

Implementation of Positive Psychology Interventions in Improving Subjective Well Being on Individual with Physical Disability Due to Accidents

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Abstract

Every person wants to have a perfect physical state to live normally, but some people must accept the condition of being disabled in conducting their lives. Physical disability can be caused by several things, one of them is accident. An accident can change an individual life drastically and affect the person's subjective well being. PPIs (Positive Psychology Interventions) is a form of treatment than can be used to improve subjective well being (SWB). This study was conducted to see the effect of PPIs (count your blessings, using your strength, and best possible self) in increasing the SWB on individuals with physical disability due to accidents. Participants of this study were previously four people (age range of 44 - 66 years) old. However, after a psychological examination, one of the participants was unable to follow the intervention sessions due to illness and had to return home. Participants recruitment was conducted by non probability sampling technique, which is purposive sampling within research design, one group pre-post test design. The statistical analysis using SPSS showed a significant difference after th intervention, measured by satisfaction with life scale (SWLS) ($p = 0.004 < 0.05$). Conversely, no significant differences were shown when measured using positive affect and negative affect scale PANAS, with positive affect ($p = 0.12 > 0.05$) and negative affect ($p = 0.17 > 0.05$) and measured by oxford happiness questionnaire (OHQ) ($p = 0.19 > 0.05$).

Keywords: Positive Psychology Interventions, Subjective Well Being, and Physical Disability.

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Introduction

Background

Disability can be caused by numbers of things and conditions, one of them is an accident. For numbers of people, accidents can become a terrible life event; moreover when the accidents caused disability due to the loss of physical functioning. People who experience such condition may have difficulties to accept themselves for they used to be normally functioning but recently experience inability to do many things. When a person fails to accept such condition, he or she may become inferior and worthless for being unable to develop personal abilities. People who were born with physical disabilities tend to get used to live in such condition; but, they who experience drastic life changes from normal into disabled may feel being enforced to live in a more limited fashion with number of obstacles and less freedom to join social activities

Accidents that causes a person to have amputation will have a negative psychological impact on the individual. According to Senra, Oliveira, Leaf, and Vieira (2011), such individuals will experience periods of sadness and frustration especially in the process of attaining well being and especially when they feel their identity turns to be disabled and feel being dependent on others.

Individuals with physical disabilities are not widely accepted in the environment. Most people may criticize, stigmatize, and discourage them to live independently. Such condition creates psychological pressure on the individuals with physical disability. Mohsin, Saeed, and Zaidi (2013) explained in his study that family members of the individual with physical disabilities consider the physically disabled member of the family as an additional burden to the family because of the loss of additional labor, increased outcome on special care, and the need to compensate for higher facilities, and no proper infrastructure of care for individuals.

Individuals with physical disabilities will generally experience deficits in happiness and satisfaction of life. They consider themselves as a helpless person, feel inferior, and can not do much in their lives. Poor moods and insignificant feelings being experienced by people with physical disabilities indicate low satisfaction of life and low positive affects in which may affect their subjective well being state. Subjective well being refers to individuals' evaluation of their life, such as an assessment of life satisfaction, evaluation of feelings, including mood and emotion (Diener & Chan, 2011). Subjective well being is often considered a very important thing for it is closely related to positive conditions that help a person performs their functions optimally. Subjective well being is believed to make a person achieves mental health, physical health, and has better coping skills, also a longer life.

One of the most reliable intervention techniques to improve subjective well being is positive psychology interventions (PPIs). Positive Psychology (PP) can be considered as a discipline in psychology that focuses on positive experiences, positive emotions, positive personality traits, and positive social interactions (Pietrowsky & Mikutta, 2012). In a study by Sheldon and Lyumbomirsky (2006, in Pietrowsky & Mikutta, 2012) "Best Possible Self" intervention proved to enhance optimistic feelings in individuals. In another study conducted by Emmons and McCullough (2003, in

Pietrowsky & Mikutta, 2012) showed that “Count Your Blessings” intervention can enhance feelings of gratitude, life satisfaction, and optimism. Lastly, “Using Your Strength” intervention is used because it encourages individuals to do something good with their personal power thus the individuals can increase their sense of independence. Such considerations have made researchers combine the three interventions to increase subjective well being on individuals with physical disabilities due to accidents.

