused coping strategies (Greenglass, 2002) and females usually adopt emotion-focused coping strategies (Burke & Greenglass, 1996).

Apart from that, Liu, Spector and Shi (2008) submitted that differences in perception of job-related stress may be connected with cultural and social construction of gender role expectations and responsibilities. For example, in Nigeria and other patriarchal or male-dominated societies, gender relations and stereotypes are defined in such a way that women are socialized to be less competitive with low ability to cope with and withstand stress than men (Akinwale, 2009; Fawole, 2008; Mudiare, 2013). This implies that socialization leads to internalization and expression of socially and culturally determined social role of gender, which may not necessarily reflect the biological gender of the individual.

Studies have shown that social role of gender was a stronger determinant of job stress than the biological role (Gianakos, 2000). Yu-Chi and Keng-Yu (2010) reported that masculinity and femininity characteristics were not more important than biological sex in employees' perception of job-related stress. They found that employees who showed masculine characteristics reported less job stress than those with feminine characteristics. In a study involving 1,104 police personnel, He, Zhao and Ren (2005) found that female police officers reported higher level of job-related stress than male officers.

As suggested in literature, marital status is an important factor in job-related stress among police personnel (Horwitz, McLaughlin & White, 1997). He, Zhao and Ren (2005) reported that work-family interference was a strong predictor of job-related stress among police personnel. Spill-over of work-family interference may be more pronounced among police personnel who are married than those who are single. In spite of job-related stress and negative work-family interference female police personnel who have access to adequate social support may not experience adverse effects of job stress, emanating from job demands, compared with those who do not have such opportunities (Rivera-Torres, Araque-Padilla & Montero-Simó, 2013). Studies suggest that negative interface between work and family demands may compound job stress in employees working long hours (Bazana & Dodd, 2013; Louw & Viviers, 2010), especially married police personnel.

Studies on gender and marital differences in occupational burnout have presented mixed results. Employees who are married tended to show higher level of occupational burnout than those who are single (Russell, Altmaier & Van Velzen, 1987). However, Taycan, Kutlu, Cimen and Aydýn (2006) and Odedokun (2015) reported that employees who were married experienced lower level of occupational burnout than those who were unmarried; with males being the more affected (Maslach, Schaufeli & Leiter, 2001). Other studies (e.g. Gulalp, Karcioğlu, Sari & Koseoğlu, 2008) found no marital difference in occupational burnout.

The job demands-resources model (Bakker, Demerouti & Euwema, 2005; Demerouti, Bakker, Nachreiner & Schaufeli, 2001) indicates that specific risk and demands, which are embedded in each job, culminate in job stress. The level of job stress is

balanced out if the job resources, which Bakker *et al.* (2005) referred to as the physical, social and organizational aspects of the job that enhance personal growth and development, are adequate. Therefore, the social roles of gender and marital status may interact with job stress to increase occupational burnout among police personnel, especially if there are no adequate social and family-supportive organizational resources that could mitigate the negative effects of work-family interference (Burke & Richardson, 2000; Montgomery, Peeters, Schaufeli & Den Ouden, 2003; Ogunbamila, 2014). Against this background, it is hypothesized as follow:

1. Gender will increase the relationship between job stress and occupational burnout; with females reporting higher level of occupational burnout than males.
2. Marital status will increase the relationship between job stress and occupational burnout; with police personnel who are married reporting higher level of occupational burnout than those who are single.

METHOD

Design and participants

This was a cross-sectional survey. Participants were 213 police personnel (male=120; female=93) sampled from 20 police divisions in Ondo State, Nigeria. Their ages ranged between 20-64 years ($M_{age}=38.15$; $SD=10.00$). In terms of job location, 125 (58.7%) were serving in 10 police stations in urban centres and 88 (41.3%) were serving in 10 police stations in semi-urban centres. Concerning marital status, 65 (30.5%) of the participant were single, 147 (69.5%) were married, and 1(0.5%) of the participants did not indicate his/her marital status. Concerning academic qualification, 32 (15%) had up to School Certificate, 64 (30.1%) had National Certificate in Education /National Diploma certificate, 88 (41.3%) had first degree/ Higher National Diploma, 19 (8.9%) had post graduate degree, and 10 (4.7%) of them did not indicate their academic qualification. In the case of job status, 72 (33.8%) were at the junior cadre, 73(34.3%) were at the intermediate cadre, 63 (29.6%) were at the senior cadre, and 5(2.3) of them did not indicate their job status.

Measures

Job stress was measured using Occupational Stress Index (OSI) developed by Srivastav and Singh (1981). It was designed to measure the level of stress employees perceive from various constituents and conditions of their job (role overload, role ambiguity, role conflict, group and political pressure, responsibility for persons, powerlessness, under participation, poor peer relations, strenuous working condition, low status, unprofitability, and intrinsic impoverishment). It was a 46-item scale rated on a 4-point scale (4 = Strongly Disagree; 1 = Strongly Agree).

Sample items include: "I have to do a lot of work in this job" (role overload), "The available information relating to my job-role and its outcomes are vague and insufficient" (role ambiguity), "My different officers often give contradictory instructions regarding my works" (role conflict), "Sometimes it becomes complicated problem for me to make adjustment between political/group pressures and formal rules and instructions" (group and political pressure), "The responsibility for the efficiency and productivity of many employees is thrust upon me" (responsibility for persons), "Most of my suggestions are heeded and implemented here" (under participation), "My decisions and instructions concerning distribution of assignments

among employees are properly followed” (powerlessness), “I have to work with persons whom I like” (poor peer relations), “My assignments are of monotonous nature” (intrinsic impoverishment), “Higher authorities do care for myself respect” (low status), “I do my work under tense circumstances” (strenuous working conditions), and “I get less salary in comparison to the quantum of my labor / work” (unprofitability).

Srivastav and Singh (1981) obtained .90 Cronbach’s alpha for the overall scale. In the present study, OSI had a Cronbach’s alpha of .84. In this study, job stress was measured as a composite psychological condition based on the overall score on OSI. High score on the measure of job stress indicated the participants were experiencing high job stress and vice versa.

Occupational burnout was measured using Maslach’s Burnout Inventory (MBI) developed by Maslach and Jackson (1986) to assess the extent to which employees feel exhausted, callous, and underachieving as a result of daily work pressure. MBI was a 22-item inventory, which had 3 subscales rated on 6-point scale (1=A few times a year; 6=Everyday).

Sample items include: “I feel used up at the end of the day’s work” (emotional exhaustion), “I have become more callous towards people since I took up this job” (depersonalization), and “I have accomplished many worthwhile things in this job” (reduced personal accomplishment). Cronbach’s alphas ranging from .71 to .90 were obtained for emotional exhaustion, depersonalization, and reduced personal accomplishment subscales (Maslach & Jackson, 1986).

In a study involving police personnel in Nigeria, Ogunbamila (2013) obtained a Cronbach’s alpha of .81 for the overall scale. The overall score on MBI was used in the present study because the study was not designed to assess the components of burnout; but it focused on occupational burnout as a syndrome. The Cronbach’s alpha of MBI, based on the present sample, was .84. High score on MBI indicated that the respondents were emotionally drained from, were less responsive toward others, and felt incompetent or underachieving and vice versa.

Procedure

Out of the 43 police divisions in Ondo State, Nigeria (Ondo Command = 17 divisions; Owo Command = 14 divisions; Akure Command = 12 divisions), 20 police divisions were selected (10 from Ondo Command, 6 from Owo Command, and 4 from Akure Command). In selecting the divisions, all the police divisions in urban and semi-urban centers were arranged, separately, in alphabetical order and Table of Random Numbers was used to select 10 divisions from the urban centers and 10 divisions from the semi-urban centers. The police personnel in the selected police divisions were given adequate information about the purpose of the study.

They were also informed that participation in the study was voluntary and that there were no known physical and psychological harm attached to the study. They were assured that they were free to discontinue with the study if they felt highly uncomfortable at any point in the course of participating in the study. Active randomization process could not be used in selecting the participants because of the

nature of their job and the security situation in the country. Therefore, questionnaires were distributed to those who were available and willing to participate in the study. In all, 250 questionnaires (urban=150; semi-urban=100) were distributed. Out of the 250 questionnaires distributed, 213 were duly completed and found usable (urban=123; semi-urban=90). This yielded a response rate of 87.6%. Data collection spanned 5 weeks.

RESULTS

Test of relationships

The results of relationships among the study variables are presented in Table 1.

Table 1:

Correlation Matrix Showing the Relationships among the Study Variables

Variables	<i>M</i>	<i>SD</i>	1	2	3	4	5	6	7	8
1. Age	38.15	10.0	1							
2. Educational qualification	-	-	.29**	1						
3. Job status	-	-	.62**	.51**	1					
4. Job location	-	-	-.13	.03	-.08	1				
5. Job stress	131.20	15.0	.11	.01	.10	.07	1			
6. Gender	-	-	-.26**	-	-	.01	-.02	1		
7. Marital status	-	-	.54**	.26**	.45**	-.07	.03	-.1	1	
8. Occupational burnout	76.42	12.4	.07	-	-.06	.18**	.40**	.16*	.22**	1

Note: ** $p < .01$, * $p < .05$, $N=213$. Gender was coded male 0; female 1. Marital status was coded single 0; married 1. Educational qualification was coded Up to School Certificate 0, National Diploma /National Certificate in Education 1; Higher National Diploma/first degree 2; postgraduate degree 3. Job status was coded junior cadre 1; intermediate cadre 2; senior cadre 3. Job location was coded urban 1; semi-urban 0.

The results in Table 1 show that job stress was significantly related with occupational burnout such that when police personnel experienced higher job stress, their occupational burnout tended to increase [$r(211) = .40$, $p < .01$]. Gender had a significant relationship with occupational burnout; with females showing higher burnout than males [$r(211) = .16$, $p < .05$]. Similarly, marital status had a significant relationship with occupational burnout; with married police personnel reporting higher occupational burnout than police personnel who were single [$r(211) = .22$, $p < .01$].

Test of hypotheses

Hypotheses 1 and 2 were tested with a 4-step hierarchical regression. In step 1 of the analysis, the socio-demographic variables were entered. Job stress was entered in step 2 of the analysis. The interaction effects of job stress and gender were added to the model in step 3. In step 4 of the analysis, the interaction effects of job stress and marital status were added to the model. The results are presented in Table 2.

Table 2:

Hierarchical Multiple Regression on the Moderating Effects of Gender and Marital Status on the Relationship between Job Stress and Occupational Burnout

Model	β	t	R	R^2	ΔR^2	F	ΔF
Model 1			.11	.01	.01	3.37*	3.37*
Age	.06	.54					
Educational qualification	-.20	-6.53**					
Job status	-.09	-.39					
Job location	.19	5.26**					
Model 2			.28	.08	.07	5.89**	2.52*
Age	.05	.35					
Educational qualification	-.19	-5.30**					
Job status	-.06	-.16					
Job location	.18	4.06**					
Job stress	.37	9.85**					
Model 3			.41	.17	.09	13.76***	5.08**
Age	.03	.26					
Educational qualification	-.17	-3.31*					
Job status	-.03	-.24					
Job location	.17	3.99*					
Job stress	.39	10.09***					
Job stress x gender	.59	14.50***					
Model 4			.39	.16	.08	12.82***	6.93**
Age	.02	.25					
Educational qualification	-.16	-3.25*					
Job status	-.02	-.22					
Job location	.16	3.24*					
Job stress	.40	11.22***					
Job stress x marital status	.42	13.01***					

Note: *** $p < .001$, ** $p < .01$, * $p < .05$, $N=213$. Gender was coded male 0; female 1. Marital status was coded single 0; married 1. Educational qualification was coded Up to School Certificate 0, National Diploma /National Certificate in Education 1; Higher National Diploma/first degree 2; postgraduate degree 3. Job status was coded junior cadre 1; intermediate cadre 2; senior cadre 3. Job location was coded urban 1; semi-urban 0.

Results in Table 2 reveal that job stress significantly predicted occupational burnout such that increase in job stress led to increase in the level of occupational burnout ($\beta = .37$, $p < .001$). Gender increased the effect of job stress on occupational burnout in such a way that job stress tended to result in higher level of occupational burnout in female than in male police personnel [$\Delta R^2 = .08$, $F(4, 212) = 13.76$, $p < .001$]. Job stress alone accounted for 13% changes in occupational burnout; whereas its interaction with gender led to 35% changes in the level of occupational burnout among police personnel. Therefore, hypothesis 1 was supported.

Marital status moderated the relationship between job stress and occupational burnout; such that marital status increased the extent to which job stress led to occupational burnout, especially among police personnel who were married than those who were single [$\Delta R^2 = .09$, $F(5, 212) = 12.82$, $p < .001$]. When the interaction effects of job stress and marital status were added to the model connecting job stress to occupational burnout the beta value increased from .37 (job stress alone) to .42 (job

stress x marital status). The moderated effects of marital status accounted for 18%; whereas job stress alone contributed 13% changes in level of occupational burnout. The results in Table 2, therefore, supported hypothesis 2.

DISCUSSION

A lacuna that has not been adequately addressed in burnout literature is how gender and marital status moderate the relationship between job stress and occupational burnout, especially among police personnel in Nigeria; where cultural and social expectations may direct how employees balance work and family obligations. Results show that gender moderated the effects of job stress on occupational burnout. Job stress increased the level of occupational burnout among police personnel. The findings of Wiese *et al.* (2003), Xie *et al.* (2011), and Iroegbu and Nwaogwugwu (2012) that job stress increased occupational burnout, were supported by the results of the present study.

The fact gender moderated the relationship between job stress and occupational burnout may be associated with gender differences in perceived job stress. Females might have perceived higher job stress than males (Meško *et al.*, 2010; Rubina *et al.*, 2011) because males tended to use pragmatic and problem-focused approach to managing job stress than females, who usually result to emotion-focused strategies to managing job stress (Burke & Greenglass, 1996; Greenglass, 2002). This may be because females in Nigeria are usually not socialized to withstand stress compared with their male counterparts who are more socialized to withstand stress in order to enhance their competitiveness (Akinwale, 2009; Fawole, 2008; Mudiare, 2013).

As submitted by Horwitz *et al.* 1997), marital status remains an important factor in the connection between job stress and occupational burnout. Previous studies (e.g. Russell *et al.*, 1987) reported that employees who were married showed higher level of occupational burnout than those who were single. This position was supported by the results of the current study. The findings of Taycan *et al.* (2006), Odedokun (2015) and Maslach *et al.* (2001) that employees who were single tended to experience higher level of occupational burnout than those who were married were not corroborated by the results of the current study.

Marital status might have moderated the relationship between job stress and occupational burnout because of the negative interference between work and family demands among employees who were married (Bazana & Dodd, 2013; Louw & Viviers, 2010). Marital status might have increased the extent to which job stress led to occupational burnout in married police personnel because of inadequate social support from the home front (Burke & Richardson, 2000; Montgomery *et al.*, 2003; Rivera-Torres *et al.*, 2013).

The results of the current study extend the job demands-resources model (Bakker *et al.*, 2005; Demerouti *et al.*, 2001). The results of the current study have suggested that married employees, especially females, who did not have access to adequate family-supportive resources (which would helped to buffer the effects of job stress that emanated from high job demands), reported high level of occupational burnout (Burke & Richardson, 2000; Montgomery *et al.*, 2003; Ogunbamila, 2014). The results of the current study, therefore, suggest that family-supportive job resources

should be provided by the organization in order to reduce the effects of job stress and occupational burnout on police personnel.

CONCLUSION

Previous studies have shown that job stress increases occupational burnout. Gender and marital differences in occupational burnout have also been investigated. What have not been adequately documented in literature are the moderating roles of gender and marital status on the connection between job stress and occupational burnout among police personnel in Nigeria.

Police personnel in Nigeria may be prone to occupational burnout when the effects of job stress interact with gender and marital obligations because gender and marital obligations are dictated more by social and cultural expectations rather than biological characteristics. The findings of the current study that, when exposed to job stress, female police personnel who were married were more prone to occupational burnout than males or employees who were single, have made a unique contribution to literature.

The current study has implicated work-family interference in the moderating roles of gender and marital status in the relationship of job stress to occupational burnout. Its findings have pointed to the fact that family-supportive job resources may be important aspects that may be considered when applying the job demands-resources model (Bakker *et al.* 2005) to explaining occupational burnout.

In spite of the contributions of the current study, there is the need to investigate how family supportiveness moderate the moderated effects of gender and marital status on the relationship between job stress and occupational burnout (Burke & Richardson, 2000; Montgomery *et al.*, 2003). This may help direct the focus of intervention on occupational burnout, especially among female police personnel who are married.

REFERENCES

- Akinwale, A. A. (2009). Manifestation of human sexuality and its relevance to secondary schools in Nigeria. *International Journal of Sociology and Anthropology*, *1*(1), 1-5.
- Bakker, A. B., Demerouti, E., & Euwema, M. C. (2005). Job resources buffer the impact of job demands on burnout. *Journal of Occupational Health Psychology*, *10*, 170-180. <http://dx.doi.org/10.1037/1076-8998.10.2.170>.
- Bazana, S., & Dodd, N. (2013). Conscientiousness, work family conflict and stress amongst police officers in Alice, South Africa. *Journal of Psychology*, *4*(1), 1-8.
- Brownson, B. O. (2012). The role of Nigeria police force in the administration of justice: Issues and challenges. Unpublished LLM Thesis, Ahmadu Bello University, Zaria, Nigeria.
- Burke, R. J., & Greenglass, E. (1996). Work stress, social support, psychological burnout and emotional and physical well-being among teachers. *Psychology, Health, & Medicine*, *1*, 193–205.
- Burke, R. J., & Richardson, A. M. (2000). Psychological burnout in organizations. In R. T. Golembiewski (Ed.), *Handbook of organizational behavior* (pp.327–368). New York: Marcel Dekker.
- Chinwokwu, E. C. (2012). Crime and criminal investigation in Nigeria: A study of police criminal investigation in Enugu State. *African Journal of Law and Criminology*, *2*(1), 46 – 55.
- Demerouti, E., Bakker, A. B., Nachreiner, F., & Schaufeli, W. B. (2001). The job demands-resources model of burnout. *Journal of Applied Psychology*, *86*, 499-512. <http://dx.doi.org/10.1037/0021-9010.86.3.499>.
- Fawole, O. I. (2008). Economic violence to women and girls: Is it receiving the necessary attention? *Trauma, Violence & Abuse*, *9*(3), 167-177. doi:10.1177/1524838008319255
- Gianakos, I. (2000). Gender roles and coping with work stress. *Sex Roles*, *42*(11/12), 1059-1079.
- Greenglass, E. (2002). Proactive coping. In E. Frydenberg (Ed.), *Beyond coping: Meeting goals, vision, and challenges* (pp. 37-62). London: Oxford University Press.
- Gulalp, B., Karcioğlu, O., Sari, A., & Koseoğlu, Z. (2008) Burnout: need help? *Journal of Occupational Medical Toxicology*, *3*, 32.
- Hallman, T., Thomsson, H., Burell, G., Lisspers, J., & Setterlind, S. (2003). Stress, burnout and coping: Differences between women with coronary heart disease and healthy matched women. *Journal of Health Psychology*, *8*(4), 433-445. doi: 10.1177/13591053030084003.

He, N., Zhao, J., & Ren, L. (2005). Do race and gender matter in police stress? A preliminary assessment of the interactive effects. *Journal of Criminal Justice*, 33, 535–547. doi:10.1016/j.jcrimjus.2005.08.003.

Horwitz, A. V., McLaughlin, J., & White, H. R. (1997). How the negative and positive aspects of partner relationships affect the mental health of young married people. *Journal of Health and Social Behavior*, 39, 124–136.

Human Rights Watch. (2010). “Everyone’s in on the game”: Corruption and human rights abuses by the Nigeria police force. Retrieved from <http://www.hrw.org/sites/default/files/reports/nigeria0810webwcover.pdf> on 14th July, 2013.

Iroegbu, M. N., & Nwaogwugwu, O. N. (2012). Impact of job status and gender on job stress among Nigerian police officers. *African Journal of Social Sciences*, 2(1), 69-75.

Lazarus, R. & Folkman, S. (1984). *Stress, appraisal, and coping*. New York: Springer.

Liu, C., Spector, P. E., & Shi, L. (2008). Use of both qualitative and quantitative approaches to study job stress in different gender and occupational groups. *Journal of Occupational Health Psychology*, 13, 357-370.

Louw G. J., & Viviers, A. (2010). An evaluation of a psychosocial stress and coping model in the police work context. *South African Journal of Industrial Psychology*, 36(1), 1-11.

Maslach, C., Schaufeli, W.B., & Leiter, M.P. (2001). Job burnout. *Annual Review of Psychology*, 52(1), 397-422.

Meško, M., Videmšek, M., Štihec, J., Meško-Štok Z., & Karpljuk, D. (2010). Razlike med spoloma pri nekaterih simptomih stresa ter intenzivnost doživljanja stresnih simptomov. *Management*, 5(2), 149-161.

Montgomery, A. J., Peeters, M. C.W., Schaufeli, W. B., & Den Ouden, M. (2003). Work-home interference among newspaper managers: Its relationship with burnout and engagement. *Anxiety, Stress, & Coping*, 16: 195–211.

Mudiare, P. E. U. (2013). The perception of gender roles and its implication for spousal violence in Kaduna metropolis, Kaduna State, Nigeria. *European Scientific Journal*, 9(23), 239-258.

Odedokun, S. A. (2015). Differential influence of demographic factors on job burnout among police officers in Ibadan, Oyo State. *Mediterranean Journal of Social Sciences*, 6(3), 520-526. doi:10.5901/mjss.2015.v6n3s1p520.

Ogungbamila, B. (2013). Occupational burnout among employees in some service occupations in Nigeria: Are health workers different? *Psychological Thought*, 6(1), 153–165. doi:10.5964/psyc.v6i1.47

Ogungbamila, B. (2014a). Work-family interference and burnout among employees in two service occupations in Nigeria. *International Journal of Psychological Studies*, 6(3), 71 -79. doi:10.5539/ijps.v6n3p71.

Ogungbamila, B. (2014b). Job stress and perceived organizational support as predictors of job involvement among police personnel in Nigeria. *Journal of Contemporary Applied Psychology*, 1(2), 37-50.

Osuji, C. (2012). Nigeria Police: Most misunderstood, under-rated and vilified – Why? Retrieved on 14th July, 2013 from <http://dailyindependentnig.com/2012/07/>.

Rivera-Torres, P., Araque-Padilla, R.A., & Montero-Simó, M. J. (2013). Job stress across gender: The importance of emotional and intellectual demands and social support in women. *International Journal of Environmental Research and Public Health*, 10, 375-389. doi:10.3390/ijerph10010375.

Roberts, N. A., & Levenson, R. W. (2001). The remains of the workday: Impact of job stress and exhaustion on marital interaction in police couples. *Journal of Marriage and the Family*, 63(4), 1052 – 1067.

Rubina, H., Sadaf, T., & Masood, N. (2011). Personal and job related predictors of teacher stress and job performance among school teachers. *Pakistan Journal of Commerce and Social Sciences*, 5(2), 319-329.

Russell, D. W., Altmaier, E., & Van Velzen, D. (1987). Job-related stress, social support and *burnout among classroom teachers*. *Journal of Applied Psychology*, 3(2), 269-274.

Srivastav, K. K., & Singh, A. P. (1981). Construction and standardization of an occupational stress index: A pilot study. *Indian Journal of Clinical Psychology*, 8, 133-136.

Taycan, O., Kutlu, L., Cimen, S., & Ayдын, N. (2006) Relation between socio-demographic characteristics depression and burnout levels of nurse working in university hospital. *Anatolian Journal of Psychiatry*, 7, 100-108.

Wiese, L., Rothmann, S., & Storm, K. (2003). Coping, stress and burnout in the South Africa police service in Kwazulu-Natal. *South African Journal of Industrial Psychology*, 29 (4), 71-80.

Xie, Z., Wang, A., & Chen, B. (2011) Nurse burnout and its association with occupational stress in a cross-sectional study in Shanghai. *Journal of Advanced Nursing* 67(7), 1537–1546. doi: 10.1111/j.1365-2648.2010.05576.x

Yu-Chi, W., & Keng-Yu, S. (2010). The effects of gender role on perceived job stress. *The Journal of Human Resource and Adult Learning*, 6(2), 74-79.

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Classifying and Defining Heterogeneity within Antisocial Behaviour

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Abstract

Confusion over the appropriate classification of antisocial behaviour (ASB) has impeded both theoretical and applied approaches to its understanding and prevention. The current review starts by making the distinction between describing ASB (as required for legal purposes) and understanding ASB (as required for theoretical purposes). We start by developing a descriptive system for the behaviours of ASB in terms of five dimensions: Type (physically aggressive, verbally aggressive and non-aggressive); Intent; Impact (Mild to Severe); Affect (Hot vs Cold) and Mode (Personal interactive, Personal non-interactive, and Impersonal). This descriptive system then underpins our theoretical analysis, which highlights the importance of the Type, Affect and Mode dimensions in the understanding of the aetiology of ASB. This classification system is not sufficient to account for all the interactions between different dimensions during the development of the 'anti-social personality' but we hope that it will provide a fruitful framework for further research.

Keywords: antisocial behaviour (ASB), subtypes, classification, causes, intent, impact, affect, mode, developmental trajectories, correlates, consequences

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Introduction

Antisocial behaviour (ASB) is a term much used but little understood. Antisocial behaviours, from late night noise to internet trolls to graffiti to tax evasion are a potent cause of aggravation and disapprobation in society, to the extent that every society attempts to 'police' behaviour within acceptable limits and to punish behaviours outwith those limits. A literal interpretation indicates that ASB is behaviour (that is, observable actions) that in some way transgresses the 'rules' of society. Since the rules of society are mostly implicit, and vary with society, societal group and over time, it may be seen that precision will be elusive. Societies have attempted to classify ASB by drawing up a legal framework. For example, the UK 'Crime and Disorder Act' (1998) defines anti-social behaviour as acting in a manner that has "caused or was likely to cause harassment, alarm or distress to one or more persons not of the same household" as the perpetrator (Muncie, 1999). Individuals convicted of ASB were then subject to an antisocial behaviour order (ASBO), which was a civil order designed to criminalize minor incidents that would not previously have warranted prosecution. In addition to the statutory importance of ASB, there is also psychological significance, in that 'Antisocial Personality Disorder' is defined both in DSM-IV and DSM-V in terms of persistent antisocial behaviour.

Unfortunately, the forms and potential underlying causes of ASB are legion. Hence, in this article we attempt to introduce a more systematic classification, by means of common sense, search of the literature, and theoretical analysis. We take the view that it is important that psychological and statutory approaches to ASB show synergy, with the legal dimension providing the impetus for clear classification, and the psychological dimension providing the opportunity for greater insight and rigour with a view to optimizing the outcomes for differential treatment or intervention depending on the precise classification. We start by giving examples of ASB culled from the literature – both academic and non-academic.

ASB refers to physical, emotional, verbal, or non-verbal actions or attitudes that violate the age appropriate norms of the society, the rights of others. Examples cited include disobedience, domestic violence, theft, cheating, heavy smoking, fraud, murder, internet trolling, homicide, sexual offenses, litter, lying, and even thumb sucking (Burt, 2012; El Hatw, El Taher, El Hamidi, & Alturkait, 2015; Walters, 2015).

This review attempts to address and tackle two problems with respect to ASB. The first problem is the sheer variety of definitions of ASB in the literature with respect to context, intensity, type of interaction, personality traits, and personality disorders, age, age of onset, gender – and indeed the use of the same term with different meanings by different researchers (Patrick, 2010; Stephens, 2014). This problem is compounded by the differing motivations of ASB researchers, varying from the applied issue of classifying a specific example of ASB for legal purposes to the theoretical issue of attempting to characterise the personality types likely to lead to the 'ASB personality'. This review attempts to address these problems by focusing initially on the observable dimensions of ASB, then using the classification derived to address the underlying theoretical issues.

Method

Articles containing the term such as “antisocial behaviour”, “classifying antisocial behaviours”, “subtypes of antisocial behaviours”, “physically aggressive” and “non-aggressive behaviours”, “disruptive disorders”, “conduct disorder”, and “domestic violence” were searched online on Google scholar, Science Direct, and Sage Publications.

The developmental trajectories with respect to demographic variables and aetiological factors in relation to antisocial behaviours were examined by entering the terms “developmental trajectories”, “gender”, “IQ”, “age”, “age of onset”, “environmental”, “epigenetic”, “genetic”, and “neurological” along with “antisocial behaviour”.

As antisocial behaviour is a symptom of personality and developmental disorders (American Psychiatric Association, 2000; 2013; Lo, Waring, Pagoto, & Lemon, 2015), antisocial behaviour was also searched as part of personality disorders and developmental disorders. For example, the terms “oppositional defiance disorder”, “conduct disorders”, “obsessive compulsive disorder” and “attention deficit Hyperactivity disorder” were searched along with the term “antisocial behaviour”.

The consequences of antisocial behaviours were searched using the terms “physical injury”, “broken homes”, “mental trauma”, “property offenses”, “self-harm”, “suicide”, “violence”, “vandalism”, “drug abuse”, “theft”, “fire setting” and “animal cruelty”.

The Diagnostic and Statistical Manual of Mental Disorders (DSM-IV-TR) and a number of researchers classify conduct disorders into physically aggressive and non-aggressive behaviours (e.g. American-Psychiatric-Association, 2000; Maughan, Pickles, Rowe, Costello, & Angold, 2000; Rowe, Maughan, Worthman, Costello, & Angold, 2004). The term “physically aggressive” gives the impression of a physical interaction involving a living or a non-living thing and the term “non-aggressive” implies mild form of ASB, which might not be termed as aggression. Physically aggressive or aggressive behaviour means actual or threatened physical/verbal aggression towards living beings while non-aggressive behaviour means actual or threatened aggression towards other people’s property (American-Psychiatric-Association, 2000). Threatening to hurt someone through verbal abuse, attempting to steal something one is wearing, or hitting someone is categorised as physically aggressive behaviours.

In contrast, examples such as setting someone’s property on fire, breaking into someone’s car or house to steal something, spray painting others’ property, selling stolen goods, shop lifting and public rowdiness are categorised as non-aggressive behaviours (Burt, 2012; Eman, Nicolson, & Blades, 2014). Such non-aggressive behaviours are most often known as delinquency (Charles, Acheson, Mathias, Michael, & Dougherty, 2012; Smith, 2011) or mild ASB (Torok, Darke, Kaye, & Ross, 2011). Physical aggression can refer to sexual abuse, destruction of property, physical attack, or verbal abuse during a confrontation (Ansel, Barry, Gillen, & Herrington, 2014). Direct physical aggression can refer to impulsive, affective, hostile or reactive aggression, which is driven by anger and frustration on the spur of the moment (Kaartinen, Puura, Helminen, Salmelin, Pelkonen, et. al., 2014). Physical

aggression might be a subtype of reactive aggression named as “reactive physical aggression” (Banny, Tseng, Murray-Close, Pitula, & Crick, 2014; White, Gordon, & Guerra, 2015).

It is also important to note developments in related literatures. There is, both in law and in psychological theory, a fundamental distinction between a ‘heat of the moment’ reaction, which may be seen as a failure of self control, and a premeditated series of actions, that suggest a clear, cognitive plan, quite the opposite of the heat of the moment. This distinction is described in the literature on executive function as the distinction between ‘hot’ and ‘cold’ cognition (Zelazo & Carlson, 2012), and the actions are underpinned by different neural systems, with the hot cognitive control taking longer to develop (Prencipe et al., 2011). The hot category is more instinctive, ingrained, dictated by the innate animal brain while the cold category is a production of a higher level of cognitive processing (Read & Loewenstein, 1999).

We therefore adopt the hot and cold distinction to represent the affective and cognitive dimensions of ASB. For example, reactive, physical, impulsive and relational aggression characterises the hot (affective) category, whereas instrumental, proactive, and premeditated aggression characterises the cold (cognitive) category (e.g. Babcock, 2014; Book, Volk, & Hosker, 2012; Crapanzano, Frick, & Terranova, 2010; Ojanen & Kiefer, 2013; Ramirez & Andreu, 2006; Vitaro, Brendgen, & Barker, 2006; Xu, Raine, Yu, & Krieg, 2014); Yu et. al., 2015; see Table 1). Callous and unemotional (CU) traits are very good example of ASB consisting of both affective and cognitive dimensions. The “unemotional” aspect of CU traits is the affective component when emotional reactivity is very low or absent (Byrd, Kahn, & Pardini, 2013). The affective-cognitive components are “callousness” and “uncaring” when there is disregard for others’ feeling, lack of conscientiousness, fearlessness and remorselessness (Patrick, 2010; Patrick, Fowles, & Krueger, 2009).

The definition of ASB within the hot and cold distinction varies. The subtypes of ASB such as early onset ASB, non-aggressive ASB, cyberbullying, proactive aggression, self-harm, CU traits (e.g. Crapanzano et al., 2010; Rowe, Maughan, Worthman, Costello, & Angold, 2004; Stringaris & Goodman, 2009; Dodge, 2009; see Table 1) have been defined as developmental trajectories with respect to age of onset, context, gender, IQ, personality disorders, developmental disorders, type of interaction (overt/covert), intensity, age, comorbidity, aetiology in terms of genetic, environmental or epigenetic factors, and consequences of ASB. For example, ASB can be classified into early onset, life course persistent, and adolescent/late onset ASB depending on the age at which ASB appears and sustains (e.g. Moffitt, 1993; Tzoumakis, Lussier, Blanc, & Davies, 2013). ASB can be further subdivided into childhood limited, adolescent limited, adolescent delayed onset or adulthood onset (Fontaine, Carbonneau, Vitaro, Barker, & Tremblay, 2009).

There are also independent literatures for ASB in specific contexts, such as driving and conduct disorder. ASB in the form of driving offences is termed aggressive driving behaviour (Danaf, Abou-Zeid, & Kaysi, 2015). In terms of type of interaction and gender, covert ASB manifested at workplace may be termed as mean girl behaviour (Stephens, 2014). With respect to different personality disorders ASB are also manifested in the form of antisocial personality disorder, obsessive-compulsive disorder, schizophrenia, paranoid personality disorder, bipolar disorder, post-

traumatic stress disorder, pathological gambling, and developmental disorder such as autism (Barrowcliffe, & Gannon, 2015; Carroll, 2009; Hodgins, 2004), attention deficit hyperactivity disorder, oppositional defiance disorders and conduct disorders (Kapalka, 2015; Tyrer, 2015). ASB has been referred broadly to conduct disorders in children, psychopathy in adults, or different types of bullying in terms of type of interaction (e.g. Sticca, Ruggieri, Alsaker, & Perren, 2013; Wiklund, Ruchkin, Kuposovc, & Klintebergd, 2014; Woodworth & Waschbusch, 2008). Conduct disorders can vary from rule breaking behaviours to violence (e.g. Scheepers, Buitelaar, & Matthys, 2011) in terms of intensity. For example, hitting may be termed as aggression and stabbing can be termed as violence (Burt, 2012). Therefore, conduct disorders have been further divided into physically aggressive and non-aggressive as subtypes based on type of interaction against living things or property offences (American-Psychiatric-Association, 2000, 2013).

Developmental trajectories of ASB in terms of age, type and mode of interaction

Conduct disorders might progress towards adulthood transforming into psychopathy (a personality type). Therefore, conduct disorders reflect ASB during childhood while psychopathy reflects ASB during adolescence or adulthood. Age can change the terminology used to define ASB. Psychopathy can involve ASB that could be reactive or proactive and pre-planned (e.g. Centifanti, Kimonis, Frick, & Aucoin, 2013) based on hot or cold distinctive nature. Reactive and proactive are examples of two opposite types of ASB. Proactive/pre-planned or indirect aggression can involve verbal abuse or bullying. Bullying can be further divided into traditional, direct cyber bullying and indirect cyber bullying (e.g. Langos, 2012; Ortega, Elipe, Mora-Merchan, Calmaestra, & Vega, 2009). Direct and indirect bullying depends on whether bullying involves physical aggression or verbal aggression. Researchers have also classified ASB into proactive/premeditated versus reactive aggression; aggressive versus non-aggressive; violent versus non-violent; confrontational versus non-confrontational; direct versus indirect aggression; aggression versus delinquency in the literature (e.g. Babcock, 2014; B. Maughan et al., 2000; Vitaro et al., 2006). The meaning of these ASB subcategories varies and they may have further subcategories with variable meanings. For instance, in the aggressive versus non-aggressive classification, aggressive behaviour refers to both actual or threatened physical and verbal aggression or just physical aggression, while non-aggressive behaviour implies delinquency, verbal aggression, relational aggression, actual or threatened aggression against others' possessions or normal/pro-social behaviour (e.g. B. Maughan et al., 2000; Mayberry & Espelage, 2007; Milojević & Dimitrijevic, 2014; Underwood, Galen, & Paquette, 2001).

Developmental trajectories of ASB in terms of comorbidities with ASB, aetiology and consequences of ASB

ASB are also defined with respect to comorbidity with personality disorders, for instance obsessive-compulsive disorder, posttraumatic stress disorder, or depressive disorders (Schepman, Fombonne, Collishaw, & Taylor, 2014). ASB can be comorbid with depression and depression can be genetic, environmental or epigenetic in the form of interpersonal interaction of children in school, parenting styles, parent-child interaction, peer group influence and so forth. Therefore, multiple aetiological factors along with age determine different subtypes of ASB. For example, ASB has been termed as primary or secondary subtypes. Primary is more likely to be early onset,

genetic or epigenetic and secondary subtype is likely to be acquired and based on environmental aetiology (Ojanen & Kiefer, 2013; Klahr, Klump, & Burt, 2014). With respect to consequences, reactive aggression (motivated by frustration, involving impulsivity) might be manifested as self-harm or suicide if oneself is the victim/target/consequence, or as verbal or physical interpersonal aggression if others are the victims (Colins, 2015). Thus, self harm, suicide, homicide, self-destructive behaviours are examples of terminologies used to determine the consequence of ASB (Conner, Duberstein, Conwell, & Caine, 2003). Therefore, developmental trajectories with respect to age of onset, context, gender, IQ, personality disorders, developmental disorders, type of interaction (overt/covert), intensity, age, comorbidity, aetiology in terms of genetic, environmental or epigenetic factors, and consequences of ASB are the defining aspects of ASB and a basis for a label to define a specific form of ASB.

Terminologies used for ASB

The variety of terminologies used to define antisocial behaviour makes the literature more ambiguous. For example, in some cases (Patrick, 2010; Stephens, 2014), the terminologies used to identify antisocial behaviours could hold different meanings. The term “meanness” is used for “relational aggression” (Stephens, 2014), a subtype of antisocial behaviour and for “callousness” (Patrick, 2010). The term “relational aggression” is defined as harmful behaviours through damage of relationships (e.g. Czar, Dahlen, Bullock, & Nicholson, 2011) and “callousness” has been defined as a state in which emotional reactivity is low or absent in response to distress of others (e.g. Gupta & Beach, 2003). In another example, the literature does not indicate the difference between “reactive aggression”, “emotional aggression”, and “hyper reactive aggression” (Dodge, 2009). We might surmise that “reactive aggression”, “emotional aggression”, and “hyper reactive aggression” are different terms for the same concepts, or indicate the degree of intensity of emotional aggression. In another example, non-aggressive behaviour may not always refer to delinquency or rule breaking behaviours (Maughan et al., 2000). Non-aggressive behaviour may refer to docile behaviours involving negotiation or delegating the matter to authority (Mayberry & Espelage, 2007). With respect to the term “aggression”, aggression does not only refer to mild physical aggression (Burt, 2012). Aggression can refer to violent offender categories, which can be subdivided into under-controlled/psychopath type and over-controlled/inhibited/controlled type. The under-controlled are more likely to be impulsive and display externalising behaviours, while the over-controlled are more likely to be shy, withdrawn and anxious (Chambers, 2010). Aggression is a more intense antisocial category involving cruelty, destruction, disobedience, as compared to non-aggressive behaviours or delinquency involving rule breaking behaviours such as lying, cheating, truancy, and stealing (e.g. Logan-Greene & Jones, 2015).

Attempted classification

The use of numerous terminologies and definitions of those terminologies such as physically aggressive versus non-aggressive, aggression versus delinquency, direct versus indirect, and their further sub-categories in various studies on personality disorders and ASB, makes ASB hard to review and evaluate.

From a legal perspective, the concept of a 'covert ASB' (Patterson & Yoerger, 1999) is a contradiction in terms, but the concept has considerable significance in understanding the underlying aetiology. Given the confusion in the literature noted

above, we consider that the first step in classification is to distinguish between 'description' and 'understanding'. We start with an attempt at developing a classification for the different types of ASB.

Classifying ASB in terms of behaviour

From a legal perspective, the key dimensions for classifying a proscribed behavior are in terms of behavior type (for example, trespass versus burglary), intent (for example, litter versus graffiti), impact (for example, wounding versus grievous bodily harm) and affect/premeditation (for example, in US distinction between murder in the first degree and third degree). We believe that these dimensions are of value both for describing the behaviour of ASB and the underlying causes of ASB. Given the importance of maintaining and developing the links with the legal and theoretical requirements of the science of ASB, we will start by using these four dimensions as an initial classification tree.

Behaviour type

The distinction between physically aggressive and non-aggressive ASB is an important one, with a third dimension of verbal aggression being necessary for clarity.

Behaviour intent

The key issue here is whether there is actually intent to behave anti-socially, or whether (as say in the case of litter, or late-night noise or putting out the rubbish on the wrong day) the outcome is an unintended consequence of the action.

