

**The Relationship Between Self-Efficacy and Depression
in Physically Handicapped Children**
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Running Head: Self-Efficacy And Depression

ABSTRACT

Objectives: To determine the relationship between self-efficacy and depression in physically handicapped children.

Design: Descriptive Study.

Place and duration of study: This study was conducted at different institutes of physically handicapped children of twin cities of Rawalpindi and Islamabad.

Subjects and Methods: The sample consisted of 42 physically handicapped children (both boys and girls in equal number). The age range of the sample was between 13 to 17 years.

The data was collected with the help of Urdu translation of Generalized Self Efficacy Scale: GSES and Beck Depression Inventory.

Results: The results showed inverse correlation between the scores of self-efficacy and depression. The correlation of scores of GSES with items of BDI pertaining to Emotional, Cognitive, Motivational and Somatic symptoms of depression showed significant inverse correlation with Emotional and Cognitive symptoms of depression ($r = -.35^*$ & $-.34^*$).

Conclusion: From these findings it can be concluded that high generalized self-efficacy in children may serve as a protective factor against depression, whereas, low self-efficacy can lead them to depression.

Key words: Self-efficacy, Depression.

INTRODUCTION

“Self-efficacy is the belief in one's capabilities to organize and execute the courses of action required to produce given attainments” (Bandura, 1997). These courses of action may include behavior, thoughts and emotions (Miller, 2002). Individuals form their self-efficacy beliefs interpret information primarily from mastery experience, vicarious experience, learning or observation, social and verbal persuasions, and physical and affective states. Self-efficacy beliefs produce diverse effects on human functioning through four major psychological processes. These psychological processes include: (1) cognitive processes, (2) motivational processes, (3) selection processes, and (4) affective processes” (Bandura, 1997). Researchers have also supported that mood affects people's judgments of their personal efficacy. Positive mood enhances perceived self-efficacy; despondent mood diminishes it (Bandura, 1999). Physiological indicators are considered as important sources of self-efficacy information. Similarly, the effects of self-efficacy on cognitive processes take a variety of forms as much of human behavior is purposive and regulated by forethought and goal setting, which is influenced by self-appraisal of capabilities (Bandura, 1999).

By influencing affective processes, self-efficacy plays highly important role in physical and mental health of an individual. High self-efficacy helps create feelings of serenity in approaching difficult tasks and activities. Conversely, people with low self-efficacy may believe that things are tougher than they really are, a belief that fosters anxiety, stress, depression, and a narrow vision of how best to solve a problem (Pajares, 2002).

Similarly, individual's belief in his coping capabilities affect how much stress and depression a person experiences in threatening or difficult situations. Depression is believed to be cognitively generated by dejecting ruminative thoughts. A low sense of efficacy in order to exercise control over these ruminative thoughts tends to contribute to the development of depression (Bandura, 1999).

Substantial amount of research (Bandura, Pastorelli, Barbaranelli, & Caprara, 1999; Dieserud, Roysamb, Ekeberg, & Kraft, 2001; Ehrenberg, Cox, & Koopman, 1991; Maciejewski, Prigerson, & Mazure, 2000; Makaremi, 2000; McFarlane, Bellissimo, & Muris, Schmidt, Lambrichs, & Meesters, 2001) have shown a significant inverse correlation between self-efficacy and depression. Relationship between self-efficacy and depression is explored among different samples, for instance on patients of different disorders (Kurlowicz, 1998; Robinson, Johnston, & Allen, 2000) people suffering from some type of injury or pain, (Arnstein, Caudill, Mandle, Norris, & Beasley, 1999; Shnek, Foley, LaRocca, Gordon, DeLuca, Schwartzman, Halper,

Lennox, & Irvine, 1997) or elderly people (Davis, 1988, 1990; Holahan & Holahan, 1987). These studies identified factors affecting self-efficacy and vulnerability to depression.

Studies on physically handicapped children maintain that children having some type of physical disability show low self-efficacy while facing the challenges of life ahead. Besides, these children also show high feelings of hopelessness and depression. Independent studies on self-efficacy (Schieman, & Campbell, 2001) and depression in physically disabled children are enormous (Prince, Harwood, Blizard, Thomas, & Mann, 1997; Tate, Forchheimer, Maynard, & Dijkers, 1994; Van & Schieman, 2001). However, none of these studies have explored the relationship of self efficacy with depression in physically handicapped children. With this background, present study is planned, which focuses on exploring the relationship between the two variables for the sample of handicapped children.

SUBJECTS AND METHODS

Sample: Sample includes 42 physically handicapped children of age range between 13-17 years ($M = 14.17$, $SD = 2.70$). These included both boys and girls (in equal number). They were taken from different institutes for physically handicapped children of Rawalpindi and Islamabad city. All the children who presented themselves on the dates of testing were included in the study. The mentally retarded children were excluded.

