Effectiveness of EMDR – IGTP in Reducing Distress and Promoting Well-being Amongst Uniformed Reserves During the Enhanced Community Quarantine

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Abstract
The Philippine Society was appalled with the massive disruption and threat of Covid when it was announced to have local transmission on March 8, 2020. As a response of the government, uniformed personnel was deployed in order to help in various communities. This study investigates the effects of the EMDR Integrative Group Treatment Protocol (EMDR-IGTP) on Uniformed personnel and volunteer reservists who have experienced negative impacts during the Covid-19 pandemic. There are sixty-six (66) participants of Uniformed personnel and volunteer reserves attended the EMDR Integrative Group Treatment Protocol (EMDR-IGTP) during their volunteer service during the Enhanced Community Quarantine. Using an ex-post facto research design, the effectiveness of EMDG-IGTP was explored in Reducing Distress and Promoting Well-being Amongst Uniformed Reserves During the Enhanced Community Quarantine, results shows that there was a significant difference in the subjective unit of distress from the pre-IGTP and post-IGTP. SUD's were also decreased in the post-test, suggesting that IGTP played a huge role in lowering down the subjective unit of disturbances of the participants. One-way ANOVA test showed a significant difference in the subjective unit of disturbance of the four (4) axes. The results from the pre-test and post-test well-being assessment indicate that the IGTP resulted in significant difference, with the post-test showing a lower mean score as compared to the pre-test. Implications of the study results are also presented in this study.

Keywords: EMDR-IGTP, Uniformed Reservist Personnel, Reducing Distress & Well-being

Introduction

The Covid-19 pandemic brough the Philippines under a state of calamity in which many essential frontline workers continued their job. During this time, Enhanced Community Quarantine was imposed in Metro Manila and other parts of the country. The Armed Forces of the Philippines, dedicated to their duties, risking their own wellbeing to ensure the safety of Filipinos affected by the dreaded disease". The war cry of our great soldiers in the Philippine Army has always been "serving the people, securing the land." The typical battlefield outfitted with military gear, tanks and cannons evolved into face masks, thermometer guns, and personal protective equipment. Wearing their battle dress uniform, the Philippine Army engaged in a larger conflict with COVID19, an invisible foe. a military that is prepared to serve in humanitarian crises in addition to fighting conflicts (Agulto, 2020).

Frontline employees are under extreme pressure at work because of the COVID-19 pandemic, which is risking their physical, mental, and social health. Long-term exposure to severe stress can have a number of negative effects on frontline employees' emotional and mental health. It can result in unhealthy behaviors like using tobacco, alcohol, or other substances, which may lead to substance use disorders, the beginning of common mental disorders like melancholy and anxiety or post-traumatic stress disorder (PTSD), and an increase in the risk of suicide among frontline workers (WHO, 2020).

In a cross-sectional-mixed method study conducted by Zhang et. al., (2021), front-line healthcare personnel encountered exceptional stresses and mental discomfort that persisted for years after the crisis. 30% of the respondents displayed depressive symptoms. From their descriptions, four themes have emerged: (1) 64.4% of respondents highlighted their anxiety about spreading the disease to themselves or others; (2) serious concern about the lack of PPE due to both the actual shortage and the evolving infection control regulations; (3) voiced worries regarding fluid protocols and the need for systemic solutions to the pandemic to address problems such not following guidelines, testing, overtaxing the system, alterations to the system for non-COVID patients, etc.; and (4) expressed concern about long-term effects, including mental health, uncertainty, economic effects, etc.

In a study conducted by Faretta, et. al., (2022), the participants were the frontline healthcare workers of a nursing home in Italy. Using Impact of Event Scale-Revised (IES-R) to measure PTSD symptoms and eye-movement desensitization and reprocessing (EMDR) therapy technique as intervention, the scores for perceived post-traumatic stress disorder (PTSD) symptoms and quality of emotional experience improved significantly following participation in the therapy program. In a similar study conducted by Fogliato, et. al., (2022), Statistical analyses were carried out to highlight the differences in Impact of Event-Revised (IES-R) and Post-Traumatic Growth Inventory (PTGI) before and after the group intervention. Healthcare workers maintained positive changes over time despite their prolonged exposure to an emergency and the possibility of re-traumatization at the onset of a new emergency phase, irrespective of their working place.

This study investigates the effects of the EMDR Integrative Group Treatment Protocol (EMDR-IGTP) on Uniformed personnel and volunteer reservists who were on-duty during the ECQ. Using an ex-post facto research design, the researchers explore the effectiveness of EMDR-IGTP in Reducing Distress and Promoting Well-being and Change Management Amongst Uniformed Reserves During the ECQ, results shows that there was a significant difference for pre-IGTP and post-IGTP for SUDs, with post-test SUD receiving low scores,

suggesting that IGTP played a huge role in lowering down the subjective unit of disturbances of the participants.