Behaviour impact

The impact of ASB can vary from minor antisocial behaviours such as cheating (McTernan, Love, & Rettinger, 2014) to serious offences such as fire-setting (Johnson, 2015). Therefore, antisocial behaviours vary in terms of impact from mild to extreme forms (Buckels, 2012; Pardini & Byrd, 2012; Stephens, 2014).

Behaviour affect

The distinction between 'spur of the moment' and 'premeditated' corresponds directly with the hot and cold categories developed by theorists. We label them as Affect here to highlight the presence or absence of emotional dimension.

Behaviour mode

While less important for legal purposes, it is crucial to consider the mode of ASB – whether it is personal and interactive (face-to-face), personal non-interactive (as, say, spreading rumours) or impersonal (as, say, in generic graffiti). It is likely that different personality types will be involved in different behaviour modes.

Table 1:

A categorisation of the subtypes of ASB in terms of the description of the behaviour

Behaviour	Type	Intent	Impact	Affect	Mode
Using weapon, hitting, pushing, throwing stones, and sexual crimes towards people and animal cruelty	Physically aggressive	Yes	Moderate to Extreme	Yes	Personal-interactive
Defiance, arguing, shouting, verbal abuse	Verbally aggressive	Varies	Varies	Yes	Personal-interactive
Football hooligan	Verbally and/or physically aggressive	Yes	Varies	Yes	Personal-interactive
Threatening/emotional abuse	Verbally/Non-aggressive	Varies	Varies	Varies	Varies
Bullying, calling names	Verbally aggressive	Yes	Varies	Yes	Personal-interactive/ Personal non-interactive
Internet troll	Verbally aggressive	Yes	Varies	Yes	Personal non-interactive
Silence- mean girl behaviour or micro aggression	Non-aggressive	Yes	Varies	No	Personal-interactive/ Personal non-interactive
Drug use, drinking, smoking	Non-aggressive	Varies	Varies	Yes	Personal-interactive
Breaking traffic rules, underage driving	Non-aggressive	Yes	Varies	Yes	Impersonal

Late night noise	Non-aggressive	No	Mild to medium	No	Impersonal
Litter	Non-aggressive	Yes	Mild	No	Impersonal
Damage to property	Non-aggressive	Yes	Varies	Varies	Impersonal
Lying, cheating, forgery, theft	Non-aggressive	Yes	Varies	Yes	Personal non-interactive
Truancy	Non-aggressive	Varies	Varies	Yes	Personal non-interactive
Public rowdiness, driving aggression	Non-aggressive	Yes	Varies	Yes	Varies
Late/improper (late card payment, tax or failing to fulfill financial obligation)	Non-aggressive	Varies	Varies	No	Varies

Table 1 provides an attempt to use this classification system for a series of different forms of ASB

Classifying ASB in terms of cause

The above analyses permit the classification of the behaviours of ASB, which is important for legal purposes. From a psychological perspective, however, understanding the causes of ASB is a crucial step in addressing the aetiology and prevention. We consider that the hot/cold dimension (Kaufman, 2007) outlined above provides an important link (Babcock, 2014; Pardini & Byrd, 2012), and this provides the first part of our classification tree. Next, the hot and cold categories are subdivided into mode – personal vs impersonal, interactive vs non-interactive. This distinction clarifies the confusion about overt and covert subtypes (Eisenberg, 2010; Kaufman, 2007; Mayberry & Espelage, 2007). Then the hot and cold categories are linked to aetiology (Ojanen & Kiefer, 2013; Klahr et al., 2014), and developmental trajectories (Maughan, 2005; Ojanen & Kiefer, 2013; Tremblay, 2013; Vitaro et al., 2006). The correlates (Esin, Dursun, Acemoğlu, & Baykara, 2015; Sengupta, Fortier, Thakur, Bhat, Grizenko, & Joober, 2015; e.g. Tyrer, 2015) and consequences of hot and cold categories (American-Psychiatric-Association, 2000; B. Maughan et al., 2000; Rowe et al., 2004) are also considered.

Table 2

A categorisation of the subtypes of ASB in terms of the theoretical understanding

Main types		References
	Hot blooded ASB	Cold blooded ASB (e.g. Kaufman, 2007).
Subtypes of antisocial behaviours	<u>Personal interactive:</u> Reactive, Reactive physical, Impulsive (lack of control; spontaneous)	<u>Personal non-interactive/Impersonal:</u> Proactive/instrumental, bullying, Premeditated (planned) <u>Personal interactive:</u> Proactive physical
	<u>Personal non-interactive:</u> Relational	<u>Impersonal:</u> Instrumental (Fassnacht, 2010).
	<u>Personal interactive:</u> Confrontational	<u>Personal non-interactive:</u> Non-confrontational (Xie, Swift, Cairns, & Cairns, 2002).
	<u>Personal interactive:</u> Physically aggressive/Aggressive (Actual/threatened physical/verbal aggression) towards people and animals	<u>Personal non-interactive/Impersonal:</u> Non-aggressive, (Actual/threatened physical aggression towards others' possessions such as Vandalism and theft)
	<u>Personal</u>	<u>Personal non-</u> (e.g. American-Psychiatric-Association, 2000; B. Maughan et al., 2000; Rowe et al., 2004).

	<u>interactive:</u> Physical (literally physical- in contact)	<u>interactive:</u> Non- physical (no physical contact or touch involved; teasing and threatening)	
	<u>Personal interactive:</u> Physical/Verbal <u>Personal non- interactive:</u> Verbal (including threats) e.g. domestic violence	<u>Personal non- interactive</u> <u>/Impersonal:</u> Social/Relational/Indi rect e.g. domestic violence	(e.g. Marsee & Frick, 2007; McEvoy, Estrem, Rodriguez, & Olson, 2003; Pursoo, 2013; Underwood et al., 2001; Vitaro et al., 2006; Waasdorp, Baker, Paskewich, & Leff, 2013).
	<u>Personal interactive/</u> <u>Personal non- interactive:</u> Physical/verbal/r elational	<u>Docile/Uninvolved/ Harmless:</u> Non- aggressive (problem solving, withdrawal or socially appropriate)	(Eisenberg, 2010; Kaufman, 2007; Mayberry & Espelage, 2007).
	<u>Personal interactive:</u> Direct Bullying/aggress ion)	<u>Personal non- interactive:</u> Indirect (bullying/aggression)	(e.g. Kaukiainen et al., 1999; Muñoz, Qualter, & Padgett, 2011; van Heerebeek, 2010).
	<u>Personal interactive:</u> Secondary psychopathy	<u>Personal non- interactive:</u> Primary psychopathy	(Chambers, 2010; Del Gaizo & Falkenbach, 2008; Kimonis, Frick, Cauffman, Goldweber, & Skeem, 2012).
	<u>Personal interactive:</u> Under- controlled: primary and secondary psychopath	<u>Personal Non- interactive/Imperso nal:</u> Controlled and inhibited	(Chambers, 2010).
	<u>Personal interactive:</u> Inhibited/Over- controlled	<u>Personal non- interactive:</u> Controlled	(Chambers, 2010).
	<u>Personal interactive:</u> Aggression, and Delinquency (sexual crime, physical contact)	<u>Personal non- interactive/Imperso nal:</u> Delinquency/Mild ASB	(e.g. Marsee, Silverthorn, & Frick, 2005; Rowe, Rijdsdijk, Maughan, Eley, & Hosang, 2008).
	<u>Personal interactive/Imp ersonal:</u> Early	<u>Personal non- interactive/Imperso nal:</u> Late onset/adult	(e.g. Maughan, 2005; Ojanen & Kiefer, 2013; Tremblay, 2013; Vitaro et al., 2006).

	onset/life-course persistent	onset	
	<u>Personal interactive/Impersonal</u> : Genetic and environmental	<u>Personal non-interactive/ Personal Interactive /Impersonal</u> : Environmental	(e.g. Klahr, Klump, & Burt, 2014; Recoquillay et al., 2013).
	<u>Personal interactive/ Personal non-interactive/Impersonal</u> : ASB (antisocial behaviour) without CU (callous and unemotional) traits	<u>Personal non-interactive/ Personal Interactive /Impersonal</u> : ASB with CU traits	(e.g. Crapanzano et al., 2010; Stringaris & Goodman, 2009).
	<u>Personal interactive/ Personal non-interactive /Impersonal</u> : Anxious	<u>Personal interactive/Personal non-interactive/Impersonal</u> : Sadistic	(e.g. Buckels, 2012; Dorfman, Meyer-Lindenberg, & Buckholtz, 2014; Proulx & Beaugard, 2014; Swogger, Walsh, Christie, Priddy, & Conner, 2014).
	<u>Personal non-interactive/Personal interactive/Impersonal</u> : OCD, ODD, CD, ADHD, disruptive disorders involving physically aggressive and self destructive behaviours; ASPD, ODD, CD neurodevelopmental in origin	<u>Personal non-interactive/ Personal interactive /Impersonal</u> : OCD, ODD, CD, ADHD, disruptive disorders, involving rule breaking behaviours	e.g. Esin, Dursun, Acemoğlu, & Baykara, 2015; Kapalka, 2015; Sengupta, Fortier, Thakur, Bhat, Grizenko, & Joobar, 2015; e.g. Tyrer, 2015.

The results of this classification system may be seen in Table 2. The correlates and the consequences cannot be grouped into hot and cold categories due to the overlapping characteristics of the correlates (Esin, Dursun, Acemoğlu, & Baykara,

2015; Sengupta, et. al., 2015; Tyrer, 2015) and the consequences (Yektatalab, Alipour, Edraki, & Tavakoli, 2015; Conner, Swogger, & Houston, 2009; also see table 1). For example, obsessive-compulsive disorder and attention-deficit hyperactivity disorder as correlates can represent both hot and cold categories (Esin et. al., 2015; Sengupta et. al., 2015; Tyrer, 2015). Consequences such as school dropout, self-harm (Yektatalab et. al., 2015; Conner, Swogger, & Houston, 2009; also see table 1), physical injury (Ferrah et. al., 2015; Skervin, Palmer, & Pascal, 2015), mental trauma (Mahishale & Mahishale, 2015), broken homes (Laeheem & Boonprakarn, 2014), disability and death (Breiding & Armour, 2015; Thomson et. al., 2015) are examples of outcomes of both hot and cold categories.

Summary and conclusions

In our introduction, we highlighted the need for synergy between the legal and psychological approaches to ASB, stressing the need for observable classifications for legal purposes while supporting further analysis for psychological purposes so as to facilitate treatment or intervention. We first highlighted the need to distinguish between ASB as a set of behaviours (as needed for any legal interpretation) and ASB as a syndrome requiring further analysis (as required for a theoretical approach).

Following a review of the academic literature, we made a fundamental theoretical distinction between hot ASB and cold ASB, based on the analysis of executive function in cognition and also reflects the important legal distinction between premeditated and heat of the moment reactions. The hot category is more likely to be early onset, caused due to genetic reasons, involve direct and physically aggressive behaviours and involve people as victims instead of objects. The cold category is more likely to be late onset, develop due to environmental reasons and involve indirect antisocial behaviours that can involve objects as victims or sophisticated methods of aggression (Burt et. al., 2015). These two categories are not mutually exclusive; their characteristics may overlap depending on the combination of factors such as gender, IQ, age, age of onset, developmental trajectory, comorbidity with other problems, psychopathology, intensity, and epigenetic factors. We then developed a classification system for the behavioural dimension of ASB in terms of five dimensions: Type, Intent, Impact, Affect and Mode. This classification applies well to the theoretical analyses, providing valuable insights in terms of aetiology, developmental trajectories, correlates and consequences of ASB.

The hot and cold types were further sub-classified into Mode subtypes based on the type of interaction of antisocial behaviours. Three categories were provided for Mode: interactive personal, non-interactive personal and impersonal. The hot interactive (personal and impersonal) subtypes would refer to 'heat of the moment' displayed ASB whereas cold interactive subtypes could refer to comparatively hidden ASB.

The hot interactive personal subtype can refer to reactive aggression, direct aggression, physical aggression, and confrontation, and includes intimate partner violence (Breiding & Armour, 2015), and impulsive acts such as hitting someone, throwing stones at someone, or trying to snatch something someone is wearing (Burt, 2012). The hot non-interactive personal subtype may refer to inhibited, suppressed, and relational aggression (Hester et. al., 2015; Thomson et. al., 2015). For example, running away from home, (Havik, Bru, & Ertesvåg, 2015), obvious social exclusion,

verbally aggressive ASB, use of social media to harm reputation and relationships, and nonverbal gestures might be characterized as hot non-interactive personal subtypes (Dailey, Frey, & Walker, 2015). The hot-impersonal subtype may include 'spur of the moment' theft, shoplifting, breaking into a car/van to steal a visible item (Burt, 2012).

In contrast to the hot and impulsive ASB, the cold type is pre-planned behaviour designed to achieve a certain goal and may be manipulative and hard to detect. The cold interactive subtype might refer to manipulative non-aggressive behaviours such as unobvious relational aggression, imperceptible micro-aggressions, non-verbal insulting body language. For example, subtle forms of emotional abuse, lying and relationship cheating could be examples of cold interactive subtype (McTernan et. al., 2014; Stephens, 2014). The cold non-interactive subtype might refer to indirect aggression, proactive/premeditated aggression, non-confrontational aggression, controlled/primary psychopath type, delinquency and subtle forms of aggression. For example, cold non-interactive ASB could involve using other people to physically attack people, damaging someone's reputation through written complaint, spreading rumours, indirect verbally aggressive ASB, and planned sophisticated murders (Chambers, 2010; Pursoo, 2013; Yu et. al., 2015). The cold non-interactive subtype may also involve non-apparent, imperceptible non-aggressive behaviours such as creating misunderstandings between people, misguiding or manipulating others to advance one's own career, and so on (Czar, Dahlen, Bullock, & Nicholson, 2011; Schmeelk, Sylvers, & Lilienfeld, 2008). The cold impersonal could involve planned theft, selling illegal drugs, introducing computer viruses into the internet web, and facilitation of planned behaviours to rob others of their property or to damage their possessions (Blakely, 2012; Burt, 2012; Morgan, Batastini, Murray, Serna, & Porras, 2015).

The hot and cold categories of antisocial behaviours follow different developmental trajectories depending on the correlates such as personality or developmental disorders, aetiology, gender, and age. Certain antisocial behaviours can belong to both hot and cold categories (Lo, Waring, Pagoto, & Lemon, 2015) depending on the correlates or context of antisocial behaviour. For example, antisocial behaviour with callous and unemotional (CU) traits (Crapanzano et al., 2010; Stringaris & Goodman, 2009; Dodge, 2009) can belong to both hot and cold categories and can be interactive or non-interactive depending on the correlates of CU traits (Berg, Hecht, Latzman, & Lilienfeld, 2015; Roşan, Frick, Gottlieb, & Faşicaru, 2015; Waschbusch, Walsh, Andrade, King, & Carrey, 2007). CU traits accompanied with depression and anxiety can be manifested in the form of physical aggression as compared to CU traits with low levels of anxiety and depression (Roşan et. al., 2015). In another example, in the context of antisocial behaviour, sadistic behaviour is likely to be interactive such as enjoyment of animal and human targeted aggression (Buckels, 2012; Vachon & Lynam, 2015) but it may occur in non-interactive forms such as mean girl behaviour (Stephens, 2014).

In terms of age of onset and aetiology, early onset ASB is more likely to be genetic and likely to persist throughout life (see table 1). Maleness (Piotrowska, Stride, Croft, & Rowe, 2015) and a lower IQ are related to antisocial behaviours (Macvarish, Lee, & Lowe, 2015). However, IQ may not be low in psychopathy possibly due to positive affective features of psychopathy (de Tribolet-Hardy, Vohs, Mokros, & Habermeyer,

2014). IQ may be average in relation to antisocial behaviours in the context of development disorders such as high functioning autism (Chandler, Howlin, Simonoff, O'Sullivan, Tseng et. al., 2015; Green, Dissanayake, & Loesch, 2015). Hence the development of antisocial behaviour involves multiple determinants.

We also classified antisocial behaviours in terms of their consequences. These include people victims, object victims, self-harm, suicide, job, school and marriage failure. Following the current classification, future researchers may be able to understand the current discoveries and build upon the existing research (Table 1 and Table 2) because several issues still need to be addressed. For example there is limited research on female antisocial behaviour. As another example, the developmental trajectories of mild antisocial behaviour in terms of unintended irresponsibility and mood problems have not been explored.

The hot and cold categories are linked to the developmental trajectories of antisocial behaviour, which are the aetiological factors including genetic, environmental, epigenetic factors (Recoquillay et al., 2013), other correlates are gender, age of onset, IQ, (Moffitt, 1993; Piotrowska et. al., 2015; Macvarish et. al., 2015) and personality disorders/developmental disorders/disruptive disorders (Sengupta et. al., 2015) as well as intensity of the antisocial behaviour on a continuum from mild to extreme (Buckels, 2012; Pardini & Byrd, 2012; Stephens, 2014). Examples of personality/developmental/disruptive disorders are Antisocial personality disorder, Attention deficit hyperactivity disorder, Oppositional defiance disorder, and Psychopathy (e.g. Tyrer, 2015; see Table 2). Antisocial behaviour might also occur with depression, substance abuse and other mental disorders (see Table 2; Bergen, Martin, Richardson, Allison, & Roeger, 2004; Ritakallio et. al., 2008). In terms of intensity, the mild category can include mood disorders/problems or maladjusted behaviour (Blatt, 2006; Khanna, Shaw, Dolan, & Lennox, 2014; Price, Turnbull, Gregory, & Stevens, 1989) whereas the extreme forms can include physical violence such as hitting others or rule breaking behaviours such as theft, and vandalism (Burt, 2012).

In conclusion, the 5-dimension descriptive system of Type, Intent, Impact, Affect and Mode provides a descriptive system capable of direct application in the legal system, and it also underpins our theoretical analysis, which highlights the importance of the Type, Affect and Mode dimensions in the understanding of the aetiology of ASB. While capable of considerable further refinement, this classification holds out the promise of developing a fruitful agenda for developing of psychological assessments and treatments that are optimally aligned with the personal characteristics of the perpetrators of ASB.

References

- American Psychiatric Association. (2000). *Diagnostic and statistical manual of mental disorders: DSM-IV-TR®*. American Psychiatric Pub.
- American Psychiatric Association. (2013). *Diagnostic and statistical manual of mental disorders* (5th ed.). Washington, DC: Author.
- Ansel, L. L., Barry, C. T., Gillen, C. T., & Herrington, L. L. (2014). An analysis of four self-report measures of adolescent callous-unemotional traits: Exploring unique prediction of delinquency, aggression, and conduct problems. *Journal of Psychopathology and Behavioral Assessment*, 37(2), 207-216.
- Babcock, J. C., Tharp, A. L., Sharp, C., Heppner, W., & Stanford, M. S. (2014). Similarities and differences in impulsive/premeditated and reactive/proactive bimodal classifications of aggression. *Aggression and Violent Behavior*, 19(3), 251-262.
- Banny, A. M., Tseng, W. L., Murray-Close, D., Pitula, C. E., & Crick, N. R. (2014). Borderline personality features as a predictor of forms and functions of aggression during middle childhood: Examining the roles of gender and physiological reactivity. *Development and Psychopathology*, 26(03), 789-804.
- Barrowcliffe, E., & Gannon, T. A. (2015). The characteristics of un-apprehended firesetters living in the UK Community. *Psychology, Crime & Law*, (In Press), 1-36.
- Berg, J. M., Hecht, L. K., Latzman, R. D., & Lilienfeld, S. O. (2015). Examining the correlates of the coldheartedness factor of the Psychopathic Personality Inventory–Revised. *Psychological Assessment*, (Brief Report), 1-6. PsycARTICLES Database.
- Bergen, H. A., Martin, G., Richardson, A. S., Allison, S., & Roeger, L. (2004). Sexual abuse, antisocial behaviour and substance use: Gender differences in young community adolescents. *Australian and New Zealand Journal of Psychiatry*, 38(1-2), 34-41.
- Blakely, B. A. (2012). *Cyberprints: Identifying cyber attackers by feature analysis*. (Doctoral dissertation, Paper 12280), Digital repository, Graduate Theses and Dissertations, Iowa State University, Iowa, USA.
- Blatt, S. J. (2006). A personal odyssey. *Journal of Personality Assessment*, 87(1), 1-14.
- Book, A. S., Volk, A. A., & Hosker, A. (2012). Adolescent bullying and personality: An adaptive approach. *Personality and Individual Differences*, 52(2), 218-223. doi: 10.1016/j.paid.2011.10.028
- Breiding, M. J., & Armour, B. S. (2015). The association between disability and intimate partner violence in the United States. *Annals of Epidemiology*, 25(6), 455-457.
- Buckels, E. E. (2012). *The pleasures of hurting others: Behavioural evidence for everyday sadism*. (Doctoral dissertation), University of British Columbia, Vancouver, Canada.
- Burt, S. A. (2012). How do we optimally conceptualize the heterogeneity within antisocial behavior? An argument for aggressive versus non-aggressive behavioral dimensions. *Clinical Psychology Review*, 32(4), 263-279.
- Burt, S. A., Rescorla, L. A., Achenbach, T. M., Ivanova, M. Y., Almqvist, F., Begovac, I., ... & Verhulst, F. C. (2015). The association between aggressive and non-

- aggressive antisocial problems as measured with the Achenbach System of Empirically Based Assessment: A study of 27,861 parent–adolescent dyads from 25 societies. *Personality and Individual Differences*, 85, 86-92. doi: 10.1016/j.paid.2015.04.036
- Carroll, A. (2009). Are you looking at me? Understanding and managing paranoid personality disorder. *Advances in Psychiatric Treatment*, 15(1), 40-48.
- Centifanti, L. C. M., Kimonis, E. R., Frick, P. J., & Aucoin, K. J. (2013). Emotional reactivity and the association between psychopathy-linked narcissism and aggression in detained adolescent boys. *Development and Psychopathology*, 25(2), 473-485. doi: 10.1017/s0954579412001186
- Chambers, J. C. (2010). An exploration of the mechanisms underlying the development of repeat and one-time violent offenders. *Aggression and Violent Behavior*, 15(4), 310-323. doi: 10.1016/j.avb.2010.03.002
- Chandler, S., Howlin, P., Simonoff, E., O'Sullivan, T., Tseng, E., Kennedy, J., Charman, T., & Baird, G. (2015). Emotional and behavioural problems in young children with autism spectrum disorder. *Developmental Medicine & Child Neurology*, (In Press), 1-7. Wiley Online Library. doi: 10.1111/dmcn.12830
- Charles, N. E., Acheson, A., Mathias, C. W., Michael Furr, R., & Dougherty, D. M. (2012). Psychopathic traits and their association with adjustment problems in girls. *Behavioral Sciences & the Law*, 30(5), 631-642.
- Colins, O. F. (2015). Assessing reactive and proactive aggression in detained adolescents outside of a research context. *Child Psychiatry & Human Development*, 1-14. Retrieved from: <http://link.springer.com/article/10.1007/s10578-015-0553-z>
- Conner, K. R., Duberstein, P. R., Conwell, Y., & Caine, E. D. (2003). Reactive aggression and suicide: Theory and evidence. *Aggression and Violent Behavior*, 8(4), 413-432.
- Conner, K. R., Swogger, M. T., & Houston, R. J. (2009). A test of the reactive aggression-suicidal behavior hypothesis: Is there a case for proactive aggression? *Journal of Abnormal Psychology*, 118(1), 235.
- Crapanzano, A. M., Frick, P. J., & Terranova, A. M. (2010). Patterns of physical and relational aggression in a school-based sample of boys and girls. *Journal of Abnormal Child Psychology*, 38(4), 433-445. doi: 10.1007/s10802-009-9376-3
- Czar, K. A., Dahlen, E. R., Bullock, E. E., & Nicholson, B. C. (2011). Psychopathic personality traits in relational aggression among young adults. *Aggressive Behavior*, 37(2), 207-214.
- Dailey, A. L., Frey, A. J., & Walker, H. M. (2015). Relational aggression in school settings: Definition, development, strategies, and implications. *Children & Schools*, 37(2), 79-88.
- Danaf, M., Abou-Zeid, M., & Kaysi, I. (2015). Modeling anger and aggressive driving behavior in a dynamic choice–latent variable model. *Accident Analysis & Prevention*, 75, 105-118.
- de Tribolet-Hardy, F., Vohs, K., Mokros, A., & Habermeyer, E. (2014). Psychopathy, intelligence, and impulsivity in German violent offenders. *International Journal of Law and Psychiatry*, 37(3), 238-244.

Del Gaizo, A. L., & Falkenbach, D. M. (2008). Primary and secondary psychopathic traits and their relationship to perception and experience of emotion. *Personality and Individual Differences, 45*(3), 206 - 212. doi: <http://dx.doi.org/10.1016/j.paid.2008.03.019>

Dodge, K. A. (2009). Mechanisms of gene-environment interaction effects in the development of conduct disorder. *Perspectives on Psychological Science, 4*(4), 408-414.

Dorfman, H. M., Meyer-Lindenberg, A., & Buckholtz, J. W. (2014). Neurobiological mechanisms for impulsive-aggression: The role of MAOA. In K.A. Miczek, & A. Meyer-Lindenberg (Eds.), *Neuroscience of Aggression: Current Topics in Behavioral Neurosciences, 17*. (pp. 297-313). Springer Berlin Heidelberg.

Eisenberg, N., Eggum, N. D., & Di Giunta, L. (2010). Empathy-related responding: associations with prosocial behavior, aggression, and intergroup relations. *Social Issues and Policy Review, 4*(1), 143-180.

El Hatw, M. M., El Taher, A. A., El Hamidi, A., & Alturkait, F. A. (2015). The association of exposure to the 2009 south war with the physical, psychological, and family well-being of Saudi children. *Saudi Medical Journal, 36*(1),73.

Eman, S., Nicolson, R.I., & Blades, M. (2014). Understanding antisocial behaviors: the roles of sensation seeking and subtypes of empathy. In *ISSN: 2189-1087- The IAFOR North American Conference on Psychology & the Behavioral Sciences 2014: Official Conference Proceedings* (pp. 43-63). Providence, RI: The International Academic Forum: international, intercultural, interdisciplinary. Retrieved from http://iafor.org/archives/proceedings/NACP/NACP2014_proceedings.pdf

Esin, İ. S., Dursun, O. B., Acemoğlu, H., & Baykara, B. (2015). Psychopathology and related psychosocial factors in children with office discipline referrals at school: Evidence from a developing country. *Community Mental Health Journal, 1-12*. doi: 10.1007/s10597-015-9861-9

Fassnacht, G. (2010). *Exploring the moderating effects of CU traits on the relationship between social intelligence and aggression*. (Master of Science in psychology), University of New Orleans, New Orleans, USA. Retrieved from <http://scholarworks.uno.edu/cgi/viewcontent.cgi?article=2169&context=td>

Ferrah, N., Murphy, B. J., Ibrahim, J. E., Bugeja, L. C., Winbolt, M., LoGiudice, D., Flicker, L., & Ranson, D. L. (2015). Resident-to-resident physical aggression leading to injury in nursing homes: A systematic review. *Age and Ageing, 44*(3), 356-364.

Fontaine, N., Carbonneau, R., Vitaro, F., Barker, E. D., & Tremblay, R. E. (2009). Research review: A critical review of studies on the developmental trajectories of antisocial behavior in females. *Journal of Child Psychology and Psychiatry, 50*(4), 363-385. doi: 10.1111/j.1469-7610.2008.01949.x

Green, C., Dissanayake, C., & Loesch, D. (2015). A review of physical growth in children and adolescents with Autism Spectrum Disorder. *Developmental Review, 36*, 156-178. doi:10.1016/j.dr.2015.02.001

Gupta, M., & Beach, S. R. H. (2003). *Animal abuse and callousness: Predicting frequency and severity of partner directed physical violence in men*. (Unpublished Master's thesis). University of Georgia, Athens, Georgia.

Havik, T., Bru, E., & Ertesvåg, S. K. (2015). School factors associated with school refusal-and truancy-related reasons for school non-attendance. *Social Psychology of Education, 18* (2), 221-240. doi: 10.1007/s11218-015-9293-y

Hester, M., Ferrari, G., Jones, S. K., Williamson, E., Bacchus, L. J., Peters, T. J., & Feder, G. (2015). Occurrence and impact of negative behaviour, including domestic violence and abuse, in men attending UK primary care health clinics: A cross-sectional survey. *British Medical Journal Open, 5*(5), 1-10.

Hodgins, S. (2004). Criminal and antisocial behaviours and schizophrenia: A neglected topic. In W. F. Gattaz & H. Häfner (Eds.), *Search for the causes of schizophrenia*, Vol. V (pp. 315-341). Darmstadt, Germany: Steinkopff Verlag.

Johnson, R. (2015). Towards an evidence-based clinical forensic diagnostic assessment framework for juvenile fire setting and bomb making: DSM-5 quadrant. *Journal of Forensic Psychology Practice, 15*(3), 275-293.

Kapalka, G. M. (Ed.). (2015). *Treating disruptive disorders: A guide to psychological, pharmacological, and combined therapies*. New York, NY: Routledge.

Kaufman, L. B. (2007). *Empathic and socio-cognitive deficits of adjudicated adolescents: differences by gender and callous-unemotional traits*. (Doctoral Dissertation). University of Vermont, Burlington, VT, USA.

Kaukiainen, A., Bjorkqvist, K., Lagerspetz, K., Osterman, K., Salmivalli, C., Rothberg, S., & Ahlbom, A. (1999). The relationships between social intelligence, empathy, and three types of aggression. *Aggressive Behavior, 25*(2), 81-89.

Kaartinen, M., Puura, K., Helminen, M., Salmelin, R., Pelkonen, E., & Juujärvi, P. (2014). Reactive aggression among children with and without autism spectrum disorder. *Journal of Autism and Developmental Disorders, 44*(10), 2383-2391.

Khanna, D., Shaw, J., Dolan, M., & Lennox, C. (2014). Does diagnosis affect the predictive accuracy of risk assessment tools for juvenile offenders: Conduct disorder and attention deficit hyperactivity disorder. *Journal of Adolescence, 37*(7), 1171-1179.

Kimonis, E. R., Frick, P. J., Cauffman, E., Goldweber, A., & Skeem, J. (2012). Primary and secondary variants of juvenile psychopathy differ in emotional processing. *Development and Psychopathology, 24*(03), 1091-1103. doi: 10.1017/S0954579412000557

Klahr, A. M., Klump, K. L., & Burt, S. A. (2014). The etiology of the association between child antisocial behavior and maternal negativity varies across aggressive and non-aggressive rule-breaking forms of antisocial behavior. *Journal of Abnormal Child Psychology, 42*(8), 1299-1311.

Laeheem, K., & Boonprakarn, K. (2014). Domestic violence behaviors between spouses in Thailand. *Asian Social Science, 10*(16), 152-159.

Langos, C. (2012). Cyberbullying: The challenge to define. *Cyberpsychology Behavior and Social Networking, 15*(6), 285-289. doi: 10.1089/cyber.2011.0588

Lo, C. B., Waring, M. E., Pagoto, S. L., & Lemon, S. C. (2015). A television in the bedroom is associated with higher weekday screen time among youth with attention deficit hyperactivity disorder (ADD/ADHD). *Preventive Medicine Reports, 2* (Brief Original Report), 1-3. doi:10.1016/j.pmedr.2014.11.001

- Logan-Greene, P., & Jones, A. S. (2015). Chronic neglect and aggression/delinquency: A longitudinal examination. *Child Abuse & Neglect, 45*, 9-20. doi:10.1016/j.chiabu.2015.04.003
- Macvarish, J., Lee, E., & Lowe, P. (2015). Neuroscience and family policy: What becomes of the parent? *Critical Social Policy, 35*(2), 248-269.
- Mahishale, V., & Mahishale, A. (2015). Violence against women: Role of healthcare systems. *Journal of the Scientific Society, 42*(2), 57.
- Marsee, M. A., & Frick, P. J. (2007). Exploring the cognitive and emotional correlates to proactive and reactive aggression in a sample of detained girls. *Journal of Abnormal Child Psychology, 35*(6), 969-981.
- Marsee, M. A., Silverthorn, P., & Frick, P. J. (2005). The association of psychopathic traits with aggression and delinquency in non-referred boys and girls. *Behavioral Sciences & the Law, 23*(6), 803-817. doi: 10.1002/bsl.662
- Maughan, B. (2005). Developmental trajectory modeling: A view from developmental psychopathology. *The ANNALS of the American Academy of Political and Social Science, 602*(1), 118-130. doi: 10.1177/0002716205281067
- Maughan, B., Pickles, A., Rowe, R., Costello, E. J., & Angold, A. (2000). Developmental trajectories of aggressive and non-aggressive conduct problems. *Journal of Quantitative Criminology, 16*(2), 199-221. doi: 10.1023/a:1007516622688
- Mayberry, M. L., & Espelage, D. L. (2007). Associations among empathy, social competence, & reactive/proactive aggression subtypes. *Journal of Youth and Adolescence, 36*(6), 787-798. doi: 10.1007/s10964-006-9113-y
- McEvoy, M. A., Estrem, T. L., Rodriguez, M., & Olson, M. L. (2003). Assessing relational and physical aggression among preschool children: Intermethod agreement. *Topics in Early Childhood Special Education, 23*(2), 53-63.
- McTernan, M., Love, P., & Rettinger, D. (2014). The influence of personality on the decision to cheat. *Ethics & Behavior, 24*(1), 53-72.
- Milojević, S. Z., & Dimitrijevic, A. (2014). Empathic capacity of delinquent convicted minors. *Psihologija, 47*(1), 65-79.
- Moffitt, T. E. (1993). Adolescence-limited and life-course-persistent antisocial behavior: A developmental taxonomy. *Psychological Review, 100*(4), 674-701.
- Morgan, R. D., Batastini, A. B., Murray, D. D., Serna, C., & Porras, C. (2015). Criminal thinking a fixed or fluid process? *Criminal Justice and Behavior*, (In Press), 1-21. doi: 10.1177/0093854815578948
- Muncie, J. (1999). Institutionalized intolerance: Youth justice and the 1998 Crime and Disorder Act. *Critical Social Policy, 19*(2), 147-175.
- Muñoz, L. C., Qualter, P., & Padgett, G. (2011). Empathy and bullying: Exploring the influence of callous-unemotional traits. *Child Psychiatry & Human Development, 42*(2), 183-196.
- Ojanen, T., & Kiefer, S. (2013). Instrumental and reactive functions and overt and relational forms of aggression: Developmental trajectories and prospective associations during middle school. *International Journal of Behavioral Development, 37*(6), 514-517. doi: 10.1177/0165025413503423

- Ortega, R., Elipe, P., Mora-Merchán, J. A., Calmaestra, J., & Vega, E. (2009). The emotional impact on victims of traditional bullying and cyberbullying: A study of Spanish adolescents. *Zeitschrift für Psychologie*, 217(4), 197-204.
- Pardini, D. A., & Byrd, A. L. (2012). Perceptions of aggressive conflicts and others' distress in children with callous-unemotional traits: 'I'll show you who's boss, even if you suffer and I get in trouble'. *Journal of Child Psychology and Psychiatry*, 53(3), 283-291.
- Patterson, G. R., & Yoerger, K. (1999). Intraindividual growth in covert antisocial behaviour: A necessary precursor to chronic juvenile and adult arrests? *Criminal Behaviour and Mental Health*, 9(1), 24-38.
- Patrick, C. J. (2010). *Operationalizing the triarchic conceptualization of psychopathy: Preliminary description of brief scales for assessment of boldness, meanness, and disinhibition*. Unpublished test manual, Florida State University, Tallahassee, FL. Available at: <https://www.phenxtoolkit.org/index.php>, 1110-1131.
- Piotrowska, P. J., Stride, C. B., Croft, S. E., & Rowe, R. (2015). Socioeconomic status and antisocial behaviour among children and adolescents: A systematic review and meta-analysis. *Clinical Psychology Review*, 35, 47-55. Retrieved from: <http://www.sciencedirect.com/science/article/pii/S0272735814001652>
- Prencipe, A., Kesek, A., Cohen, J., Lamm, C., Lewis, M. D., & Zelazo, P. D. (2011). Development of hot and cool executive function during the transition to adolescence. *Journal of Experimental Child Psychology*, 108(3), 621-637.
- Price, D. K., Turnbull, G. J., Gregory, R. P., & Stevens, D. G. (1989). Neuroleptic malignant syndrome in a case of post-partum psychosis. *The British Journal of Psychiatry*, 155(6), 849-852.
- Proulx, J., & Beaugard, E. (2014). Pathways in the offending process of extrafamilial sexual aggressors against women. In J. Proulx, E. Beaugard, P. Lussier, & B. Leclerc (Eds.), *Pathways to sexual aggression* (pp.71-109). New York: Routledge.
- Pursoo, T. (2013). *Predicting reactive and proactive relational aggression in early adolescence as a function of individual differences in machiavellianism, empathy, and emotion regulation*. (Doctoral dissertation). University of Ottawa, Ottawa, Ontario, Canada.
- Ramirez, J. M., & Andreu, J. M. (2006). Aggression, and some related psychological constructs (anger, hostility, and impulsivity) - Some comments from a research project. *Neuroscience and Biobehavioral Reviews*, 30(3), 276-291. doi: 10.1016/j.neubiorev.2005.04.015
- Read, D., & Loewenstein, G. (1999). Enduring pain for money: Decisions based on the perception and memory of pain. *Journal of Behavioral Decision Making*, 12(1), 1-17.
- Recoquillay, J., Leterrier, C., Calandreau, L., Bertin, A., Pitel, F., Gourichon, D., Gourichon, D., Vignal, A., Beaumont, C., Le Bihan-Duval, E., Arnould, C. (2013). Evidence of phenotypic and genetic relationships between sociality, emotional reactivity and production traits in Japanese Quail. *Plos One*, 8(12), 1-11. doi: 10.1371/journal.pone.0082157

- Ritakallio, M., Koivisto, A. M., von der Pahlen, B., Pelkonen, M., Marttunen, M., & Kaltiala-Heino, R. (2008). Continuity, comorbidity and longitudinal associations between depression and antisocial behaviour in middle adolescence: A 2-year prospective follow-up study. *Journal of Adolescence*, *31*(3), 355-370.
- Roşan, A., Frick, P. J., Gottlieb, K. A., & Faşicaru, L. (2015). Callous-unemotional traits and anxiety in a sample of detained adolescents in Romania. *Journal of Evidence-Based Psychotherapies*, *15*(1), 79-95.
- Rowe, R., Maughan, B., Worthman, C. M., Costello, E. J., & Angold, A. (2004). Testosterone, antisocial behavior, and social dominance in boys: pubertal development and biosocial interaction. *Biological Psychiatry*, *55*(5), 546-552.
- Rowe, R., Rijdsdijk, F. V., Maughan, B., Eley, T. C., & Hosang, G. M. (2008). Heterogeneity in antisocial behaviours and comorbidity with depressed mood: a behavioural genetic approach. *Journal of Child Psychology and Psychiatry*, *49*(5), 526-534.
- Scheepers, F. E., Buitelaar, J. K., & Matthys, W. (2011). Conduct disorder and the specifier callous and unemotional traits in the DSM-5. *European Child & Adolescent Psychiatry*, *20*(2), 89-93.
- Schepman, K., Fombonne, E., Collishaw, S., & Taylor, E. (2014). Cognitive styles in depressed children with and without comorbid conduct disorder. *Journal of Adolescence*, *37*(5), 622-631.
- Schmeelk, K. M., Sylvers, P., & Lilienfeld, S. O. (2008). Trait correlates of relational aggression in a nonclinical sample: DSM-IV personality disorders and psychopathy. *Journal of Personality Disorders*, *22*(3), 269-283.
- Sengupta, S. M., Fortier, M. È., Thakur, G. A., Bhat, V., Grizenko, N., & Joober, R. (2015). Parental psychopathology in families of children with attention-deficit/hyperactivity disorder and exposed to maternal smoking during pregnancy. *Journal of Child Psychology and Psychiatry*, *56*(2), 122-129.
- Skervin, H. M., Palmer, S. D., & Pascal, J. L. (2015). Physical injury, as the face of violence against women in Grenada. West Indian Medical Journal Supplement, conference abstract (pp. 1-75). In *Caribbean Public Health Agency. Caribbean Public Health Agency: 60th Annual Scientific Meeting*. Kingston, The University of the West Indies. Retrieved from: <http://bases.bireme.br/cgi-bin/wxislind.exe/iah/online/?IsisScript=iah/iah.xis&src=google&base=MedCarib&lang=p&nextAction=lnk&exprSearch=18003&indexSearch=ID>
- Smith, L. (2011). *An exploration of the relationship between poor parent-child attachment and callous-unemotional traits in a sample of high-risk young offenders* (Doctoral dissertation, University College London, London, UK).
- Stephens, C. L. (2014). *Gender incivility, aggression and job satisfaction in the workplace* (Doctoral dissertation). Walden University, Minneapolis, United States.
- Sticca, F., Ruggieri, S., Alsaker, F., & Perren, S. (2013). Longitudinal Risk Factors for Cyberbullying in Adolescence. *Journal of Community & Applied Social Psychology*, *23*(1), 52-67. doi: 10.1002/casp.2136
- Stringaris, A., & Goodman, R. (2009). Three dimensions of oppositionality in youth. *Journal of Child Psychology and Psychiatry*, *50*(3), 216-223.