Problem Identification

Does the implementation of positive psychology interventions have a significant effect on improving subjective well being in individuals with physical disabilities due to accidents?

Research Purpose

This study aims to examine the effect of positive psychology interventions on improving subjective well being in individuals with physical disabilities due to accidents.

Literature Review

Physical Disability

Definition of Physical Disability

Article 1 Paragraph (1) of Law No. 4 of 1997 concerning about people with disabilities, specifically affirms that physical disability is a physical disorder which may interfere or constitute obstacles and difficulty for its persons to conduct activities as appropriately divided into three types, blind, deaf or speech impaired, and disabled.

Type of Physical Disability

According to the Law on Persons with Disabilities, Article 1 paragraph (1) of Law No. 4 of 1997, the type of physical disability can be grouped into three groups. First, the blind, is a person who is impeded by mobility of motion caused by the loss or diminution of vision function as a result of birth, accident or illness. Second, hearing or speech, is a disability as a result of the loss or disruption of hearing and/ or speech function, either caused by birth, accident or illness. Third, disability, is a defect in the limb part of the body. Disability can be defined as a state of being damaged or disturbed, as a result of disruption of shape or resistance to bone, muscle, and joint in its normal function. This condition can be caused by illness, accident or can also be caused by innate nature.

Causes of Physical Disability

According to Nugroho and Utami (2008), the types and causes of disability can be caused by various factors, such as: a) acquired defects, the cause may be due to traffic accidents, wars or armed conflicts or due to chronic diseases and b) or from birth (congenital), among other causes due to the disorder of the formation of organs

(organogenesis) during pregnancy, virus attack, malnutrition, the use of uncontrolled drugs or sexually transmitted diseases.

Subjective Well Being

Subjective Well Being Definition

Subjective well being refers to how people evaluate their lives and includes variables such as life satisfaction and marital satisfaction, lack of depression and anxiety, and positive moods and emotions (Diener, Suh, & Oishi 1997). In other words, subjective well being is a condition in which positive affects are greater than negative affects and have satisfaction in life as a whole, as in the domain of health, occupation, and independence

Subjective Well Being Components

According to Eddington and Shuman (2005), subjective well being is composed by several major components, such as the satisfaction of life globally, satisfaction with a particular life domain, positive affects (mood and pleasant emotions), and lack of negative affects (unpleasant mood and emotions). Positive affects and negative affects belong to the affective component, whereas life satisfaction belongs to the cognitive component.

Factors Affecting Subjective Well Being

According to Eddington and Shuman (2005), there are several factors that influence the subjective well being of a person, including gender differences, personality trait, marital status, health, and optimism.

Positive Psychology Interventions

Positive psychology was introduced by the president of the American Psychological Association, Martin Seligman in 1998 which is a scientific study of positive experiences and positive traits that individuals possess, as well as the things that facilitate their development (Duckworth, Steen, & Seligman, 2005). Positive psychology aims to broaden the focus of clinical psychology beyond the pain (negative things) experienced by individuals. In positive psychology, positive emotional coaching and building positive characters can help individuals alleviate suffering and release root causes (Duckworth, et al., 2005). So the treatment focuses more on how to build positive things than to reduce the negative things.

Positive emotions are more than just good feelings. Lyubomirsky, King, and Diener (2005) said that positive emotions can drive a person to successful outcomes in various domains of life, including relatively better performance, increased creativity, greater marital satisfaction, and social relationships. The benefits of positive emotions are very relevant to produce a change in one's life.

Framework of Thinking

Individuals with physical disabilities will experience much decreased function in their lives. Individuals will tend to limit their activities and withdraw from social life because they feel helpless and the existence of a negative rejection or stigma from the environment. Such conditions trigger the emergence of new problems, such as becoming more susceptible to poor mood and low life satisfaction because of feeling helpless and unable to function normally or do many activities in their life.