Well-being of the Uniformed Personnel During the ECQ

In comparison to the general population, there is a higher risk of infection in policing, which is commonly acknowledged as a high-risk profession. Since the beginning of the pandemic, the function of uniformed personnel has changed from just preventing crime in our communities to also playing a crucial part in containing the virus's spread, upholding the law, and encouraging safer neighborhoods. Police officers are faced with the tough responsibility of maintaining community safety and stopping the spread of COVID-19 while putting their physical and mental health at risk. This makes their job during the coronavirus (COVID-19) pandemic difficult (Edwards, A. M., & Kotera, Y., 2021).

According to Mehdizadeh, S., and Kamkar, K., (2020), the COVID-19 pandemic has provided extra occupational stresses to police, such as public threats and assaults, as well as viral exposure, raising the chance of operational stress injuries (OSI). The danger of psychological work-related problems does increase for police officers. OSI are ongoing psychological issues brought on by operational or service-related responsibilities. Depression, anxiety disorders, trauma and stressor-related illnesses, particularly post-traumatic stress disorder (PTSD), and/or drug use disorders are a few frequent mental health issues. Risks can also include discomfort, physical injuries, physical health issues, such as cardiovascular disease, and a variety of psychosocial stressors (such as financial strains, relationship strains), all as part of operational or service-related duties.

Additionally, local officials need to be aware of the serious risk that COVID-19 infection poses to law enforcement personnel. Law enforcement and other first responders, such medical professionals, will probably come into contact with an infected person. Law enforcement personnel may encounter significant stress in addition to the risks of getting the COVID-19 virus during this period due to increased demands and ongoing duties outside of work as well as the possibility of family members being ill (Ors, Y., 2020).

Volunteering in the Midst of the Pandemic

Volunteering seems to improve life satisfaction more in older (age 60 and above) individuals than in younger individuals. According to a survey conducted by the British Household Panel that was analyzed using a life course perspective, volunteering has a favorable effect that is more noticeable in midlife and later in life when freely chosen and not mandated (Tierney, S., and Mahtani, K.R., 2020). In another study conducted by Alhajjaj, H. A., and Al Nabulsi, H. H., (2022), volunteering during the COVID-19 pandemic has helped people during this time gain a variety of skills, which has been beneficial.

Since volunteers are particularly susceptible to health hazards in these situations, there is a great need to protect them. and the study's findings make clear that they have a poor view of society and place little value on their involvement in bringing about social change (Alhajjaj, H. A., & Al Nabulsi, H. H., 2022). Volunteering for social emergencies was associated with those having diagnosed physical condition (8% greater chances) or mental illness (16% higher odds). People with identified mental health disorders had a 23% greater chance of participating in formal volunteering, whereas those with physical sickness had a 27% lower chance of participating in neighborhood volunteering (Mak, H. W., & Fancourt, D., 2021).

Volunteering provides significant health and wellness advantages, in addition to playing an important role in helping individuals and communities (e.g. improved self-rated health, lower levels of sadness, greater wellbeing, self-esteem, and quality of life).

Research Questions

This study was conducted during ECQ with the Uniformed Personnel in an attempt to improve the well-being of the participants using EMDR-IGTP. Specifically, it aims to answer the following research questions: 1) Is there a significant difference between the SUDs of the participants in pre-IGTP and post-IGTP? 2) Are there significant differences between the SUDs of the participants per axis? 3) Is there a significant difference between the pre-test and post-test of well-being scale? 4) What are the participants' perspectives about their future vision?

Materials and Methods

Research Design

This study used an Ex-post Facto and Quasi-experimental research design. An Ex-post Facto research design is used to determine the cause and effect relationship between an independent and dependent variable. This entails particular character or traits of participants that cannot be manipulated. A quasi-experimental research design is similar to experimental research in a sense that the independent variable is being manipulated with no control group, no random selection, no random assignment, or no active manipulation, and is different from experimental research (White and Sabarnal, 2014). Comparative analysis of the pretest and the post-test well-being scores and SUD's of the participants were also conducted.

Sample

The participants of the study were composed of 66 uniformed personnel and volunteer reserves with the age range of 21 to 40 years old, who rendered their duty during the Enhanced Community Quarantine (ECQ) in the succeeding months: March 17, 2020 to August 18, 2020, regardless of the gender.

Research Instruments

In order to measure the distress and well-being and impacts of EMDR-IGTP, the following instruments were used during the study.