- Swogger, M. T., Walsh, Z., Christie, M., Priddy, B. M., & Conner, K. R. (2014). Impulsive versus premeditated aggression in the prediction of violent criminal recidivism. *Aggressive Behaviour, 41*(4), 346–352.
- Thomson, A., Tiihonen, J., Miettunen, J., Sailas, E., Virkkunen, M., & Lindberg, N. (2015). Psychopathic traits among a consecutive sample of Finnish pretrial fire-setting offenders. *BioMed Central Psychiatry, 15*(1), 44.
- Torok, M., Darke, S., Kaye, S., & Ross, J. (2011). Conduct disorder as a risk factor for violent victimization and offending among regular illicit drug users. *Journal of Drug Issues, 41*(1), 25-43.
- Tremblay, R. E. (2013). Development of antisocial behavior during childhood. In C. L. Gibson & M. D. Krohn (Eds.), *Handbook of life-course criminology* (pp. 3-19): Springer New York.
- Tyrer, P. (2015). Personality dysfunction is the cause of recurrent non cognitive mental disorder: A testable hypothesis. *Personality and Mental Health, 9*(1), 1-7.
- Tzoumakis, S., Lussier, P., Blanc, M. L., & Davies, G. (2013). Onset, offending trajectories, and crime specialization in violence. *Youth Violence and Juvenile Justice, 11*(2), 143-164. doi: 10.1177/1541204012458440
- Underwood, M. K., Galen, B. R., & Paquette, J. A. (2001). Top ten challenges for understanding gender and aggression in children: Why can't we all just get along? *Social Development, 10*(2), 248-266. doi: 10.1111/1467-9507.00162
- van Heerebeek, E. C. M. (2010). *The relationship between cognitive and affective empathy and indirect and direct aggression in Dutch adolescents*. (Masters Thesis). Utrecht University Repository, Utrecht, The Netherlands. Retrieved from <http://dspace.library.uu.nl/handle/1874/188513>
- Vachon, D. D., & Lynam, D. R. (2015). Fixing the problem with empathy development and validation of the affective and cognitive measure of empathy. *Assessment, 1*(1-15). doi:10.1177/1073191114567941
- Vitaro, F., Brendgen, M., & Barker, E. D. (2006). Subtypes of aggressive behaviors: A developmental perspective. *International Journal of Behavioral Development, 30*(1), 12-19. doi: 10.1177/0165025406059968
- Waasdorp, T. E., Baker, C. N., Paskewich, B. S., & Leff, S. S. (2013). The association between forms of aggression, leadership, and social status among urban youth. *Journal of Youth and Adolescence, 42*(2), 263-274.
- Walters, G. D. (2015). A multi-wave cross-lagged regression analysis of the Youth Psychopathic Traits Inventory and self-reported offending. *Journal of Criminal Justice* (In Press). doi:10.1016/j.jcrimjus.2015.04.002
- Waschbusch, D. A., Walsh, T. M., Andrade, B. F., King, S., & Carrey, N. J. (2007). Social problem solving, conduct problems, and callous-unemotional traits in children. *Child Psychiatry and Human Development, 37*(4), 293-305.
- White, B. A., Gordon, H., & Guerra, R. C. (2015). Callous–unemotional traits and empathy in proactive and reactive relational aggression in young women. *Personality and Individual Differences, 75*, 185-189. doi:10.1016/j.paid.2014.11.031
- Wiklund, G., Ruchkin, V. V., Kuposovc, R.A., & Klintebergd, B. A. (2014). Pro-bullying attitudes among incarcerated juvenile delinquents: Antisocial behavior,

psychopathic tendencies and violent crime. *International Journal of Law and Psychiatry*, (0). doi: <http://dx.doi.org/10.1016/j.ijlp.2013.11.019>

Woodworth, M., & Waschbusch, D. (2008). Emotional processing in children with conduct problems and callous/unemotional traits. *Child: Care, Health and Development*, 34(2), 234-244.

Xie, H., Swift, D. J., Cairns, B. D., & Cairns, R. B. (2002). Aggressive behaviors in social interaction and developmental adaptation: A narrative analysis of interpersonal conflicts during early adolescence. *Social Development*, 11(2), 205-224. doi: 10.1111/1467-9507.00195

Xu, Y., Raine, A., Yu, L., & Krieg, A. (2014). Resting heart rate, vagal tone, and reactive and proactive aggression in Chinese children. *Journal of Abnormal Child Psychology*, 42(3), 501-514.

Yektatalab, S., Alipour, A., Edraki, M., & Tavakoli, P. (2015). Types of aggression among kindergarten and preschool children of Mohr county/fars province in 2013–2014. *International Journal of School Health*, 2(1), 2-6.

Yu, Y., Gong, D., Cao, Y., Lu, M., Huang, F., & Deng, Z. (2015). A murder disguised as a medical accident: A case report of homicidal poisoning of three anesthetics. *Romanian Journal of Legal Medicine*, 23(1), 45-48.

Zelazo, P.D., & Carlson, S.M. (2012). Hot and cool executive function in childhood and adolescence: Development and plasticity. *Child Development Perspectives*, 6(4), 354-360.

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Stages of Consciousness Formation

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Abstract

The purpose was to describe the basic stages of formation of the personality: A. On the basis of development of the informational processes in Consciousness. B. For the purpose of reaching the highest results. The basic questions are the qualitative changes and their conditions.

Stage 1. External programming: Accurate statements form operating programs of Consciousness, images define the type of reactions. These are conditions for shaping of the purposes, criteria of information evaluation. The task is to research the world and its laws. Possible results of this stage: A. Admittance to the following stage. B. Blocking of the exit.

Stage 2. Self-testing.

The *beginning* is the questions: «Who am I?», «What are my purposes?». The *end* of this way is the received answers. The methods are different tests, challenges, various techniques. Possible results of this stage: A. Admittance to the third stage. B. Blocking of the exit.

Stage 3. Purposeful development means *getting ready to the purposes*: education, personal qualities, communications. There are various conditions depending on the purposes. Possible results of this stage: A. Full readiness. B. Average readiness. C. Blocking of development.

Stage 4. Self-actualization which supposes *the purposeful movement to the goal, to the highest results*. The conditions are the right calculation, discipline, skills to communicate and professionalism. Possible results of this stage are: A. The constant movement upwards. B. Achievement of a goal and stop of the motion (because of carelessness, active blocking problems). C. Breakdown (lack of many conditions). D. Defeat (set of errors)

Keywords: consciousness forming, consciousness development, development of a person, theory of consciousness, informational model of consciousness, consciousness programming, personality forming, consciousness centers, life goals, modification of consciousness, consciousness reprogramming.

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Introduction

The object in view of the speech is to introduce the basic stages of forming, the basic stages of development of human consciousness. In other words, these are the basic stages of the personality forming, not just from the point of view of development of human organism, ageing and the corresponding problems, but from the point of view of achievement of the highest results in life. **The basic questions** to be introduced here are:

The first point is the short representation of our approach and the principles our research is based upon.

The second one is description of the stages.

The third point includes other fulfilled tasks and our offers.

1. Short representation of this direction

On the one hand, the science keeps on developing and psychology as well. On the other hand, the amount of vices and psycho-emotional problems is still growing with at least the same speed. (*2)

The **Key statements are:** the practical application as the object, the way of the practical application, the key points we are based on and the solved tasks.

The first task of the given area is not just to investigate something in a person. The ultimate goal is **forming of the perfect human being**. And, in our opinion, this should be the most important task in psychology and not only in psychology, but, in the science as a whole, the most crucial task for society and for each country. (*1)

There is one simple reason: the perfect society is the perfect person first of all. Imperfect society and all its problems are caused by people with their problems — evil, impolite, alcoholics, drug-addicts etc., Such people show no dignity. **The main object of this area is forming of the personality. This is the first point. The second one is how we see this** — the basic practical ways of application, implementation of the given approach. The first basis in many respects is similar to the approach used in the best times of the mankind. I mean use of the long-term programs for personality forming. Each person should learn this. If we don't learn to be worthy, then we will be shaped by television, the street, various computer games et cetera. The second basic point is the set of tasks and conditions affecting personality forming.

In The third part we describe the basis of the specified area including long-term programs of training. To solve this problem, **first** we had to develop the corresponding spiritual-moral standard or **so called** the standard for the dignified person. (*3) And our task was to pick up all the best from today's society and from the history. In this case this would be the standard created on scientific basis. After the standard we should solve the **second problem which is one of the most crucial in modern science. I'm talking about working out of the general theory of human consciousness**. As we all know, this problem has not been solved yet in psychology. And the third basis which is also very important — to define, what knowledge we should form as this should be the knowledge necessary for almost every human being who wants to change himself/ herself and the whole life to better — to become a dignified personality, to be happy, to become successful. Such knowledge is important for everybody. The core that should be developed is the knowledge the corresponding training programs will be based on. And now I'd like to say some

words 'bout the theory — the general theory of human consciousness that is the basis for this research work. Most of scientists research consciousness, as the brain function. In this case our approach is completely different: we consider the consciousness as a supercomputer with its special architecture. And this computer works with information. (*4)

The next topic is how the mentioned model looks. It has some levels. The lowermost level is information of some kind. The first kind is a spoken word, some text, formalized information or any thought in consciousness, which is the program for our computer functioning. The second kind **is** some image. All images are any nonformalized information — pictures, sounds, whatever. The consciousness processes this information and transforms it into thoughts or programs that can be used. The third kind **is** sensations, that are our reactions, reactions of our consciousness, and in some cases our body reactions. I mean pleasure, fear, some feelings, enthusiasm or inspiration. And the fourth kind **is**, the energy, as the concept — something that stimulates sensations. The information is processed, similar to computer processing. How is it processed? There are so called thought structures, some kind of the processors, and each of them solves its special problem. These are the processors. Then we have memory, which, obviously, stores the info and the operating part which uses the installed operating system to control all active processes. And these devices are united, into certain computer boards. Our thought structures and other components are placed on them. And there are twelve computer boards (or the consciousness centers) like this in our scheme. They are also united into bigger parts of consciousness. The operating **part**, or the basic **part** is what we see, feel, think. This is our basic consciousness. Other parts function mostly automatically. And they are programmed or reprogrammed by the basic consciousness.

So, the consciousness is the supercomputer with its certain architecture and it is programmed by the information. All our research work is carried out on the basis of this statement. And one of the most significant advantages is that almost all known properties of consciousness are described within one model, with numerous details, of course.

A few more words 'bout the introduction: All I am telling about, all our workings out are not just theoretical. This has been proved during the last 20 years. The basic Projects, **the basic ways of realization:** the first one is the training course of personality forming, conducted on a regular basis. It is active and the final goal is reforming of existing educational system so that it would be possible to save 50 per cent of school hours for forming of the personality. Personal qualities such as purposefulness, communication skills, strong will, goodwill, self-control and others are always important for everyone, no matter what your occupation is. So our ultimate goal is the personality forming as the main task of the system of education.

2. The stage of consciousness forming

The following topic: The stages of consciousness forming or the personality forming.

STAGES OF CONSCIOUSNESS FORMING

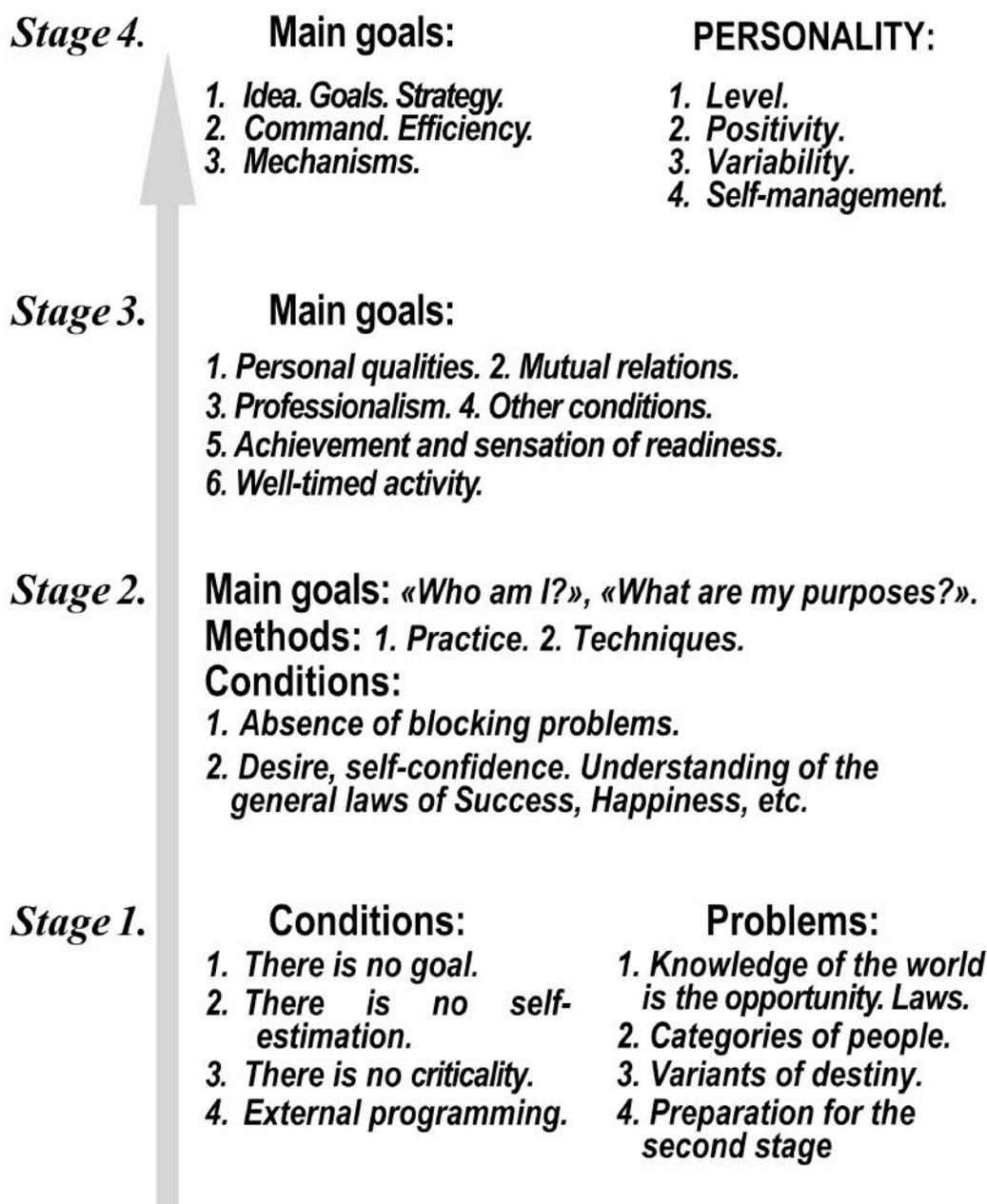


Figure 1: Stages of Consciousness Forming.

First of all, let's specify our basic requirements in this question: our object in view is to understand what everyone needs to reach the highest results, both in the inner **world** (to be happy, self-reliant, et cetera) **and** in his or her everyday's life and the destiny, both in career and in relationship, and in other spheres as well.

The first requirement is what everyone needs to reach the highest result.

The second one — certainly, everything we consider **here**, is considered from the point of view of development of information processes that is **how** the information transforms in consciousness. The stages should be qualitatively and accurately separated from each other. The tasks for solution on every stage should be defined.

The third — requirement. All this should not be just research work. All this should be extremely useful and effective. In other words at the end of our work we should have the full list of questions for the person to understand and to solve, to get to the best results. What we should remove in our life, in ourselves to get rid of the problems we have, so that we could come closer to those best results we are able to achieve. These are three basic requirements. Using them and, certainly, studying everything that was happening to people, we were able to specify the following four basic stages of development of human consciousness.

The first Stage almost doesn't depend on the will of a person, as everyone is born very little. This is the stage of initial knowledge accumulation, the stage of external programming when you are told something and you believe it. You just don't have any additional sources of information. During the first stage you accumulate the info and if you pass **through** it successfully then the following stage will activate your search for the answers to the questions like «Who am I? What should I live for? What is my place in this world?».

The second stage is our self-knowledge and definition of the place to study in, definition of what to live for. And each person should answer these questions, someone in the age of 5 (there are such cases), and someone could not **answer** or even ask them until passing away. The statistics says, that almost 97 per cent of people don't have their own objects, I mean, the definite ones. As soon as you have determined the objects in your life, you start the third stage which is the purposeful training for achievement of those goals — education, shaping of personal qualities, some other conditions. And when you are ready, here comes the fourth final stage for it can take you very long. So this is the purposeful movement to your goals.

And now a bit more in detail concerning each stage.

The first stage, what does it look like? A newborn baby with mom and dad or somebody who will play their role during the first few years of life. So these are the unique sources of information. The baby automatically accepts their belief, and copies their reactions that can be seen, heard or felt. The baby doesn't need to transform the information, in fact in the beginning babies don't have any self-esteem to choose what is necessary, what to accept and what to reject. There is no criticality so far. These are the basic conditions — there are no goals, no self-estimation, no criticality, that's why external programming is the main factor. This stage may have different scenarios but there are at least two basic opposite variants. The first and the best one is when you solve all primary tasks and this allows you to pass to the following stage successfully. The second and the worst variant is when you can't complete the previous stage and move to the following one.

What tasks all of us should solve.

The most important is to see lots of opportunities when you look around. So the first point is to see these opportunities, the second is when you know the rules how to use them, the third point is when you can see the certain differences between people and when you understand the variants of your destiny. Let's see what is the difference between the destiny of a businessman and the life of some vagabond or an alcoholic? The businessman has enough reasons to compare, to evaluate, and to start thinking 'bout the choice in his life. Moreover, in the better variant, such person understands what he should do, he has enough knowledge, and he is enough motivated to move forward to complete the stage.

The following task to be solved is, «to understand who you are, your talents. Then you should accurately choose your goals, and fight for them, for the best result». This is the perfect variant of completion of the first stage. And if we are talking 'bout the perfect **society** the modified system of education should give everyone the answers to all these questions for every person to be ready for the real life. In the bad variant, a person doesn't see this picture, and the opportunities. In this case you can't see the difference between people you don't understand the variants, the complete picture of your destiny. Such person will live according to some sad scenario, for instance "like father like son". Or when a young girl lives with her mum without father, and after a while she accurately copies her mom's destiny, hating all men and living without seeing the possibilities to change something. In such cases a person usually doesn't trust in himself, he doesn't want to become good, or successful. He is ruled by social clichés, fears, and other weaknesses. That's why such person can't move forward and consequently, most of people don't ever think of who they are, or what they live for. Or maybe they don't see the right answer.

According to statistics we have, only 3 per cent of people have been able to pass to the second stage, «the definite purposes». And actually, these people are those who reach the highest results in their life. Those who write down their purposes, achieve incomparably more than all other people. This was the first stage.

The second stage. This stage has its certain beginning and its certain end as well. The beginning is the statement of the questions like, «who am I? What am I living for? What are my purposes?». The end of this stage is when you have the answers to these questions. «Who am I?» is the **question** that will let you know about the greatest aspiration of your soul from the point of view of success. What can I do showing the greatest enthusiasm and feeling the greatest inspiration? When you something you don't like, everything is much worse, you have no energy, no enthusiasm, your results are poor. On the one hand we have the question «what are the aspirations of my soul?», where there is the biggest enthusiasm and energy, on the other hand there is the question «What are my talents?». Certainly, every person should choose something, that would be useful to other people. You should answer the question «Who am I?». And if you clearly see your strong points and your weak **points**, what you are interested in, then it will be much easier to define the objects of your life.

Let's name the basic ways of solution of this problem. The most traditional one is to try everything you can — It can take you too long. The second way is to use different approaches such as tests, meditation, everything helping to understand the main thing, which is what touches your soul most of all, what inspires you most of all.

As a rule, as soon as you find such **sphere** this at least gives you the biggest pleasure, the highest energy you can use in the process. The basic condition for you to be capable to feel your talent depends upon your belief and personal qualities. In case if your consciousness is full of fears, laziness, prejudice and other negative programs, you just can't feel your soul, its reactions. But you will feel your problems. That is why you should clear your consciousness from the negative programs and internal problems. And only then you will be able to feel your talents. And from the first stage a person should want to become successful, to achieve significant results showing considerable efforts. You should trust in yourself, and use other programs that push you forward also. Most of people don't even want to be active, so for them results are impossible.

It is a brief description of the second stage. When your life objects are accurately defined, this is the end of the second stage. And then you have to start the third one. By the way, it may start at any age. Some of the millionaires have made their money after their retirement. «There was nothing to lose, why not to start the business?». The life goals can be shaped at any age, in childhood or even in venerable age.

The third stage is your movement to your goal. There is a list of conditions, and here are some of them, the basic ones: The first one is that the person should possess necessary personal qualities, such as strong will, purposefulness and so on. Each sphere has its special requirements. The second condition is that the person should communicate with other people, be sociable, understand how to co-operate with others. You also have to learn to play in a team. The third condition is that you should certainly be a professional. The fourth one depends on the objects in view, when you should meet some additional requirements (such as some papers, money, useful acquaintance, fulfilled works, participation in competitions, depending on the special area). Except the tasks mentioned above, it is also important for the person to get ready internally saying: «I have knowledge and qualities, and meet all requirements, I am ready ». One should feel like this «I am ready, I am ready to fight».

And there is one more condition about when you should start. Everything should be done in time as the first popular mistake is «just to study without doing anything during the whole life», the second mistake is to rush, when you are not ready. There will be nothing but disappointment, failure and troubles. The third stage comes to an end when you can tell «I am ready», and you just start moving towards your main goals. It is not obligatory to reach all your goals simultaneously (career, your private life, friendship et cetera). You may reach each of them separately. In this case, this principle is fair for each of your goals and for all your life purposes as a whole.

The third stage is over, when you make the decision «I start right now». And here comes **the Fourth stage** — the purposeful movement to your goals. This stage is widely described in literature, there are definite conditions of success — some good idea, the accurate objects, understanding of the strategy and other questions connected with the information. The second condition is the team work, forming of efficient team, the third part includes all other conditions: organizational, financial, legal et cetera. But, except these well-known conditions, there are several requirements which are present in our field.

The first of them is the concept which is absent in modern science. I'm talking about levels of a person. If we take an example of computer, then first we have to start with abacus, then we have the calculator, some simple models, and then step by step increasing complexity, power and completeness. Actually complexity of problems we can solve and our speed are stipulated by the level of a person. Actually our level defines the level of our possible success.

The second general indicator is our positivity (amount of good and evil stuff, positive and negative programs in our consciousness). It defines what states for instance happiness and enthusiasm and what feelings a person can reach. In other words if we live in constant negative state feeling sadness, depression, this is incompatible with happiness and feelings. The less negative programs we have the more positive opportunities we possess. In this case we feel happy, and we are friendly to the world around.

The third indicator is ability to change oneself. For successful people their thoughts, their habits, their actions are only those that lead to the goal. Everything that disturbs, is to be removed. If you are not capable to change yourself there will be no success. So, the following task is your self-control. Most of people are controlled by their subconsciousness; negative emotions appear, and it is hard to stop them. Self management is when you "extinguish" everything disturbing you, find the right mood, and just like an artist you take the most appropriate role which will be highly effective at this very moment. So you don't need to lie, you are sincere «I choose this role» and you are able to play it. Finally there will be no situations that will make you lose your temper. You will always be quiet, friendly, attentive, you'll be able to make decisions.

These were key statements concerning the stages of forming of human consciousness.

The basic conclusions: The given statements completely meet the declared requirements. Now it is clear how to reach the highest top. All points we considered, were connected with development of information processes. And if to we go deep, then **the list of the tasks**, which are to be solved to reach your finest destiny and to have the best results **becomes obvious**. And everything I am talking about now is also the basis of our training programs on Personality formation.

3. Other tasks and our offers.

From the point of view of personality formation, the primary goals to be solved are: How the consciousness works, how to control and to change it. Therefore one of the most important tasks was to develop these *management commands* — how to control your voice, your vision, attention and will. The Management commands are the rules, the mechanisms and techniques of consciousness reprogramming. So you decide to remove a problem and to put some advantage instead of it. You change the consciousness program. Then one of the most important points is to understand the structure of problems and how to get read of them. So you should learn about all advantages, about every good feature and the programs it is based on. You should learn to develop good qualities, to control your state as a whole, to discover talents. And there are many other tasks necessary for the ultimate goal to be achieved.

Our offers are connected with all above-mentioned. *For those who are interested in this field, in studying of all these statements, in publishing* (as we are going to publish about one hundred articles during next few years), in preparation of monographs, textbooks, training courses for HIGH SCHOOLS, universities and other institutions, in working out of different Projects for modelling of human consciousness.

The logo for 'iafor' is centered on the page. It consists of the lowercase letters 'iafor' in a light blue, sans-serif font. The text is surrounded by several overlapping, semi-transparent circular arcs in shades of blue and red, creating a dynamic, circular graphic effect.

References

Abraham H. Maslow (1968). *Toward a Psychology of Being*. Litton Education Publishing.

Krzysztof Gašior. (2014). Diversifying childhood experiences of Adult Children of Alcoholics. *Alcoholism and Drug Addiction*.27(4): 289-304. Elsevier.

Mianiye M. Y. (2013). *THE MANIFEST. Worthy person, Worthy Organization, Worthy Society*.- Kharkiv, Ukraine: Sozidaniye, p.1-24.

Mianiye M. Y. (2015). «The general information model of human consciousness», in Book of abstracts «Toward a Science of Consciousness 2015», 9-13 June 2015, Helsinki, Finland, p. 61,148.

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A Comparative Study on Positive Psychological Well-Being between Chinese and Taiwanese University Freshmen

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Abstract

This study investigated positive psychological well-being of 734 university freshmen from China and Taiwan. Both Chinese students (n=514) and Taiwanese students (n=220) completed paper-and-pencil surveys in Chinese measuring positive psychological well-being (happiness, curiosity and exploration, gratitude, and life satisfaction) as well as their character, clarity about future goals and satisfaction with their own physical appearance. Results indicated that Chinese freshmen showed a significantly lower level of curiosity and exploration and life satisfaction than Taiwanese freshmen. Both Chinese and Taiwanese female students showed a significantly higher level of curiosity and exploration as well as gratitude than their male counterparts. In addition, satisfaction with physical appearance appeared to have the strongest link with one's positive psychological well-being for Chinese sample. For Taiwanese sample, character and clarity about future goals appeared to be equal predictors of one's positive psychological well-being. The research findings suggest that personal attributes, gender, social context and cultural value may have an impact on the development of one's positive psychological well-being. Future research can be focused on how these factors shape individuals' positive psychological well-being.

Keywords: positive psychology, psychological well-being, happiness, life satisfaction, comparative study

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Introduction

With the endeavor of some positive psychologists (e.g. Seligman & Csikszentihalyi, 2000), positive psychology has drawn an increased attention in the field of psychology in the past twenty years. Decades of research in the discipline have shown the value in studying people's positive qualities that shape healthy well-being and demonstrated the effects of positive traits as buffers, helping people, for example, cope with stress in life (Masten & Coatsworth, 1998). In recent years, more and more efforts have been paid to exploring factors that contribute to one's positive psychological well-being. Factors such as hope (see Valle, Huebner, & Suldo, 2006), life goal (see Sheldon, Elliot, Chirkov, Kim, Wu, Demir, & Sun, 2004) and character (see Peterson, Ruch, Beermann, Park, & Seligman, 2007) have received a great deal of attention and have been proven associated with positive psychological well-being in various western contexts. However, there is limited research evidence to suggest that the association between these factors and one's positive psychological well-being demonstrated in the western contexts can be applied to non-western contexts (e.g., Aisa).

Research shows that Chinese college students present a noticeable degree of psychological difficulty (e.g. depressive and anxious symptoms) in adjusting to university life but few of them seek help from mental health professionals (Chang, 2007). Chinese students with higher level of mental difficulties were found more reluctant to seek professional help (Chang, 2007). Instead, they prefer to resolve their psychological difficulties on their own (Boey, 1999; Chen, 1987; Cheung, 1984, Guo, 1986; Jiang & Wang, 2003). It is suggested that such a phenomenon may be due to social and cultural pressure the Chinese students faced. Under the Chinese cultural context, revealing psychological difficulties may be interpreted as evidence of a flawed character and a sign of weakness (Chang, 2007). It is then not difficult to understand why few Chinese students are willing to come forward to deal with their psychological challenges.

As the literature showing inadequate evidence on the power of positive psychology in non-western contexts and the scarce help-seeking among Chinese students, it is therefore important to understand Chinese students' psychological states and examine factors that contribute to their psychological well-being. In the present study, we investigated how people's positive psychological well-being relates to their character, clarity about future goals and satisfaction with their own physical appearance. A total of 734 participants from two universities (a Chinese and a Taiwanese universities) were recruited for the study. We firstly investigated differences in positive psychological well-being between the Chinese and Taiwanese university students. Next, we explored gender differences in the students' positive psychological well-being. We then examined relationships between the students' positive psychological well-being and their character, clarity about future goals and satisfaction with their own physical appearance. Lastly, we examined whether any differences found in this study are statistically significant and discussed their related implications for further studies.

Literature Review

Positive psychology is intended to add people's knowledge of a balanced science in understanding human experience, combination of sufferings, happiness and intervention to relieve suffering and increase happiness (Peterson, Park, & Seligman, 2005). Researchers (Seligman & Csikszentmihalyi, 2000) have suggested that positive psychology can be understood from three levels. Firstly, at the subjective experience level, positive psychology is about well-being, satisfaction, happiness and hope. Secondly, at the individual level, positive psychology is about personal traits, such as love, gratitude, courage and interpersonal skills. Thirdly, at the group level, it is about the civic institutions that help individuals to have a better citizenship, responsibility and work ethics (Seligman & Csikszentmihalyi, 2000). In a nutshell, positive psychology lies in the components of positive emotions, positive character traits, and enabling institutions (Park, Paterson & Seligman, 2004).

In recent years, the power of positive psychological research has been constantly demonstrated in terms of improving individuals' psychological well-being and physical health. This has led to a change in approach to unraveling the impacts of positive psychology from a theoretical-based to a practical-based orientation. For instance, a growing body of research has devoted itself to examining character strengths. Character strengths are defined as the virtues, as a part of psychological ingredients (Park & Peterson, 2009). Inspired by positive psychology, the *Values in Action – Inventory of Strengths* (VIA-IS) has done advanced research into strength of character (Peterson & Seligman, 2004). VIA-IS classified 24 widely recognized character strengths under overarching six virtues: wisdom and knowledge, courage, humanity, justice, temperance, and transcendence. Empirical research found that character strengths present as a mental health value to measure subject well-being (Proctor, Maltby & Linley, 2011). Most importantly, character strengths and virtue are considered to be potentially universal to different cultures and nations (Park et al., 2006).

To date, there is a dearth of positive psychological research examining association between character strengths and their interrelationship with personal, environmental and situational variables (Proctor, Maltby, & Linley, 2011). Character strengths like hope and zest were significantly related to life satisfaction (Park and Peterson, 2006; Peterson et al., 2007). Life satisfaction has been defined as a global appraisal of an individual's quality of life based on the person's own chosen criteria (Shin & Johnson, 1978; Sam, 2001). Scores obtained from life satisfaction measure are used as an indication of measuring happiness (Proctor, Linley, & Maltby, 2009). In addition, research evidence shows character strengths which are most associated with life satisfaction have also shown to be associated with three orientations to happiness: pleasure, engagement and meaning (Peterson, Ruch, Beermann, Park, & Seligman, 2007; Seligman, 2002; Csikszentmihalyi, 2002). However, despite abundant studies

suggesting the association between character strengths and life satisfaction, many of them were conducted in western contexts. The lack of like investigation conducted in non-western contexts has limited the ability to estimate the impacts of character strengths in association with one's life satisfaction.

As stated, positive psychology has been widely shown to be effective in terms of promoting individuals' well-being (Slade, 2010). But, few studies delve into the association between individuals' personal evaluation (self-regard) and their positive psychological well-being. Particularly, whether one's self-evaluation of his/her own personality types, clarity about future goals and satisfaction with own physical appearance have an impact on their positive psychological qualities. Regarding personality types, research evidence shows that personality traits are associated with life satisfaction, particularly positive emotion facet of extraversion were the strongest and most consistent predictors of life satisfaction (Schimmack, Oishi, Furr, & Funder, 2004). It is however still unclear whether personality types (extrovert and introvert personality types) have a salient association with one's other positive psychological qualities (Cheng, Kim, & Hull, 2010). Regarding one's satisfaction with own physical appearance, a study conducted with 700 University students showed the students' well-being was influenced by perceived satisfaction with physical appearance, economic level, perceived attitude of parents, religious belief, and locus of control (Tuzgöl Dost, 2006). The study also showed no gender differences in the students' subjective well-being level, which contradicts another study showing that women might possess an advantage than men in perceived gratitude (Kashdan, Mishara, Breen, & Froh, 2009).

As there is limited research evidence on the association between positive psychological well-being and one's self-evaluation of his/her own attributes, there is a need to delve into factors that contribute to the association. Also, as most of the positive psychological studies were conducted in western contexts, there is a need to investigate the power of positive psychology in non-western contexts such as Asia.

Research Purpose

The purpose of the present study was threefold: firstly, to explore differences in positive psychological well-being between Chinese and Taiwanese first-year university students; secondly, to investigate gender differences in the students' positive psychological well-being; thirdly, to examine relationships between the students' positive psychological well-being and three factors, namely, character, clarity about future goals and satisfaction with physical appearance. Life goals are considered as specific motivational projections or outcomes that direct the person through life (Spasovski, 2013). Personality type in the current study is divided into introvert and extrovert. Introvert personality refers to people who are more interested in their inner sense of self and inner world of ideas, whereas extrovert people are generally prefer outside world and people (Cheng, Kim, & Hull, 2010). Physical appearance satisfaction is very pervasive to adolescents during 13-19 years old across

the different countries; and it is especially prevalent among girls (Chen & Jackson, 2012). The indicators used to measure the students' positive psychological well-being, included happiness, satisfaction with life, curiosity and exploration as well as gratitude.

The present study attempted to answer the following questions:

1. Is there a difference in positive psychological well-being between Chinese and Taiwanese first-year university students?
2. Are there gender differences in the students' positive psychological well-being?
3. Is there a relationship between character, clarity about future goals, satisfaction with physical appearance and the students' positive psychological well-being?

Research Participants and Procedures

In total, there were 734 participants recruited out of 1500 first-year university students from two university samples. The Chinese sample consisted of 514 first-year university students (M= 222, 43%; F=292, 57%) from 29 provinces studying various majors (e.g., Economics, Mathematics, Nursing, Medicines, and Engineering) at an urban university in China. The students were recruited through advertisements at attending the first year Mental Health courses. Interested students were given questionnaires to complete in the class.

The Taiwanese sample consisted of 220 first-year university students (M= 90, 41%; F=128, 59%) from eight cities studying different majors (e.g., Art, Chinese Language, Computer Science, and Education) at an urban university in Taiwan. The students were recruited through advertisements passed out to first-year undergraduates in 18 classes of various subjects. Interested individuals were given questionnaires to complete in the class. Both Chinese and Taiwanese students completed self-report paper-and-pencil questionnaires between late September and early October 2014.

Measures

Happiness Scale (HS) (Park & Peterson, 2006)

This 12-item measure examined the degree to which one endorses each of the four orientations to happiness: achievement (Q1, Q9, Q10 – e.g., “I’m proud of myself.”); engagement (Q8, Q3, Q7 – e.g., “I am usually very interested in what I do.”); emotion (Q2, Q6, Q11 - e.g., “I’m usually in a good mood.”); and meaning (Q4, Q5, Q12 - e.g., “I have a clear idea of the meaning of my life.”). Each item required a participant to answer on a multiple-choice rating scale which included five statements that reflected five different degrees of the measured item.

Satisfaction with Life Scale (SWLS)(Diener, Emmons, Larson, & Griffin ,1985)

This 5-item measure examined the degree to which one evaluated his/her global life

satisfaction (e.g., “I’m satisfied with my life.”). The participants answer each question on a 5-point scale (1 = very much unlike me, 5 = very much like me).

Curiosity and Exploration Scale (CES) (Kashdan, Gallagher, Silvia, Winterstein, Breen, Terhar, & Steger, 2009)

This 10-item measure examined the individual’s evaluation of own curiosity and exploration about the world around him/her (e.g., “No matter where I go, I always look for new things and experience.”). Participants select one of five options ranging from “1 (very much unlike me)” to “5 (very much like me)” for each question.

Gratitude Scale (GS) (McCullough, Emmons, & Tsang, 2002)

This 6-item measure examined the degree to which the individual showed gratitude to things around him/her (e.g., “There are so many things in my life that deserve my appreciation.”). Each item required a participant to answer on a 5-point scale (1=very unlike me, 5=very like me).

The three factors (character, clarity about future goals and satisfaction with physical appearance) were measured with a 5-point scale. The participants were asked to rate their character from “1, being introvert” to “5, being extrovert”, their clarity about future goals from “1 being unclear at all” to “5, being very clear about their future goals”, and their satisfaction with their own physical appearance from “1, being not satisfied at all with their own physical appearance” to “5, being very satisfied with their own physical appearance”.

Results

Descriptive statistics and preliminary analyses

Descriptive statistics for four subscales of positive psychological well-being in Chinese and Taiwanese students are shown in Table 1. Table 1 shows that all variables are normally distributed with values for skewness and kurtosis within acceptable limits. The composite scores of the four subscales were used to examine the reliability of the measurement of positive psychological well-beings. The results showed the measurement for both university samples are reliable (for Chinese sample, for Taiwan sample, and the four subscales of positive psychological well-beings are highly positively correlated ($r > .25, p < .01$) (see Table 2).

Table 1. Descriptive statistics for positive psychological well-being

Positive psychological well-being	Nations	Mean	SD	Range
Happiness	Chinese (n=512)	2.68	0.46	1-4
	Taiwanese (n=210)	2.72	0.46	1-4
Curiosity and exploration	Chinese (n=511)	3.08	0.79	1-5
	Taiwanese (n=214)	3.23	0.71	1-5
Gratitude	Chinese (n=512)	3.51	0.20	1-5
	Taiwanese (n=216)	3.56	0.34	1-5
Life satisfaction	Chinese (n=512)	2.86	0.74	1-5
	Taiwanese (n=216)	3.14	0.66	1-5

Table 2. Pearson correlation for four subscales of positive psychological well-being

	Curiosity & exploration	Gratitude	Life satisfaction
Happiness	.462*	.254*	.426*
Curiosity & exploration		.346*	.293*
Gratitude			.309*

* $p < .01$. All tests were two tailed.

Q1: Is there a difference in positive psychological well-being between Chinese and Taiwanese first-year university students?

Mixed ANOVA was used to examine interaction between gender and nations in influencing Taiwanese and Chinese students' positive psychological well-being: 2 (nations) \times 2 (gender) \times 4 (positive psychological well-being: happiness, life-satisfaction, gratitude, curiosity and exploration), with independent groups on the first two factors and repeated measures on the last factors. The results revealed a significant main effect of the four positive psychological well-being subscales, $F(2.58, 710) = 253.25$, $p < .001$, the four psychological well-being scores are significantly different from each other. Gratitude scores the highest ($M=3.53$, $SD=0.47$), followed by curiosity and exploration ($M=3.13$, $SD=0.77$), life-satisfaction ($M=2.94$, $SD=0.73$), and happiness ($M=2.69$, $SD=0.46$). However, there is no significant three-way interaction between gender, nations, and positive psychological well-being.

There is a significant interaction between positive psychological well-being and

nations, $F(2.58,710)=6.49$, $p < .001$. T-test showed there are significant differences between Chinese students and Taiwanese students in their curiosity and exploration scores ($t= -2.34$, $df=723$, $p < .05$) and life satisfaction scores ($t= -4.91$, $df=726$, $p < .001$). Taiwanese students revealed more curiosity and exploration (Taiwanese $M=3.23$, $SD=0.71$; Chinese $M=3.08$, $SD=0.79$) and life satisfaction (Taiwanese $M=3.14$, $SD=0.66$; Chinese $M=2.86$, $SD=0.74$) than Chinese students. However, it showed no significant difference in gratitude and happiness between Chinese and Taiwanese students.

Q2: Are there gender differences in the students' positive psychological well-being?

A significant interaction was found between gender and positive psychological well-being, $F(2.58,710)=5.12$, $p < .01$. For Chinese sample, an independent t-test showed a significant difference in curiosity and exploration ($t= -3.32$, $df= 510$, $p < .01$) as well as in gratitude ($t= -3.32$, $df=510$, $p < .01$) between male and female students. Chinese female students showed a higher level of curiosity and exploration (Male $M=3.43$, $SD=.52$; Female $M=3.57$, $SD=.41$) as well as gratitude (Male $M=3.43$, $SD=.52$; Female $M=3.57$, $SD=.41$) than Chinese male students. For Taiwanese sample, an independent t-test revealed gender differences in happiness ($t=.62$, $df=214$, $p < .05$), curiosity and exploration ($t=-1.55$, $df= 212$, $p < .05$) and gratitude ($t=-1.55$, $df=212$, $p < .05$). Taiwanese male students showed a greater level of happiness than their female counterparts (Male $M=2.75$, $SD = .52$; Female $M=2.71$, $SD=.42$). Taiwanese female students showed a greater level of curiosity and exploration (Male, $M=3.50$, $SD= .56$; Female $M=3.61$, $SD=.44$) and gratitude (Male $M=3.50$, $SD=.56$; Female $M=3.61$, $SD=.44$). There were no significant gender differences found between Chinese male and Taiwanese male students or between Chinese female and Taiwanese female students.