The impact of feeling helpless for being unable to function normally affect subjective well being on the individuals with physical disabilities. Subjective well being refers to the well-being of individuals who are viewed through two domains, such as affective (positive affects and negative affects) and cognitive (life satisfaction). Subjective well being is also often considered very important because it is closely related to positive conditions that help a person perform their functions optimally. Therefore, it is important for individuals with physical disabilities to improve their subjective well being to be able to live a more optimal life function.

Subjective well being can be improved by giving positive psychology interventions. These interventions are part of positive psychology which is a scientific study of positive experiences, positive individual traits, and potentials that facilitate their development so as to achieve both well being and optimal functioning (Duckworth, et al., 2005). In this study, the use of positive psychology interventions will focus more on improving positive feelings and self-discovery potential and life satisfaction.

If illustrated, it will form a frame of thinking will be like this.

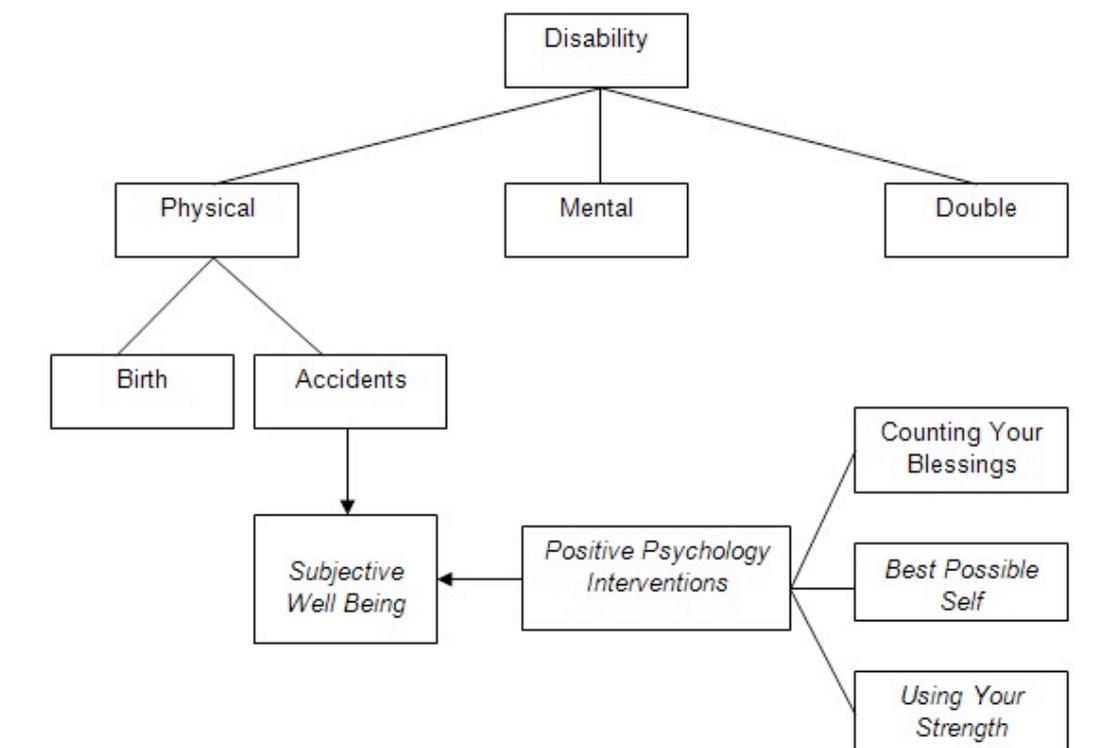


Figure 1: Framework of thinking for the influence of positive psychology interventions on subjective well being

Research Methods

Participants

Participants who are selected in this study were individuals with low subjective well being, measured using three scales, such as Positive and Negative Affect Schedule (PANAS), Satisfaction with Life Scale (SWLS), and Oxford Happiness Questionnaire (OHQ). In this study, participants should have low score characteristics on positive affects and high scores on negative affects measured by PANAS, score below 20 on SWLS, and score below 4 on OHQ.

In addition, participants must also be over 18 years of age. Last, participants also agreed to attend therapy and measurement sessions by filling out informed consent and signing a statement about their willingness to follow the entire therapy session.