Warwick-Edinburgh Mental Well-being Scale (WEMWBS). This study used The 14-item Warwick-Edinburgh Mental Well-being Scale (WEMWBS) that offers a comprehensive picture of mental health with the well-balanced questions covering subjective well-being and psychological functioning. It is preferred in situations where it is valuable to give study participants a picture of their mental wellbeing. to measure the participants' mental well-being. Five response categories make up the 14-item WEMWBS scale, and their aggregate yields a single score. The concept is made more approachable by the items' positive wording and coverage of both feeling and functioning aspects of mental wellbeing. The scale has been widely utilized worldwide for project and program evaluation, monitoring, and research into the factors that influence mental health (Tenant, R., et. al., 2007).

Treatment

EMDR-IGTP. The therapy technique that was used in this study is EMDR-IGTP, which was originally developed for children who are having a hard time expressing their traumatic experiences, and was later updated for adults (Jarero, I., Artigas, L., Alcala, N., Cano, T.L, 2015). Originally, it has a total of 7 phases, but this study utilized 5 phases: (1) Client history, where all the information concerning the traumatic experience is gathered; (2) Preparation, ensuring that the ratio is 1 therapist is to 10 participants, establishing rapport, and normalizing the experience so the participants will know that everyone in the room were in the same boat, and then the techniques like the safe place, the butterfly hug, and the tapping paces were introduced; (3) Assessment, where the therapists have to check the emotions of the participants in the group, and starting to draw on the Axis A; (4) Desensitization, where the butterfly hug is being performed while recalling the traumatic experience drawn in Axis A, followed by the instruction that all the changes that the participants noticed after doing the butterfly hug will be drawn in Axis B, repeating the process of doing the butterfly hug and drawing the changes in Axis C, and then doing the process for Axis D; (5) Future Vision, where after re-installing the safe place and checking the SUD, the participants were asked how they see themselves in the future. The rationale for changing the individual EMDR procedure was to provide mental health services in the aftermath of a disaster and to meet the demands of the mental health population. The procedure was initially intended for use with children, and then later tailored for adults (Jarero, I., Artigas, L., Alcala, N., Cano, T.L, 2015).

Procedure

Recruitment of participants were held in two stages and occurred between June 10, 2020 to June 25, 2020 in the National Capital Region. In the first stage, a trained facilitator explained the purpose of the research to the interested uniformed personnel and volunteer reservists, as well as inclusion and exclusion criteria. In the second stage, the same assessor obtained informed consent and administered the WEMWBS (pre-intervention measurements).

From June 10, 2020 to June 25, 2022; the WEMWBS was administered on different occasions for the pre-treatment assessment followed by the EMDR Integrative Group Treatment Protocol. Between September 2, 2020 and October 9, 2020, the administration of WEMWBS post-treatment assessment was conducted. There was no follow-up assessment given, considering the limitations of the duty schedules by the uniformed personnel and volunteer reservists due to slow lifting of quarantine restrictions.

Data Analysis

T-test independent statistical analysis was applied to compare the difference between the pre-test and post-test of Warwick-Edinburgh Mental Well-being Scale (WEMWBS), and the pre-and-post IGTP-EMDR intervention. T tests are typically employed when the experimental participants are split into two distinct groups, each receiving a different treatment (A or B). Pre-treatment and post-treatment outcomes are two different sorts of results that researchers can gather before and after the therapy (Kim, T. K., 2015). One-way ANOVA was used to determine the differences of the participants' Subjective Units of Disturbances (SUD) for each individual axis of the IGTP-EMDR treatment. In the need to determine the differences with more than 3 groups, ANOVA is the best parametric statistical treatment to use (Kim, T. K., 2017).

Ethical Considerations

All participants were provided with an information sheet that detailed the background and the aims of the study as well as the requirements of taking part. The Office of the Uniformed Reserves Unit approved of the conduct of the study. Respondents gave written informed consent to take part in the evaluation, and all processes undertaken in the evaluation were carried out in accordance with the APA Code of Ethics for Psychological Research.

Results and Findings

This part of the study discusses the interpretation, descriptions, and the significance of the result findings in light of knowing whether there is a significant difference between the data in comparison, and to explain new understanding and insights when taking the findings into consideration.

Table 1. *Demographic Profile*

Age range	***f***	**%**
20-29	35	54
30-39	16	24
40 and above	14	21

Table 1 shows the age range of the participants. 54% of the uniformed personnel's age fell in the range of 20-29 years old (f = 35, n = 65), followed by 24% ages 30-39 years old (f = 16, n = 65), and 21% for ages 40 and above (f = 14, n = 65).

Table 2. *t-test for pre-IGTP and post-IGTP Subjective Units of Disturbances*

	Mean	**Pearson Correlation**	***df***	***t* stat**
Pre-IGTP	5.92	0.43	65	10.81
Post-IGTP	1.95			

In table 2, a t-test analysis was to determine the difference between the pre-IGTP and the post-IGTP SUD. Table 2 shows that there was a significant difference for pre-IGTP and post-IGTP for SUDs, $t(65) = 10.81$, $p < .00001$, with post-test SUD receiving low scores, suggesting that IGTP played a huge role in lowering down the subjective unit of disturbances of the participants.