Q3: Is there a relationship between character, clarity about future goals, satisfaction with physical appearance and the students' positive psychological strengths?

Pearson correlation Tests were employed to examine relationships between individual's personality character, physical appearance satisfaction, clarity about future goals and positive psychological well-being separately. Table 3 indicates that for Chinese sample, character is significantly correlated to happiness, life satisfaction, curiosity and exploration. Clarity about future goals is significantly correlated to happiness, curiosity and exploration and gratitude. Satisfaction with physical appearance is significantly correlated to happiness, life satisfaction, curiosity and exploration and gratitude.

Table 3. Pearson Correlation test on relationships between character, clarity about future goals, satisfaction with physical appearance and Chinese university students' positive psychological well-being.

	Happiness	Life Satisfaction	Curiosity and exploration	Gratitude
Character	.175**	.107*	.097*	ns
Clarity about future goals	.263**	ns	.231**	.170**
Satisfaction with physical appearance	.347**	.319**	.190**	.143**

* $p < .05$; ** $p < .01$

ns = not significant

Table 4 shows that for Taiwanese sample, character is significantly associated with happiness, life satisfaction and curiosity and exploration. Also, clarity about future goals is significantly associated with happiness, life satisfaction and curiosity and exploration. Satisfaction with physical appearance is significantly associated with happiness and life satisfaction.

Table 4. Pearson Correlation test on relationships between character, clarity about future goals, satisfaction with physical appearance and Taiwanese university students' positive psychological well-being.

	Happiness	Life Satisfaction	Curiosity and exploration	Gratitude
Character	.330*	.217*	.230*	ns
Clarity about future goals	.428*	.187*	.345*	ns
Satisfaction with physical appearance	.383*	.274*	ns	ns

* $p < .01$

ns = not significant

Discussion

Differences in positive psychological well-being between Chinese and Taiwanese university students

Results reported here showed that there are significant differences between Chinese and Taiwanese students in two positive psychological well-being indicators: curiosity and exploration as well as life satisfaction. Taiwanese students reported a higher level of curiosity and exploration as well as life satisfaction than Chinese students. Such results may be associated with differences in social context and cultural values between the two nations. Past research suggests that there is a tendency for Western societies to exhibit more creativity than people from Confucian Asian societies (Kim, 2005; Cheng, Kim & Hull, 2010) and life satisfaction is influenced by cultural values (Lu, Gilmour & Kao, 2010). A study shows that international students from Europe and North America were on the whole more satisfied with their lives than their peers from Africa and Asia (Sam, 2001). Yan and Zhen's (2007) study suggests that students from Mainland China have a lower level of life satisfaction than their counterparts in Hong Kong and United States. Although both China and Taiwan share a Confucian heritage, there are socio-political and economic differences between China and Taiwan. For example, the Chinese communist party governs Mainland China whereas Taiwan follows a more western style democracy with a greater level of freedom of expression. Also, Taiwan's higher education system has more foreign influences. For instance, American universities influence many Taiwanese higher education institutions. In addition, Taiwan's economic model is more liberalized whereas the Chinese economy involves strong state intervention. Therefore, these subtle differences between China and Taiwan may be accounted for the differences between Chinese students' and Taiwanese students' level of curiosity and exploration as well as of life satisfactions.

Gender differences in positive psychological well-being

Analyses of gender differences showed that the female students in both nations typically reported higher scores on the gratitude measure than did the male students. The results remain consistent with previous work that suggests that women might possess an advantage over men in experiencing and benefiting from gratitude (Kashdan, Mishra, Breen, & Froh, 2009). These results are also supported by a study (Linley, Maltby, Wood, Joseph, Harrington, Peterson, Park, & Seligman, 2007) study in which they found women's scores for kindness and love were higher than men's, and showed the strongest effect sizes for gender differences (together with gratitude). In both samples, female students showed a higher level of curiosity and exploration than their male counterparts. Such results may suggest a certain level of emancipation from traditional Chinese expectations of women. Traditionally, Chinese women are perceived to be more homely and sheltered and are not expected to be as adventurous as Chinese men. Regarding happiness measure, in Taiwanese sample, male students reported a significantly higher level of happiness than their female counterparts. Such a result is not in line with past research. Coats and Feldman's (1996) research showed

that women are better able to encode happiness emotion than men. One explanation for this inconsistency may be that Coats and Feldman's (1996) study was conducted with adult participants and mainly focused on nonverbal emotions. However, the current study conducted with adolescents with a focus on positive psychological well-being.

Relationships between character, clarity about future goals, satisfaction with physical appearance and the students' positive psychological well-being

Analyses showed that in both samples, the students showed a satisfactory level of self-evaluation of their character, clarity about future goals and satisfaction with their own physical appearance. Character is significantly linked to happiness, life satisfaction and curiosity and exploration. Clarity about future goals seems to be a predictor to happiness, and curiosity and exploration. Satisfaction with physical appearance is positively and significantly correlated with happiness and life satisfaction. Such results imply that both Chinese and Taiwanese students showed a satisfactory level of self-evaluation of their attributes and these attributes are shown significantly and positively correlated with the positive psychological well-being. This echoes the past study done with Chinese university students (Zhen & Zhang, 2004) that students who have more positive self-evaluation are more likely to feel satisfied with their lives. Recent studies on positive psychology revealed the consistent association between life satisfaction and the gratitude, curiosity and hope (Park, Peterson, & Seligman, 2006; Peterson, Ruch, Beermann, Park, & Seligman, 2007). Previous research also revealed that there is a link between meaning of life and positive psychological well-being (Pan, Wong, Joubert, & Chan, 2008). Several researchers have found that attainment of meaning of life is strongly associated with positive dimensions of psychological well-being among college students (Zika & Chamberlain, 1992).

Conclusion

It can be concluded that one's self-evaluation of own character, clarity about future goals and physical appearance may have an impact on their positive psychological well-being. People who value their own attributes appear to have a higher level of positive psychological well-being. Along with socio-political and cultural differences, gender differences seem to play a role in influencing how one's positive psychological well-being is perceived. This study has important implications for applications in positive psychology education in university settings. It appears that encouraging students to appreciate their own attributes may contribute to the enhancement in their positive emotions and thoughts.

The study contributes to our understanding of positive psychological well-being between Taiwan and Chinese university students as well as of factors associated with their self-evaluation of their own positive emotions. However, there are some limitations in this study. First, the unequal sizes existed between Chinese (N=514) and Taiwanese samples (N=220). This could have potentially skewed the data for the

two sample groups to positive psychological well-being subscales. Second, the study recruited participants from two universities only. It cannot be used to generalize to all Chinese and Taiwanese university students. In order to gain a fuller picture of the development in university students' positive psychological well-being, a number of issues and social variables deserve considerations for the future studies. First, what and how factors contribute to the association between positive psychological well-being and personal evaluation. Second, further work can be focused on the enhancement of self-evaluation and positive psychological well-being among Chinese and Taiwanese university students.



References

- Boey, K. W. (1999). Help-seeking preference of college students in urban China after the implementation of the "Open-Door" policy. *International Journal of Social Psychiatry, 45*(2), 104–116.
- Chang, H. (2007). Psychological distress and help-seeking among Taiwanese college students: role of gender and student status. *British Journal of Guidance & Counselling, 35*(3), 347–355.
- Chen, H., & Jackson, T. (2012). Gender and Age Group Differences in Mass Media and Interpersonal Influences on Body Dissatisfaction among Chinese Adolescents. *Sex Roles, 66*, 3–20.
- Chen, L. L. (1987). A study of the process of psychological help-seeking among college students in Taiwan. *Chinese Journal of Mental Health, 3*, 125–138.
- Cheng, Y., Kim, K. H., & Hull, M. F. (2010). Comparisons of creative styles and personality types between American and Taiwanese college students and the relationship between creative potential and personality types. *Psychology of Aesthetics, Creativity, and the Arts, 4*(2), 103–112.
- Cheung, F. M. (1984). Preferences in help-seeking among Chinese students. *Culture, Medicine and Psychiatry, 8*(4), 371–380.
- Coats, E. J., & Feldman, R. S. (1996). Gender Differences in Nonverbal Correlates of Social Status. *Personality and Social Psychology Bulletin, 22*(10), 1014–1022.
- Csikszentmihalyi, M. (2002). *Flow: The classic work on how to achieve happiness*. London: Rider.
- Diener, E., Emmons, R. A., Larsen, R. J., & Griffin, S. (1985). The Satisfaction With Life Scale. *Journal of Personality Assessment, 49*(1), 71–75.
- Guo, G. C. (1986). A survey research on the college students' need and attitude of help-seeking. *Journal of Counselling, 9*, 165–203.
- Jiang, G., & Wang, M. (2003). A study on help-seeking propensity of Chinese undergraduates. *Chinese Journal of Clinical Psychology, 11*(3), 180–184.
- Kashdan, T. B., Gallagher, M. W., Silvia, P. J., Winterstein, B. P., Breen, W. E., Terhar, D., & Steger, M. F. (2009). The curiosity and exploration inventory-II: Development, factor structure, and psychometrics. *Journal of Research in Personality, 43*(6), 987–998.
- Kashdan, T. B., Mishra, A., Breen, W. E., & Froh, J. J. (2009). Gender Differences in Gratitude: Examining Appraisals, Narratives, the Willingness to Express Emotions, and Changes in Psychological Needs. *Journal of Personality, 77*(3), 691–730.
- Kim, K. H. (2005). Learning From Each Other: Creativity in East Asian and American Education. *Creativity Research Journal, 17*(4), 337–347.

- Linley, P. A., Maltby, J., Wood, A. M., Joseph, S., Harrington, S., Peterson, C., Park, N., & Seligman, M. E. P. (2007). Character strengths in the United Kingdom: The VIA Inventory of Strengths. *Personality and Individual Differences, 43*(2), 341–351.
- Lu, L., Gilmour, R., & Kao, S. F. (2001). Culture values and happiness: An East-West dialogue. *Journal of Social Psychology, 141*(4), 477–493.
- Masten, A. S., & Douglas, J. (1998). The development of competence in favorable and unfavorable environments: Lessons from research on successful children. *American Psychologist, 53*(2), 205–220.
- McCullough, M. E., Emmons, R. A., & Tsang, J.-A. (2002). The grateful disposition: A conceptual and empirical topography. *Journal of Personality and Social Psychology, 82*(1), 112–127.
- Pan, J.-Y., Wong, D. F. K., Joubert, L., & Chan, C. L. W. (2008). The Protective Function of Meaning of Life on Life Satisfaction Among Chinese Students in Australia and Hong Kong: A Cross-Cultural Comparative Study. *Journal of American College Health, 57*(2), 221–232.
- Park, N., & Peterson, C. (2006). Moral competence and character strengths among adolescents: The development and validation of the Values in Action Inventory of Strengths for Youth. *Journal of Adolescence, 29*(6), 891–909.
- Park, N., Peterson, C., & Seligman, M. E. P. (2004). Strengths of Character and Well-Being. *Journal of Social and Clinical Psychology, 23*(5), 603–619.
- Park, N., Peterson, C., & Seligman, M. E. P. (2006). Character strengths in fifty-four nations and the fifty US states. *The Journal of Positive Psychology, 1*(3), 118–129.
- Peterson, C., Ruch, W., Beermann, U., Park, N., & Seligman, M. E. P. (2007). Strengths of character, orientations to happiness, and life satisfaction. *The Journal of Positive Psychology, 2*(3), 149–156.
- Peterson, C., & Seligman, M. E. P. (2004). *Character Strengths and Virtues: A Handbook and Classification*. Oxford: Oxford University Press.
- Proctor, C., Linley, P. A., & Maltby, J. (2009). Youth life satisfaction measures: A review. *The Journal of Positive Psychology, 4*(2), 128–144.
- Proctor, C., Maltby, J., & Linley, P. A. (2011). Strengths Use as a Predictor of Well-Being and Health-Related Quality of Life. *Journal of Happiness Studies, 12*(1), 153–169.
- Sam, D. L. (2001). Satisfaction with life among international students: An exploratory study. *Social Indicators Research, 53*(3), 315–337.
- Schimmack, U., Oishi, S., Furr, R. M., & Funder, D. C. (2004). Personality and Life Satisfaction: A Facet-Level Analysis. *Personality and Social Psychology Bulletin, 30*(8), 1062–1075.
- Seligman, M. E. P. (2002). *Authentic Happiness*. New York: Free Press.

- Sheldon, K. M., Elliot, A. J., Ryan, R. M., Chirkov, V., Kim, Y., Wu, C., Demir, M., Sun, Z. (2004). Self-Concordance and Subjective Well-Being in Four Cultures. *Journal of Cross-Cultural Psychology*, 35(2), 209–223.
- Shin, D., & Johnson, D. (1978). Avowed happiness as an overall assessment of quality of life. *Social Indicators Research*, 5, 474-492.
- Slade, M. (2010). Mental illness and well-being: the central importance of positive psychology and recovery approaches. *BMC Health Services Research*, 10(1), 1-50.
- Spasovski, O. (2013). The Relation of Basic Psychological Needs, Intrinsic and Extrinsic Life Goals, and Collectivism with Subjective Well-Being: A Case in Macedonia. In H. H. Knoop & A. D. Fave (Eds.), *Well-Being and Cultures* (pp. 71–81). Netherlands: Springer.
- Tuzgöl Dost, M. (2006). Subjective well-being among university students. *Hacettepe Üniversitesi Eğitim Fakültesi Dergisi*, 31, 188- 197.
- Valle, M. F., Huebner, E. S., & Suldo, S. M. (2006). An analysis of hope as a psychological strength. *Journal of School Psychology*, 44(5), 393–406.
- Yan, B. B., & Zhen, X. (2007). A Comparison of College Students' Life Satisfaction in Chinese Mainland, Hong Kong and America. *Chinese Mental Health Journal*, 21(7), 436–439.
- Zhen, L. N, & Zhang, J.X., (2004). General life satisfaction and self-esteem of University students. *Chinese Mental Health Journal*, 18(4), 222-224.
- Zika, S., & Chamberlain, K. (1992). On the relation between meaning in life and psychological well-being. *British Journal of Psychology*, 83(1), 133–145.



The Relationship between Gambling Behavior, Emotional Intelligence, and Self-Esteem in Adolescence

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Abstract

Accumulating research suggests that gambling can negatively affect core domains of development, particularly among adolescents. The present study sought to explore the relationship between gambling behavior, emotional intelligence, and self-esteem in a sample of 324 Greek adolescents (*Age*= 13.9). Measures of constructs included the South Oaks Gambling Screen–Revised for Adolescents (SOGS-RA; Winters, Stinchfield, & Fulkerson, 1993), the Trait Emotional Intelligence Questionnaire (TEIQue; Petridis, 2009), and Rosenberg’s (1965) Self-Esteem Scale. In total, 124 adolescents (38%) reported gambling at least once a month (N= 94 males, N= 30 females). Within gamblers, a positive correlation between emotional intelligence and self-esteem ($r = .65, p < .000$) was observed; the strength of the relationship was higher in female gamblers ($r = .77, p < .000$) than in male gamblers ($r = .62, p < .000$). Furthermore, 66 adolescents (20.4% of the total population) reported gambling on a weekly basis (N=56 males, N= 10 females). The correlation between emotional intelligence and self-esteem did not vary significantly as a function of time among boys; emotional intelligence and self-esteem were moderately correlated ($r = .60, p < .000$), independent of whether they gambled or not. In female gamblers, however, the correlation between emotional intelligence and self-esteem was $r = .85 (p < .005)$, as opposed to those who do not gamble ($r = .69, p < .000$). Increasing gambling behavior in adolescence highlights the need for further research on the exact nature, including psychosocial causes, of the relationship between frequency of gambling, emotional intelligence, and self-esteem, especially in girls.

Keywords: gambling behavior, adolescence, emotional intelligence, self-esteem

Introduction

The gambling industry has one of the fastest growth rates in today's economy supported fully by the public and private sector (Gupta, Derevensky, & Ellenbogen, 2006). Gambling refers to placing something of value at risk hoping to gain something which will prove of greater value (Blaszczynski & Nower, 2002; McMillen, 1996). For most individuals, gambling is a harmless diversion of everyday life, which is enjoyable and stimulating (Walker & Dickerson, 1996). Some individuals are nevertheless unable to control their gambling behavior, despite its adverse consequences on their psychosocial and financial well-being (Gupta et al., 2006; Poulin, 2000). Research indicates that, while most people keep their gambling behaviors under control, around 3.5% to 5% of the general population develops problematic gambling (Walker & Dickerson, 1996). Problematic gambling is the urge to continuously gamble, despite the adverse effects it has on the gambler's life. The most severe form of problematic gambling is pathological gambling, which is characterised by the *Diagnostic and Statistical Manual of Mental Disorders, Fourth Edition*, as continuous or periodic loss of control over gambling (Stinchfield, 2003).

Once viewed as a sin, gambling has now become a socially acceptable activity. Unlike previous generations, individuals no longer have to visit the local casino to gamble (Gupta & Derevensky, 2014). Gambling opportunities are easily available and accessible, with the internet being brought to the schools, homes, and the workplace, allowing for electronic gambling; visiting the corner convenience store to buy a lottery ticket is equally popular (Gupta & Derevensky, 2014). These abundant gambling opportunities have made it a common practice for the youth of today to engage in gambling activities (Gupta & Derevensky, 2000). Data suggest that problem gambling amongst adolescents is 2-4 times that of problematic adult gamblers (Parker et al., 2008). Recently, studies conducted in Canada and the US reveal that 4-8% of adolescents currently suffer from a severe gambling problem, while 10-15% of adolescents gamble excessively (Dickson, Derevensky, & Gupta, 2004). Early forms of youth gambling includes playing card games for money with friends, engaging in lottery play, or playing in sport games (Hardoon, Derevensky, & Gupta, 2001). However, as the gambling behaviour increases, youth generally gain illegal access to casinos, gamble online, play video-lottery games or place bets on sport (Hardoon, Derevensky, & Gupta, 2001). As parents, teachers, and psychologists have shown little concern over the increasing gambling rates in adolescents, research should shed important light on the exact nature of gambling-related behaviors (Campbell, Derevensky, Meerkamper, & Cutajar, 2012).

Compared to literature on adult gambling, it seems that research is scattered in terms of youth gambling (Hayatbakhsh et al., 2013). Little is known about how mental and emotional states may affect gambling tendencies (Hayatbakhsh et al., 2013). Some literature suggests that a common risk factor for adolescents becoming involved in gambling is poor parenting, maladaptive parent-child relationships, childhood abuse, parents who are addicts, dissociation from school, and easy access to gambling activities (Dickson, Derevensky, & Gupta, 2008). In addition, those individuals who are prone to seek novel activities and have poor self-direction are impulsive and unpredictable, increasing the likelihood that they will engage in gambling from a young age and eventually develop a gambling addiction (Dickson, Derevensky, & Gupta, 2008). Research has shown that youth who suffer from gambling problems

will use maladaptive ways of coping, including risky behaviors, such as drinking and/or taking drugs (Poulin, 2000). Consequently, these youth engage in gambling as a means to escape their reality of daily problems and stressors (Kun & Demetrovics, 2010). In his General Theory of Addictions, Jacobs (1986) suggested that individuals who have a state that is hyper or hypo aroused (i.e. impulsive or depressed), together with a traumatic childhood and low self-esteem, are more likely to acquire an addictive behavior to cope with their daily lives.

Gambling and Self-Esteem

Psychologists have defined self-esteem as the positive and negative evaluations we have about ourselves (Cheung, Cheung, & Hue, 2015; Crocker & Major, 1989). Rosenberg (1965) defines the concept of self-esteem as an individual's attitudes toward their self. Self-esteem also refers to general feelings of self-worth or self-value and helps construct a sense of self (Lightfoot, Cole, & Cole, 2008; Robins & Trzesniewski, 2005). Adolescents are characterized by different levels of self-esteem which vary according to social class, culture, and ethnicity (Harter, 1990). Gender differences are especially prominent in literature (Bachman et al, 2011; Baumeister, 1993; Harter, 1990; Puskar et al, 2010), with adolescent girls typically exhibiting lower levels of self-esteem compared to boys. Contributing to this, King (1997) found that, compared to girls, boys consistently scored higher on self-esteem, with a slight difference across age groups. Furthermore, self-esteem rates show a significant decrease during adolescence (Rosenberg, 1965; Robins & Trzesniewski, 2005). Bodily and psychosocial characteristics that accompany and typify puberty play a significant role in this decrease (Lightfoot et al, 2008). Studies have revealed that around one-half of adolescents struggle with a low self-esteem which may lead to delinquency, self-inflicted behaviours, suicide, and eating-disorders (Harter, 1990; Hirsch & DuBois, 1991).

Researchers have attempted to explain the association between self-esteem and problem behaviours, without however being able to identify the exact causal direction. In other words, it remains unclear whether low self-esteem causes adolescents to engage in risky and problematic behaviours or, reversely, engagement in problem behaviours bring about a poor self-esteem. One body of research suggests that individuals who have low self-esteem are more prone to engage in risky behaviours and develop addictions (Lightfoot et al, 2008). Perhaps poor self-esteem is a starting point for youth becoming involved in gambling. Other studies point out that engaging in gambling activities has a negative effect on one's own self-worth (Kaare, Mottus, & Konstabel, 2009). Accordingly, Baumeister (1997) suggests that gambling is a self-defeating behavior, which is directly linked to emotional unrest, firstly because it results in adverse consequences, such as losing large sums of money, and secondly because it undermines one's ability to self-regulate their emotions and regret ever having gotten involved in the self-defeating behavior in the first place. This self-defeating behavior negatively affects self-esteem, which increases anxiety and depression (Kaare, Mottus, & Konstabel, 2009). It is also possible that having a low self-esteem influences an individual's decisions to engage in gambling as a recreational activity, and as the behavior increases and becomes problematic this further decreases individual's self-esteem.

Finally, comorbidity studies relate gambling behavior with poor self-esteem, social alienation, anti-social behavior, higher emotional distress, and learning difficulties (Harrison & Hoffman, 1989), as well as a high prevalence of emotional disorders, with 49.6% of subjects having mood disorders, 41.3% suffering from anxiety and 60.8% having a personality disorder (Petry, Stinson, & Grant, 2005). Indeed, this comorbidity may further lower gamblers self-esteem.

Gambling and Emotional Intelligence

When investigating mental disorders and addictions, psychologists generally focus on the construct of emotions (Kun & Demetrovics, 2010). Since the construct of emotional intelligence is only two decades old, not much literature has been dedicated to investigating the relationship between emotional intelligence and gambling amongst adolescents (Kun & Demetrovics, 2010). According to Salovey and Mayer (1990, p. 189), emotional intelligence is strictly defined as “the ability to monitor one’s own and others’ feelings and emotions, to discriminate among them and to use this information to guide one’s thinking and actions”. This global definition of emotional intelligence suggests that individuals with high emotional intelligence have more adaptive ways of coping with life, have more positive mental and physical health, experience more success and have more intimate interpersonal relations than others (Chamorro-Premuzic, Bennett, & Furnham, 2007; Cheung et al, 2015; Salovey, Bedell, Detweiler, & Mayer, 1999; Tsaousis & Nikolaou, 2005). Equally important regarding emotional intelligence is the finding that girls on average have a higher level of emotional intelligence compared to boys (Katyal & Awasthi, 2005).

Moreover, a plethora of studies have found that inability to regulate affect is more common amongst those who have lower levels of emotional intelligence and is a defining risk factor for developing addiction-related behaviors, such as problematic gambling. Lumley and Roby (1995) postulated that lack of affect regulation causes individuals to experience difficulty controlling maladaptive and adverse emotions. This is mainly due to the fact that these individuals experience difficulty firstly in identifying their subjective feelings and secondly in being unable to confide in others about their feelings and seek the comfort they desperately need (Parker et al., 2008). Consequently, these individuals use addictive behaviors, such as gambling, to regulate their emotions and cope with them (Lumley & Roby, 1995). According to Kaur, Schutte, and Thorsteinsson (2006), those who have lower levels of emotional intelligence run a greater risk of problem gambling. Furthermore, the aforementioned researchers found that individuals with a higher emotional intelligence perceive themselves as more competent and successful, thus better able to handle any gambling tendencies they may have (Kaur, Schutte, & Thorsteinsson, 2006). As most of the information on emotional intelligence and gambling is related to the adult population, perhaps emotional intelligence is a contributing factor to the various determinates of problematic gambling amongst adolescents.

Self-Esteem and Emotional Intelligence

Schutte and colleagues (1998) investigated the relationship between self-esteem and emotional intelligence and found a strong positive correlation between the two constructs, where subjects with higher levels of emotional intelligence have more positive self-esteem. This finding is supported by literature which explains that emotionally intelligent people experience greater psychological well-being and lower levels of emotional deficits compared to those who are less intelligent emotionally (Chamorro et al, 2007). Mayer and Salovey (1995) explain that this is because those individuals who have a high level of emotional intelligence are able to maintain positive cognitions due to their ability to recognize, understand, generate, regulate and promote their emotions. Petrides and co-workers found that children who are more emotional intelligent have more positive traits and are more prosocial and successful, compared to students with lower emotional intelligence (2006). Petrides et al (2006) argues that higher emotional intelligence is directly linked to positive psychological functioning. Similarly, Austin, Saklofske, and Egan (2005) found that higher emotional intelligence is linked to higher well-being.

The accumulating studies showing that self-esteem is indispensable for positive psychological development have proven that higher levels of self-esteem are clearly associated with higher levels of emotional intelligence and vice versa. Moreover, research has consistently shown that adolescents who gamble perceive themselves more negatively and have poor control over their emotions, compared to non-gamblers (Gupta et al, 2006). The purpose of the present was to provide evidence on the relationship between the two constructs and gambling behavior in adolescence. It was hypothesized that higher levels of gambling behavior amongst adolescents will be associated with lower rates of self-esteem and emotional intelligence.

Method

Participants

For the purposes of the present study, 324 Greek high-school students were recruited from two public schools in the Southern suburbs of Athens. Of those recruited, 53.4% were male ($N= 173$) and 46.6% were female ($N= 151$). The age of the sample ranged from 12 to 17 years ($M_{age}= 13.9$). The participants' socioeconomic status ranged from middle to low.

Materials

Participants were requested to complete a brief demographic section which indicated their age and gender (see Appendix A), as well as three additional scales.

The South Oaks Gambling Screen-Revised for Adolescents (SOGS-RA; Winters, Stinchfield, & Fulkerson, 1993) was employed to assess participants' gambling behavior as well as the frequency of its occurrence in adolescents' lifetime as well as during the last 12 months (see Appendix B). The scale also indicates the severity of problematic gambling behavior following DSM criteria.

Participants' levels of emotional intelligence were assessed by the Trait Emotional Intelligence Questionnaire – (TEIQue-SF) which was developed by Petrides and Furnham (2006) (see Appendix C). The TEIQue-SF is a shorter version of the Trait

Emotional Intelligence Questionnaire (Petrides & Furnham, 2001). It is a 30-item Likert scale and responses may take values from 1= *completely disagree* to 7= *completely agree*. The total scores on the TEIQue-SF range from 30 (minimum score) to 210 (maximum score). Furthermore, the internal reliability of the scale was explored by calculating Cronbach's coefficient of alpha which was estimated at .797, providing satisfactory internal reliability.

Lastly, Rosenberg's Self-Esteem Scale (RSES; Rosenberg, 1965) was employed to assess students' self-esteem (see Appendix D). It consists of ten items and participants were requested to respond to each item on a 4-point Likert scale, ranging from SA= *strongly agree* to SD= *strongly disagree*. The minimum score that could be attained in the RSES is ten and the maximum score is thirty. The Cronbach's alpha value was found to be .806, indicating good levels of internal reliability.

Procedure

Data were gathered from two high schools during school hours. The two principals had been informed of the aims of the study in advance and had granted the necessary permission for the study to be conducted in their school premises. The researchers distributed to all students an informed consent form to be signed by their parents if they agreed for their child's participation (see Appendix E). After collecting all consent forms, the two principals contacted the researchers to arrange the days for the conduction of the study. Only two parents refused their offspring's participation in the present research. Given the number of students, two consecutive days were booked in each school.

The two researchers entered each classroom and introduced themselves to the students. The aims of the study were briefly explained and all ethical procedures that would be followed throughout the study (i.e. anonymity and confidentiality) were clarified. Students were also asked to confirm whether they wanted to participate in the study, regardless of their parents' permission. During the completion of the questionnaires, the researchers were available for any clarifications, while being discreet to provide the necessary privacy. The completion of the scales lasted approximately 20 minutes on average. The researchers collected the completed questionnaires and thanked the participants for their cooperation. Students were then debriefed for the objectives of the current study and a written debriefing form was given to them for their parents. The principal and the teachers of both schools were also debriefed upon completion.

Results

Frequencies, means, and gender differences

Overall, 80% of our population ($N= 259$) reported that they have gambled at least once in their lifetime, while 38% ($N= 124$) stated that they gamble on a monthly basis, and 20.4% ($N= 66$) on a weekly basis. In general, boys gambled more and more frequently than girls. 90% ($N= 155$) of our male sample stated that they have gambled at least once in a year whereas 69% ($N= 104$) of the female population reported that frequency. Moreover, 54% ($N= 94$) of boys indicated that they gamble at least once in a month and 32% ($N= 56$) at least once in a week. On the other hand, only 20% ($N= 30$) of girls engaged in monthly gambling and 7% ($N= 10$) in weekly (see Table 1).

Frequency of Gambling Behavior	Boys		Girls		Total	
	n	Perc.	n	Perc.	n	Perc.
Yearly	155	90%	104	69%	259	80%
Monthly	94	54%	30	20%	124	38%
Weekly	56	32%	10	7%	66	20.4%

Note. Perc. = percentage

Table 1: Frequencies and percentages of gambling behavior as a function of frequency of gambling and gender

Our sample's ($N= 324$) mean scores of emotional intelligence (EI) and self-esteem (SE) were similar, independently of the frequency of gambling (see Table 2).

	Yearly	Monthly	Weekly
	$M (SD)$	$M (SD)$	$M (SD)$
Emotional Intelligence	138.2 (19.0)	138.1 (19.6)	136.6 (19.7)
Self-esteem	28.6 (5.1)	28.9 (4.7)	28.9 (5.0)

Table 2: Means and standard deviations (SD) of EI and SE as a function of frequency of gambling behavior

The mean scores of emotional intelligence and self-esteem of males who gambled on a yearly (Yearly $M_{EI}=138.7$, Yearly $M_{SE}= 29.6$) or a monthly (Monthly $M_{EI}=139.0$, Monthly $M_{SE}= 29.6$) basis were slightly higher than those of girls (Yearly $M_{EI}=137.4$, Yearly $M_{SE}= 27.2$; Monthly $M_{EI}=135.3$, Monthly $M_{SE}= 26.7$). As far as weekly gamblers are concerned, females reported higher levels of emotional intelligence (Weekly $M_{EI}= 143.0$) than boys (Weekly $M_{EI}= 135.5$), but lower levels of self-esteem (Weekly $M_{SE}= 27.6$) compared to boys (Weekly $M_{SE}= 29.1$), (see Table 3).

Male Gamblers			
	<u>Yearly</u>	<u>Monthly</u>	<u>Weekly</u>
	<i>M (SD)</i>	<i>M (SD)</i>	<i>M (SD)</i>
Emotional Intelligence	138.7 (19.3)	139.0 (20.0)	135.5 (19.8)
Self-esteem	29.6 (4.7)	29.6 (4.5)	29.1 (5.1)

Female Gamblers			
	<u>Yearly</u>	<u>Monthly</u>	<u>Weekly</u>
	<i>M (SD)</i>	<i>M (SD)</i>	<i>M (SD)</i>
Emotional Intelligence	137.4 (18.4)	135.3 (18.7)	143.0 (18.4)
Self-esteem	27.2 (5.4)	26.7 (4.7)	27.6 (4.8)

Table 3: Means and standard deviations (*SD*) of EI and SE as a function of frequency of gambling and gender

Associations between emotional intelligence and self-esteem

Correlations between emotional intelligence and self-esteem in gamblers were computed to assess the relationship between the two constructs across frequency of gambling behavior. Pearson's correlations are presented in Table 4. Overall, moderate levels of association between self-esteem and emotional intelligence were observed in those who gambled on a yearly basis ($r=.661$, $N = 259$, $p < .000$), in those who gambled on a monthly basis ($r= .649$, $N = 124$, $p < .000$), and those who gambled on a weekly basis ($r= .609$, $N = 66$, $p < .000$). Increases self-esteem were correlated with increases in emotional intelligence.

Measure	<u>Yearly</u>		<u>Monthly</u>		<u>Weekly</u>	
	<i>1</i>	<i>2</i>	<i>1</i>	<i>2</i>	<i>1</i>	<i>2</i>
1. Emotional Intelligence	-	.661*	-	.649*	-	.609*
2. Self-esteem	.661*	-	.649*	-	.609*	-

Note. * $p < .000$

Table 4: Correlations between EI and SE as a function of frequency of gambling behavior

Given the moderate level of associations observed, we also explored gender differences in the relationship between the two constructs. More specifically, Pearson's correlations were computed to assess the relationship between self-esteem and emotional intelligence in male adolescents who gambled on a yearly, monthly, and weekly basis. Similar to the associations observed for the total population, moderate, positive correlations between the TEIQue-SF and RSES scales were observed in those males who gamble on a yearly basis ($r=.597$, $N = 155$, $p < .000$), a

monthly basis ($r = .618$, $N = 94$, $p < .000$), and a weekly basis ($r = .603$, $N = 56$, $p < .000$). Overall, increases in self-esteem were moderately correlated with increases in emotional intelligence (see Table 5).

Male Gamblers						
Measure	Yearly		Monthly		Weekly	
	1	2	1	2	1	2
1. Emotional Intelligence	-	.597*	-	.618*	-	.603*
2. Self-esteem	.597*	-	.618*	-	.603*	-

Note. * $p < .000$

Female Gamblers						
Measure	Yearly		Monthly		Weekly	
	1	2	1	2	1	2
1. Emotional Intelligence	-	.782*	-	.769*	-	.850**
2. Self-esteem	.782*	-	.769*	-	.850**	-

Note. * $p < .000$, ** $p < .005$

Table 5: Correlations between EI and SE as a function of frequency of gambling behavior and gender

Accordingly, Pearson's correlations were computed to assess the relationship between self-esteem and emotional intelligence in female adolescents who gambled on a yearly, monthly, and a weekly basis. High positive correlations between the TEIQue-SF and RSES scales were found in those female adolescents who gambled on a yearly basis ($r = .782$, $N = 104$, $p < .000$), a monthly basis ($r = .769$, $N = 30$, $p < .000$), as well as on a weekly basis ($r = .850$, $N = 10$, $p < .005$). Overall, self-esteem and emotional intelligence were found to be strongly associated in the case of females (see Table 5).

In sum, moderate correlations between the two constructs were found in male adolescents, independent of the frequency of their gambling behavior. For girls, however, the associations between self-esteem and emotional intelligence were found to be strong, and continued to increase as the frequency of their gambling behavior increased.

Discussion

The present study sought to explore the relationship between adolescents' gambling behaviour and two psychosocial constructs. More specifically, students' levels of self-esteem as well as their levels of emotional intelligence were measured and analyzed in relation to the frequency of their gambling behaviour.

First of all, it was hypothesized that higher levels of gambling behaviour will be associated with lower levels of self-esteem, in both male and female adolescents. Previous research (Baumeister, 1997; Gupta et al, 2006; Harrison & Hoffman, 1989; Kaare et al, 2009; Lightfoot et al, 2008; Petry et al, 2005) suggests that risky behaviours and gambling activities in particular are consistently related to poor self-esteem.

Our results indicated no significant variation in self-esteem across frequency of gambling behaviour, in both males and females. In other words, levels of self-esteem remained relatively constant, independent of whether the participants gambled once a year, once a month, or only once a week. A possible explanation could relate to the age of our sample; the mean age of the total population was 13.9 years. Lightfoot and colleagues (2008) provide enough evidence that changes in self-esteem are directly related to the rise of puberty, when adolescents are going through this awkward stage where they are experiencing bodily changes, fluctuating emotions and are developing new interpersonal relationships. It is therefore possible that early adolescence presents no marked changes in self-esteem and that the sample in the present study has not yet fully experienced the characteristics of puberty. Significant differences may not appear until middle to late adolescence.

A second possible explanation for the absence of variation in self-esteem levels as a function of frequency of gambling behaviour may be that adolescents who gamble may not gamble to double their money, but are rather doing it for fun. Baumeister (1997) suggests that one of the reasons gambling undermines one's own self-worth is losing large amounts of money, in other words, the financial cost. If adolescents have a different intention when they are gambling (compared to pathological gamblers who gamble because they are unable to control their behaviors and want to make money) and take the chance with their money and gamble, it is possible that losing may have little effect on their self-concept compared to pathological gamblers who rely on winning. Further research is needed to better understand the exact nature of the relationship between incentives for gambling and self-esteem, predominantly in adolescence.

The gender differences observed in self-esteem typically agree with findings in previous studies (Bachman et al, 2011; Harter, 1990; Lightfoot et al, 2008; Puskar et al., 2010); female adolescents in the present study reported lower levels of self-esteem than males, regardless of how frequently they engaged in gambling activities.

The second main goal of our study focused on the relationship between gambling behaviour and the psychosocial construct of emotional intelligence. Following previous work (Gupta et al, 2006; Kaur, Schutte, & Thorsteinsson, 2006; Kun & Demetrovics, 2010; Lumley & Roby, 1995; Parker et al, 2008), it was hypothesized

that higher frequency of gambling behaviour will be associated with lower levels of emotional intelligence, in both male and female populations.

Our results showed that male adolescents who gamble frequently (that is, on a weekly basis) reported lower levels of emotional intelligence compared to those who gamble on a monthly basis or once a year. This finding is consistent with previous literature (Gupta et al, 2006; Kun & Demetrovics, 2010; Parker et al, 2008) which suggests that those who have higher levels of emotional intelligence are more efficient in controlling their gambling behaviour.

Surprisingly, our female adolescent population suggested a different pattern of the relationship between the two constructs. Girls who reported gambling on a weekly basis showed higher levels of emotional intelligence compared to those females who gambled once a month or once a year and significantly higher levels of emotional intelligence than boys who gambled weekly. A review of literature on emotional intelligence clearly shows significant differences between girls and boys in terms of emotions (Austin et al, 2005; Feldman, 2011; Lightfoot et al, 2008; Kun & Demetrovics, 2010). Traditionally, the emotional dimensions of human beings have been linked to a greater extent with the female gender, which experience positive and negative emotions more intensely than males. This has been supported by both biological and social explanations. The biological explanation holds that women's biochemistry is better prepared to consider one's own emotions as well as those of others as an important factor in survival. Supporting this claim, certain parts of the brain that control emotions are larger in females than in males, and the cerebral processing of emotions also differ in males and females; the female brain is also predominantly structured to feel empathy and the male brain predominately seeks to understand and construct systems. Socially, women obtain an education biased towards expressing emotions from a young age, whereas men are socialized to minimize emotions such as guilt, sadness and vulnerability. This greater self-awareness may possibly explain why girls' levels of emotional intelligence increased as a function of gambling, mainly because as they gamble more frequently, they are better able to recognize that this may develop into a problem. This greater insight potentially may allow females to control their gambling tendencies more so than males. It is also being suggested that researchers should revisit the impact of gender on the relationship between levels of emotional intelligence and frequency of gambling in adolescence.

One limitation of the present study relates to the number of assessment strategies adopted to measure the constructs of interest. Each variable was measured by a single scale. It could be argued that a more variable approach to the assessment of emotional intelligence and/or self-esteem might have resulted in greater variability in our findings. Petrides and Furnham (2000), for example, suggest that, in studying and measuring emotional intelligence, an ability measure or a self-report format may yield different results.

Another limitation of the present study is that gambling behavior was studied as a single act. Although we collected data on the different gambling activities adolescents engage in (South Oaks Gambling Screen – RA), the study mainly focused on the frequency of those activities (grouped as 'gambling behavior') rather than the type. Jacobs (2000), for example, suggests that males and females prefer different types of

gambling. Perhaps stronger associations among constructs may have been observed if different activities were analyzed, especially in studying boys. A follow-up study could focus on an in-depth investigation of emotional intelligence and self-esteem in relation to the different types of gambling activities, further including adolescents' self-reports of levels of expertise in those activities.

Interventions

As gambling is becoming extremely popular amongst adolescents, various interventions are developed to act as roadblocks, preventing gambling from resulting in negative consequences, such as problematic gambling. Adolescents need to be educated of their possible misconceptions about gambling and develop more realistic attitudes (Ferland, Ladouceur, & Vitaro, 2002). Cognitive-behavioral approaches may teach adolescents to identify their erroneous thoughts and correct them; they may also help them develop skills to monitor their thinking about gambling while developing replacement behaviors (Lightfoot et al, 2008; Santrock, 2011). The social media, such as Facebook, may also highlight potential risks in this problematic epidemic as well as the grave consequences of engaging in addictive behaviours.

Furthermore, school psychologists and educators are in the unique position to be able to identify students with potential gambling problems, advise them, and monitor their academic progress and psychosocial development. As many adolescents keep this behavior a secret, schools should routinely inquire about gambling behaviour and develop educational and social policies, just as they do with drug and alcohol problems (Santrock, 2011).

Even though most adolescents may gamble pointlessly, many novel and more intriguing gambling opportunities may appear in the future, which may intensify the thrill of winning, and potentially turn this behaviour into a problematic behavior. Thus parents and teachers should be vigilant and help adolescents realize their hobbies, while encouraging them to be constructively occupied through participation in group activities that are meaningful (Colwell, Grady, & Rhaiti, 1995).