Research Design

The research design used in this study is one group pre-post test design. Measurements were conducted quantitatively by giving questionnaires and qualitative measurements by making observations and interviews. In this study, the researchers made initial measurements of the subjective well being condition of the participants and the re-measurements were made after the intervention was completed as a form of manipulation.

Location Setting and Research Equipment

This study was conducted in a social home in a special room so that the intervention can be conducted well with focus and make the client feel comfortable. Equipment that will be used in this research include chairs, tables, and stationery (paper, pencil, pen, eraser, and sharpener).

Measurement

Questionnaire

Participants will be given three types of scales at the beginning before the intervention and the end after the intervention to find out the change in subjective well being condition after completion of the intervention. The three measuring tools are Satisfaction with Life Scale (SWLS), Positive Affect and Negative Affect Schedule (PANAS), and Oxford Happiness Questionnaire (OHQ).

Interview

The researcher will direct the conversation to certain matters or aspects in the participant's life or the participant's subjective experience, then the information obtained will be used as supporting material of other psychological tests result and to know the progress they make from session to session.

Observation

Observations in this study are natural so that researchers do not use standard guidelines in making observations. Observation activities were carried out at each intervention session to observe the behaviors performed by the participants.

Procedure

The screening process was conducted by giving pre-test to the participants. They were also interviewed, and they were observed during the interview session. They who met the characteristics for the participants became the prospective participants and they were asked to follow the 8 therapy sessions which consisted of Count Your Blessings, Using Your Strength, and Best Possible Self. Quantitative evaluation was conducted in this study is to see if there is a change in subjective well being of the participants. Participants also gave responses to SWLS, PANAS and OHQ. Responds before and after intervention were measured. Increased SWLS score, increase positive affects and decrease negative impact of PANAS and increased OHQ indicate improvement of subjective well being

Result and Discussion

Analysis and Intervention Results

The First Subject (BS)
Table 1 Intervention Results (BS)

No.	Scale	<i>Pre Test</i>	<i>Post Test</i>
1.	SWLS	12	21
2.	PANAS	<i>Positive Affect = 25</i> <i>Negative Affect = 36</i>	<i>Positive Affect = 40</i> <i>Negative Affect = 26</i>
3.	OHQ	3.79	3.82

Based on the results in the table above, it can be seen that measured by three different scales, BS indicates a change. On the SWLS scale, BS has increased in terms of life satisfaction from score 12 (*not satisfied, below average*) to score 21 (*quite satisfied, on average*). This indicates that after the intervention, BS has a better life satisfaction (score > 20).

The same increase was also shown by BS on the PANAS on the positive affect dimension in which BS showed an increased score from 25 to 40, whereas in the negative affect dimension, BS showed a decreased score from 36 to 26. It can indicate that after intervention, in psychological condition, BS feels more positive affects than negative affects.

On the OHQ scale, there was a change in pre test and post test scores, although very it's not significant. Both score 3.79 and score 3.82, show the same, which is *not*

particularly happy or unhappy. Individuals in this category are not very happy or not so unhappy or ordinary.

Second Subject (RS)
Table 2 Intervention Results (RS)

No.	Scale	<i>Pre Test</i>	<i>Post Test</i>
1.	SWLS	19	27
2.	PANAS	<i>Positive Affect = 38</i> <i>Negative Affect = 39</i>	<i>Positive Affect = 41</i> <i>Negative Affect = 37</i>
3.	OHQ	3.13	3.96

Based on the results in the table above, it can be seen that measured by three different scales, RS showed a change. On the SWLS scale, RS has increased in terms of life satisfaction from score 19 (*slightly dissatisfied, less than average*) to a score of 27 (*very satisfied, above average*). This indicates that after the intervention, RS has a better life satisfaction (score > 20).

The increase is also shown by RS on the PANAS on the positive affect dimension and decrease in the negative affect dimension, although the changes shown are not too large. RS has changed the score from 38 to 41 on the dimensions of positive affect and changes from score 39 to 37 on the dimensions of negative affect. Although the changes shown are insignificant, it can reasonably indicate that after intervention, RS has more positive affects than negative affects.