Figure 1. Scatterplot of Subjective Units of Disturbances (SUD) per axis

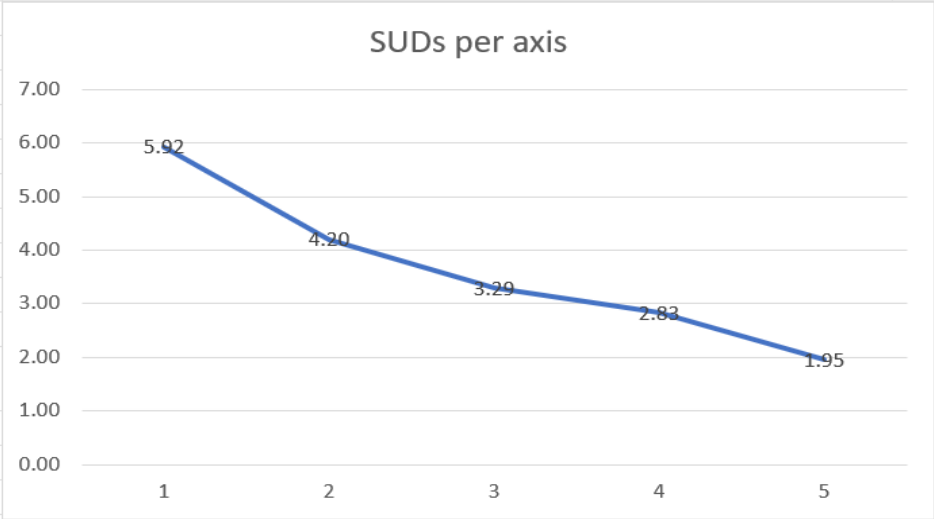

Figure 1 shows the scatter plot of the Subjective Units of Disturbances (SUD) per axis. Axis A ($\bar{x}$ = 5.92), Axis B = ($\bar{x}$ = 4.20), Axis C ($\bar{x}$ = 3.29), Axis D ($\bar{x}$ = 2.83), and the last SUD ($\bar{x}$ = 1.95). The trend line shows that the SUDs are significantly decreasing per axis. The psychometric properties of SUD is highly reliable in terms of global measures of both physical and emotional discomfort during traumatic events (Kim, Bae, & Chon Park, 2008).

Table 3. *One-way ANOVA (between groups) SUD per axis*

df	***F***	***F*-crit**	***p***
4	16.03064364	2.399432062	0.0001

Table 3 shows the result of one-way ANOVA having a significant difference in the subjective unit of disturbance of the four (4) axes, $F(4, 325) = 16.03$, $p < .0001$.

Table 4. *Mental Well-being Scale Result*

	mean	***df***	***t* stat**	***t*-crit**	***p***
pre-treatment	4.47	57	1.95	1.67	0.02
post-treatment	4.31				

The results from the pre-test (M = 4.47, SD = 0.38) and post-test (M = 4.31, SD = 0.40) well-being assessment indicate a significant difference between their scores, $t(57) = 1.95$, $p = .02$. The post-test showing a lower mean score as compared to the pre-test.

Discussion

The results of the study appear to indicate that EMDR-IGTP, offered to uniformed reservist who experienced subjective unit of disturbances due to ECQ appears to be effective. Furthermore, this treatment, after comparing the pre-test and post-test subjective unit of disturbance scores specifically lowers the distress levels of the participants. However, the

mental well-being of the participants were not affected due to several reasons. One, the EMDR session needs to be administered in more than one session to impact the mental well-being of the participants. Secondly, the researchers purported that considering the time when this study was conducted, the effect on the economy and the isolation caused by the Enhanced Community Quarantine played a significant role in lowering down the well-being scores of the participants. According to Barbisch et al. (2015), boredom, being alone and separated from loved ones can have a negative impact on a person's wellbeing. Significant resentment, anxiety, and even an increase in suicide rates have been documented after the implementation of restrictions due to Covid-19 outbreak (Brooks et. al., 2020).

Limitations

This was a small study with participants who were volunteer Uniformed reservists. There was no control group or comparator group and no follow-up was conducted after the study.

Conclusions

There is a substantial amount of research indicating the lowering of the subjective units of distress of participants with adverse life events after undergoing EMDR-IGTP. This shows that processing memories or distress of such experiences can relieve negative emotions, beliefs and physical sensations. Potential applications of EMDR-IGTP to stress related problems and as well those individuals suffering from other conditions. Front liners like Uniformed Reservist can benefit from this intervention. EMDR-IGTP can contribute in determining the degree to which distressing experiences add up and address the problem through memory processing that can help resolve psychological distress.

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