References

- Austin, E. J., Saklofske, D. H., & Egan, V. (2005). Personality, well-being and health correlates of trait emotional intelligence. *Personality and Individual Differences*, 38(3), 547-558.
- Bachman, J. G., O'Malley, P. M., Freedman-Doan, P., Trzesniewski, K. H., & Donnellan, M. B. (2011). Adolescent self-esteem: Differences by race/ethnicity, gender, and age. *Self and Identity*, 10(4), 445-473.
- Baumeister, R. F. (1993). Understanding the inner nature of low self-esteem: Uncertain, fragile, protective, and conflicted. In *Self-Esteem* (pp. 201-218). Springer US.
- Baumeister, R. F. (1997). Esteem threat, self-regulatory breakdown, and emotional distress as factors in self-defeating behaviour. *Review of General Psychology*, 1, 145-174.
- Blaszczynski, A., & Nower, L. (2002). A pathways model of problem and pathological gambling. *Addiction*, 97(5), 487-499.
- Campbell, C., Derevensky, J., Meerkamper, E., & Cutajar, J. (2012). The influence of cultural background on parental perceptions of adolescent gambling behaviour: A Canadian study. *International Journal of Mental Health and Addiction*, 10, 537-550.
- Chamorro-Premuzic, T., Bennett, E., & Furnham, A. (2007). The happy personality: Mediational role of trait emotional intelligence. *Personality and Individual Differences*, 42, 1633-1639.
- Cheung, C., Cheung, H. Y., & Hue, M. (2015). Emotional intelligence as a basis for self-esteem in young adults. *The Journal of Psychology: Interdisciplinary and Applied*, 149(1), 63-84.
- Colwell, J., Grady, C., & Rhaiti, S. (1995). Computer games, self-esteem and gratification of needs in adolescents. *Journal of Community and Applied Social Psychology*, 5(3), 195-206.
- Crandal, R. (1973). The measurement of self-esteem and related constructs. In J. P. Robinson, & P. R. Shaver (Eds.), *Measures of social psychological attitudes*. Revised edition. Ann Arbor: ISR.
- Crocker, J., & Major, B. (1989). Social stigma and self-esteem: The self-protective properties of stigma. *Psychological review*, 96(4), 608.
- Derdikman-Eiron, R. U. T. H., Indredavik, M. S., Bratberg, G. H., Taraldsen, G., Bakken, I. J., & Colton, M. (2011). Gender differences in subjective well-being, self-esteem and psychosocial functioning in adolescents with symptoms of anxiety and depression: Findings from the Nord-Trøndelag health study. *Scandinavian Journal of Psychology*, 52(3), 261-267.

Dickson, L., Derevensky, J. L., & Gupta, R. (2004). Youth gambling problems: Reduction prevention model. *Addiction Research and Theory*, *12*, 305–316.

Dickson, L., Derevensky, J. L., & Gupta, R. (2008). Youth gambling problems: Examining risk and protective factors. *International Gambling Studies*, *8*(1), 25-47.

Feldman, R. (2011). *Understanding psychology*. McGraw-Hill.

Ferland, F., Ladouceur, R., & Vitaro, F. (2002). Prevention of problem gambling: Modifying misconceptions and increasing knowledge. *Journal of Gambling Studies*, *18*(1), 19-29.

Gupta, R., & Derevensky, J. (2000). Adolescents with gambling problems: From research to treatment. *Journal of Gambling Studies*, *16*, 315-342.

Gupta, R., & Derevensky, J. (2014). Reflections on underage gambling. *Responsible Gambling Review*, *1*(1).

Gupta, R., Derevensky, J., & Ellenbogen, S. (2006). Adolescent gambling behavior: A prevalence study and examination of the correlates associated with problem gambling. *Journal of Gambling Studies*, *14*(4), 319-345.

Hardoon, K., Derevensky, J., & Gupta, R. (2001). Social influences involved in children's gambling behavior. *Journal of Gambling Studies*, *17*(3), 191-215.

Harrison, P. A., & Hoffman, N. G. (1989). *Adolescent treatment completers one year later*. St. Paul, MN: Ramsey Clinic.

Harter, S. (1990). Identity and self-development. In S. Feldman, & G. Elliott (Eds.), *At the threshold: The developing adolescent* (pp. 352-387). Cambridge, MA: Harvard University Press.

Hayatbakhsh, M. R., Clavarino, A. M., Williams, G. M., Bor, W., & Najman, J. M. (2013). Early life course predictors of young adults' gambling. *International Gambling Studies*, *13*(1), 19-36.

Hirsch, B., & DuBois, D. (1991). Self-esteem in early adolescence: The identification and prediction of contrasting longitudinal trajectories. *Journal of Youth and Adolescence*, *20*, 53-72.

Jacobs, D. F. (1986). A general theory of addictions: A new theoretical model. *Journal of Gambling Behavior*, *2*(1), 15–31.

Jacobs, D. F. (2000). Juvenile gambling in North America: An analysis of long term trends and future prospects. *Journal of Gambling Studies*, *16*, 11-149.

Kaare, P. R., Mottus, R., & Konstabel, K. (2009). Pathological gambling in Estonia: Relationships with personality, self-esteem, emotional states and cognitive ability. *Journal of Gambling Studies*, *25*(3), 377-390.

- Katyal, S., & Awasthi, E. (2005). Gender differences in emotional intelligence among adolescents of Chandigarh. *Journal of Human Ecology, 17*(2), 153-155.
- Kaur, I., Schutte, N. S., & Thorsteinsson, E. B. (2006). Gambling control self-efficacy as a mediator of the effects of low emotional intelligence on problem gambling. *Journal of Gambling Studies, 22*, 405–411.
- King, K. A. (1997). Self-concept and self-esteem: a clarification of terms. *Journal of School Health, 67*(2), 68-70.
- Kun, B., & Demetrovics, Z. (2010). Emotional intelligence and addictions: A systematic review. *Substance Use & Misuse, 45*(7-8), 1131-1160.
- Lightfoot, C., Cole, M., & Cole, S. (2008). *The development of children*. New York, US: Worth Publishers
- Lumley, M. A., & Roby, K. J. (1995). Alexithymia and pathological gambling. *Psychotherapy and Psychosomatics, 63*, 201–206.
- Mayer, J. D., & Salovey, P. (1995). Emotional intelligence and the construction and regulation of feelings. *Applied and Preventive Psychology, 4*(3), 197-208.
- McMillen, J. (1996). Understanding gambling. *Gambling Cultures: Studies in History and Interpretation*, 6-42.
- Moksnes, U. K., & Espnes, G. A. (2013). Self-esteem and life satisfaction in adolescents—gender and age as potential moderators. *Quality of Life Research, 22*(10), 2921-2928.
- Parker, J. D., Taylor, R. N., Eastabrook, J. M., Schell, S. L., & Wood, L. M. (2008). Problem gambling in adolescence: Relationships with internet misuse, gaming abuse and emotional intelligence. *Personality and Individual Differences, 45*(2), 174-180.
- Petrides, K. V., & Furnham, A. (2000). On the dimensional structure of emotional intelligence. *Personality and Individual Differences, 29*, 313-320.
- Petrides, K. V., & Furnham, A. (2001). Trait emotional intelligence: Psychometric investigation with reference to established trait taxonomies. *European Journal of Personality, 15*, 425-448.
- Petrides, K. V., & Furnham, A. (2003). Trait emotional intelligence: Behavioural validation in two studies of emotion regulation and reactivity to mood induction. *European Journal of Personality, 17*, 39-57.
- Petrides, K. V., & Furnham, A. (2006). The role of trait emotional intelligence in a gender-specific model of organizational variables. *Journal of Applied Social Psychology, 36*, 552-569.
- Petrides, K. V., Sangareau, Y., Furnham, A., & Frederickson, N. (2006). Trait emotional intelligence and children's peer relations at school. *Social Development, 15*(3), 537-547.

Petry, N. M., Stinson, F. S., & Grant, B. F. (2005). Comorbidity of DSM-IV pathological gambling and other psychiatric disorders: Results from the national epidemiologic survey on alcohol and related conditions. *The Journal of Clinical Psychiatry*, *66*, 564–574.

Poulin, C. (2000). Problem gambling among adolescent students in the Atlantic provinces of Canada. *Journal of Gambling studies*, *16*(1), 53-78.

Puskar, K. R., Marie Bernardo, L., Ren, D., Haley, T. M., Hetager Tark, K., Switala, J., & Siemon, L. (2010). Self-esteem and optimism in rural youth: Gender differences. *Contemporary Nurse*, *34*(2), 190-198.

Robins, R. W., & Trzesniewski, K. H. (2005). Self-esteem development across the lifespan. *Current Directions in Psychological Science*, *14*(3), 158-162.

Rosenberg, M. (1965). *Society and the adolescent self-image*. Princeton, NJ: Princeton University Press.

Salovey, P., Bedell, B. T., Detweiler, J. B., & Mayer, J. D. (1999). Coping intelligently: Emotional intelligence and the coping process. In C. R. Snyder (Ed.), *Coping: the psychology of what works* (pp. 141–164). New York: Oxford University Press.

Salovey, P., & Mayer, J. D. (1990). Emotional intelligence. *Imagination, Cognition and Personality*, *9*, 185–211.

Santrock, J. (2011). *Educational psychology*. McGraw-Hill.

Schutte, N. S., Malouff, J. M., Hall, L. E., Haggerty, D. J., Cooper, J. T., Golden, C. J., & Dornheim, L. (1998). Development and validation of a measure of emotional intelligence. *Personality and Individual Differences*, *25*(2), 167-177.

Stinchfield, R. (2003). Reliability, validity, and classification accuracy of a measure of DSM-IV diagnostic criteria for pathological gambling. *American Journal of Psychiatry*, *160*(1), 180-182.

Tsaousis, I., & Nikolaou, I. (2005). Exploring the relationship of emotional intelligence with physical and psychological health functioning. *Stress and Health*, *21*, 77–86.

Walker, M. B., & Dickerson, M. G. (1996). The prevalence of problem and pathological gambling: A critical analysis. *Journal of Gambling Studies*, *12*(2), 233-249.

Winters, K. C., Stinchfield, R. D., & Fulkerson, J. (1993). Toward the development of an adolescent problem severity scale. *Journal of Gambling Studies*, *9*, 63-84.

Wylie, R. C. (1974). *The self-concept*. Revised edition. Lincoln, Nebraska: University of Nebraska Press.

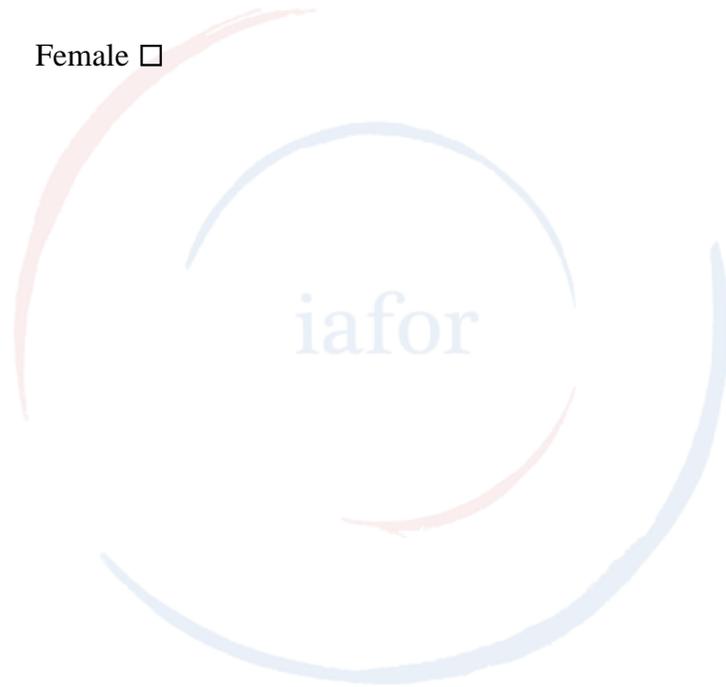
Appendix A

Demographic Information

1. Age: _____

2. Gender: Male

Female



Appendix B

South Oaks Gambling Screen – RA (revised for adolescents) R.Stinchfield, K. Winters

Date: _____

Age: _____

1. Indicate how often, if at all, you have done these activities in your lifetime and in the past 12 months.	<u>LIFETIME</u>		<u>DURING PAST 12 MONTHS</u>				
	Never	At least once	Never	Less than monthly	Monthly	Weekly	Daily
a. Played cards for money							
b. Flipped coins for money							
c. Bet on games of personal skill like pool, golf or bowling							
d. Bet on sports games							
e. Bet on horses, dogs or other animals							
f. Played bingo for money							
g. Played dice games (such as craps or over and under)							
h. Played slot machines, poker machines or other gambling machines							
i. Played scratch tabs							
j. Played the lottery by picking numbers							
k. Played pull tabs							
l. Played Jai-Alai							
m. Bet at a casino							
n. Bet on a gambling cruise ship							
o. Played bolita							
p. Bet on video games							
q. Played the stock, options or commodities market for money							
r. Bet on some form of gambling not listed above (Specify) _____							

2. What is the largest amount of money you have ever gambled at one time in the past 12 months?

- \$1 or less
- More than \$1 up to \$10
- More than \$10 up to \$49
- \$50-\$89
- \$100-\$199
- \$200 or more

3. Do either of your parents (or guardians) play any games of chance for money?

- Yes
- No
- I don't know

If "yes," which one?

- Mother only
- Father only
- Both mother and father
- Other (specify) _____

4. Do you think that either of your parents (or guardians) gamble too much?

n. Yes

- No
- Don't know

If yes, which one?

- Mother only
- Father only
- Both Mother and Father
- Other (specify) _____

5. In the past 12 months, how often have you gone back another day to try to win back money you lost?

- Every time
- Most of the time
- Some of the time
- Never

6. In the past 12 months when you were betting, have you ever told others you were winning when you really weren't winning?

- Yes
- No

7. Has your betting money, in the past 12 months, ever caused any problems for you such as arguments with family and friends, or problems at school or at work?

- Yes
- No

8. In the past 12 months, have you ever gambled more than you had planned to?

- Yes

- No
- 9. In the past 12 months, has anyone criticized your betting or told you that you had a gambling problem, regardless of whether you thought it was true or not?**
- Yes
 No
- 10. In the past 12 months, have you ever felt bad about the amount you bet, or about what happens when you bet money?**
- Yes
 No
- 11. Have you ever felt, in the past 12 months, that you would like to stop betting money but didn't think you could?**
- Yes
 No
- 12. In the past 12 months, have you ever hidden from family or friends any betting slips, IOUs, lottery tickets, money that you've won, or other signs of gambling?**
- Yes
 No
- 13. In the past 12 months, have you had money arguments with family or friends that centered on gambling?**
- Yes
 No
- 14. In the past 12 months, have you borrowed money to bet and not paid it back?**
- Yes
 No
- 15. In the past 12 months, have you ever skipped or been absent from school or work due to betting activities?**
- Yes
 No
- 16. Have you borrowed money or stolen something in order to bet or to cover gambling debts in the last 12 months?**
- Yes
 No
- If yes, check (☐) from whom or where you got the money or goods (check all that apply):**
- | | |
|--------------------------------|--|
| a. ___ Parents or guardians | e. ___ Loan sharks |
| b. ___ Brother(s) or sister(s) | f. ___ You sold personal or family property |
| c. ___ Relatives | g. ___ You passed a bad check on your checking account |
| d. ___ Friends | h. ___ You stole from someone |

Score _____ (Completed by Provider) Provider Code _____

SOUTH OAKS GAMBLING SCREEN: REVISED FOR ADOLESCENTS (SOGS-RA)

The 12 scored items for the SOGS-RA from Winters, K.C., Stinchfield R.D. and Fulkerson, J. (1993a) are listed below.

a. How often have you gone back another day to try and win back money you lost gambling?

Every time/Most of the time/Some of the time/Never

b. When you were betting, have you ever told others you were winning money when you weren't?

Yes/No

c. Has your betting money ever caused any problems for you such as arguments with family and friends, or problems at school or work?

Yes/No

d. Have you ever gambled more than you had planned to?

Yes/No

e. Has anyone criticized your betting, or told you that you had a gambling problem whether you thought it true or not?

Yes/No

f. Have you ever felt bad about the amount of money you bet, or about what happens when you bet money?

Yes/No

g. Have you ever felt like you would like to stop betting, but didn't think you could?

Yes/No

h. Have you ever hidden from family or friends any betting slips, IOUs, lottery tickets, money that you won, or any signs of gambling?

Yes/No

i. Have you had money arguments with family or friends that centered on gambling?

Yes/No

j. Have you borrowed money to bet and not paid it back?

Yes/No

k. Have you ever skipped or been absent from school or work due to betting activities?

Yes/No

l. Have you borrowed money or stolen something in order to bet or to cover gambling activities?

Yes/No

Scoring Rules for SOGS-RA

Each item is scored either 1 (affirmative) or 0 (nonaffirmative). Item "a" is scored 1 if respondent indicates "every time" or "most of the time" and is scored 0 otherwise. Calculations for broad and narrow rates come from Winters, Stinchfield and Kim, 1995.

Calculation of Narrow Rates

Level 0 = No past year gambling.

Level 1 = SOGS-RA score of _ 1

Level 2 = SOGS-RA score of 2 or 3

Level 3 = SOGS-RA score of _ 4

Calculation of Broad Rates

Level 0 = No past year gambling

Level 1 = Gambling less than daily and SOGS-RA score = 0, OR, less than weekly gambling and SOGS-RA score _ 1.

Level 2 = At least weekly gambling and SOGS-RA score _ 1 OR gambling less than weekly and SOGS-RA score _ 2.

Level 3 = At least weekly gambling + SOGS-RA score _ 2 OR daily gambling

Winters, K.C., Stinchfield, R.D, & Fulkerson, J. (1993). Toward the development of an adolescent problem severity scale. *Journal of Gambling Studies*, 9, 63-84.

Appendix C

TEIQue-SF

Instructions: Please answer each statement below by putting a circle around the number that best reflects your degree of agreement or disagreement with that statement. Do not think too long about the exact meaning of the statements. Work quickly and try to answer as accurately as possible. There are no right or wrong answers. There are seven possible responses to each statement ranging from ‘Completely Disagree’ (number 1) to ‘Completely Agree’ (number 7).

1 2 3 4 5 6 7
Completely Disagree **Completely Agree**

1. Expressing my emotions with words is not a problem for me.	1	2	3	4	5	6	7
2. I often find it difficult to see things from another person’s viewpoint.	1	2	3	4	5	6	7
3. On the whole, I’m a highly motivated person.	1	2	3	4	5	6	7
4. I usually find it difficult to regulate my emotions.	1	2	3	4	5	6	7
5. I generally don’t find life enjoyable.	1	2	3	4	5	6	7
6. I can deal effectively with people.	1	2	3	4	5	6	7
7. I tend to change my mind frequently.	1	2	3	4	5	6	7
8. Many times, I can’t figure out what emotion I’m feeling.	1	2	3	4	5	6	7
9. I feel that I have a number of good qualities.	1	2	3	4	5	6	7
10. I often find it difficult to stand up for my rights.	1	2	3	4	5	6	7
11. I’m usually able to influence the way other people feel.	1	2	3	4	5	6	7
12. On the whole, I have a gloomy perspective on most things.	1	2	3	4	5	6	7
13. Those close to me often complain that I don’t treat them right.	1	2	3	4	5	6	7
14. I often find it difficult to adjust my life according to the circumstances.	1	2	3	4	5	6	7
15. On the whole, I’m able to deal with stress.	1	2	3	4	5	6	7
16. I often find it difficult to show my affection to those close to me.	1	2	3	4	5	6	7
17. I’m normally able to “get into someone’s shoes” and experience their emotions.	1	2	3	4	5	6	7
18. I normally find it difficult to keep myself motivated.	1	2	3	4	5	6	7
19. I’m usually able to find ways to control my emotions when I want to.	1	2	3	4	5	6	7
20. On the whole, I’m pleased with my life.	1	2	3	4	5	6	7
21. I would describe myself as a good negotiator.	1	2	3	4	5	6	7
22. I tend to get involved in things I later wish I could get out of.	1	2	3	4	5	6	7
23. I often pause and think about my feelings.	1	2	3	4	5	6	7
24. I believe I’m full of personal strengths.	1	2	3	4	5	6	7
25. I tend to “back down” even if I know I’m right.	1	2	3	4	5	6	7
26. I don’t seem to have any power at all over other people’s feelings.	1	2	3	4	5	6	7
27. I generally believe that things will work out fine in my life.	1	2	3	4	5	6	7
28. I find it difficult to bond well even with those close to me.	1	2	3	4	5	6	7
29. Generally, I’m able to adapt to new environments.	1	2	3	4	5	6	7
30. Others admire me for being relaxed.	1	2	3	4	5	6	7

Scoring key: Reverse-score the following items and then sum up all responses

I often find it difficult to show my affection to those close to me. (R) 16
I often find it difficult to see things from another person's viewpoint. (R) 2
I normally find it difficult to keep myself motivated. (R) 18
I usually find it difficult to regulate my emotions. (R) 4
I generally don't find life enjoyable. (R) 5
I tend to change my mind frequently. (R) 7
I tend to get involved in things I later wish I could get out of. (R) 22
Many times, I can't figure out what emotion I'm feeling. (R) 8
I normally find it difficult to stand up for my rights. (R) 10
I tend to "back down" even if I know I'm right. (R) 25
I don't seem to have any power at all over other people's feelings. (R) 26
On the whole, I have a gloomy perspective on most things. (R) 12
Those close to me often complain that I don't treat them right. (R) 13
I find it difficult to bond well even with those close to me. (R) 28
I often find it difficult to adjust my life according to the circumstances. (R) 14

*Numbers on the right correspond to the position of the items in the short form of the questionnaire.

**If you would like to derive factor scores based on the long form, see Webnote 2 on the website.

Trait Emotional Intelligence Questionnaire – Short Form (TEIQue-SF). This is a 30-item questionnaire designed to measure *global* trait emotional intelligence (trait EI). It is based on the long form of the TEIQue (Petrides & Furnham, 2003). Two items from each of the 15 subscales of the TEIQue were selected for inclusion, based primarily on their correlations with the corresponding total subscale scores. This procedure was followed in order to ensure adequate internal consistencies and broad coverage of the sampling domain of the construct. Items were responded to on a 7-point Likert scale. The TEIQue has been constructed with the aim of providing comprehensive coverage of the trait EI domain (Petrides & Furnham, 2001).

Petrides, K. V. & Furnham, A. (2001). Trait emotional intelligence: Psychometric investigation with reference to established trait taxonomies. *European Journal of Personality*, 15, 425-448.

Petrides, K. V. & Furnham, A. (2003). Trait emotional intelligence: Behavioural validation in two studies of emotion recognition and reactivity to mood induction. *European Journal of Personality*, 17, 39-57.

Reference for the TEIQue-SF: Petrides, K. V. & Furnham, A. (2006). The role of trait emotional intelligence in a gender-specific model of organizational variables. *Journal of Applied Social Psychology*, 36, 552-569.

Please note that any commercial use of this instrument is strictly prohibited.

If you would like to use the long form of the TEIQue, please e-mail me at:

k.petrides@ucl.ac.uk

For more information about the trait emotional intelligence research program go to:

www.psychometriclab.com

Appendix D

Rosenberg Self-Esteem Scale (Rosenberg, 1965)

The scale is a ten item Likert scale with items answered on a four point scale - from strongly agree to strongly disagree. The original sample for which the scale was developed consisted of 5,024 High School Juniors and Seniors from 10 randomly selected schools in New York State.

Instructions: Below is a list of statements dealing with your general feelings about yourself. If you strongly agree, circle **SA**. If you agree with the statement, circle **A**. If you disagree, circle **D**. If you strongly disagree, circle **SD**.

1.	On the whole, I am satisfied with myself.	SA	A	D	SD
2.*	At times, I think I am no good at all.	SA	A	D	SD
3.	I feel that I have a number of good qualities.	SA	A	D	SD
4.	I am able to do things as well as most other people.	SA	A	D	SD
5.*	I feel I do not have much to be proud of.	SA	A	D	SD
6.*	I certainly feel useless at times.	SA	A	D	SD
7.	I feel that I'm a person of worth, at least on an equal plane with others.	SA	A	D	SD
8.*	I wish I could have more respect for myself.	SA	A	D	SD
9.*	All in all, I am inclined to feel that I am a failure.	SA	A	D	SD
10.	I take a positive attitude toward myself.	SA	A	D	SD

Scoring: SA=3, A=2, D=1, SD=0. Items with an asterisk are reverse scored, that is, SA=0, A=1, D=2, SD=3. Sum the scores for the 10 items. The higher the score, the higher the self esteem.

The scale may be used without explicit permission. The author's family, however, would like to be kept informed of its use:

The Morris Rosenberg Foundation
c/o Department of Sociology
University of Maryland
2112 Art/Soc Building
College Park, MD 20742-1315

References

References with further characteristics of the scale:

Crandal, R. (1973). The measurement of self-esteem and related constructs, Pp. 80-82 in J.P. Robinson & P.R. Shaver (Eds), **Measures of social psychological attitudes. Revised edition**. Ann Arbor: ISR.

Rosenberg, M. (1965). **Society and the adolescent self-image**. Princeton, NJ: Princeton University Press.

Wylie, R. C. (1974). **The self-concept. Revised edition**. Lincoln, Nebraska: University of Nebraska Press.



Appendix E

Informed Consent

Purpose of the study: Your child is being invited to participate in a research study that is being conducted by Dr. Evanthia Ganetsou, Psychology Professor at the American College of Greece, Deree College, Nefeli Ladaki, and Nastassja Brennan DeVine, both undergraduate psychology students at the American College of Greece, Deree College. The aim of this study is to examine student attitudes towards gambling and their relationship to different psychological constructs.

Procedure: If you agree for your child to participate in this research, your child will be asked to complete three questionnaires. No more than 20 minutes are required for their completion. It is important that questions are answered as honestly as possible. Your child may ask for any clarifications concerning the completion of the questionnaire at any point of the procedure.

Risks: There are no known psychological and physical risks for taking part in this research. Your child can withdraw from the procedure at any point if he/she feels uncomfortable. Do not forget, your child's participation is totally voluntary!

Benefits: By allowing your child to participate in this research, you contribute to psychological research. The findings of this research can be useful to developmental and educational psychologists. More specifically, the research findings may form the basis for additional research on adolescent gambling behaviors in Greece, which seem to be on the increase.

Confidentiality and Anonymity: Your child's answers will be kept completely confidential. Your child will not be asked to provide its name on the questionnaire. The answers will be used only for the purposes of the specific study. All questionnaires will be kept in a safe place and only the researchers will have access to them.

Contact information: If you have any questions regarding this research, you may contact the researchers by email at: eganetsou@acg.edu, nladaki@acg.edu, ndevine@acg.edu

By signing this informed consent, you acknowledge that you have read and understood its content and that your child's participation in this research is completely voluntary. Also, keep in mind that your child can withdraw from the study for any reason, at any point.

Participant's Parent signature: _____

Date: _____

Researcher's signature: _____

Date: _____

Thank you in advance for allowing your child to participate!

Sensitivity and Interpretativity - Between Schizoaffective Disorder and Paranoid Schizophrenia

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Abstract

Motivation: Making a differential diagnosis between *Schizoaffective Disorder and Paranoid Schizophrenia* is difficult in this case, the patient presenting specific elements of both disorders, requiring both an assessment based on life history information and history of the disorder and the emotional resonance and emotional presence of the patient in the relationship during clinical interview.

Objective: This study proposes both a comparative analysis of literature and an evaluation of a type of disorder marked by sensitivity and interpretability in relation to dominated delusional ideas about physical appearance.

Hypothesis: It is difficult to emphasize the diagnosis of Schizoaffective Disorder, the patient symptoms oscillating between paranoid elements (*Paranoid Schizophrenia*) and affective ones (Schizoaffective Disorder). These oscillations are based on a fragile Ego structure, together with a kind of rigidity / cognitive reinforcement.

Results: The study outlines a profile based on: interpretability, sensitivity, fragile Ego and personal boundaries, addiction to *reflection* (in the light of others), psychotic activity (the intensity of the feelings from the present) and the psychotic elements manifested in the past (auditory hallucinations as commenting voices, delusional erotomanic ideation). Also, based on the transfer and countertransference elements identified, the emotional resonance is low.

Conclusions: It is difficult to make a precise differential diagnosis between *Schizoaffective Disorder and Paranoid Schizophrenia*, because of the uncertain dynamics of affective sphere elements in relation to those of the cognitive sphere, while the outside environment is a permanent threat to the structure and the consistency of the fragile Ego.

Keywords: Schizoaffective Disorder, Paranoid Schizophrenia, sensitivity, interpretability, fragile Ego

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Introduction

General description of the case

R. is a 36 years old woman, who comes from a family with a modest condition, having a brother. She lives in Bucharest, unmarried, she graduated from Faculty of Law and she is practicing in the field, working in a good social position, which involves increased responsibility.

She lives with her mother, her father died five years ago because of lung cancer. She has been in a relationship (for several months) with a man which she describes as having a *contagious optimism* and he offers her support and acknowledgments, in those moments when pre-psychotic fears appear.

The important current complains: enhanced sensitivity to comments, criticisms, jokes of the people around, which are addressed to her, and a tendency towards interpretability, centered on a particular theme → patient's fear that she is ugly, for which she finds confirmations, even in situations not related to the subject.

Living and working conditions: She lives with her mother in an apartment in Bucharest, with good living conditions, but in the relationship with her mother there is an over-responsibility and high stress levels: *"I have to do everything alone, mom comes here like she is coming to the hotel to find them ready made."* The same stress factor is the workplace, and because of the co-workers consisting of ten women with constant criticism and an environment marked by social competitiveness.

History of disorder: It started at the age of 18, when she was studying for faculty admission exam. Since childhood she presents an exacerbated sensitivity and interpretability in relation to the criticism of others. She had two florid psychotic episodes with hospitalization, the diagnosis was *Schizophrenia*, with good prognosis due to compliance and premorbid personality structure.

The first episode occurs in the context of History tutoring, for the admission exam to the Faculty of Law, developing erotic delirium for the professor who was teaching her, with interpretability and hyper-analytic delirium. R. repressed erotomaniac impulses to the point where they escaped control, leading to a confrontation, which made her confess the feelings and the teacher's rejection led to a decompensation manifested through verbal aggressiveness. The situation ended with a period of hospitalization of one month, during which she showed good compliance with treatment, which was maintained structured for 5 years.

The following year of the onset of the disease, she joined the faculty, but starting with the preparation of the graduation paper, the patient tried to stop the medication. As a result, she developed a second episode that required hospitalization. Since then, she has never discontinued the medical treatment, trying some dose reductions, which led to increased symptoms each time, after that higher doses being needed to control symptoms.

Current condition: Currently, she is in incomplete remission between episodes, being kept both interpretability and sensitivity particularities to rejection.

Perception: Shows no productive type disorders during the examination, but auditory hallucinations (commenting voices) appeared in the history of the disorder, with onset on a fatigue background.

Attention: Voluntary hyperprosexia, which operates as a mechanism for adapting to insecure social situations and as a way of obtaining social validation.

Memory: Good retrieval background, but she presents temporary lapses during the speech and the update of some insignificant details.

Thinking: Flat and slow rhythm and idea - verbal flow, inducing the feeling of ideational mechanization and emotional flatness. Latency in speaking and verbal blockages can be explained by the simultaneous operation of two plans: concrete, situational (conversation as such) and the interior, which is trying to structure the Ego and a verbal censor, being present the phenomenon called mental fading that *"It is manifested by a slowdown of the verbal rhythm, as the patient would be detached of what he/she says for a short period."* (Tudose, 2011). She presents cognitive *fixation* in relation to concerns regarding physical appearance and an inflexible thinking, which is manifested by the constancy in insignificant and abundant details.

Another essential element is interpretability, a structuring way having as core a fixation on form (whether the form of words or physical appearance). Cognitive inflexibility involves a gravitation of patient's interests around the theme form (insists more on pronouncing certain words, names, the description in detail of certain circumstances, as if their shape defining would bring her own Ego the structure it needs).

Interpretability is predominantly related to its external appearance and centered by delusional theme:

*** *"I heard my boyfriend telling others that, although I'm not beautiful, at least I should realize that he likes me."*

*** *"Some colleagues asked me how I can smile in a particular situation, and it seemed they say that because I am not allowed to smile, being ugly"*

*** *"My friends may try to support me, but I'm not so geek or stupid... Maybe I'm looking for a different answer from them ..."*

The affective corollary of interpretability appears in phenomena of sensitivity, responsiveness to baffle and suspiciousness. R. presents an increased sensitivity to criticism, jokes and rejection, and also to the needs of others. During a trip to the mountains, she feels hurt by the comments of her partner and friends, to a small, minor fact, from those around. The incident made her recall some childhood memories related to the fact that family would have sent her to seek by herself information, when she didn't know something without explaining her anything. She considers a similar discussion regarding a girl from the group (currently in their group of friends) being specially initiated, suggested, to put R. in a position of inferiority, making direct reference to her childhood. Also in the same context, she tells jokes from friends, for which she manifests rejection and lack of connection to their playful content, convinced that there is a painful and hidden meaning, in order to make her feel bad.

Enhanced sensitivity related to others is what allows her to easily connect, unconsciously, to the needs and preferences of people around: *For example*, she is the one that comes with a very appropriate proposal for the gift that they would make to a friend whose birthday they were celebrating during the trip in the mountains, managed to find something to suit his tastes and concerns, just as she feels the need that her wishes to be taken in consideration by others: *"This is how I wanted to buy me someone a gift, after they study me and see what concerns me. Like I noticed that that boy is interested in Astrology. "*

The inflexibility of thinking is transposed through a reduced ability to answer emotional and cognitive to connotative messages in different social contexts (anecdotes, jokes). Basically, R. fails to understand the difference between a direct message and a connotative one (joke) and, therefore, takes connotative messages, setting rigidly in her allusive commonly reporting system around the main fear linked to self-image.

Ideation → Patient currently presents ideation with commonly intensity with symbolic self-harm within the self-image, having minimum criticism that the reality might be different from her own interpretations, which, however, she cannot change. In past episodes, ideation reached delusional intensity, being of erotomaniac nature and persecution-related

Intellect → Above average that favoured both treatment compliance and critical illness, it is a positive prognostic factor.

Affectivity: Currently, she presents affective flattening, maintaining a slight resonance in speech related to her partner. One also can distinguish moments when she fluctuates from sadness (because of fatigue) to joy, but these fluctuations of mood do not change the meaning of patient interpretability. If in the first episode, delusional ideas were correlated with hereto-aggressiveness and explosive expression of emotional feelings, currently anger was introjected and brought in a symbolic way within her Ego. This may be an argument which advocates for Affective Schizophrenia to the detriment of Paranoid Schizophrenia.

Instinctual life: R. presents a strong control of the aggressive impulses, for which she finds a motivation inside her Ego without projecting it outside.

Critical illness is present, the patient admitting several times that it is possible that the ideas might belong to her or that her excessive sensitivity might cause her pain, and not the feedbacks or negative intentions of others.

*** *"Doesn't she look at her to see how ugly she is, how can she smile, since she's so ugly ?!"* → in the context of the interpretability related to appearance, she understands that the message she heard might be only partially true, supplemented with *part of her imagination* or speculation and personal associations: *"I do not know if they said that, but this is what I believe and that's important to me, what I think."*

Personality: R. has a structural vulnerable side, with enhanced sensitivity to rejection and negative evaluation. However, she doesn't require the attention of others, confirmation, affection, but it makes her feel good to accept them. In childhood, it was marked by multiple *fears*, also by the desire to be awarded and liked by others.

Currently, she is characterized by conscientiousness, compliance, cooperation, and also fear of the new, the need for stability and structure, organization (evidenced by the way she plans her life, by the attention she gives to details): "*The unexpected scares me a little... I like stability and all that drives me out of my pace and of how I think is good and right, makes me sad.*" (given that she would be late only for a single therapy session in seven years due to the clocks that were behind, which she realized later).

Self-Identity: A fragile Ego, with a poor image and dependent on others' feedbacks, which came on a self-critical structure, which favoured the lack of borders and indiscriminate taking over of the others' point of view.

The particularity of the case: sensitivity, fragile self-image, productive symptoms centred around physical appearance ("*The voices are always telling me I'm ugly! Never tell me something else...*").

Medication: 3-4 mg Risperidone constantly over the past ten years. Although she is trying to reduce the dose to 2 mg, she fails, psychotic dismantling appearing.

Interpretation of the case: Coming on a fragile Ego, the patient interpretability sensitivity become structured, making her personality inflexible, similar from some points of view to the hardening / stiffness of the obsessive - compulsive, with obsessive *fixation* on her self-image.

The fixation on form, whether it is beauty, appearance, the form of words she uses, or about the fixation regarding the correctness of the insignificant details of life, involves, *in fact and in practice*, a lack of form, and partially, a lack of content of Ego. This lack of structuring also implies an inability to distinguish, both in concrete terms, regarding the inability to distinguish between the basic meaning and the connotative one, the playfulness of words, and emotionally, by the inability of separation from ideational and valuable content of the others.

Thus, the centripetal force of the Ego is so small, that it fails to form a coherent and structured image of her identity. If we turn into a metaphor R.'s Ego image, it is like a divided structure, without borders, whose elements gravitate around the others, without rendering a coherent content. It is this cognitive reinforcement of the patient that tries to compensate for the lack of form of the Ego.

And, because R. cannot build an internal structure by herself, she relates to the people around to reflect her Ego as a whole, hoping to get coherent whole. But, reflecting occurs fragmentarily, resulting in an even higher inconsistency to her self-valorisation system and personal identity. So that, from this point, occurs the patient ideation of self-deprecation, which interprets the inability of others to reflect her a consistent and positive image, as having a personal, internal motivation →namely, the fact she is ugly (that she is not uniform and harmonious). Following an evolution in the emotional and cognitive trajectory, a self-reported episode is recalled, in which her father showed her only pieces of physical attributes (telling her she has *nice hair and beautiful eyes*), but never including the whole. Exactly the elements mentioned in the speech about father are found in other episodes of illness, saying that her eyes were complimented (the partner) and hair (by a co-worker).

The phenomenon of interpretability appeared since childhood and now works afterthought, R. telling an episode in which she was deeply disturbed by remarks (real or not) of some children: *"We do not throw snowballs at her, she's ugly!"*. It also highlights the importance of the evaluations coming from strangers, considering that close people can deceive her about her real image: *"Perhaps these are the most sincere opinions, jokingly discarded by strangers, at first sight."*

Another issue regarding patient interpretability and the **projection phenomenon** refers to the idea that some people born under Gemini are superficial, who judge and insult her: *"They try to get to me, but they fail, because they are not able and then they are the ones who say such things about me!"*

R. seems to feel safe in the world of children, which resonates with her tendency to immaturity. Given this feature of infantilism, we can further evaluate the patient trend to take, in a non-discriminatory way, the assessments not only from others, but also their states, which leads to a contextual and limited poikilothermia. Thus, after a relaxing time spent in the mountains with her partner and friends, having a positive humour, the remark a co-worker on her emotional state - *"I'm not feeling as good as you!"* – perturbs her, inducing her the obligation to change the status: *"I have no right to be joyful when others are sad."* This phrase serves as a rule of social behaviour, which R uses as a way to define the Ego (in relation to others) and as an attempt of social integration.

Also within the area of interpretability and cognitive rigidity, R. recalls an episode that took place during the trip in the mountains, together with her partner and some friends, an episode during which she says she surprised them talking about her beauty. Moreover, we can observe an inability of emotional resonance and of understanding the connotations, in relation to the remarks of others.

Given the lack of form of the Ego, the patient's need for stability and organization is structured. Any interference in her schedule and life makes her feel unstable, *an example* being the perception of the trip in the mountains as a relaxing and pleasant time, but at the same time as being a disturbing factor of her balance: *"It was a relaxing trip, yet there were new things and new people and I tried to deal with..."*

Sometimes R. accuses commenting voices, which occur when she is overstrained, tired, referring to her ugliness. Throughout life, there were two clear florid psychotic episodes: the disorder onset (with delusional erotomania) and another one, which started in the bus returning from a trip to Greece, being with a friend and her daughter. Being very tired (trip lasting 12 hours), the patient began to hear the voice of a man who was talking about how ugly she is, other passengers contradicting him or asking him to stop *"Change the subject, we are bored and this is an offense."* R. asked confirmation of these words from her friend, who has denied, later the daughter told her mother *"If you tell her she didn't heard, when in fact everyone has heard, she will think she is crazy"*. In this situation, the clear psychotic elements were the commenting voices, as well as the patient's interpretability in relation with little girl's answer.

Crying very easily and enhanced sensitivity to the separation (even for a short period of time) from the partner is another argument in favour of immaturity: *"Even the thought that he will go makes me start crying..."*

At least at the moment, the relationship with the partner is a support for R., he managing to support her emotionally and validate her qualities, being available to offer her explanations and reassurances regarding her fears. Although gestures of tenderness, affection and valorisation from him do not destroy the common system of beliefs, however, the patient assigns to him positive intentions, to the point of doubting the authenticity of her *fears*. Thus, during the trip to the mountains, when her partner has expressed excitement over the two pictures that came out great, R. says: *"I think I'm not a beautiful girl, I am really ugly... and from that picture it seems only that we are in love ... But it's good so, too! "*

Although the patient did not disclose to her partner the diagnosis (saying that it is just a mental *breakdown because of stress, strain and failure in love*, for which she takes medication), this is nevertheless a positive element regarding the criticism on the disease and to the protection of a vulnerable side. She wants to tell him and she believes he could help her, but she is not sure yet that he will cope.