On the OHQ scale, there is a change in pre test and post test scores, from score 3.13 to 3.96 where both fall into the category of *not particularly happy or unhappy*. Individuals in this category are not very happy or not so unhappy or ordinary.

Third Subject (WM)
Table 3 Intervention Results (WM)

No.	Scale	<i>Pre Test</i>	<i>Post Test</i>
1.	SWLS	18	28
2.	PANAS	<i>Positive Affect = 24</i> <i>Negative Affect = 32</i>	<i>Positive Affect = 42</i> <i>Negative Affect = 13</i>
3.	OHQ	3.75	5.13

Based on the results in the table above, it can be seen that measured by three different scales, WM shows a significant change. On the SWLS scale, WM experienced an increase in life satisfaction from a score of 18 (*slightly dissatisfied, less than average*) to a score of 28 (*very satisfied, above average*). This indicates that after intervention, WM has a better life satisfaction (score > 20).

Significant changes were also shown by RS on PANAS. In the positive affect dimension, WM shows an increase in score, from 24 to 42, whereas in the negative affect dimension, WM shows a decrease, from score 32 to 13. Increase in positive affect and decrease in negative affect, indicating that WM feels more happy after being given intervention.

On the OHQ scale, WM showed a significant change between the pre test and post test scores from the score of 3.75 to 5.13. Score 3.75 goes into the category *not particularly happy or unhappy*. Individuals in this category are not very happy or not so unhappy or just plain, while score 5.13 goes into the category of *very happy*, where individuals in this category are very happy.

If concluded, then the improvement experienced by the three subjects after completion of the intervention based on the difference of pre test and post test results are as follows:

No	Subyek	Skala (Pre Test)			Skala (Post Test)		
		SWLS	PANAS	OHQ	SWLS	PANAS	OHQ
1.	BS	12	<i>Positive Affect = 25</i> <i>Negative Affect = 36</i>	3.79	21	<i>Positive Affect = 40</i> <i>Negative Affect = 26</i>	3.82
2.	RS	19	<i>Positive Affect = 38</i> <i>Negative Affect = 39</i>	3.13	27	<i>Positive Affect = 41</i> <i>Negative Affect = 37</i>	3.96
3.	WM	18	<i>Positive Affect = 24</i> <i>Negative Affect = 32</i>	3.75	28	<i>Positive Affect = 42</i> <i>Negative Affect = 13</i>	5.13

Conclusion

Results on the three participants (BS, RS, & WM) indicates improvement in the aspect of life satisfaction and positive affect, and decrease in the negative affect aspect. Thus positive psychology interventions can improve subjective well being, especially happiness, optimism, hope, independence, and life satisfaction. In the first intervention, the Count Your Blessings, the three participants are now able to appreciate the little things that happen in their daily life. In addition, they also begin to realize the positive things that are around that make them feel happy and cared for.

In the second intervention, Using Your Strength, the three participants said that now they know what ability they have. So they could realize that behind the physical disabilities, they still have some personal qualities that can be used for something useful. The three participants are also able to use their personal qualities or personal strength in real life so that they feel more meaningful because it can be useful for others. In addition, they also feel proud and confident to socialize and join a larger social environment because of their strenght or something good inside them.

In the third intervention, the Best Possible Self, the three participants were able to visualize their life in the future. They are also quite capable of making steps to achieve their desires in the future. So it increases expectations and makes them feel more optimistic to make it happen.

Discussion

Based on research conducted by Pietrowsky and Mikutta (2012), positive psychology interventions proved to increase subjective well being in individuals. Measured by using satisfaction with life scale (SWLS) by comparing the results of pre test and post test, in this study, the results of different statistical test showed significant differences ($p = 0.004 < 0.05$). The statistical analysis also showed that the average post test is higher than the average pre test ($t = -15.588$) with a mean increase from 16.33 to 25.33. This means that all three subjects experienced a significant improvement in the life satisfaction aspect.