Instruments: Following instruments were used in this study.

I. *Generalized Self Efficacy Scale*

Urdu Translation of “Generalized Self-Efficacy Scale” (Tabbassum, Rehman, Schwarzer, Jerusalem, 2003) originally developed by Schwarzer & Jerusalem (2000) was used in this research (Schwarzer, 2001). GSES is a 10-item, 4-point Likert type scale. GSES assesses a broad and stable sense of personal competence or a general sense of perceived self-efficacy to cope or deal efficiently with a variety of stressful situations and novel or difficult demands in life. It assesses the strength of an individual's belief in his or her own ability, to predict coping with daily hassles and to deal with any associated obstacles or setbacks, as well as adaptation after experiencing all kinds of stressful life events (Schwarzer, 2001; Schwarzer & Jerusalem, 1993 & 2000).

II. *Beck Depression Inventory (BDI)*

BDI (Beck, Ward, Mendel son, Mock & Erbaugh, 1961) is a self administered 21 items self-report inventory, presented in multiple choice formats. It purports to measure and assess supposed manifestations, presence, degree, intensity, severity, characteristic attitudes and symptoms of depression in clinical and normal patients (Beck, 1971, 2002).

For the present research Urdu adaptation (Khan, 1996) of Beck Depression Inventory (BDI) was used. Item number 21 of BDI was dropped because of its sexual connotation, which inhibits a true response in our culture setting.

Procedure: The participants were approached in their institutes individually after having formal permission from principals of the institutes. Respective school teachers helped in selecting the sample. The tests compiled in the form of test booklet along with demographic information sheet were individually administered to the physically handicapped children by the researcher, who read out each item herself.

RESULTS

Correlation of scores of physically handicapped children on GSES with BDI is shown in the table 1. The Pearson Product Moment correlation of GSES and BDI scores was found to be $-.25$ ($p .12$). Although the scores of GSES and BDI are inversely correlated, however, the value of correlation is not statistically significant. Further analysis was performed by calculating correlation of scores of GSES with the scores of the items of BDI pertaining Emotional, Cognitive, Motivational and Somatic symptoms of depression. The table 1 below shows the correlation of scores of GSES with the scores of items of subcategories of BDI:

Table 1: *Pearson Product Moment Correlation of GSES scores with the scores of 4 categories of items of BDI*

	Emotional Symptoms	Cognitive Symptoms	Motivational Symptoms	Somatic Symptoms
GSES	-.348*	-.343*	-.015	.080

* $p < .05$

The findings in the table show that scores of GSES are significantly inversely correlated with the scores of emotional and cognitive symptoms of BDI.

DISCUSSION

It was hypothesized that "self-efficacy will be inversely correlated with depression in physically handicapped children". The results show that scores of GSES are inversely correlated with scores of BDI. These findings are in line with some earlier studies (Bandura et al., 1999; Davis, 1988, 1990; Dieserud et al., 2001; Ehrenberg et al., 1991; Maciejewski et al., 2000; Makaremi, 2000; McFarlane et al., 1995; Muris et al., 2001; Robinson et al., 2000) indicating an inverse correlation between self-efficacy and depression. Our findings is also supported by Bandura (1994) and Pajares (2002), who maintain that Physical and affective states such as anxiety, stress, arousal, and mood states provide information about efficacy beliefs. Mood has significant effect upon people's judgments of their personal efficacy. Positive mood enhances perceived self-efficacy and despondent mood diminishes it (Bandura, 1994).

Results further indicate that the scores of GSES are significantly inversely correlated with the scores of BDI on items measuring Emotional and Cognitive symptoms of depression. These findings suggest that impact of low self efficacy is more upon emotional and cognitive symptoms of depression compared to the motivational and somatic symptoms of depression. Our findings get support from the findings of Pajares (2002) who maintains that self-efficacy beliefs influence an individual's thought patterns and emotional reactions. Bandura (1994) also maintains that much human depression is cognitively generated by dejecting ruminative thoughts and a low sense of efficacy to exercise control over these ruminative thoughts also contributes to the development of depression.

CONCLUSION

Findings of this study indicate that there exists an inverse correlation between generalized self-efficacy and depression in physically handicapped children. It can thus be concluded from these findings that high generalized self-efficacy of these children may serve as a protective factor against depression, whereas, low self-efficacy can lead them to depression. The results of this study can be used for developing intervention strategies, training and intervention programs for handicapped children, for their parents and teachers. Efforts should be made to make these children learn to face the challenges of life with courage. The present research can serve as a preliminary study for future prospective researches in the area. Future researches should focus upon exploring the relationship of social and familial support and attitudes with self efficacy and depression on a larger sample of handicapped children.