Although there are times when she feels misunderstood and even ridiculed by her partner because of her excessive sensitivity, R. manages to admit her mistakes and face the fears: *"Maybe there are just simple jokes and are not to be taken seriously and I must not cry because of them."*

In conclusion, the patient presents a **fragile Ego, partially destructured within interpretability and sensitivity area**, with negative prevalence ideation regarding the self-image, but with a limited disruption because of the positive prognostic factors, such as high intellectual level, compliance to treatment and emotional support from the relationship with the partner, R. being socially and professionally integrated. Also, positive prognostic factors are the two of her hobbies: *"After all this stress, after all that happens to me, after that it seems to me that everybody.... the only things that make me relax are reading an Astrology book and put me up to date ...with this issue of human relations ... "*

A psychotherapy session with R. will centre around the concept of **content** and much less around the **interpretation** one, because, for her, **the interpretability** mechanism is the dike that punctuates her mind. At the same time, R. is immature, dealing with a sort of *infantilism* in cognition and emotions, specific for the former little girl, who currently feels comfortable only around ten years old children. R. interprets everything: both the phenomena of the external world and those of the inner world, using arguments like "to split hairs", which is how the *network* delirium is formed, which gathers inside any unimportant information of the outside world, which is taken as an argument in chaining delusional ideation.

In the therapeutic approach, the focus is shifted from thinking on living, making R. easier to accept auditory and visual hallucinations, that are the result of her unexplained fears, and to believe that everything happens because of a **particular sensitivity**, rather than to believe that her thinking and perception are distorted, getting to work not in accordance with reality. Hallucinations and delusions come

from the most hidden feelings of defeat she had early in childhood: *"I heard A. saying: Although she is not beautiful, I wish she at least realized that I love her."*

The patient has many deficiencies, not only related to the feminine part (in which the perception of self-beauty is an important attribute) but including the acceptance of **competitiveness**. *Friendship, comparison, to become a wife*, bring in R.'s mind other dimensions. Then, she adopts an ironic tone to everything that femininity means and believes that it does not worth to enter the competition. Emotions are from the area: *dissatisfaction, frustration and irritation*. R. is unable to perceive herself, outside the cohesion between her and A., which for the future (if the partner can remain constant in her psychic life) can be repaired. A. will have to struggle, as in fairy tales, with hallucinations and delusional ideation and, also, with mechanism of interpretability from R.'s mind. Her love and gratitude because A. showed up in her life seems to help her to trust him. In other words, she gives him the chance he could function restoratively!

The question remains whether, at the limit, first (in her psychopathological disorders appearance) was changing the mood (and we find in her emotional history a real period of time changed in a depressive way) *or* if the thoughts were the first which distorted, from the interpretation of reality to the delirious pole. R. says: *"Some people talk like they breathe"*, remaining on the use of **projection** in relation to *what others think of her*. Somehow in a primitive registry, where *only beautiful people can write nice!* Together with bantering, subtly, R. feels indignation: *"Some people, whom I see superficial, are the ones who find me ugly! For them, the external image of someone matters very much! Emotions or feelings do not matter under any circumstances."*

In the description of this case, an important aspect is the urgent and commenting tone of the voices, when R. is in the bus, after a tiring period of time, which reduces her reception thresholds and makes possible the exacerbated perception of the sensorial inputs. The accusatory voices talk with the rescuing and repairing ones. Somewhere, law-like and logic appearance, prohibition, restriction of aggressiveness against herself (also related to the para- side and the operation *as of right*) are introjected in the hallucinations that defend her, saying: *"This is an offense! You will go to jail for the denigration of this girl! "*

To hear or perceive things that are out of reach of others, for R. gets the character of functioning in *the mirror*, in the sense that everything seems *reversed*, even the madness and her own beliefs on her perceptual disturbances. The patient hears voices that others do not hear. The two friends try to convince her (empirically) that what happens to her is unusual and inaccurate. R. interprets distortedly and "upside down" and, namely, that everyone has heard something evil and slanderous and that the two women are trying to convince her that she is the only one that should not hear! As if she would remain forever a child of ten years, *sentenced* to not reveal how cruel and painful big reality is → *"Now she will think she's crazy, if you say it's not true what she heard, when everyone around realized what was happening! "*

Delusional interpretability works being correlated to visual or auditory illusions and always around the concept of "being ugly": *"I was walking on the street smiling. And I heard: How can she afford to smile, since she is so ugly?* In psychodynamic sense, the two major dimensions that represent the foundation of forming the **sensitive**

ideation of relationship are: **fragile personality structure** (regarding psychotic decompensation risk) and the **envy mechanism and managing it through projection**. R. feels guilt related to any moment of joy (no matter how minor it may be), this stopping her from being happy: *"I was so cheerful in the morning ... when my friend came and told me that I do not well what I do ... "*. R. is fragile and sensitive, with an artificially upgraded Ego and exaggerated so as to cope with. But success is illusory, any little intervention of someone from outside seeming to "deflate" her and make her unable to enjoy and to face the reality. These movements, transgressions and regressions of R.'s Ego between **trust** and **self-disappointment** are immediately noticed by her partner, who feels the changes from her soul (which are not equivalent to exclusively dispositional changes!), who tells her: *"You're not the same like this morning! It seems you are no longer YOURSELF!"* The claim is made in a metaphorical context, but in relation to a human being which is so fragile, it refers to a concrete way of changing the Ego, even in her physical functioning context.

R. gives a whole speech during the session about the confusion caused by changing the time zone and all the emotional and administrative consequences arising therefore (including sending two messages to ensure that the meeting remains valid). *"This unpredictable situation ... I like stability ..."* → she states proving a desperate attempt to anchor in reality. For R., fatigue is always a trigger to decrease sensory limit. Also, stimuli or situational situations that for other people are considered within the great range of normality or pleasant, are experienced by R. with high energy consumption and exacerbated desire *to handle*: *"New things, new people ... I tried to face them..."* → she refers to the event related to her leaving to the mountains, which was for her a relational adventure.

In a perspective that we would like to discuss the **para-side** present in R., we could place it on a direction that starts from normality and that moves to the psychotic zone. First, R., is a master of **empathy**. She has good intuition, with fine nuances, what things are pleasing those around her (as the friend to whose birthday they is going, offering him a gift he liked, in a manner in which she herself would like others do to make her happy). At this level of functioning in the empathy area, R. impresses and delights her friends. Later, talking of **sensitivity**, a kind of emotional fragility, the remarks from others, even the innocent ones, seem to touch and to destabilize her (R. is hurt that *she didn't wash her hair with shampoo three times, as her friend does, so that means there is something wrong with her, she is excessively careful to an invitation to the wedding of her boss and she is wondering if she reacted right or not*).

In this type of relationship, the game is always within us, with the unconscious involvement of the other, who gets to interact at a much deeper level than she would want at a first interaction. Going further, toward extreme psychopathology, we find again **sensitivity**, when in R.'s interpretations regarding ordinary phenomena, *a danger wind is blowing*. The patient's speech is representative for the **relationship sensitive delirium**, when the allusions of her colleagues are made in order to highlight her deficient existence, in relation to anyone with whom she could be compared. The sensitive level refers to the area of living and feeling, the immediately following one, of **interpretability**, inserts thinking, cognition and introduces evaluative judgment over data, facts and events that were previously only experienced.

Returning to the beautiful side of empathy, present in this patient, by the gift that she makes to the friend whose birthday party she is invited, R. expresses her own fascination with the stars, a typical feeling for a ten years old girl, who wonders about everything that can be beautiful in the world. It is a true joy, coming from that she sees in the book of Astrology, an Encyclopaedia of human relations, a Dictionary to which she must appeal in difficult moments, just like in childhood, when upon any request of communication and need to discover *anything* together with her parents, is sent to learn by herself from the books.

R. has the princelps psychiatric diagnosis of **Paranoid Schizophrenia**, but it is worth to discuss the **Affective Schizophrenia**, and the **post-psychotic Depression**, at times, directly the next acute episodes, overlapping schizophrenia evolving from the age of 18, even in the continuous presence of the drug treatment. As a psychological problem (not in the sense of psychiatric diagnosis), the case raises discussions on the pathology of **dysmorphophobia**, as well as to the personality functioning in a primitive, narcissistic – paranoiac context. **The size of beauty and corporeality** is always related to the ideal image regarding physical Ego, and primary weakening is initially related to the body, subsequently extending to the spiritual and intellectual functioning.

Although the psychiatric diagnosis made by the doctor who has her under observation for 19 years is the Paranoid Schizophrenia (with incomplete remission between episodes), we consider that, at the moment, the case is structured more in the area of Affective Schizophrenia, having as argument the easy emotional fluctuation between states of sadness and joy, especially in relation to the partner. Another argument is the fact that a patient with Paranoid Schizophrenia would project aggressive drives to exterior and he/she would place their motivation there too, while R. is living painfully the motivation of her misery, watching them through their own inadequacies: *"I think I'm not beautiful girl, I'm really ugly ..."*

References

*** (2003). DSM - IV - TR 2000. *Manual of Diagnosis and Statistics of Mental Disorders*. Bucharest: Association of Free Psychiatrists of Romania.

Gabbard, G., O (2007). *Treaty of Psychodynamic Psychiatry*. Bucharest: Trei Publishing House.

Tudose, F., Tudose, C., Dobranici, L. (2011). *Treaty of Psychopathology and Psychiatry for Psychologists*. Bucharest: Trei Publishing House.

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***Cumulative Perspective in the Expression of Pathological Love
(Libidinal Fixation)***

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Abstract

Motivation: The problems of couple relationships represent a reference subject in daily life. As regards the case, it hides behind the usual couple difficulties, a deviation from normality, migrating toward the pathologization of intra- and interpersonal dynamics. The pathology can be explained by the effect of intensification of a disharmonic structure of personality by the accentuated conflictuality of the couple relationship.

Objectives: The paper aims at analysing the impact a dysfunctional couple relationship can have over the pre-existent individual vulnerability and especially to what extent can the couple dynamics determine the pathologization of individual functioning.

Hypothesis: Patient's symptoms represent the result of a plurality of endogenic and exogenic factors. Her special, pre-psychotic psychic functioning and the premorbid personality with histrionic shades were potentiated by the relational context, crossing the border of normality. The present symptoms offer hints of a delusional disorder.

Methods: Clinical interview (from the psychiatric and psychological perspectives), the discourse analysis.

Results: We try to offer a perspective as coherent as possible on a *story* with many variables. The endeavour was one with the elucidation of psychological mechanisms involved and of their pathogenic potential. The symptoms of the patient were analysed, in close relation with the current life context, so as to understand the importance of each involved factor over the present problems.

Conclusions: The impact a certain interpersonal relation can have on an individual is, sometimes, surprising. The situation of the patient, the couple relationship seems to be the triggering factor of her pathogenic potential.

Keywords: Delusional disorder, paranoid personality disorder, histrionic structure, dysfunctional relationship

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Brief presentation of the case

Misses A., aged 47 years, comes for therapy as a result of a court order. This decision was made in court, as a result of the trial her former husband opened against her. What he invoked was the *harassment* from Mrs. A., materialized in a very high number (approximately 3 000) of written messages, she had sent on his mobile phone. The trial ended also with a restriction order, the patient being prohibited approach, at a distance of less than 100 meters, her former husband. At the same time, the patient declares she has not the right to have money at her disposal (*“Therefore, I am also under guardianship in his mind... I cannot have cash... What could I understand of the fact that he never gives me money and he sends me with his driver to shopping?”*).

The patient’s problems are related to the relationship with her former husband. The two divorced a short while ago, after a tumultuous relationship, with a very complex dynamics, within which pathological mechanisms were activated and emerged, which are related both to the individual structures of the two partners, and to the type of their interactions. Two children were born from this relationship, of 12 years old and 2 years old respectively, both of female sex.

The two met approximately twenty years ago. During the first eight years, they had the statute of lovers, because he was married with another woman. But he divorced, their relationship being subsequently officialised. Their marriage lasted ten years, and during it the first child was born. During marriage, the husband continued to have extra-marital affairs with younger partners, but, at a certain moment, he decided to end the relationship with his wife, because he wanted to move with his new lover, whom he considered, as the patient says, “his great love” (*“He left on March 4, 2011. He warned me he would never come back. He said he leaves all to me.”*). But after a short period of time, the relationship of the former husband of A. with the new partner ended, he being abandoned by the woman in question. As a result, says the patient, *“On September 8, 2011, we were back to bed together, strictly in secret”*.

In this point of the story, there comes out a major mismatch in the stories of the two, which exemplifies very well the pathological nature of this relationship. The patient declares that they had an intense love affair for three months (*“We loved each other in those three months as we did not love in 20 years... He was carrying me in his arms through the house. He did not do it even when I was 28 years old... They were some magnificent months”*), while the husband denies the existence of such a period and he asserts that, ceding to her pressures and threats, they had only one sexual contact, after which their second child was born. The patient explains herself the end of the story of the three months as being caused by the occurrence of the pregnancy (*“It was over because I went with young, according to his theory... The miserable says now that, if I had an abortion, he would have returned”*). Up to present, the former husband refused to know his second daughter, whom he never saw, negating in fact her existence.

At present, this pathological relationship (which up to a point manifested only within the couple) tends to extend its borders and to include a higher and higher number of people, because the two do not communicate directly, but by intermediaries (*"I am not allowed to speak with him and I am in an extremely humiliating position ... We communicate through our facilitator. If I need something, I have to address to a third party, to our godfather, whose email is read by our godmother... and so on..."*).

Moreover, the situation was built in a way as the two are in a permanent indirect contact. The patient allowed being completely dependent upon the former partner (financially), so that, for the satisfaction of the basic needs, she must address to him (*"If I want to buy food for the children, I must speak with the driver, because he has the money..."*). On the other hand, the husband manipulates the context, so that A. always reach to him (*"We have signed an agreement, which stipulates that he must give me money"*), whether it is about financial needs, or of various appointments to the psychologist and/or psychiatrist (made by him), out or obligation or not. The ambivalence proved by both of them could not be settled within the couple, its settlement being tried by the appeal to other persons (judge, psychologist, psychiatrist, godparents), who acted as mediators and who, in various moments, had wither the role to approach them or to distance the two. As a result, we consider that the patient's problems cannot be discussed independently of the relationship with her former husband, of the dynamics of the couple, of the way in which it was built and evolved, as well as of the effects and proportions this pathogenic relationship has at present.

Psychic examination of the present condition

Perception:

The patient did not feature obvious qualitative changes of prosexic function.

Attention:

She does not feature considerable changes. But one can notice the fact that the selective attention is preponderantly oriented toward the stimuli corresponding to the area of interest of the patient. *For example*, on the one hand, A. ignores the messages of the interlocutor, referring to the establishment of the therapeutic framework, and, on the other hand, she manifests an increased focalisation of attention, during the moments when psychological aspects of her relationship are reflected by the therapist.

Memory:

She falls within the parameters of normality. But A. features selective retrospective hypermnesia, for certain data, facts and events concordant with the focalisation of ideative and erotic interest. In this respect, what's important for the patient is the date of his husband's departure from the relationship and his return, as well as the date of the last intercourse with him (*"He left on March 4, 2011", "On September 8, 2011, we were back to bed together", "I did not make love for two years. On December 18, I celebrated two years..."*).

Language:

It represents an element of special importance in the psychological profile of the patient, being the mental product, as well as its verbalization. Therefore, the discourse is enough alert, being „sprinkled” with a slight tendency to logorrhoea and alternations between very high and very low intensities and tonalities. These aspects indicate theatricality and are materialized in a histrionic mode of expression. Even if the speech is slightly incoherent (as a result of the tendency to leave the phrases uncompleted), A.’s language is generally elaborates, elevated, reflecting her high educational level.

Thinking:

One can notice the accelerated ideative rhythm and flow. According to the previous remarks, the patient’s tendency to leave phrases unfinished can be justified by an increased ideative flow, which cannot be coherently and concisely verbalized. A. is obliged, along with the acceleration of the cognitive processing, at the moment of incoercible evocation of events having emotional impact on her, to express in a cathartic and theatrical mode, simultaneously, as many ideas as possible, in an unstructured manner (*“I remained dishevelled... All who were close to me reproached me that I do not apply the brake, even this is what I am asked... I am fighting a huge battle... because it is not about money here...”*).

As regards the content and frequency of ideas, they are strongly exacerbated from an affective point of view, being in strict agreement with the intense preoccupation of the patient, related to the relationship with her partner. Thus, on this background, an **erotic delirium** is materialized, entailing the other psychic functions, sliding progressively into parareal, as one can notice in the relevant aspects exposed previously (particularities of the function of attention, memory or language). Throughout the entire speech, A. tries by all means to persuade and to impose her ideas related to her relationship, feeling them with a great conviction. The erotic character of the delirium is highlighted by a series of interpretations, intuitions, indirect conversations, passionate polarizations in close connection with the partner. In this sense, the patient interprets any gesture or manifestation of him (*“Have you ever thought that if are always sending me to the psychiatrist and to the psychologist people could think you care about me?”* → the reproduction of an address to the partner, *“He told he sends me to get rid of me...”*). Another aspect characteristic to delirium is the fact that A asserts that she sent some thousands of phone messages to her partner, in various registers, used by him as proof to obtain the restriction order (*“The theory is as follows: I spied him, I blackmailed him to make love with me. He deleted the messages he sent to me during this entire period and which were in the same register, he kept only those from me and he went with those into court, to make me mad... In good faith, I neither kept mines nor his...”*).

As regards the relationship of the patient with her partner, it acquires the characteristics of a **couple pathology**, A.’s delirium becoming strongly related, and

with direct reference to the behaviour of the partner, strongly invested affectively. Psychoanalytically, the context in which the two are found at present acquires the features of a game provoked under the form of a **perverse mechanism**, having as proof the manipulation of the husband regarding the payment of the therapy and the financial support of the patient (*“We communicate through our facilitator”, “If I need something, I must address to a third party, to our godfather”, “He came from abroad and called you to make psychotherapy with me, otherwise I will not receive the child support any more...”*).

The interpretability of the patient, specific to delirium, highlights to the same extent her **paranoid dimension**. One can notice an abstract intuition and a high level of sensitivity, when A justifies her husband’s gesture to obtain a restriction order based on the phone messages, as being a mode through which he had obtained the validation of a the personal image from the judge.

Affectivity:

One can notice the emotional ambivalence, both of the patient and of her partner. A.’s affective disposition is on a descending slope, being preponderantly negative. This aspect is highlighted also by the suicidal attempt of the patient, from her past, as well as by other assertions related to her state of mind from the present (*“I don’t feel good”, “My condition is a terrifying storm”, “My life ended with him”, “We communicate through our facilitator, fact throwing me into an abyss”, “I could lose weight after pregnancy only when I took Reductil, and this has thrown me into another abyss”, “I have wanted to withdraw completely from the world, I have wanted to die!”*).

This intense emotional load represents the support of the previously described delirium being exteriorized in an obvious manner. The force and durability of this ideal-affective group support the systematization of delusional ideas, based on the affective criterion.

Social functioning:

The external life of the patient is altered at all levels, because of this massive affective involvement. The deficient relationship with the child represents a first significant consequence (*“M. was always subsidiary to the relationship. The child is just a result of the love between us, human beings, in my opinion...”*). At the same time, the relationships with the close persons have been damaged, A. migrating progressively toward isolation (*“I have not talked to anyone, I have wanted to withdraw completely from the world, I have wanted to die...”*).

Instinctual life:

The patient makes references in an euphoric manner to the sexual life next to her partner, in the positively charged evocations from an emotional point of view (*“We loved each other in those three months as we did not love in 20 years. And we created*

the little one...”, “We were making love. That was the most beautiful period from this point of view. God blessed me as a woman...”).

At present, A. is sexually inactive, without wishing to be involved in other relationships (“*I did not make love for two years. I celebrated two years on December 18.*”, “*He was the last man in my life.*”).

Personality structure:

Even if, as we have showed and argued above, the patient’s problems are related to a couple pathology, a special relevance in the coloristic of the case is due to her personality structure, which was a fertile field for the development of such a dynamics. In fact, the relationship with her husband was the *trigger* which highlighted her vulnerability with pathogenic potential, to which are also included the adjacent defence mechanisms.

We consider that the patient has a personality with accentuated traits, of more types. The **histrionic notes** seem to be in the foreground, emerging from the appearance very well arranged, the expression theatricality, the tendency of exacerbation of emotional reactions, as well as self-dramatization. The seducing speaking style, which served her for sure in the profession she has (lawyer), is corroborated with the self-victimization, managing thus to manipulate those around needing their help. Another indicator for histrionism is also the demonstrativeness of the suicidal attempt she relates (“*I wanted to die in August. The housekeeper found me; if she did not come, I would have managed to do it. I took pills, but they were not sufficient... Tramadol and Phenobarbital, from my mother-in-law. The housekeeper found me, because she came earlier than usually...*”).

One can also notice in A.’s life story the **dependence notes**. The most concluding proof of their presence is found in the relationship with her former husband. The patient offered him everything, since the moment she met him, allowing arriving in the situation in which she depends on him for anything she needs (“*When he left, we were only one in all, including the profession. All was at him, I had not put anything aside, and even the company was on his name.*”). A.’s entire behaviour was oriented toward keeping him at all costs, passing over infidelity, violence and disdain. To this structure with dependency notes, there are also added the **addictive tendencies**, materialized in the consumption of alcohol and amphetamines.

Beyond these aspects of personality, indicating rather vulnerability, there is the **paranoid side** of her structure. It results from the force and resistance the patient proves in this entire context. The effect of pathological nuances of her personality is partially annulled by this force, by means of which she managed to surpass the depression installed immediately after she was abandoned (“*I have wanted to withdraw completely from the world, I have wanted to die*”) and to bring into play more “adaptive” mechanisms of the *power* register, such as specifically histrionic

manipulation, which finally proved to be „useful” for her purpose. By the same strength, she managed to regain, even if temporarily, her husband, and to get pregnant with the second child, under improbable conditions (“*I am very happy that I ended my carrier of woman with a maternity at 45 years old!*”). More than that, she could manage with the pregnancy, even if, during the first months, she consumed alcohol and amphetamine, from the “*weight loss capsule*”, thinking that the foetus is not alive anymore (“*I went to the doctor because I was getting weight. I was thinking how I would stay on Christmas days for curettage - I was sure S. is not alive...*”).

Theoretic perspectives on the case

We will try to outline some diagnosis directions, by the confrontation of the present symptoms with the main theoretical suggestions within specialty literature. Beyond the already discussed aspects, regarding to the pathological couple relationship, as protection factor of an individual vulnerability, the patient in question proved, however, a disaptative behaviour, tending to cross the normal limits. Taking into consideration the symptoms present, a plausible diagnosis hypothesis would be **delusional disorder**.

The case of the patient in question can be a special form of delusional disorder, even if the DSM criteria are met *ad literam*. Her obsession to write messages to her former husband, even if it does not represent a proper delusional idea, represents a preoccupation whose intensity can be considered delusional, having an erotic substrate. Moreover, A.’s attitude toward this preoccupation is a non-equivocal one, disclosing thus her own lack of criticism on the situation and the impenetrability to the attempts of others to counter-argue her. As regards the functioning, she was significantly affected by the existence of this fixation. The best example in this sense is the neglect of children and failure to accomplish her maternal duties, as a result of the excessive time invested into message writing.

According to Kaplan and Sadock (2001), the defensive mechanisms often involved in delusional disorder are **negation, reaction formation and projection**. The main defence is projection. The symptoms represent a defence against unacceptable ideas and feelings. These are transformed just in their opposite, by the formation of reaction or projected over those around. In the case of the patient analysed, negation is obvious. She refuses to accept the definitive departure of her partner. At the same time, she tries to transform the positive feelings for her former husband, which at present prove to be unacceptable, in negative ones, hoping that these will serve her *better*, being more appropriate to their relational context.

Pillman, Wustmann and Marneros (2012), trying to grasp the possible differences between reactive delusional disorder (with a precipitating factor) and the non-reactive one, noticed that, even if there are no differences as regards the evolution and the prognosis, there are still some significant differences at the level of personality traits. They acknowledged that the patient suffering of reactive delusional disorder have

high levels of *neuroticism* and predispositions toward accentuated traits of *dependent personality or borderline*. At the same time, they have an *increased vulnerability to interpersonal conflicts*. The conclusions of these authors match perfectly in the case of the patient analysed. The onset of her onset is surely a reactive one, the triggering event being the separation from her husband. As regards personality, the traits grasped by Pillman, Wustmann and Marneros in their study are also found in the profile of this patient, who has an increased vulnerability to the interpersonal conflicts, and the dependent traits can also be identified easily.

Psychodynamic explanations

The three fundamental dimensions, in which A's pathology is expressed, are: **histrionism, paranoid area and the potentiality of mania**. Beyond these possibly evolutive directions, and as a crossing of them, there appears the **caricatural**, grasped from the discrepancy between the high socio-cultural and educational level of the two and the **ludic with character of „brothel”**, where A. speaks nonchalantly about: *tampons, the need to do pro bono facts for her, to be pregnant, to leave from the chiropody room to go for a roll in the hay, to be lover and to have love affairs, “miserable husband”, to have passionate sex and to walk naked in the house at 45 years old, to be sordid and to provoke disgust to the husband*.

Histrionism, activism, and hypomania are only a coloured feathering, the superficial layers where her secluded personality exteriorizes, the nucleus being paranoid. Disinhibition, attractiveness, effervescence, that *being different* represent the seductive side of A., due to her profession and intelligence, managing to make up the impenetrability and psychotic rigidity of fixation. Superior laughter, with understood implications, and the manipulating attempt to catch as many persons as possible in the pathological play, if you look closer, are related to the paranoid side and not to the histrionic one.

The appearance, the attitude and behaviour of A. are reunified in the parable by which she alone opens the meeting: *“For whores and lawyers, money are given beforehand!”*. The associative chain leads further to another parable, namely that: *“Each and every woman wanted sometimes in her life to have sex for money, at least once, to see how much she values.”*. Even if she is lawyer, A. does not manage to charge sufficiently from the laurels of her profession, needing— as regards the value — to lower to concrete world and to analyse in the physical register (maybe the patient's increased preoccupation for the fitness rooms and for her physical appearance, regardless her age, is not accidental). To give birth normally and without complications at the age of 46 and to look 20 years younger depends on the drive impulse dynamics of psychic force, on an investment capability which, if it has fortunate manifestations, is enviable.

Paranoid dimension of A.'s pathology is related to **the problems of the volition**, namely to **inhibitory, passive aspects**: *"I cannot stop anymore", "I have reached in the situation to speak with servants", "The path to **not thinking** is not fit for me!"*. To cope with the huge quantity of drive impulses which pours out from the abyss of her psychism, A. tries in a certain phase borderline manifestations, having behaviours resembling those of adolescents perturbing an entire group with their love stories. Another way to cope with and to metabolize suffering, less expressed, but the intensity of which we can feel, was faith: *"I prayed continuously!"* → as an attempt of displacing the fixation to the register of physical love to higher entities. A way which did not last. As defence mechanism also, A. tries self-bantering, exacerbating in a grotesque manner words with painful impact: *"my blockhead husband", "you have realized, imbecile?!", "that miserable told me that if I made an abortion, he would have returned", "he told me to look at myself, because I am sordid!", "he told to his friends that he was disgusted by me", "all ended because I got pregnant", "I grew terribly old, and I do not look in the mirror for three months"*. In laic words, the caricature, the grotesque A. tries to highlight, can be put in the word **deplorable**. The patient does not know if she wants to discover or not *how much is she actually troubled emotionally*. As she neither wants to discover *the coefficient of complicity to the game* of each participant, because **intrusion** is not only prevented, but it is **the sense and scope of these perverse manifestations**.

Of her paranoid structure depends the **ability** (with black humour and self-bantering) **to turn in an opposite manner any feeling**: *"Do you realize, you stupid, that all you do is interpreted as a care for me?", "I have recently celebrated the fact that I did not make love for two years!", "God gave me the end of my carrier as woman with maternity!", "I have drawn up myself the petition for the amicable dissolution of marriage!"*. A symbolic way to tell: *"Look at me to see how well I cope with my suffering!"*. In order to further highlight the manifestations of this kind, A. expresses blatantly coarsely, having the tendency to trivialize this area: *"If his sexual organ proposed to do it, so he does!"*.

The thousands of messages the patient had written to her former husband represent a continuous description of her feelings, in an attempt to obtain a parareality, where the two remain together. The messages are a sort of quasi-permanent comments to what A. believes her husband feels, a wish to preserve a non-altered continuity of an emotional flow/exchange of feelings, unseen, telepathic ravel, meant to prevent the mind and soul of the other to detach from the fusion.

The extreme of the perverse mechanism functions when A. feels pleasure to be injured and treated by disdain. She appreciates addiction, commenting: *"I have suddenly become extremely intelligent due to amphetamine. The cocaine consumption was forbidden because people become too smart and have the capacity to look into depths!"*. Under the envelope of the feeling of being deplorable and capable to cause pity, A. remains special and manifests her value in the special way of her force to be

woman: “*You stupid, how could you have erection to get me with child?*”. The emphatic, doubled by persiflage as regards obscene vocabulary, proves a rather paranoid functioning than a maniacal one: “*Do you know this tone, don’t you?*”.

A. lives again, at the age of 45, the beauty of her first period of relationship with her husband, when she was the lover and the chosen woman, at the same time: “*When my phone rang at 9 a.m. and I left from the chiropodist’s wash basin with a leg arranged and one not, that woman could only think that my lover called me, isn’t it?*”. To gather around a theatre of spectators composed of simple and mediocre persons (the chiropodist, the housekeeper) augments the halo of *special*. Subsidiarily, the patient lives the drama of *being consumed*, overlapped to a *structure needing an eternal life* (she caring her mother-in-law in this register, ensuring her that “*any woman should behave as Queen Elisabeth, who did not consume herself even at the age of 80!*”).

The pathology of this couple manifests in the attempts to project outside what they cannot solve in their inner sides. **A. has in herself Eros and Thanatos with extraordinary energies. On the outside, she is permanently searching a judge.** Histrionic side played in the power to be lover for eight years. Subsequently, the tonus, the magisterial investiture of the relationship, to catch others into extreme emotional load, are related to the paranoid force. Beyond the mask, A. tried both mystical reasoning and exteriorization of aggressiveness. At the limit, the pathology of the two also dresses the anti-social register, where the devotement takes only its apparent coloration. In extremely stressing situations, A. does not manage to depress, but she reacts by “pressing the pedal” and the hyper investiture of the drive impulse. She does not appeal to the inner side of her being (tender and vulnerable), but she clenches external elements (manipulates the environment, addiction to amphetamine and alcohol, dependence upon a perverse relationship).

Beyond her unsafety structure, A. lived all these years in an apprehension/anxious contemplation of punishment according to which, *because she has stolen the husband of another woman, the same thing will happen to her, too.*

References

Gutman, J., McDermut, W., Miller, I., Chelminski, I., Zimmerman, M. (2006). Personality Pathology and Its Relation to Couple Functioning. *Journal of Clinical Psychology*, 62 (10), 1275 – 1289.

Joutsenniemi, K., Moustgaard, H., Koskinen, S., Ripatti, S., Martikainen, P. (2011). Psychiatric Comorbidity in Couples: A Longitudinal Study of 202.959 Married and Cohabiting Individuals. *Social Psychiatry & Psychiatric Epidemiology*, 46, 623 – 633.

Kaplan, B., Sadock V. (2001). *Pocket Style Manual of Clinical Psychiatry*. Medical Publishing House, Third edition, Bucharest.

Manual of Diagnosis and Statistics of Mental Disorders. (2003). Association of Free Psychiatrists of Romania Publishing House, IVth edition reviewed, Bucharest.

Pillmann, F., Wustmann, T., Marneros, A. (2012). Clinical Course and Personality in Reactive, Compared With Nonreactive, Delusional Disorder. *Canadian Journal of Psychiatry*, 57 (4), 216 - 222.

Tudose, F., Tudose, C., Dobranici, L. (2011). *Treaty of Psychopathology and Psychiatry for Psychologists*, Trei Publishing House, Bucharest.

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*Hearing Filipino Journalists' Side of the Story:
A Mixed Method Approach*

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Abstract

Journalists have the power to relay important information to the public, sometimes endangering their own safety and health in order to cover stories. The researchers studied the experience of Filipino journalists covering wars, conflicts, natural disasters, police reports and accidents. The study used content analysis to analyze the semi-structured interviews and multiple regression to analyze the results of burnout, well-being and dispositional resilience scale. Hardiness was found to moderate the relationship of burnout and well-being ($p < 0.005$), so despite high levels of burnout, a person with high hardiness has better well-being than a person with low hardiness. Majority of the journalists claimed that they became stronger after entering the profession. Some have trouble sleeping at night, and experience dreams about the things they have witnessed. Emotional effects include being immune and callous to events they cover and feeling an assortment of emotions – anxiety, sympathy and excitement. Journalists employ different ways to cope with the demands of their work such as talking about their experiences with friends, making jokes and laughing about it with their colleagues. Others would build a wall to separate their experiences on the job from their personal life while others would resort to traveling, drinking and smoking to help them de-stress. The researchers suggest that the study be extended to a larger sample size and other factors that affect a journalist's well-being. Also, the National Union of Journalists of the Philippines and news networks should provide an avenue for counselling, briefing and debriefing of journalists.

Keywords: Journalists, well-being, experience, coping, hardiness, burnout

Introduction

Media covers worldwide events and reports on different stories and news. It relays information about national events, international news, business, stocks, sports, weather, entertainment, leisure and other aspects of people's lives. Journalists work from curiosity, trained to answer who, what, when, where, why and how questions to inform the public under pressures and deadlines. (Hager, 1990). They are catalysts for dissipating information on different topics such as kidnappings, plane crashes, auto wrecks, conflicts, wars, and ever-present issues such as the poor, workers, minority groups, sex and violence.

Journalists are exposed to different kinds of events, both good and bad, and some that may be harmful or dangerous. It is an inevitable part of a journalists' profession to experience disastrous events such as wars, conflicts, natural disasters, and accidents repeatedly, which potentially endangers their safety and health. While journalists try to be detached, it may not always be possible and, journalist may share the emotion being felt by the public affecting the journalist's welfare (Coleman & Wu, 2011).

Journalists' experiences are distinct from the experiences of other professions such as volunteers and social workers who are exposed to wars and natural calamities as well. Though journalists often experience or witness stressful events, they are not expected to involve themselves but rather assume the role of a spectator instead. Not having a direct, helping role when attending to incidents may present journalists with complex ethical dilemmas - an unpleasant feeling with an accompanying belief that one should have acted differently (Browne, Evangeli & Greenberg, 2012). A recognized reaction after an incident is trauma-related guilt and Kubany (1996) has described it as "an unpleasant feeling with an accompanying belief that one should have thought, felt or acted differently" (p. 429). Research has provided evidence that journalists who cover trauma and disaster events are at risk for developing posttraumatic stress and secondary traumatic stress from witnessing trauma at disasters, war-related conflicts, accident scenes, homicides, and murder trials, to name a few types of events.

The researchers studied Filipino journalists covering events such as natural disasters, wars, police reports and accidents and focused on job burnout, wellbeing and hardiness as well as experiences in journalism, reactions to coverage, effects of the coverage and journalists' ways of coping.

Literature Review

Experience of Journalists

Smith (2008) and Smith and Newman (2009) found that 86-100% of daily news-gatherers were exposed to events that could result to possible traumatization leaving them at high risk of developing crisis-related psychological trauma (Backholm, 2012). Journalism can lead to job burnout (Backholm and Björkqvist, 2010) and consequently, a decline in well-being (Burke and Greenglass, 1996). Upon disasters, journalists tend to work intensely on adrenaline. After however, comes a period of mental exhaustion, burnout, fatigue and a tendency to feel confused and depressed (Ricchiardi & Gerczynski, 1999). Journalists who cover trauma or emotionally distressing or disturbing events and disasters are at risk for developing traumatic stress (Feinstein and Nicholson, 2005). Ricchiardi (1993) stated, "some journalists who have coverage of gruesome stories say they fear that admitting to any mental

distress may be viewed as weakness” (p. 36) choosing a culture of machismo instead (Massé, 2011) as cited by Long (2013).

Coping Strategies of Journalists

According to Buchanan and Keats (2011) journalists often use the avoidance method to cope with traumatic events and continue with their work. Other coping methods include exercising and using of substances (alcohol, marijuana, cocaine, and heroin).

Psychological Well Being

A journalists’ psychological, personal and professional sense of well-being or match between a person’s actual life and their ideal life (Zou, Schimmack& Gere, 2013) is at risk of suffering due to the nature of a journalist’s work to ignore managing his or her physical and emotional needs and trauma (Kalter, 1999). Hardiness is a personality structure that functions as a resistance resource under adversity Kobasa (1979). A hardy personality can reduce the effects of life stress on physical or psychological disturbance (Ganellen & Blaney, 1984) such as when a journalist stifles his or her reaction after witnessing witness painful and chaotic events.

Conceptual Framework

The researchers utilized early experiences, hardiness, burnout and well-being in the diathesis-stress model to assess the experiences of Filipino journalists as seen in Figure 1. On the other hand, Figure 2 shows that interrelations to be studied.

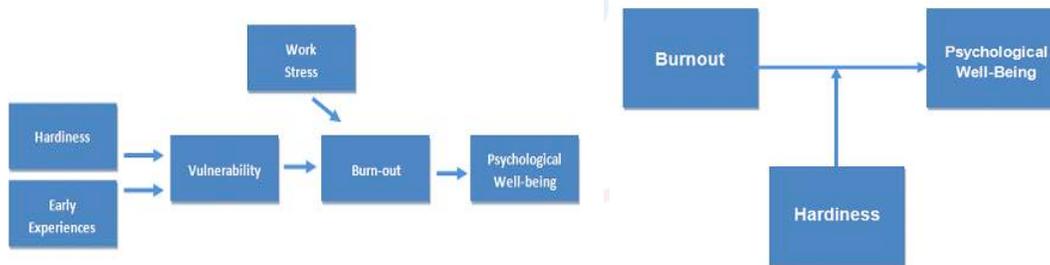


Figure 1

Diagram for the diathesis stress model

Figure 2.

Diagram for variables to be studied

A journalist’s psychological well-being depends on the interaction between the degree of vulnerability towards developing burnout and the degree of stress (Monroe and Simons, 1991). In this study, the diathesis is manifested through vulnerability which is determined by hardiness and early experiences while stress is manifested through the journalists’ erratic schedules, ineffective coping, and the like. A journalist’s early experiences and involvement in trauma-related workload and coverage risks the vulnerability of developing burnout (Maslach & Courtois, 2008). However, hardiness allows a journalist to cope better with stress protecting the journalist from developing burnout (Bonnano, 2004).

Improper treatment of burnout may affect one’s well-being negatively (Hobfoll, 1989) and cause psychological health problems such as distress, depression, and psychosomatic complaints (Shirom, Melamed, Toker, Berliner, & Shapira, 2005). Although Schaufeli and Bakker (2004) and Hakanen, Bakker, and Schaufeli (2006), found in their model that burnout was negatively related to health. The degree of how a person deals, or is affected by burn out can be moderated by hardiness. Hence, a

burned out journalist's psychological well-being may not be affected if he or she is protected by hardiness.

Research Questions

This study aimed to answer the following research questions: (1) What are the levels of job burnout, psychological well-being and hardiness of journalists? (2) Does job burnout predict psychological well-being for Filipino journalists? (3) Does hardiness, as a personality trait, moderate the relationship between job burnout and psychological well-being? (4) What are the experiences of journalists when they cover events like wars, natural disasters, police reports and accidents? (5) What are their reactions whenever faced with these situations? (6) How are they affected cognitively, emotionally, and behaviorally? (7) How do they cope with their reactions or feelings?

Hypotheses

The researchers hypothesized the following answers to the study's research questions:

1. Job burnout significantly predicts psychological well-being for Filipino journalists.
2. Hardiness moderates the relationship between job burnout and psychological well-being.

Significance of the Study

Journalism is a dangerous line of work not only due to the adverse circumstances required by their work but there have been numerous unsolved and unjustified cases of captivities and murders of journalists in the country have kept the Philippines among the list of the most dangerous places for journalists in the world. In fact, in 2009, the Philippines was named as the most dangerous place for journalists due to the infamous Maguindanao Massacre (Medina, 2013) also dubbed by the Committee on Protecting Journalists as the "deadliest single attack on press history" (Papa, 2009).

Presently, there are only several researches done regarding the effects of traumatic stress in journalism (Keats & Buchanan, 2009). Most of the studies are anecdotal, with only a number of empirical studies that measure post-traumatic stress disorder (PTSD) among war correspondents (Feinstein & Nicholson, 2005), some survey research on trauma tackling news reporting in general (Marais & Stuart, 2005) and a few other studies examining journalists covering on disaster events (Weidmann, Fehm, & Fydrich, 2008). It is rare to hear that a journalist, unlike military and other professions, has received trauma training in preparation for reporting on disaster and trauma events or received psychological debriefing or assistance on returning home (Keats & Buchanan, 2009; Simpson & Boggs, 1999; Teegen & Grotwinkel, 2001 as cited by Backholm 2012).