Different from life satisfaction aspect, positive affects ($p = 0.12 > 0.05$) and negative affect ($p = 0.17 > 0.05$) did not show significant difference as measured by positive affect and negative affect scale. Nevertheless, the increase in positive affect is indicated by the three subjects with a value of $t = -2.169$, where the minus sign indicates that the post test score is higher than the pre test result with a mean increase from 29.00 to 41.00. The progress experienced by the three subjects was also marked by a decrease in negative affect with a value of $t = 2.104$, where a positive sign indicates that the post test score is lower than the pretest result with a mean decrease from 35.67 to 25.33. In addition, statistical analysis results also did not show significant differences measured using oxford happiness questionnaire (OHQ) ($p = 0.19 > 0.05$). Nevertheless, an improvement in the aspect of happiness is indicated by the three subjects with a value of $t = -1.905$, where the minus sign indicates that the post test score is higher than the pre test result with a mean increase of 3.55 to 4.30.

A significant difference in the life satisfaction aspect is related to the attitude of the three subjects who have begun to accept their physical limitations and to be grateful for the things that are happening around. Conversely, the insignificant differences in the aspects of positive affect and negative affect and happiness may be due to the small number of participants so that the outcome is not representative and can not be ascertained statistically whether positive psychology interventions can actually improve subjective well being.

In addition, insignificant results are also caused by negative feelings that still have high scores, such as feelings of distress, annoyance, and anxiety, especially on both subjects, namely BS and RS. Both said that the feeling is no longer derived from the physical disability they experience, but the many rules in the home make them often feel negative feelings. RS also still has a high score on hostile feelings. RS said that friends in the social home often made her feel annoyed, even taking her stuffs several times.

Furthermore, gender factors are also predicted to be other predictors affecting subjective well being. Compared with the two other subjects, RS showed the smallest improvement in the positive affect and decreased aspects in the negative affect. This

is in line with research by Eddington and Shuman (2005) which stated that women reported more negative and depressive affects than men.

Suggestion

Suggestions to Further Researchers

Based on the results discussed earlier, the researcher suggested to increase the number of participants if you want to do similar research so that the results obtained can be more representative and add the control group to be ascertained whether the results obtained at the end of the session is the influence of the intervention or there are other factors which also contributes to the subjective well being condition.

Further research may also attempt to combine other types of interventions from positive psychology interventions to see if there are other interventions that can also improve subjective well being. Thus, research on subjective well being and positive psychology interventions can be richer and more varied.

Suggestions for Subjects

The first subject, BS, is advised to be grateful for the things he received during his stay in the social home, so does not focus too much on life outside the social home which is always regarded as pleasing by the BS. By being grateful, BS is expected to have more positive views and thoughts, and be able to cope with stress and pressure that he often felt.

The second subject, RS, is advised to be more aware of the positive things she receives while in the orphanage, as there are still many people who care about her. So she does not focus too much on the hostilities she experienced from other people. If necessary, the social home itself may request assistance to the institution to help them resolve the problem with other people, for example with group counseling. RS is also advised to maintain good qualities she has, such as helping and caring for others, so RS increasingly realize that behind the physical limitations that she has, she can still be useful and do good to others. In addition, the she is also advised to participate in skill activities, such as sewing so that she has the skills to be able to live independently when later out of the social home.

The third subject, WM, is advised to focus on what he wants to achieve by continuing to develop the self ability that he has. Furthermore, he is asked to make more concrete to reach his goals, so that he is not just imagining, but he can feel more optimistic about a better future. In addition, WM is also advised to keep improving his skills, for example by directing other people to make something, like mat and broom. Thus, WM is expected to be more aware of the ability he has and confident when dealing with the external environment.

Suggestions for the Social Home

Based on what has been explained earlier, that other factors that cause the people often feel negative feelings are the condition of the social home that is considered unpleasant and bound by many rules. Therefore, the researcher suggested that the

social home can review the rules applied because unwittingly these rules greatly affect the psychological condition of the people. The many rules and restrictions make the people often feel depressed and uncomfortable living in the social home.

In addition, this condition can also be improved by first changing the attitude of the social workers to the people. Social workers, especially those who directly connected with the people, are advised to be more friendly, for example by greeting the people when they meet and offer assistance to the people by pushing a wheelchair or getting the items they need. Social workers can also give appreciation in the form of praise or give rewards when the people do good or able to complete the task well. This is done so that the people feel appreciated with what they have done and have a sense of pride in themselves and hope that positive behavior can be repeated in the future.

Social workers are allowed to reprimand the people (not scolding) when they make mistakes, both in their daily lives and when they do the job of the skill, but the selection of words and tone of speech must also be considered well. Submission of inappropriate words, will make the people feel depressed and afraid to perform these activities in the future so that it also affects the confidence. In addition, social workers are also advised not to offend the physical disability they have though with the intention of joking because it is feared will make them feel offended and can lead to feelings of worthless and underestimated them.

References

- Addabbo, T., Sarti, E., & Sciulli, D. (2014). Disability and life satisfaction in Italy.
- Barbotte, E.G., F.Chau, & N. Lorhandicap Group. (2011). Prevalence of impairments, disabilities, handicaps and quality of life in the general population: A review of recent literature. *Bulletin of the World Health Organization*, 79 (11), p. 1047.
- Canha, L., Simões, C., Matos, M.G., & Owens, L. (2016). Well-being and health in adolescents with disabilities. *Health Psychology Research*. doi.org/10.1186/s41155-016-0041-9.
- Diener, E. (2003). Personality, culture, and subjective wellbeing: Emotional and cognitive evaluations of life. *Annual Review of Psychology*, 54, 403-425.
- Diener, E., Chan, M.Y. (2011). Happy people live longer : Subjective Well being contributes to health and longevity. *Journal Applied Psychology: Health and Well-Being*, 3(1), 1-43
- Diener, E., & Lucas, R. (2000). Subjective emotional well-being. In M. Lewis & J. M. Haviland-Jones (Eds.), *Handbook of emotions* (2nd ed., pp. 325-337). New York: Guilford.
- Diener, E., Lucas, R.E., & Oishi, S. (2009). Subjective well being: the science of happiness and life satisfaction. *The Oxford Handbook of Positive Psychology* (2 ed.). doi: 10.1093/oxfordhb/9780195187243.013.0017
- Diener, E., Suh, E., & Oishi, S. (1997). Recent findings on subjectivwe well-being. *Indian Journal of Clinical Psychology*, 1-24.
- Duckworth, A.L., Steen, T.A., & Seligman, M.E.P. (2005). Positive psychology in clinical practice. *Annual Review of Clinical Psychology*. doi: 10.1146/annurev.clinpsy.1.102803.144154
- Eddington, N. & Shuman, R. (2005). Subjective Well Being (Happiness). Continuing Psychology Education: 6 Continuing Education Hours.
- Feist, Jess & Feist. (2006). *Theories of Personality*. Boston: McGraw-Hill Education.
- Health Day (2012) April 5, Retrieved on 12 August 2012 from USN Health.usnews.com/healthnews/news/article/2012/04/05depression_anxiety_tied_to_p_hysical_disability_in_seniors.
- Hills, Peter & Argyle, Michael. (2002). Oxford happiness questionnaire: A compact scale for the measurement of psychological well-being. *Personality and Individual Differences* 33 (2002) 1073–1082
- Hurlock, Elizabeth B. (2006). *Developmental Psychology*. Jakarta: Erlangga