This research paper aimed to shed light on the experiences of the journalists in the Philippine culture. The paper identified a myriad of processes that journalists go through on a daily basis, and identified them thoroughly to achieve an understanding regarding the kind of attention these people need. The study looked at the work environment and situations journalists have to cover, the support they receive from their employer and family, and the coping strategies journalists employ. It opted to contribute to the lack of literature in this affair. The study also aimed to look at the

resilience and susceptibility to trauma of different journalists. The paper looked at factors causing stress and factors that facilitate coping.

The results that were gathered by the end of this research gave a deeper understanding of the influences that job burnout has on an individual. Furthermore, the results also showed how the moderator, hardiness, used as a personality trait, may affect a journalist's well-being. The study is helpful for future reference as a means to pursuing studies regarding the well-being of Filipino journalists. Furthermore, the results of this study also contribute to the knowledge of training and preparations a journalist can undergo to help cope with stressful work. This study opens a new perspective of looking at the safety and psychological health of Filipino journalists. Lastly, this study aimed to give information about a journalist's experience in the face of traumatic events.

Research Design

The study used a mixed method approach, utilizing quantitative and qualitative methods to test the hypothesis and understand the experience of Filipino journalists. The quantitative non-experimental research design, allowed for research regarding burnout, well-being and hardiness. The qualitative design allowed for a supplementary and an in-depth exploration of the experiences of the journalists. The data was gathered through a series of semi-structured interviews and transcripts of the interviews were subjected to content analysis.

Instruments

The Shirom Melamed Burnout Questionnaire consisted of 14 items, Ryff's Psychological Wellbeing Scale consisted of 17 items, and Dispositional Resilience Scale contained 9 items were used to measure burnout, well being and hardiness respectively. For the semi-structured interview, a general to specific approach was used. Pilot tests were conducted to increase reliability of the test and revise the interview questions.

Procedures

Data gathering for the quantitative research and qualitative research were done at the same time, using a retrospective time orientation. The researchers used convenience sampling of 100 Filipino journalists. They were handed a packet that included 3 scales, which measured hardiness, burnout and well-being. As for the qualitative method, the researchers interviewed 10 Filipino journalists using a semi-structured interview.

Data Analysis

A non-parametric test was used since both independent and dependent variables were measured at an interval level. To determine the influence of burnout towards well-being, a multiple regression analysis was applied. The qualitative data was analyzed through content analysis. The researchers identified codes from the transcript, and then made into subthemes and themes to identify patterns and processes relevant to the topic (Shannon and Hsiu - Fang, 2005).

Results

Quantitative Results

The mean age of the participants of the survey was 37 years old and the average number of years on the job was 13 years. Burnout and well-being have a negative, moderate relationship; hardiness and well-being have a positive, moderate relationship; and interaction of burnout, hardiness and well-being have a positive, moderate relationship. A journalist with high burnout has low well-being, however hardiness modifies the relationship. The higher the hardiness level of a person, the more positive the well-being of the person will be.

Table 1. *Relationship of Burnout and Wellbeing as Moderated by Hardiness*

	b*	Std.Err.	B	Std.Err.	t(96)	p-value
	of b*		of b			
Intercept			1.26	0.99	1.27	0.21
IV Burnout	-0.35	0.091	-0.28	0.07	-3.83	0.00
Moderator Hardiness	0.26	0.09	0.91	0.32	2.86	0.01
Product Burnout*Hardiness	0.26	0.082	0.06	0.02	3.13	0.00

Qualitative Results

The average age of the interviewees was 40 years old and they have been on the job for an average of 20 years. The 4 main themes represent journalists' experiences in journalism, reactions to coverage, effects of the coverage and their ways of coping. Results show that the work of a journalist is different compared to other jobs because they look for stories that bring them closer to danger. Challenges of the job as a journalist include not having control over their time and there is no predictability of safety. Not all journalists receive the same amount of support from their networks for debriefing. While some journalists recognize the need for a debriefing after particular coverage, others dismiss it.

Journalists react differently to coverage; some journalists react with anxiety, sympathy or excitement. Some are fearful and anxious, others feel sad and sympathize with the people they encounter, and some journalists claim that they don't feel scared during coverage because of the adrenaline they feel. Different coverage has different emotional, cognitive and behavioral effects on journalists. Journalists learn to be stronger and feel invincible as part of emotional effects. Some would start out very sympathetic and empathetic towards the people they encounter, but as they continue in the profession, they detach themselves from the situation and concentrate on the story at hand. Cognitive effects include having events that they cover become etched in their mind. After surviving coverage, they realize how blessed they are and their perspective of the world changes. The perception of danger changes and they may become overly confident. Many of the journalists had difficulty sleeping after their coverage and would have troubling dreams about the coverage as part of the behavioral effects.

To cope with the work, journalists use engagement and disengagement responses. Talking about their experiences is a form of therapy for journalists. Journalists would have a watering hole where they would share their experiences with each other. One

mentioned trying to separate work and personal life apart, so she practices “*pagpag*”. Others would go on vacations, drink, or smoke in attempts to control their emotions. A number of news networks provide briefing and debriefing as a standard operating procedure and others give a hotline where journalists can seek professional psychological help.

Discussion

Job burnout significantly predicts psychological well-being of Filipino journalists while hardiness moderates the relationship. Burnout affects the well-being of a journalist in a negative way, the higher the burnout, the lower the well-being. Hardiness contrary to burnout protects the well-being. Therefore, higher the level of hardiness, the higher the well-being of a journalist would be. A journalist with high burnout should result to low well-being, however when coupled with a hardiness the less affected the well being of the journalist.

Journalists are exposed to feel an assortment of emotions – anxiety, sympathy and excitement. Reactions of anxiety like panic and fear, reactions of sympathy like feelings of compassion and awareness of suffering, and reactions of excitement like courage and eagerness. According to Kalter (1999), journalists experience effects of their coverage after the task at hand, like insomnia come after the story has been wrapped up. Journalists mentioned that emotional effects include being immune and callous to events they cover. Majority of the journalists claimed that cognitive effects include becoming stronger after entering the profession. It also changes the way one views the world, and makes one more confident because of what one has gone through. Majority of the journalists have trouble sleeping at night, and experience dreams about the things they have witnessed as part of behavioral effects of the coverage.

Journalists employ different ways to cope with the demands of their work. Many reporters use engagement response such as talking about their experiences with friends and making jokes and laughing about it with their colleagues. Bonanno (2004) said that laughter and other positive activities may lead to resilience. Disengagement responses include traveling, compartmentalizing and separating personal and work matters. Others would resort to drinking and smoking as attempts to control their emotions and this was found to be a way journalists use to de-stress (Buchanan & Keats, 2011).

Diathesis Stress Model

Job burnout significantly predicts psychological well-being of Filipino journalists and hardiness moderates the relationship between job burnout and well-being. Changes in the well-being of a person can be attributed to the different levels of burnout and hardiness. Findings showed that burnout affects the well-being of a journalist in a negative way, the higher the burnout, the lower the well-being. Hardiness has a positive relationship with well-being so the higher the level of hardiness, the higher the well-being of a person. Hardiness, as a moderator, also has a significant effect on well-being. A journalist with high burnout has low well-being, however hardiness modifies the relationship. The higher the hardiness level of a person, the less affected the well-being of the person will be.

According to the diathesis stress model, each individual has a predisposing risk factor for developing burnout which could serve as a foundation for various psychological problems. According to a study by Maslach, Schaufeli and Leiter (2001), burnout has been associated with psychological distress, anxiety, and depression. In the study, the researchers utilized hardiness and early experiences in order to predict vulnerability that could lead to burnout and eventually, affect the well-being of a journalist. The development of burnout is predicted by vulnerability. If the person is highly vulnerable, he or she is more susceptible to burnout. Consequentially, if the person has low vulnerability he or she is less likely to develop burnout.

The predisposition vulnerability is influenced by two factors, early experiences and hardiness. Experience includes direct encounter or observation of event as it unfolds and hardiness, as defined by Kobasa (1979), is a personality that helps a person be immune under adversity. For example, some journalists claimed that exposure to dangerous, tragic, stressful and atypical events their work brings is just a matter of getting used to. In addition, some journalists claimed that they have become braver, tougher, wiser and stronger as compared to their rookie selves as time went by. As the frequency of their exposure towards such events increased, the less affected they became, indicating that consistent exposure to traumatic events can either develop a person's hardiness or become immune to the hostile and possible traumatic factors involved in coverage. However, there is also a possibility that it could take a toll on the journalist and make him or her vulnerable to burnout.

Hardiness as a moderator. Hardiness predicts vulnerability and was found to mitigate the relationship of burnout and well-being. Hardiness serves as a protection towards well-being and buffers the degree to which a person is affected by burnout. For example, the higher the level of hardiness, the less vulnerable a journalist is towards developing burnout and the less likely the well-being of a journalist will be harmed. Therefore, despite high level of burnout, a person with high hardiness is unlikely to be vulnerable to succumbing to poor well-being compared to person with low hardiness who would be more vulnerable.

Stressor. However, apart from vulnerability work stress can also influence burnout and well-being. Work stress such as irregular working schedules, lack of control over the coverage assignment, immediate deadline, threat to safety, and pressure to get a story affects a journalist. Work stress triggers the predisposition and in effect, the journalist's likelihood to manifest burnout. A study by Lee, Lim, Yang, & Lee (2011), said that burnout is related to journalists' high levels of stress and erratic schedule. If a journalist who is vulnerable encounters a stressful situation, such as a cross-fire during coverage, he/she may cultivate burnout therefore, his/her well-being may decline. On the contrary, when journalist with low vulnerability encounters a similar situation, he/she will most likely not be burned-out nor will his/her well-being be affected.

Reactions to Coverage

Journalists are exposed to feel an assortment of emotions – anxiety, sympathy and excitement. In this light, the researchers have uncovered how journalists react to their coverage. Reactions of anxiety like panic and fear, reactions of sympathy like feelings of compassion and awareness of suffering, and reactions of excitement like courage and eagerness. Some journalists' reactions of excitement included feelings of

adrenaline that increase during the coverage, therefore lessening feelings of fear. Additionally, Johansson et al. (1973) as cited by Dienstbier (1989) suggests that an increase in adrenaline levels in an individual has better social adjustments and emotional stability. Other journalists have witnessed horrifying events that could make them fearful. Some journalists are caught off guard, being empathetic and sympathetic to the victims of a tragedy.

Effects of Coverages

Coverages leave lasting effects on the journalists who cover them because they are exposed to traumatic events 86-100% of the time (Smith, 2008 & Smith & Newman, 2009). There are emotional, cognitive and behavioral effects of coverage. Journalists mentioned that emotional effects would include being immune and callous to events they cover. Feinstein (2006) as cited by Novak & Davidson (2013) found in his study that being able to identify with a situation or people involved on a personal level would increase the risk of traumatic reactions. Hence, being objective and emotionally distant seemed to diminish being emotionally overwhelmed. A journalist also said that as his level of fear went down as he gained more experience, and he is less inclined to avoid dangerous situations. Rose, Bisson, Churchill, and Wessely (2005), found that members of the media are required to communicate potentially distressing events in great detail to their audiences and this is in direct contrast with the idea that distancing oneself from such events may be a naturally adaptive defense mechanism against distress.

According to Kalter (1999), journalists experience the negative effects of their coverages after the task at hand; he claims that the fear, numbness, and insomnia come after the story has been wrapped up. Cognitive effects and realizations make themselves known to the journalists after certain experiences. They claim that it helps them appreciate the little things, and that there is so much more to life than what they cover. Majority of the journalists claimed that they became stronger after entering the profession. It also changes the way one views the world, and makes one more confident because of what one has gone through.

Majority of the journalists have trouble sleeping at night, and experience dreams about the things they have witnessed as part of behavioral effects of the coverage. One reporter claimed that even though he fell asleep, he would still scream in his sleep. Keats and Buchanan (2012) said that effects of covering traumatic events include distressing memories or images of an incident, flashbacks, nightmares or dreams about other frightening themes around the event, and becoming upset.

Ways of Coping

Journalists employ different ways to cope with the demands of their work. Their ways of coping can either be engagement, which are attempts to change the situation or one's reaction, or disengagement, which include attempts to avoid the stressor and distract oneself. News networks also assist the journalists by providing training and briefing and debriefing seminars.

Engagement responses include being able to talk about their experiences with their fellow journalists. One journalist stated that it haunts her when she is not able to talk about it with anyone. The journalists have a watering hole where they can freely express themselves and share stories with fellow journalists. Many reporters tend to

make jokes and laugh about it with their colleagues. Their actions are supported by research done by Bonanno (2004), who said that laughter and other positive activities may lead to resilience.

However, other journalists use disengagement responses to cope with what they go through. Some would compartmentalize personal and work matters and try to separate them as much as possible. Many of the respondents would travel and take a vacation after a stressful coverage to help them forget about their experience. Other would resort to drinking and smoking as attempts to control their emotions. Many respondents emphasized taking breaks after stressful coverages, which may serve as distractions from the encounters still fresh in their minds. These responses were designed to avoid the memories and experiences of their coverage.

Future Research

The researchers suggest that studies be done to look at other factors that may affect a journalist's well-being. The study can also be extended to a larger sample size and a variety of respondents from the Philippines who have covered different types of events. The researchers suggest that journalists from different news networks and journalists using different media be included in the study, as well. The gender, age, years of experience and frequency of coverage of events of the journalists may have affected the results of the study, so the researchers propose that future studies use a sample size with equal characteristics.

Future research can also focus on the experience of journalists who have a shared experience like the coverage of certain events. Studies should also be conducted to analyze the reaction and coping of journalists who aren't affected or detached during coverage. Further research regarding secondary or vicarious trauma, depression, and coping can also be done to expand the knowledge on the experience of journalists. Journalists encounter dangerous and near death situations that puts them at risk so studies on perception of danger of journalists can also be conducted. Succeeding research can also look at resilience of journalists, stress, and life satisfaction.

Practical Implications in the Philippine Setting

The researchers recommend that ample briefing and debriefing be available for journalists who cover different events and that news networks provide such support. The news network must explain beforehand the purpose of consulting a psychologist and deem it necessary to evaluate the journalist. Although some news networks provide training, seminar and debriefing, the researchers strongly suggest that the National Union of Journalists of the Philippines provide an avenue for counseling, briefing and debriefing of journalists. The journalists must be aware and knowledgeable about the possible dangers, effects and risks of the job and help them cope with the demands of the job. The culture of machismo and the stereotype of seeing a psychologist must also be changed so journalists are more open to seeking professional help.

References

- Backholm, K. (2012). *Work-related crisis exposure, psychological trauma and PTSD in news journalists*. Diss. Abo Akademi University, 2012. UNIPRINT, 2012. Print.
- Backholm, K., & Björkqvist, K. (2010). The effects of exposure to crisis on well-being of journalists: A study of crisis-related factors predicting psychological health in a sample of Finnish journalists. *Media, War & Conflict*, 3, 138-151.
- Bonnano, G. A. (2004). Loss, trauma, and human resilience: Have we underestimated the human capacity to thrive after extremely aversive events? *The American Psychologist*, 59, 20–28.
- Buchanan, M. & Keats P.(2011). Coping with traumatic stress in journalism: A critical ethnographic study. *International Journal of Psychology*, 46 (2), 127–135. doi: 10.1080/00207594.2010.532799
- Feinstein, A. & Nicholson, D. (2005). Embedded journalists in the Iraq war: Are they at greater psychological risk? *Journal of Traumatic Stress*, 18(2) 129-132.
- Ganellen, R. & Blaney, P. (1984). Hardiness and social support as moderators of the effects of life stress. *Journal of Personality and Social Psychology*, 47(1), 156-163.
- Hakanen, J., Bakker, A.B., & Schaufeli, W.B. (2006). Burnout and work engagement among teachers. *The Journal of School Psychology*, 43, 495-513
- Hobfoll, S. E. (1989). Conservation of resources: A new attempt at conceptualizing stress. *American Psychologist*, 44, 513-524.
- Kalter, J. (1999). The workplace burnout. *Columbia Journalism Review*, 7, 30-34.
- Kobasa, S. (1979). Stressful life events, personality and health: An inquiry into hardiness. *Journal of Personality and Social Psychology*, 37, 1-11
- Lee, J., Lim, N., Yang, E., & Lee, S. M. (2011). Antecedents and consequences of three dimensions of burnout in psychotherapists: A meta-analysis. *Professional Psychology: Research and Practice*, 42, 252–258. doi:10.1037/a0023319
- Long, C. (2013). *Sense from the senseless: Understanding how journalists make sense of everyday trauma* (Masters dissertation). Royal Roads University, Colwood, BC.
- Maslach, C., & Courtois, C. A. (2008). Burnout. In G. Reyes, J. D. Elhai, & J. D. Ford (Eds.) *The encyclopedia of psychological trauma* (pp. 103-107). Hoboken, NJ: Wiley.
- Monroe, S. M., & Simons, A. D. (1991). Diathesis-stress theories in the context of life-stress research: Implications for the depressive disorders. *Psychological Bulletin*, 110, 406–425.
- Novak, R. & Davidson, S. (2013). Journalists reporting on hazardous events: Constructing protective factors within the professional role. *Traumatology*, 19(4), 313-322.

- Papa, A. (2009, November, 26). *Inquirer Philippines*. Retrieved from newsinfo.inquirer.net/breakingnews/nation/view/20091126-238554/Maguindanao-massacre-worst-ever-for-journalists
- Ricchiardi, S. (1993). After the adrenaline. *American Journalism Review*, 40, 34-39.
- Ricchiardi, S., & Gerczynski, T. (1999). Confronting the horror. *American Journalism Review*, 21(1), 34.
- Rose, S., Bisson, J., Churchill, R., & Wessely, S. (2005). Psychological debriefing for preventing post traumatic stress disorder ("PTSD"). *Cochrane Database System Review*, 2002(2), CD000560.
- Schaufeli, W. & Bakker, A. (2004). Job demands, job resources and their relationship with burnout and engagement: A multi-sample study. *Journal of Organizational Behavior*, 25, 293-315
- Shannon, S. & Hsiu-Fang, H. (2005). Three approaches to qualitative content analysis. *Qualitative Health Research*, 15, 9.
- Shirom, A., Melamed, S., Toker, S., Berliner, S. & Shapira, I. (2005). Burnout and health review: Current knowledge and future research directions. *International Review of Industrial and Organizational Psychology*, 20, 269-309
- Smith, R. (2008). *Trauma and journalism: exploring a model of risk and resilience* (Doctoral dissertation). Retrieved from UMI Dissertation Services. (3328102)
- Smith, R., & Newman, E. (2009, January 1). *Covering trauma: impact on journalists*. Retrieved from <http://dartcenter.org/content/covering-trauma-impact-on-journalists>.
- Zou, C., Schimmack U., & Gere, J. (2013). The validity of well-being measures: A multiple-indicator-multiple-rater model. *Psychological Assessment*, 25(4), 1247-1254.
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The Difference of Perception of Facial Emotions for People with Different Ages

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INTRODUCTION

Emotions are an incredibly important aspect of human life and basic research on emotions of the past few decades has produced several discoveries that have led to important real world applications. Facial emotions are perceived by different people in different way. Possibility to read facial expressions is getting hard with the age. More decrease happens with the 'happiness' emotions than other expressions. Previous studies showed that Youngers better recognize happy face than others. Joakim Svärd, Stefan Wiens and Håkan Fischer in their experiment show that across age groups, recognition performance for happy faces was better than for neutral face. David Richter, Cathrin Dietzel and Ute Kunzmann showed that younger women were better at recognizing sadness and anger than older women. It has been widely demonstrated that older adults have more difficulty than young adults in identifying negative social emotions (such as anger and sadness; Brosigole & Weisman, 1995; Calder et al., 2003; Keightley, Winocur, Burianova, Hongwanishkul, & Grady, 2006; Ruffman et al., 2008). Isaacowitz et al., 2007 found that facial expressions seem to decrease with age, the absolute performance level for happy faces is preserved; Ruffman et al., 2008 argued that decrease in performance with age also in recognition of happy faces. Older adults performed worse than younger adults in recognition of all facial expressions except for faces displaying disgust. Mather and Carstensen, 2005: recognition performance for happy faces seems to be relatively preserved in older adults, which is in line with the notion of a shift of focus toward positive, and away from negative information with advancing age. In my experiment I'm going to figure out if facial emotions are really hard to read with the age in general.

MATERIALS AND METHODS

PARTICIPANTS

The sample consisted of 30 older (19 women and 11 men), 26 adult participants (19 women and 7 men) and 30 children. Mean age was **23.2** years for adults, **27.3** years for younger men, **71.5** years for older people, and **13.4** years for children.

MATERIALS

25 gray scale pictures of faces depicted 10 individuals, each displaying anger, sadness, disgust, happiness and neutral facial expressions (Ekman 1976). 18 of the identities were female, and 8 were male. 25 masking pictures were generated by scrambling the 30 original pictures. Each original was 160x160 pixels. They were presented on a standard 15.6-inch monitor.

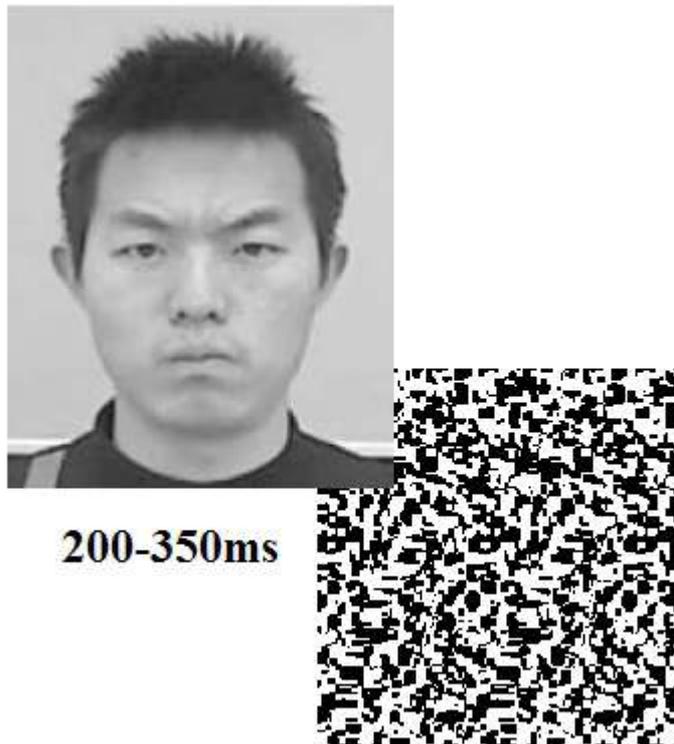
PROCEDURE

The experiment consisted of two parts: First – Adaptation part of experiment: After running experiment, participants first see the blank page which lasts 1000ms, after which Instruction 1 appears. This step is an adaptation step, here they need to learn the position of each button and it will help them to quickly response in the second part of the experiment. I present the same words – angry, sad, disgust, happy and neutral – in the center. This words stay in the screen until they give a response. For the adaptation participants receive these words 40 times (each words 8 times). For each wrong answer they need to answer to this trial again.

Second part of experiment: real experiment. In the second instruction I ask participants to determine whether it is angry, sad, disgust, happy or neutral face. As i mentioned before these stimili are presented in both sides randomly. But before these

stimuli there is a fixation point to which participants need to concentrate their attention. Unmasking is required to prevent afterimage effect.

+



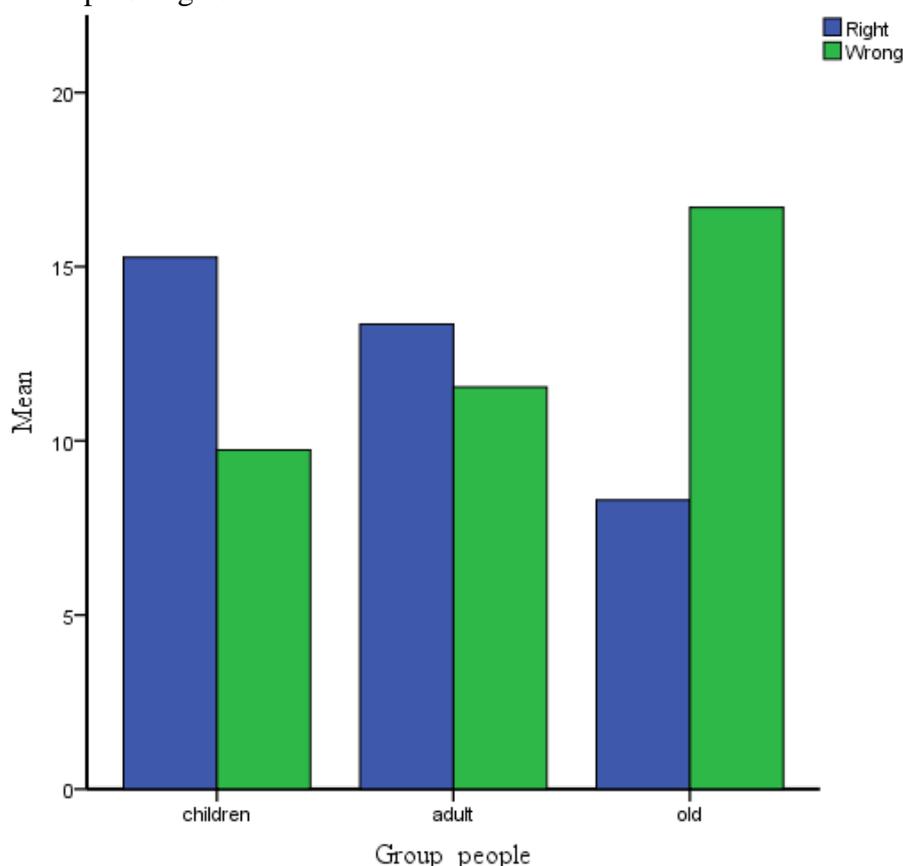
Answer?

FIGURE 1|Example of the stimulus presentation

RESULTS

Our goal was to study whether it's getting hard to recognize facial emotions as people gets older or not. We measured right and wrong answers of each 86 participants. The results show that the mean of 'Right' answer for *children* was 15.27, for *adult* 13.35, whereas for *old* it was only 8.30. We can clearly see that there wasn't significant difference between the scores of adult and children. In contrast, *Old* people rated almost twice less than children. In the '*wrong*' category, children made less mistakes than the other two group of people. And again, there is non-significant difference between children ($M=9.73$) and adults ($M=11.54$). Old people made more mistakes, M (16.70).

Our bar chart helps us to see these differences. The number of correct answers decrease as people gets older. And in contrast number of incorrect answers increases when a person gets older.



For *right* variable, Kolmogorov-Smirnov test D shows not-significance value .200 for children ($D=.098$) and for old people (.200) ($D=.120$), $p > .05$, and significant value (.027) for adult ($D=.182$), $p < .05$. The results are the same for the *wrong* variable. We can assume that our data is normally distributed. $F(2, 83) = 2.47$ for right answer, $F(2, 83) = 2.75$ for wrong answer.

Pearson correlation shows us a perfect negative linear relationship between our variables, $r = -.997$; 95% CI [-1.000; -.989]

After all analysis, we can say that in fact, it is difficult to read facial emotions for the people with the age of 55+. We saw also that there is difference between children and adult. But these differences are not significant.

REFERENCES

Joakim Svärd, Stefan Wiens and Hakan Fische - Superior recognition performance for happy masked and unmasked faces in both younger and older adults

Isaacowitz DM¹, Löckenhoff CE, Lane RD, Wright R, Sechrest L, Riedel R, Costa PT - Age differences in recognition of emotion in lexical stimuli and facial expressions.

Aire Mill, Juri Allik, Anu Realo, and Raivo Valk - Age-Related Differences in Emotion Recognition Ability: A Cross-Sectional Study





***An Integrated Model of Counseling, Support, and Ancillary Services
for Caregivers of Dementia Patients***

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Abstract

This study examined the confluence of several factors associated with caregiving that demonstrated alleviation of caregiver burden, lessening of a sense of isolation, and amelioration of related anxieties among spouses or partners caring for a person with mid-to late-stage dementia. Taken separately, the interventions did not alleviate stressors; however, together the integrated aspects constituting the model of care based upon the New York University Caregiver Intervention (NYUCI) were shown to enhance caregivers' quality of life in this three-year study.

Keywords: social support, caregivers, dementia, Alzheimer's, quality of life

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Introduction

A model of psychosocial treatment that works well is a powerful tool for caregivers under the stress of daily obligations, however motivated and loving the caregiver. Family members providing continual oversight of Alzheimer's patients are known to encounter stressors resulting in compromised health status for the caregiver, psychosocial distress, and even social and emotional burnout (Carretero, Garces, & Redenas, 2007; Gonzalez-Salvador, Arango, Lyketos, & Barba, 1999). Solutions have been proposed and tested through the years (Qualls & Anderson, 2009; Rose et al, 2007) and singly, many measures have been adopted by the caregiving public as well as professional health service workers in attempts to address the many stressors associated with caregiving (Bormann et al, 2009; Bradley, Whiting, Hendricks, & Wheat, 2010; Nichols, Martindale-Adams, Burns, Graney, & Zuber, 2011). However, the factors that contribute to an integrated model of care for ill, disabled, and older family members have not been fully explored. A 36-month project funded by the U.S. Administration on Aging has demonstrated a model of interventions effective in ameliorating caregiver stress, and this study examined in some depth the stressors experienced by adult family caregivers as well as the factors that combined through an integrated model of caregiving appear to alleviate at least some of the burden and stress.

Caregivers of persons with dementia frequently believe that they "have things under control" and should not call upon other people for help, but eventually they can become overwhelmed and then unsure where to turn for help. The post-World War II generation has particular concerns about being a burden to other people and wanting to handle life events and life crises without having to call upon others (Bradley, Whiting, Hendricks, & Wheat, 2010; Nuttman-Schwartz, 2007). Within the project described here, the evaluators and clinical staff often heard such comments as "I'm too tired and worn out to get any help for myself" or "I have health issues of my own and I'm just hanging on with taking care of my husband." The knowledge gained from this study, however, appears to have implications for clinicians and health personnel working with stressed, anxious, and depressed caregivers and points to ways in which health services and social workers can be of greater help in alleviating at least some of the burden of caregiving, enhancing social support, and generally guiding families toward a greater quality of life.

Background and Rationale for the Study

This project constituted a three-year empirical study that served as a demonstration model of human services and family practice with caregivers of dementia patients in Sarasota Florida, one of the U.S. regions with the highest percentages of elder population (35%). The study produced measurable outcomes of counseling interventions, in-person therapy visits, ad hoc visits and telephone interviews, as well as familial social support. The outcomes, such as improved caregiver burden assessments and caregivers' improved understanding of memory loss and behavioral change in individuals with Alzheimer's Disease, were found to be positive for caregiving individuals. The most interesting finding, however, was that these interventions taken singly were not nearly as helpful to caregivers as they were in tandem with each other, or as an integrated and interdisciplinary approach to care. The findings present a cohesive argument that a systematic and evidence-based model

of psycho-social interventions plays an important role in alleviating the stress commonly known as “caregiver burden”.

Caregiver burden is a key typical measure in research about dementia caregivers, and it is often used as a baseline measure in intervention studies. Prior research has found many factors associated with caregiver burden, such as the relationship quality among family members of the caregiver, the patient’s cognitive ability, behavioral symptoms exhibited by the dementia patient, and demographics such as caregiver gender (Papastaurou & Kalokerinova, 2007). Interventions that focus on caregivers and provide pleasant activity would seem to alleviate some degree of caregiver burden, based upon prior knowledge (Thompson, Futterman, Gallager-Thompson, Rose, & Lovett, 1993). We believed, however, that providing pleasant or distracting activity would not be enough to create a significant decrease in the sense of burden, thus we added such factors as counseling, social support, ad hoc visits for supportive monitoring, and group and individual attention to depressed mood and other features of social and emotional distress.

It is well known that dementia caregivers have a high level of burden compared with caregivers of patients with other disabilities or diagnoses (Gonzalez-Salvador et al; Ory et al., 1999). Authors of a prominent book on caregiving described the caregiver role as a “36-Hour Day” (Mace & Rabins, 1999). If for patient well-being alone, caregiver burden has been cited as needing improvement (Brodaty et al., 1993; Mittelman et al., 2004). However, the author asserts that a caregiver in such circumstances warrants examination of (and alleviation of) the depth of burden in his or her own right (not only for patient well-being), in keeping with social work and other professional ethics to preserve individual dignity and choice, and to alleviate human suffering whenever possible.

The purpose of this quantitative study was the examination of any relationships among social support, quality of life, and caregiver burden in a population known to have difficult social and emotional adjustment: those caring for spouses or partners with dementia. We focused here primarily upon dementias of the Alzheimer’s type or “Alzheimer’s Disease and Related Dementias” (ADRD), as the diagnosis is known in the Diagnostic and Statistical Manual of Mental Disorders-IV-TR (2007). Caregiver burden is a key measure in research about dementia caregivers, and is often used as a baseline measure in intervention studies.

In one study specifically focused upon caregivers of dementia patients, the caregivers were found to endure “caregiver burden” due to several prominent factors: the degree of cognitive impairment of the person with dementia, the presence of behavior problems, a degree of personal care dependency, and the number of conditions needing attention (Bass et al, 2012). The most common problems that produced “burden” in these caregivers were social isolation and depression. Thus, the chronic and unremittent nature of dementia care seem to suggest that one solution would be respite care for the caregiver, to allow her (in the Bass study, all caregivers were also female) to get out occasionally and to alleviate the isolation and possibly improve the depressed mood. Even telephone support programs for family caregivers are known to lessen anxiety about isolation and to offer a greater perception of social support (Bormann et al, 2009), and thus we incorporated this intervention into our study. Behavioral interventions have been shown to reduce caregiver stress and the sense of

having to go it alone (Nichols, Martindale-Adams, Burns, Graney, & Zuber, 2011). Such caregivers are also known to abdicate their own self-care in the process of making sure all needs are met for their loved ones (Thorpe et al, 2006), so it seems likely that any process that alleviates some of that burden of care will be useful and welcomed by caregivers. The high financial cost of caregiving is also known, although less costly in comparison with formalized nursing home care; an analysis of the National Longitudinal Caregiver Study estimated caregiving costs of \$18,385 annually per patient in 1998, undoubtedly more at the present time, fifteen years later.

Prior research has found many social and relational factors associated with caregiver burden, such as the relationship quality among family members of the caregiver, the patient's cognitive ability, behavioral symptoms exhibited by the dementia patient, and demographics such as caregiver gender (Papastaurou & Kalokerinova, 2007). Research on family treatment considerations specifically found that the frailty of the dementia patient was especially problematic to witness by family members (Sherman, Fischer, Sorroco, & McFarlane, 2011), and that patient-centered care is worthwhile as a treatment methodology in that families' personal and professional experiences vary and each situation needs to be examined uniquely and treatment planned accordingly (Rose et al, 2007).

According to the Alzheimer's Association Facts & Figures for 2010, there are an estimated 5.3 million individuals living with Alzheimer's disease in the U.S. and more than 10.9 million unpaid family, friends and neighbors who provide care to those individuals. Florida State Profiles estimates that more than 500,000 Floridians suffer from Alzheimer's disease (2009 Florida State Profile). With more than 3.3 million Floridians 65 or older, the number of people who will develop Alzheimer's disease or related disorders (ARD) and the number of families directly impacted with providing care within that state alone will reach an estimated 640,000 by 2025. Thus, Florida reflects the anticipated aging of the U.S. in many ways.

Two organizations in Sarasota County have taken the lead in assisting caregivers of people with ARD, currently intervening in more than 1,500 families of people with ARD, and they participated in this federally-funded study. One of the agencies annually serves more than 70 people with ARD and 80 caregivers of people with ARD through individual counseling, family counseling, caregiver support groups, wraparound case management services, and respite care. Additionally, approximately 300 caregivers per year receive telephone counseling and support through these service agencies. Another 1,000 people attend educational workshops for caregivers each year, although only approximately 300 of those workshop participants are caring for people with ARD.

Sarasota County, one of the "oldest" counties in the U.S., with areas of population consisting of 35% over the age of 65, is served by one of 15 Florida designated memory disorder clinics which sees approximately 350 patients per year. This clinic directly serves more than 400 caregivers by providing information and referral to community resources; this clinic was a major referral source for study participants. Professional staff currently are certified by the State of Florida to provide Alzheimer's training to professional and non-professional caregivers and in the last fiscal year provided training to more than 2,500 people on issues related to care and aging. These two entities therefore partnered to provide the NYUCI intervention

model and to enroll caregivers into the study. Because many caregivers also receive formal agency help or other relative assistance, they did not meet the study inclusion criteria, and thus, over 200 families eventually enrolled in the study. Only spouses or adult caregivers were admitted to this study.

Research has suggested that interventions often offer only moderate relief to caregivers (Brodaty et al, 2003), and some have called for greater assessment of caregiver burden simply for the sake of caregiver relief (Schultz et al., 2002). Existing literature also lacks attention to variability among caregivers studied, and attention to variability among caregivers as a factor in caregiver burden (Mittelman et al, 2004; Carretero et al, 2007). Many studies have, in fact, focused upon the impact of the cognitive deficits in the care recipient, help with everyday functioning and level of care needs, and behavioral and psychological factors more generally (although without considering individual factors in the caregiver). However, relationships outside the marital or partner dyad have typically been neglected as objects of study (Pearlin et al, 1990). This study added knowledge about the role of social support from family members and others, as well as the influence of respite services that might alleviate some of the burden of caregiving.

The caregiver intervention study was funded by the U.S. Administration on Aging (now the Administration for Community Living) over a three-year period in which a demonstration project could take place in order to evaluate the effects of a specified intervention protocol that assessed social support as well as caregiver burden, caregiver depression, quality of life as perceived by the caregiver, and physical well-being of the caregiver during the study period.

Thus, this study endeavored to note relationships among several variables that include attention to the individual caregiver's aspects of support as well as the social and emotional variables of perceived social support and quality of life. A note: in homage to the idea that the number of social contacts does not equal a quality of social interaction, we acknowledge the difficulty of using only a quantitative numeric to describe social support in terms of contact with relatives. The author is more interested in the quality of the contact as perceived by the caregiver, as well as the relief of caregiver burden or stress resulting from contact and perceived social support from relatives, especially in relation to their geographic locations. Unfortunately, the numeric reporting of social support contacts is the longstanding measure of perceived social support (see greater discussion in the limitations section).

Methods

The Alzheimer's Disease caregiver study described here was designed to use the New York University Caregiver Intervention (NYUCI) counseling and support intervention to assess the well-being of caregivers. NYUCI elements consisted of an initial assessment of the family system and problems, a first individual session followed by four family sessions for counseling and problem-solving, as well as teaching dementia caregiving suggestions and answering family questions, ad hoc contacts to the agency for the following 18-month period if the caregiver wished for individual or group counseling, and follow-up assessments at quarterly intervals during the two-year enrollment period.

A pre- and post-survey design was used; the instruments were administered by licensed social work clinicians who assumed case management of the family's needs upon enrollment of each participant. As a demonstration project, the research method incorporates ongoing services targeting resolution of perceived needs followed by measurement of the behavioral and psychological outcomes of those services. The overall measures are designed to assess caregiver physical health, evaluate caregiver depressive symptoms, and to note caregiver social support and caregiver appraisal of patient memory and behavior.

The university researcher, a specialist in gerontological social work, maintained close contact with all study partners to implement each facet of the research. The researcher achieved approval by the institutional review board and conducted a comprehensive evaluation of all phases of the program. At the conclusion of the 36-month project, the researchers now have an easily replicated program of interventions for people/families affected by ADRD.

Participants and the Sample Frame

Participants are 58% female in the overall project's caregiving sample of 213 families providing care to a patient with dementia, and the female preponderance is concomitant with the general population of U.S. caregivers. Caregiver ages ranged from 58 years to 101 years, with more than one care recipient over the age of 100. All but three of the caregivers are partners or spouses of the care recipient (98%); three (2%) are adult relative (daughter) caregivers. The initial study's inclusion criteria called for only spouse or partner caregivers, and two years into the study the lead funding agency allowed adult child caregivers to participate; an amendment was requested and granted by the Institutional Review Board. None of the caregivers are formal or paid help; this was also specified in the original study protocol and this requirement has been adhered to throughout the study.

The sample (N=213) was drawn from the Sarasota County, FL, elder population, which approaches 35% of the total population in some areas of the county, (in contrast to approximately 18% of the total U.S. population presently). The majority of program participants were White (94%), 2% were African-American, and 4% were Hispanic or Latino. Although socio-demographic characteristics were obviously skewed toward White participants, other demographic characteristics such as urban/rural residence, number of family members, social support resources, and quality of life perceptions were essentially similar.

As a community-based, cross-sectional study of older adults in caregiving situations, eligible individuals were drawn from two large referral sources: the Jewish Family and Children's Services program and a Sarasota hospital system and memory disorder clinic. Eligible individuals between 50 and 101 became the sample frame. Among the 250+ individuals contacted to offer the no-cost demonstration project's services, 213 ultimately accepted the offer to participate in the interviews, assessment, counseling sessions, groups, and instruments of measure. The present analysis used cognitively intact caregiving participants. The size of the resulting sample completing the social support, caregiver burden, and quality of life scales in their entirety was 98 (the results reported here pertain to the 98 female caregivers).

Quantitative inquiry was chosen to determine the effects of this project's interventions due to the availability of good established measurements for the outcomes of interest: social support, caregiver burden, and quality of life. Similar studies of caregiver burden and quality of life have also used quantitative measures (Pearlin, Mullan, Semple, & Skaff, 1995; Sherman, Sorocco, Fischer, & McFarlane, 2011; & Thorpe et al, 2006).