- Kashdan, T.B. (2004). The assessment of subjective well-being (issues raised by the Oxford Happiness Questionnaire). *Personality and Individual Differences* 36 (2004) 1225–1232
- Keyes, C.L., Ryff, C.D., & Dop, S. (2002). Optimizing well-being: The empirical encounter of two traditions. *Journal of Personality and Social Psychology*, 82 (6), 1007–1022.
- Kerlinger, F.N., & Lee, H.B. (2000). *Foundation of behavioral research 4th edition*. Orlando, FL: Harcourt Inc
- Librán , Eliso Chico. (2006). Personality dimensions and subjective well-being. *The Spanish Journal of Psychology*, 9 (1), 38-44.
- López, J., Beatriz, N.B., Ignacio, P.M., Fernando, A.P., Jose, M.L., & Francisco, E.R. (2010). *Psychological well being, assessment tools, and related factors*.
- Lyubomirsky, S., King, L. A., & Diener, E. (2005). The benefits of frequent positive affect: Does happiness lead to success? *Psychological Bulletin*, 131, 803–855.
- Matsuda, T., Tsuda, A., Kim, E., & Deng, K. (2014). Association between perceived social support and subjective well-being among Japanese, Chinese, and Korean college students. *Psychology*, 5, 491-499.
- Mohsin, M, N., Saeed, W., & Zaidi, I, H. (2013). Comorbidity of physical disability with depression and anxiety. *International Journal of Environment, Ecology, Family, and Urban Studies (IJEEFUS)*. 3(1), 79-88.
- Noh, J.K., Kwon, Y.D., Park, J., Oh, I.H., & Kim, J. (2016). Relationship between Physical Disability and Depression by Gender: A Panel Regression Model. 11 (11). doi: 10.1371/journal.pone.0166238
- Pasal 1 Undang-Undang Nomor 4 Tahun 1997 tentang Penyandang Cacat, (Lembaran Negara Republik Indonesia Tahun 1997 Nomor 9, Tambahan Lembaran Negara Republik Indonesia Nomor 3670). www.bpkp.go.id/uu/filedownload/2/46/442.bpkp
- Pengelompokan penyandang cacat pada Undang-Undang Nomor 4 Tahun 1997 tentang Penyandang Cacat dibagi menjadi penyandang cacat mental, penyandang cacat fisik dan penyandang cacat mental dan fisik, Pasal 1 ayat (1). www.bpkp.go.id/uu/filedownload/2/46/442.bpkp
- Pietrowsky, R & Mikutta, J. (2012). Effects of positive psychology interventions in depressive patient – a randomized control study. *Psychology*, 3 (12), 1067-1073.
- Radler, C. (2000). Phases of Adaptation and Individuals with Physical Disabilities.
- Romero, E., GoMez-Fraguela, J.A., & Villar, P. (2012). Life aspirations, personality traits and subjective well-being in a Spanish sample. *European Journal of Personality*, Eur. J. Pers. 26: 45–55 (2012). doi: 10.1002/per.815.

- Rose, J (2008) Assessing motivation for work in people with developmental disabilities. *Journal of Intellectual Disability*. 56: 7-8.
- Ryan, R.M., & Deci, E.L (2001). On happiness and human potentials: A review of research on hedonic and eudaimonic well being. *Annual Review Psychology*. 52, 141 – 166.
- Nugroho, S & Utami, R. (2008). Meretas Siklus Kecacatan-Realitas yang Terabaikan, Yayasan Talenta, Surakarta, h.114.
- Sin, N.L., Porta, M.D.D., & Lyubomirsky, S. (2010). Tailoring positive psychology interventions to treat depressed individuals. *Applied Psychology*.
- Seligman, M.E.P. and M. Csikszentmihalyi. (2000). Positive psychology: An introduction. *American Psychologist* 55, pp. 5–14.
- Seligman, M. E. P. & Steen, T. (2005). Making people happier: A randomized controlled study of exercises that build positive emotion, engagement, and meaning. *Am. Psychol.*
- Senra, H., Oliveira, R.A., Leaf, I. &Vieira, C. (2011). Beyond the body image: A qualitative study on how adults experience lower limb amputation. *Clinical Rehabilitation*.
- Siedlecki, K.L., Salthouse, T.A., Oishi, S., & Jeswan, S. (2013). The relationship between social support and subjective well-being across age. *Social Indicators Research*, 112 (2). doi: 10.1007/s11205-013-0361-4.
- Snyder, C. R., & Lopez, S.C. (2007). Positive psychology: The scientific and practical explorations of human strengths. New Delhi: Sage Publications, Inc.
- Stewart, C.J. & Cash Jr, W.B. (2000). *Interviewing: Principles and practice*. New York: McGraw-Hill.
- Tentama. F. (2010). Berpikir positif dan penerimaan diri pada remaja penyandang cacat tubuh akibat kecelakaan. *Jurnal Online Psikologi*, 7(1).
- World Health Organization and world report on disability (1980). *Disability and Rehabilitation*.
- Zolfagharifard. (2017). 12 Positive Psychology Interventions + 3 Ways to Find the One You Need. <http://positivepsychologyprogram.com/positive-psychology-interventions/>

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