Once an interview was arranged and the participant enrolled in the program, a licensed clinical social worker (LCSW) made an assessment visit and began the protocol of visits, both in-person and by telephone or electronic message if more feasible for the participant. Especially with distant relatives, the alternative methods were often utilized. At the first in-person visit, regardless, the participant signed an informed consent form outlining the nature of the research and the duration and content of the study. The scales and other instruments of measure were described, explained if needed, and made available to the participant for leisurely review. The caregivers (deemed the "participants" in this study) completed a psychosocial assessment and demographic information pertaining to age, gender, relationship status, and the like was gathered within that instrument as well. Detailed information about social support and social relationships was a major part of the data collection.

Participant Assessments and Instruments

The Social Support Scale, Caregiver Burden Inventory, and a quality of life measure were administered at baseline (initial visit) and for subsequent months thereafter at a six-month interval for a pre-and post-measure design. If participants preferred, instruments were mailed to them at the home address rather than brought physically to the home. Response rate was 62%, considered a high rate of return by typical and historically accepted research standards (Dillman, 1978).

Social Support. This measure tallies the number and type of social relationships perceived by the caregiver to be offering support, defined as being available for consult or companionship, making the caregiver feel less isolated, and helping the caregiver realize that he or she is not alone in caregiving. The measures included six items assessing the number of relatives or friends considered to be a part of the support system, frequency of contact, and the degree of emotional closeness experienced, as well as geographic distance or nearness. Reliability was satisfactory ($\alpha=.77$).

Although caregivers in this study did consider themselves to be essentially self-sufficient and capable in their caregiving duties, 68% of respondents report that they do not live close to family members. Anecdotally throughout the patient records kept for this study, caregivers all noted that mobility and transportation are problematic issues as they age. In fact, 85% have considered their options in regard to continuing to maintain independence and their ability to be effective caregivers if unable to drive.

Caregiver Burden

The Caregiver Burden Scale is a 21-item measure of perceived stress within the caregiving role, with such items as "I don't have enough time for myself" and "I fear what will happen to my relative in the future". The scale is essentially a rating of the degree of stress or burden encountered by the caregiver in his or her role with the

person with dementia. Participants all scored in lesser ranges at the completion of the post-test. The caregiver burden scale showed significant difference from pre-to post-test, with a mean overall decrease in caregiver burden score of 14.9 points, with both men and women reporting significantly fewer indicators of caregiver burden (12.1 in men and 13.9 in women of a possible total score of 45).

Quality of Life

A five-item measure of participants' perception of change in the quality of their overall life experience reveals low to high satisfaction with life events and life processes. Respondents were asked to report whether they agreed with such statements as "Things seem better than they were a few months ago" or "These are the best years of my life". All items were positively worded; i.e., no reverse-scoring was necessary on the 3-point Likert-type scale ranging from 0 (strong disagreement) to 2 (strong agreement). Reliability was shown to be high in the present sample ($\alpha=.77$).

Other Variables

Demographic information included age (in years), gender (0=male, 1=female), marital status (0=not married, 1=married or partnered), educational attainment (actual years of education), and financial income status (numerical range). Although not a measurable instrument, the presence of respite services was also noted and entered into the stepwise regression analysis. Respite services were offered to all participants in the study, although all of the participants did not accept the service.

Results

Data were analyzed with SPSS Version 12 (SPSS 2008). Descriptive analyses, including frequencies, mean values, chi-square and analysis of variance (ANOVA), were conducted on the demographic and pre-test items. ANOVA was used to test for statistically significant differences by gender. Paired-sample t-tests were used to compare pre- and post-test results on social support measures, caregiver burden, and caregiver's perception of the quality of life.

For continuity of data analysis and to attend to all possible configurations of the relatives' geographic status, initially the sample was divided into three potential groups: a) caregivers with no provision of social support; b) caregivers with a "high" level of social support defined as acceptance of counseling interventions, family visits, ad hoc visits and phone calls, and ancillary services offered by the NYUCI model; and c) caregivers with "low" social support as defined by the same indicators above. To further operationalize "high" and "low" levels of support or utilization of the model, the cut points of greater or lesser than 40 visits of any combined type (family, counselor, ad hoc interventionist, etc.) denoted "high" support levels as those receiving 40 or more visits or treatments, and "low" support considered when fewer than 40 visits were indicated. Because no respondent fell into the first category (N=0), only the last two groups were used in the analyses (caregivers with high or low support indicators: HSS or LSS to abbreviate high social support or low social support). The higher or lower support groups did not vary significantly in other aspects of family, social, or demographic conditions.

Independent samples t-tests and chi-squares analyses were conducted to assess differences between these groups. Correlation coefficients among study variables in the last two groups were compared using Fisher's *r-to-z* transformation, which allows a statistical determination of the difference between independent correlation coefficients (Steiger, 1980). In multivariate analyses, a hierarchical regression model of quality of life scores was estimated in each group. After controlling for demographic variables, the relative contact frequencies, social support, and quality of life measures were entered in the model of individuals receiving respite.

Associations among study variables. Descriptive characteristics of the sample and study variables include an examination of Groups 2 and 3, those receiving high or lower social support (recall that we excluded Group 1). On average, participants were 74.2 years of age (SD=6.14) and more than 94% were married. The average years of education were 14.2, and the large majority was White (98.5%). The author notes that this sample was biased with regard to a slightly higher educational level than the general national population and it included few non-White participants; however, that is reflective of the region's ethnic disposition, which is 92% White.

Regression model of perceived quality of life and caregiver burden. The results of the hierarchical regression model suggest that a higher degree of social support as indicated by the greater level of intervention was associated with lessened caregiver burden although family visits alone and counseling visits alone did not relate to lowered caregiver burden. Only the array of interventions embedded in the entire model when taken together appeared to alleviate caregiver burden.

In the regression model for individuals with family support only, support variables explained 9% of the variance in perceived quality of life, with female gender and higher levels of education being the most important predictors of high satisfaction with quality of life. The inclusion of marital status, having respite services, and caregiver burden made no additional contribution to the model. In the regression model for individuals receiving all aspects of the NYUCI model and thus, high social support, demographic variables explained 8% of the variance of quality of life. A higher level of education was also found to be an important predictor in this analysis. In the third model, social contacts, counseling interventions, ad hoc visits, and gender when combined were found to explain 19% of the variance, resulting in a total explained variance of 36%.

Discussion: Why an Integrated Model is Important

Quality of life and the alleviation of caregiver burden are important considerations for caregiving individuals, especially with dementia patient care. If a person has a basis of an adequate or better quality of life, one can imagine that the burden of caring for an impaired but loved family member may be ameliorated by social support during difficult times. For this study, the author questioned whether the addition of counseling services and ad hoc availability of professional caregiving services would make a difference to caregivers who already received some family support; i.e., was the quality of life different if the caregiver's source of social support was "added to" by the model of integrated services? In the subset of caregivers with the entire range of services, the caregivers' gender and educational level were associated with a higher quality of life, but the addition of integrated caregiving services also explained a

variance in overall life satisfaction and a lessened sense of burden. Of note, marital status and self-rated health seemed to have no particular association with quality of life; whether or not one is married, a committed relationship may engender a similar degree of caregiver burden and impaired quality of life as one observes a family member's decline and distress.

Caregivers find their tasks physically and emotionally demanding, often stating something indicating that "I'm on the go for 24 hours per day." It appears that the emotional demands have the greatest impact. Because caregivers are known to have difficulty setting boundaries and setting aside time for themselves, it may alleviate some degree of burden to know whether social support is available and to understand that taking advantage of that support can be beneficial for the patient as well as for themselves. In our study, those with the highest scoring on the scale of caregiver burden also related the greatest relief when utilizing social support systems. Further, anecdotally we heard that delaying the acceptance of support delayed the alleviation of the sense of burden, and this will be further explored in future study. If the acceptance of social support and especially formalized social interventions does alleviate caregiver burden to any extent as apparent here, the greater normalization of this practice would seem also to lessen the extent of shame or guilt that caregivers often experience in using such services. Thus, the belief in needing to "go it alone" might be modified.

Ultimately, if a better integrated model of caregiving relief appears to influence one's perception of the quality of life or self-rated satisfaction with one's life overall, we may surmise that the entire model of care is worth considering when implementing services for burdened caregivers of dementia patients.

These findings emphasize the importance of screening the caregiver's social support status when medical and other clinical assessments are made. It would follow that an alleviation of isolation and caregiver burden could potentially decrease visits to doctors, hospitals, or emergency rooms, or could have an impact upon decisions about nursing home or assisted living placements. Thus, the costs of health care could indirectly be affected by greater social support and/or lessened caregiver burden. At least anxieties about the caregiver's ability to provide adequate supervision and services for the dementia patient might be eased.

A limitation of this study is the inability to assess the quality of social contacts and social activity, as the scales measured numbers of social contacts and social support persons in the caregiver's life. An additional limitation and subject of future study would be the relative influence of respite or non-respite service provision in the presence of varying degrees of quality of that support; i.e., is a high number of supporting relatives (or friends) as important as the support of a few high quality interactions with fewer friends and relatives? Additional study could focus upon ways that families and communities or veterans' organizations and governmental agencies make social support feasible and accessible. Many communities offer fine examples of social support to caregivers in their homes as well as programs that can help when they have inadequate support or attention from their own family systems. Community social service practitioners should be aware of the utility of an integrated model of care.

References

- Bass, D.M., Judge, K. S., Snow, A. L., Wilson, N. L., Looman, W. J., McCarthy, C., et al. (2012). Negative caregiving effects among caregivers of veterans with dementia. *The American Journal of Geriatric Psychiatry*, 20, 239-247.
- Bormann, J., Warren, K.A., Regalbutto, L., Glaser, D., Kelly, A., Schnack, J., & Hinton, L. (2009). A spiritually based caregiver intervention with telephone delivery for family caregivers of Veterans with dementia. *Alzheimer's Care Today*, 10, 212-220.
- Bradley, L., Whiting, P., Hendricks, B., & Wheat, L. (2010). Ethical imperatives for intervention with elder families. *The Family Journal*, 18(2), 215-221.
- Brodsky H., Green, A., & Koschera K. (2003). Meta-analysis of psychosocial interventions for caregivers of people with dementia. *Journal of the American Geriatrics Society*, 51(5), 657-664.
- Carretero, S., Garces, J., & Redenas, F. (2007). Evaluation of the home help service and the impact on the informal caregiver's burden of dependent elders. *International Journal of Geriatric Psychiatry*, 22, 738-749.
- Diagnostic and Statistical Manual of Mental Disorders-IV-TR* (2007).
- Dillman, D.A. (1978). *Mail and telephone surveys: The total design method*. New York: John Wiley & Sons.
- Gallagher-Thompson, D., Lovett, S., Rose, J., McKibbin, C.L., Coon, D.W., & Futterman, A., (2012). Impact of psychoeducational interventions on distressed family caregivers. *Journal of Geropsychology*, 6, 91-110.
- Gonzalez-Salvador, MT, Arango, C., Lyketos, CG, & Barba, A.C. (1999). The stress and psychological morbidity of the Alzheimer patient caregiver. *International Journal of Geriatric Psychiatry*, 14, 701-710.
- Mittelman, M. S., Roth, D. L., Haley, W. E., & Zarit, S. H. (2004). Effects of caregiver intervention on negative caregiver appraisals of behavior problems in patients with Alzheimer's Disease: Results of a randomized trial. *Journal of Gerontological Psychology*, 59, 27-34.
- Nichols, L.O., Martindale-Adams, J., Burns, R., Graney, M.J., & Zuber, J. (2011). Translation of a dementia caregiver support program in a health care system--REACH VA. *Archives of Internal Medicine*, 171, 353-359.
- Nuttman-Shwartz, O. (2007). Men's perceptions of family during the retirement transition. *Families in Society: The Journal of Contemporary Social Services*, 88(2), 192-202.
- Ory, M.G., Hoffman, R. R., Yee, J. L. (1999). Prevalence and impact of caregiving: A detailed comparison between dementia and non-dementia caregivers. *The Gerontologist*, 39, 177-185.
- Papastaurou, E., & Kalokerinova, A. (2007). Behavior, burden, and depression in caregivers. *Journal of Advanced Nursing*, 58, 446-457.

Pearlin, L., Mullan, J. T., Semple, S. J., & Skaff, M. M. (1995). Caregiving and the stress process: An overview of concepts and their measures. *The Gerontologist, 30*, 583-591.

Qualls, S., & Anderson, L. (2009). Family therapy in late life. *Psychiatric Annals, 39*(9), 844-850.

Rose, J., Bowman, K., O'Toole, E., Abbott, K., Love, T., Thomas, C., & Dawson, N. (2007). Caregiver objective burden and assessments of patient-centered, family-focused care for frail elderly Veterans. *The Gerontologist, 47*(1), 21-33.

Sherman, M. D., Fischer, E. P., Sorocco, K., & McFarlane, W. R. (2011). Adapting the multifamily group model to the Veterans Affairs system: The REACH program. *Couple and Family Psychology: Research and Practice, 1*(S), 74-84.

Thorpe, J.M., Sleath, B.L., Thorpe, C.T., Kalinowski, M., Van Houtven, C.H., Blalock, S. J., Landerman, L.R., Campbell, W.H., & Clipp, E.C. (2006). Caregiver psychological distress as a barrier to influenza vaccination among community-dwelling elderly with dementia. *Medical Care, 44*, 713-721.

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The logo for the International Association for Family and Couple Psychology (iafor) is centered on the page. It features the lowercase letters "iafor" in a light blue, sans-serif font. The text is enclosed within a circular graphic composed of two overlapping, semi-transparent arcs: a light blue outer arc and a light red inner arc, creating a ring-like effect around the text.

Gender Differences in the Relationship between Job Instability and Depression: A Preliminary Study

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Abstract

Stress factors in the workplace can affect workers mental health, increasing the risk of developing psychological disorders. Different factors affect the relationship between the perception of safety in the workplace and mental health: security of workplace, quality of relationships and internal communication, gender and type of role. Longitudinal studies showed that a higher level of job insecurity, flexibility and low social support can negatively affect mental health, with high correlations to depressive and anxiety disorders. Furthermore, differences in the reaction to job stress related to the gender have been reported in literature. In this preliminary study we investigated the relationship between type of contractual form, gender, subjective perception of safety in work place, salary and personal relationship considering a sample of 30 subjects (16 with permanent job, 14 with temporary job). We evaluated the subjective perception of stress (PSS), the level of anxiety and depression (BDI and STAY). Quality of relationships with colleagues, hygiene in workplace, level of education and adherence to studies were also considered. The results of GLM analysis shown significant correlations between the type of contractual form, gender and the level of depression (BDI). Furthermore, we found a non significant trend between job stability and gender, and STAI and salary.

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Introduction

High level of stress in the workplace can has a strong effect on the workers health and mental health, producing an array of consequences including the increased risk of coronary diseases developing (Marmot & Brunner 2005; Karmaus 1984; Hemingway et al. 2003), mental ill and psychological symptoms such as depression, insomnia, headache, anxiety, weight change and panick attack (Cooper et al. 1989; Danna and Griffin, 1999). Godin et al (2005) found that positive rewards, such as promotions, in relation to high work efforts, could have positive effects on the worker's mental health. Indeed, low level of job satisfaction (i.e. low level of responsibility, lack of freedom in the working methods choosing and lack of job variety) results to be associated to workers high stress level, which is significantly predictive of high level of mental ill and low level of wellbeing (Cooper et al. 1989; Adelman, 1987).

Currently, a descriptive framework of the main stress factors and their consequence on mental health (Danna and Griffin, 1999) is available. The main described stress factors are: workload, safeness in the workplace, leadership quality, internal communication efficiency, sudden change in job or job environment, social support (Karasek & Theorell, 1990) and lack control over work (Marmot et al., 1997).

Some authors highlighted that job insecurity has a important role in the worker's mental health, causing high anxiety level, depression and stomach and sleep disorders (Sverke et al., 2002; Burgard et al., 2012; Schumacher et al., 2015; Latza et al., 2015). Furthermore, Carlson (2015) found an effect of job insecurity distress on birth outcomes.

Recent studies suggest that variables concerning personal life and personality characteristics could provide important information to better understand the role of work-stress in the mental health (Bonde et al., 2008; Marchand et al., 2015). In particular, Marchand et al. (2015) included in the study an array of familiar factors, such as marital status, marital strain, parental strains, family-work conflicts and work-family conflicts.

In several works, the relationship between job stress and gender has been studied, but the results are not always consistent (Cordes and Dougherty, 1993). Some studies show gender differences in the relationship between job satisfaction and psychological distress (Clearly and Mechanic, 1983), in the burnout incidence (Pretty et al., 1992), in the relationship between self-efficacy and job satisfaction (Klassen & Chiu 2010) and in perception of job control and job strain (de Smet et al. 2005). On the other hand, gender effect could became not significant reducing the sampling bias (considering variables such as job role, salary or education) (Gore and Mangione, 1983; Barnett et al., 1993; 2001). More generally, several authors proposed to consider the effects of social, cultural and economical changes on the gender differences in work studies (Barnett et al., 2001, Greenhouse and Powell, 2006; Mitchell et al., 2015)

In this study, we evaluated the role of gender in the relationship between job insecurity (permanent vs not permanent job contract) and mental health, considering

the sentimental status, the salary subjective satisfaction and the perception of safeness at work in a sample of 30 subjects from Milan (Italy). We measured the level of depression, anxiety, perceived stress and personality style to assess the mental health status.

Material and methods

We sought to study if gender differences have a role in the relationship between the job instability and mental health, in Italian workers. Mental health of the participant were evaluated on the basis of a battery of psychological tests, while their life situation were evaluated on the basis of personal data.

Dependent Variables

To assess the mental health status of participant we chose to measure the level of depression, anxiety, the perception of personal well-being, stress and the personality style using tests validated on the Italian sample. Beck Depression Inventory-II (BDI-II) (Beck et al., 1996), State-Trait Anxiety Inventory - Forma Y (STAI-Y) (Spielberger et al., 1970), Big Five Inventory (BFI) (John & Srivastava, 1999), The Psychological General Well-Being Index (PGWBI) (Dupuy, 1984) and Perceived Stress Scale (PSS) (Cohen et al., 1983) were used to this purpose. The Psychological General Well-being Index measures 5 different scale: depression (3 items), anxiety (5 items), positivity and wellbeing (4 items), self-control (3 items), general health (3 items), vitality (4 items). The Big Five Questionnaire measures 5 scale: Agreeableness (9 items), Neuroticism (8 items), Openness (10 items), Extroversion (8 items), Conscientiousness (9 items).

Personal data considered in the study were sex, age, nationality, past or current mental disease, pharmacological treatment, perception of adequacy of salary, involving in a romantic relationship, job contract form and perception of safeness on the workplace. The variables “adequacy of salary on the job performed” and “safeness on the workplace” were evaluated with a numerical scale, ranging from 1 to 10 (1: very bad, 10: excellent).

Subjects recruitment

The subjects included in the study (n=30) were recruited from the Milan hinterland area (Italy) by using social media. We selected 30 subjects of which, 16 with permanent job contract and 14 with not permanent job contract (mean age: 34, +- 8, range 26-42; sex: 15 females and 15 males).

We up-loaded all tests on the on-line platform “Google Documents”, so that each subject could perform the questionnaires at home. When the participants completed the tests, they was not able to access to the tests. All participant were asked to perform the tests at home, without having distracting elements or discomfort.

All the involved subjects signed the voluntary Informed Consent to participate in the study, with information about the object of the study and the modality used. Privacy of data has been guaranteed by completely anonymous procedures of data analysis.

Data analysis

The collected data were organized in a database, and variables with very low level of variability were selected to be removed.

Outliers were detected on the basis of the Mahalanobis distance, calculated with “psych” R library (Roe et al., 2015), and removed from the database.

To study the role on the relationship between job insecurity and mental health, we used General Linear Model (GLM) to test the relationship between personal data variables and the result of each psychological test included in the study. We tested the following models:

model 1 (no Sex-Contract interaction):

$$\text{Test} = \beta_0 + \beta_1 \text{Contract} + \beta_2 \text{Sex} + \beta_3 \text{Per.Rel} + \beta_4 \text{Salary} + \beta_5 \text{Safeness} + \varepsilon$$

model 2 (Sex-Contract interaction):

$$\text{Test} = \beta_0 + \beta_1 \text{Contract} + \beta_2 \text{Sex} + \beta_3 \text{Per.Rel} + \beta_4 \text{Salary} + \beta_5 \text{Safeness} + \beta_6 \text{Contract} * \text{Sex} + \varepsilon$$

The dependent variable (Test) represents the psychological test result, “Contract” represents the job contract form (permanent, not permanent), “Sex” represents sex (male, female), “Per.Rel” represents the romantic relationship (involving in romantic relationship, not involving in romantic relationship), “Salary” represents the perception of adequacy of salary and “Safeness” the sense of safeness on the workplace. In the first model, the linear relationship between the independent variables (Contract, Sex, Per.Rel, Salary and Safeness) and the Test variable was tested, while in the second model, the interaction between the sex and the job contract form was added to the model. The two models were used to fit personal data to all the scales of the psychological tests included in the study, one by one.

For each analysis, t-test was used to check if the mean of the residuals is statistically significantly different from zero, while we used the Shapiro-Wilk test to check if residuals were normally distributed.

The Akaike Information Criterion (AIC) was used to compare the model 1 and the model 2: the models were considered to be significant different if AIC difference was equal or more than 2 (Sakamoto et al. 1986) .

Results

The aim of this study was to evaluate the role of the sex on the relationship between job insecurity and mental health. We included in the study 30 subjects, 25-45 years-old from the Milan hinterland area (Italy). Subjects were interviewed using a battery of psychological tests, including BDI-II (Beck et al., 1996), STAI-Y (Spielberger, 1983), BFI (John et al., 1999), PGWBI (Dupuy, 1984) and the PSS (Cohen et al., 1983). Sex, perception of adequacy of salary, involving in a romantic relationship, job contract form, perception of safeness on the workplace, age, nationality, past or current mental disease, and pharmacological treatment personal data were also collected from the subjects.

Four outliers were identified and removed from the database (see material and methods). From the remaining dataset, the nationality (25 Italian, 1 Peruvian), past or current mental disease (26 with no mental disease declaration) and pharmacological treatment (26 with no pharmacological treatment declaration) variables were removed from the database because of their stability in the sample.

The relationship between the personal data variables and the 14 psychological scales values (obtained from the five psychological tests included in the study) were tested with two generalized linear models (see Material and Methods). Both the models contain the same dataset of independent variables (the personal data variables sex, perception of adequacy of salary, involving in a romantic relationship, job contract form, perception of safeness on the workplace) with the main difference that, in contrast to the first model, the second model includes the interaction between the variables Sex and Contract. For each scale of the psychological tests included in the study, both the models were tested and difference in the model AIC were considered.

The results of GLM analyses (Table 1) performed using the first model (Test = $\beta_0 + \beta_1$ Contract + β_2 Sex + β_3 Per.Rel + β_4 Salary + β_5 Safeness + ε) show a negative no significant trend between STAI 1 and Sex ($\beta_2 = -8,12$, p-value < 0.1), a negative no significant trend between Depression scale of PGWBI and Salary ($\beta_4 = -0,58$, p-value < 0.1), a negative no significant trend between Agreeableness scale of BF and Contract ($\beta_1 = -4,68$, p-value < 0.1), a significant relation between Agreeableness scale of BF and Sex ($\beta_2 = 5,32$, p-value < 0.05) and from Agreeableness scale of BF and Salary ($\beta_4 = 1,22$, p-value < 0.05) and a negative no significant trend from Neuroticism scale of PGWBI and Sex ($\beta_2 = -7,57$, p-value < 0.1).

The results of GLM analyses (Table 1) performed using the second model (Test = $\beta_0 + \beta_1$ Contract + β_2 Sex + β_3 Per.Rel + β_4 Salary + β_5 Safeness + β_6 Contract * Sex + ε) show a significant relation between BDI and Contract ($\beta_1 = 20,56$, p-value < 0.01), BDI and Sex ($\beta_2 = 24,23$, p-value < 0.01), a negative no significant trend between BDI and Personal Relationship ($\beta_3 = -3,39$, p-value < 0.1), a negative no significant trend between BDI and Safeness ($\beta_5 = -0,68$, p-value < 0.1), a significant relation between BDI and the interaction between Contract and Sex ($\beta_6 = -16,27$, p-value < 0.0001).

Furthermore, in the analyses performed using BDI as dependent variable, the AIC value calculated for the model 2 (AIC = 14,48), which include the interaction between

Sex and Contract variables, is significantly less than the correspondent value calculated for the model 1 (AIC= 151, 54). This indicates that model 2 fits the data better than model 1 (Sakamoto et al., 1986).

The mean BDI values obtained from the male-permanent, male-not-permanent, female-permanent and female-not-permanent categories are shown in Figure 1. The BDI mean value is very similar between males and females with not-permanent job contract, while it is significantly different (Wilcoxon test, p-value < 0.05) between male and female with permanent job contract.

Table1

Test	Intercept (β)	Contract (β)	Sex(β)	Per.Per(β)	Salary (β)	Safeness (β)	AIC1	Intercept (β)	Contract (β)	Sex(β)	Per.Per(β)	Salary (β)	Safeness (β)	Contract*Sex (β)	AIC2	AIC1-AIC2
BDI	34.33**	-1.33	-2.73	3.75	0.26	0.30	151.54	-31.33	20.58**	34.73**	-3.38	0.25	-0.08	-16.27***	136.70	14.84
STAI	60.02***	4.40	-8.12	-2.07	-1.33	-0.43	174.24	43.10	14.87	-6.54	-1.90	-1.35	-0.40	-7.84	173.24	1.00
STAI2	42.44**	-0.53	-4.67	-3.08	-0.29	0.30	184.36	23.82	10.88	9.17	-2.80	-0.39	0.53	-4.53	183.59	1.23
PGWBI ANXIETY	11.63	-0.81	3.205	1.52	-0.18	0.04	143.18	15.66	-2.90	0.03	1.49	-0.18	0.03	1.55	145.02	1.84
PGWBI DEPRESSION	13.04***	-0.99	1.18	0.32	-0.38	0.06	113.65	20.32**	-4.92	-3.66	0.46	-0.38	0.04	2.92	115.74	0.09
PGWBI WELLNESS	11.90**	-1.51	-0.33	0.57	-0.48	-0.48	128.66	22.66*	-7.88	-3.16	0.47	-0.48	0.46	4.73	127.75	0.94
PGWBI AUTOCONTROL	10.41*	-1.31	0.47	0.46	-0.11	0.03	120.97	18.84*	-4.42	0.38	-0.11	0.02	0.02	3.80	120.36	0.61
PGWBI VITALITY	14.42*	1.21	-0.16	-0.52	-0.68	-0.07	187.09	14.47	1.18	-0.29	-0.32	-0.48	-0.07	0.02	180.09	2.03
PGWBI PSS	22.46**	0.02	-4.45	2.01	-0.57	0.06	154.80	17.65	2.83	-0.86	2.86	-0.77	0.07	-2.17	156.02	1.82
BF EXTRO	28.64**	-2.36	0.67	1.34	0.43	-0.25	161.45	31.38	-4.15	-1.33	1.33	0.43	-0.26	1.33	165.40	1.95
BF CONSC	33.18***	-1.37	-0.65	0.85	0.15	-0.01	153.43	46.50**	5.44	-10.60	0.47	0.15	-0.06	6.00	153.88	0.46
BF OPEN	31.50**	0.56	-0.34	-1.87	-1.14	-0.57	170.39	35.91	10.04	11.14	-1.71	-1.55	-0.32	-7.65	180.92	1.33
BF AGREE	30.02***	-4.68	5.32*	-6.60	1.22*	-0.37	144.01	26.90*	-2.76	7.68	-0.57	1.21*	-0.36	-1.42	145.88	1.87
BF NEURO	35.07**	4.34	-7.57	-3.66	0.54	-0.85	169.50	33.86	11.15	0.82	-3.54	0.54	-0.81	-5.06	170.96	1.46

Table 1. GLM results: All the coefficients calculated in the GLM analyses are reported. The AIC value of each analysis and the absolute value of the AIC difference between the two model are reported. Statistically significance is reported as follow: . P < 0.1; * P < 0.05; ** P < 0.01; *** P < 0.001.

Table2

Test	Contract				Sex			
	Permanent		Not Permanent		Male		Female	
	mean	sd	mean	sd	mean	sd	mean	sd
STAI 1	41.37	9.44	42.76	7.51	41.37	9.44	42.76	7.51
STAI 2	25.68	14.92	30.82	11.53	25.68	14.92	30.82	11.53
BDI	10.00	7.04	9.88	5.50	10.00	7.04	9.88	5.50
PGWBI Anxiety	15.84	5.05	14.71	4.06	15.84	5.05	14.71	4.06
PGWBI Depression	11.89	2.02	11.35	2.78	11.89	2.02	11.35	2.78
PGWBI Wellness	10.21	3.15	10.53	3.50	10.21	3.15	10.53	3.50
PGWBI Self-control	9.63	2.50	9.76	2.46	9.63	2.50	9.76	2.46
PGWBI General health	10.32	2.47	10.59	3.26	10.32	2.47	10.59	3.26
PGWBI Vitality	13.11	5.11	12.47	4.00	13.11	5.11	12.47	4.00
PSS	17.37	6.76	19.24	5.73	17.37	6.76	19.24	5.73
BF Extroversion	27.89	5.82	29.59	6.53	27.89	5.82	29.59	6.53
BF Agreeableness	32.95	5.19	34.71	4.82	32.95	5.19	34.71	4.82
BF Conscientiousness	28.58	6.74	32.47	7.12	28.58	6.74	32.47	7.12
BF Neuroticism	24.89	10.42	24.71	6.91	24.89	10.42	24.71	6.91
BF Openness	37.89	10.88	40.65	6.85	37.89	10.88	40.65	6.85

Table 2. Psychological test mean and standard deviation values: Comparison of mean and standard deviation (sd) values in subjects, organized on the basis of their contract form and the gender.

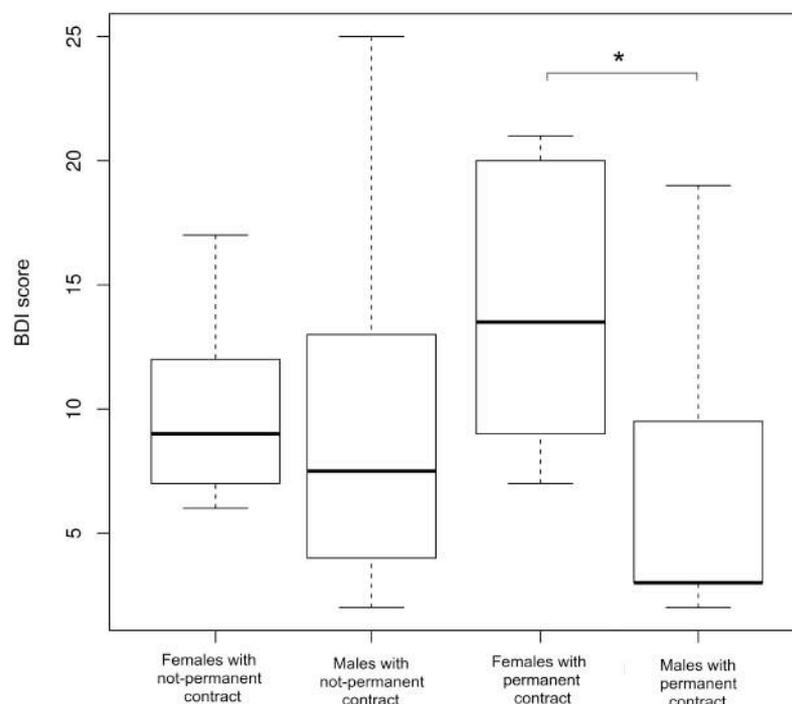


Figure 1. Mean BDI score in gender-contract subjects categories. The significantly (P -value < 0.05) different pair of means are indicated with *.

Discussion

During the 2003, not-permanent job contract forms were introduced in the Italian Labour Code. At the moment the relationship between the wellbeing and mental health status and the condition of instability at work, is not completely understood. Currently, the gender role in the relationship between job instability (due to not-permanent job contract) and mental health is an open topic.

In this work we present the result of a preliminary study involving 30 workers, recruited in the Milan hinterland area (Italy) during Spring 2015. We collected a set of personal data (sex, perception of adequacy of salary, involving in a romantic relationship, job contract form, perception of safeness on the workplace, age, nationality, past or current mental disease and pharmacological treatment) from the subjects and evaluated their mental health on the basis on a battery of psychological tests (BDI-II, STAI-Y, BFI, PGWBI, PSS). We tested the influence of the gender in the relationship between job instability and mental health using two general linear models.

In our sample, we found that sex has a major role in the relationship between the job instability and the depression level. Indeed, females with permanent job contracts results to be affected to a significantly higher depression level, in comparison to the

males with the same contract form. The results (Table 1) show that the subjects involved in a romantic relationship have lower depression level (measured with BDI test), consistently with data in literature (Karasek and Theorell, 1990; Greenhouse et al., 2006; Mitchell et al., 2015). Furthermore, the level of perceived safeness on workplace could be negatively related to the measured depression level, suggesting the importance of this factor in the worker's mental health status. Moreover, depression level measured with PGWBI depression scale results negatively related to salary.

The data concerning the relation between depression level, gender and job stability could be read in two ways: a) females are strong responsive to job stress, increasing their level of depression and anxiety (Clearly and Mechanic, 1983; Pretty et al., 1992; Klassen and Chiu, 2010); b) the relationship between gender and the levels of depression and stress could be due to a sampling bias, produced by the lack of social and job variables in the framework (Gore and Mangione, 1983; Lernkau et al., 1987; Barnett et al., 1993).

Following the first way of interpretation, we should expect to find significant relations between gender and the levels of stress, anxiety or depression. On the second interpretation we should expect to find relations between one or more psychological test variables and the salary, the safeness or the romantic relationship variables, without gender effect. Indeed, we found a not significant trend between these three variables and depression level measures.

In conclusion, the results of this study suggest that male and female show different levels of depression in relation to the job, but social and economical conditions (salary satisfaction, security at work, sentimental relationship) have a role in determining this effect. In this preliminary study we did not consider how salary, security at work and sentimental status differ between male and female. More detailed information concerning these variables and a wider sample are required to better understand this phenomenon.

References

- Adelmann, P. K. (1987). Occupational complexity, control and personal income: Their relation to psychological well-being in men and women. *Journal of Applied Psychology*, 72, 529-537.
- Barnett R.C., Marshall N.L., Raudenbush S.W., Brennan R.T. (1993). Gender and the relationship between job experiences and psychological distress: A study of dual-earner couples. *J. Pers. Soc. Psychol.* 64:794-806.
- Barnett, R.C., & Hyde, J.S. (2001). Women, men, work, and family. *American psychologist*, 56(10), 781.
- Beck A.T., Steer R.A., & Brown, G.K. (1996). Beck depression inventory-II. *San Antonio*.
- Bonde JP (2008). Psychosocial factors at work and risk of depression: a systematic review of the epidemiological evidence. *Occup Environ Med*, 65(7):438-445.
- Burgard S.A., Kalousova L., Seefeldt K.S. (2012). Perceived job insecurity and health: the Michigan Recession and Recovery Study. *J. Occup. Environ. Med.* 54:1101-1106.
- Carlson, K. (2015). Fear itself: The effects of distressing economic news on birth outcomes. *Journal of health economics*, 41, 117-132.
- Cleary, P. D., & Mechanic, D. (1983). Sex differences in psychological distress among married people. *Journal of Health and Social Behavior*, 111-121.
- Cohen, S., Kamarck, T., & Mermelstein, R. (1983). A global measure of perceived stress. *Journal of health and social behavior*, 385-396.
- Cooper, C. L., Rout, U., & Faragher, B. (1989). Mental health, job satisfaction, and job stress among general practitioners. *Bmj*, 298(6670), 366-370.
- Cordes, C. L., & Dougherty, T. W. (1993). A review and an integration of research on job burnout. *Academy of management review*, 18(4), 621-656.
- Danna K., & Griffin N. (1999). Health and Well-Being in the Workplace: A Review and Synthesis of the Literature. *J. Manage.* 25:357-384.
- De Smet P et al. (2005). Gender and regional differences in perceived job stress across Europe. *Eur. J. Public Health.* 15:536-45.
- Dupuy, H.J. (1984). The psychological general well-being (PGWB) index. *Assessment of quality of life in clinical trials of cardiovascular therapies*, 170-183.
- Godin, I., Kittel, F., Coppieters, Y., & Siegrist, J. (2005). A prospective study of

cumulative job stress in relation to mental health. *BMC Public Health*, 5(1), 67.

Gore, S., & Mangione, T.W. (1983). Social roles, sex roles and psychological distress: Additive and interactive models of sex differences. *Journal of Health and Social Behavior*, 300-312.

Greenhaus, J.H., & Powell, G.N. (2006). When work and family are allies: A theory of work-family enrichment. *Academy of management review*, 31(1), 72-92.

Hemingway H et al. (2003). Social and psychosocial influences on inflammatory markers and vascular function in civil servants (the Whitehall II study). *Am. J. Cardiol.* 92:984-987.

John, O.P., & Srivastava, S. (1999). The Big Five trait taxonomy: History, measurement, and theoretical perspectives. *Handbook of personality: Theory and research*, 2(1999), 102-138.

Karasek, R. A., & Theorell, T. (1990). *Healthy work*. New York: Basic Books.

Karmaus W. (1984). Working conditions and health: social epidemiology, patterns of stress and change. *Soc. Sci. Med.* 19:359-72.

Klassen RM, Chiu MM. (2010). Effects on teachers' self-efficacy and job satisfaction: Teacher gender, years of experience, and job stress. *J. Educ. Psychol.* 102:741-756.

Latza U. et al. (2015). Association of perceived job insecurity with ischemic heart disease and antihypertensive medication in the Danish Work Environment Cohort Study 1990-2010. *Int. Arch. Occup. Environ. Health*,

Marchand A., Durand P., Haines V., & Harvey S. (2015). The multilevel determinants of workers' mental health: results from the SALVEO study. *Soc. Psychiatry Psychiatr. Epidemiol.* 50:445-459.

Marmot, M.G., Bosma, H., Hemingway, H., Brunner, E., & Stansfeld, S. (1997). Contribution of job control and other risk factors to social variations in coronary heart disease incidence. *The Lancet*, 350(9073), 235-239.

Marmot M, Brunner E. (2005). Cohort Profile: the Whitehall II study. *Int. J. Epidemiol.* 34:251-256.

Mitchell, M.E., Eby, L.T., & Lorys, A. (2015). Feeling Work at Home: A Transactional Model of Women and Men's Negative Affective Spillover from Work to Family. In *Gender and the Work-Family Experience* (pp. 121-140).

Pretty, G.M., McCarthy, M.E., & Catano, V.M. (1992). Psychological environments and burnout: Gender considerations within the corporation. *Journal of Organizational Behavior*

Roe C.A., Sonnex C., Roxburgh E.C. (2015). Two meta-analyses of noncontact healing studies. *Explore* (NY). 11:11–23.

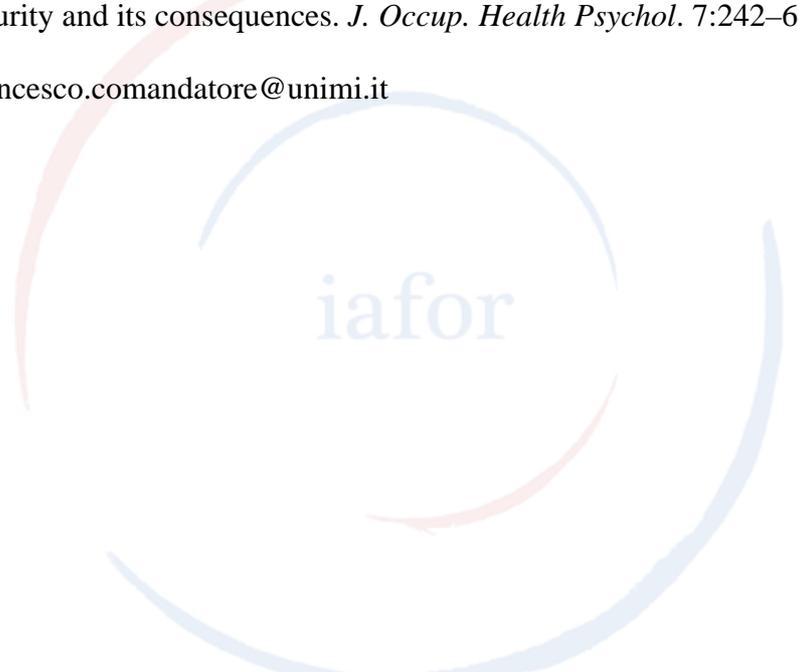
Sakamoto Y., Ishiguro M., & Kitagawa G. (1986). *Akaike information criterion statistics*. KTK Scientific Publishers.

Schumacher D., Schreurs B., Van Emmerik H., & De Witte H. (2015). Explaining the Relation Between Job Insecurity and Employee Outcomes During Organizational Change: A Multiple Group Comparison. *Hum. Resour. Manage.*

Spielberger, C.D., Gorsuch, R.L., & Lushene, R.E. (1970). *Manual for the State/Trait Anxiety Inventory*. Palo Alto: Consulting Psychologists Press

Sverke M., Hellgren J., & Näswall K. (2002). No security: a meta-analysis and review of job insecurity and its consequences. *J. Occup. Health Psychol.* 7:242–64.

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