REFERENCES

1. Acosta DW, Martinez JH, Martinez JP, Martinez L, Roper P, Chandler S, Cyr T. (2002). Self efficacy [Online] available: <http://www.positivepractices.com/Efficacy/SelfEfficacy.html>. Last accessed 3rd Oct 2002.
2. Arnstein P, Caudill M, Mandle CL, Norris A, & Beasley R. (1999, April). Self efficacy as a mediator of the relationship between pain intensity, disability and depression in chronic pain patients. *Pain*, 80 (3), 483-491. Retrieved December 9, 2002 from <http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=PubMed&listuids=10342410&dopt=Abstract>
3. Bandura A. (1994). Self-efficacy. [Online] available: <http://www.emory.edu/EDUCATION/mfp/BanEncy.html>. Last accessed 3rd Oct 2002.
4. Bandura A, Pastorelli C, Barbaranelli C, & Caprara GV. Self-efficacy pathways to childhood depression. *Journal of Personal Social Psychology* (1999); 76 (2), 258-69.
5. Beck AT.(1971). Beck depression inventory. [Online] available: <http://www.cps.nova.edu/~cpphelp/BDI.html>. Last accessed 3rd Oct 2002.
6. Beck AT. (2002). Beck depression inventory II. [Online] available: <http://mail.med.upenn.edu/~abeck/scales.html>. Last accessed 3rd Oct 2002.
7. Davis BJ. Self-efficacy and depressive symptomatology in older adults: an exploratory study. *International Journal of Aging Human Development* (1988); 27 (1), 35-43.
8. Davis BJ. Physical self-efficacy, perceived physical status, and depressive symptomatology in older adults. *Journal of Psychology*(1990); 124 (2), 207-15.

9. Dieserud G, Roysamb E, Ekeberg O, & Kraft P. (2001). Toward an integrated model of suicidal attempt: a cognitive psychological approach. Pakistan Scientific and Technological Information Center.
10. Eastin MS, LaRose R. (2000). Internet self efficacy and psychology of the digital divide. [Online] available: <http://www.ascusc.org/jcmc/vol6/issue1/eastin.html>. Last accessed 22nd Jan 2003.
11. Ehrenberg M F, Cox DN, & Koopman RF. The relationship between self-efficacy and depression in adolescents. *Adolescence* (1991); 26 (102), 361-74.
12. Holahan CK, & Holahan CJ. Self-efficacy, social support, and depression in aging: a longitudinal analysis. *Journal of Gerontology* (1987); 42 (1), 65-8.
13. Khan J. (1996). Validation and Norm Development of Salma Shah Depression Scale (SSDS). Unpublished M.Sc Research Report. Department of Psychology, Peshawar University.
14. Kurlowicz LH. Perceived self-efficacy, functional ability, and depressive symptoms in older elective surgery patients. *Nursing Research* (1998); 47 (4), 219-26.
15. Maciejewski PK, Prigerson HG, & Mazure CM. Self-efficacy as a mediator between stressful life events and depressive symptoms: Differences based on history of prior depression. *British Journal of Psychiatry* (2000); 176, 373-8.
16. Makaremi A. Self-efficacy and depression among Iranian college students. *Psychology Rep* (2000); 86 (2), 386-8.
17. McFarlane AH, Bellissimo A, & Norman GR. The role of family and peers in social self-efficacy: links to depression in adolescence. *American Journal of Orthopsychiatry* (1995); 65 (3), 402-10.
18. Miller PH. (2002). Theories of developmental psychology. USA: Worth publishers.
19. Muris P, Schmidt H, Lambrichs R., & Meesters C. Protective and vulnerability factors of depression in normal adolescents. *Behavior Residual Therapy* (2001); 39 (5), 555-65.
20. National Institute of Mental Health. (2001). The Invisible Disease: Depression. [Online] available: <http://www.nimh.nih.gov/publicat/invisible.cfm>. Last accessed 17th Oct 2002.
21. Pajares. (2002). Overview of social cognitive theory and of self-efficacy. [Online] available: <http://www.emory.edu/EDUCATION/mfp/eff.html>. Last accessed 3rd Oct 2002.
22. Prince MJ, Harwood RH, Blizard RA, Thomas A, & Mann AH. Impairment, disability and handicap as risk factors for depression in old age: The Gospel Oak Project V. *Psychology Medicine* (1997); 27 (2), 311-21.
23. Rawlin RP, & Heacock PE. (1993). Clinical manual of psychiatric nursing (2nd .Ed). London: Moseby.
24. Robinson SG, Johnston MV, & Allen J. Self-care self-efficacy, quality of life, and depression after stroke. *Arch Phys Med Rehabilitation* (2000); 81 (4), 460-4.
25. Schieman S, & Campbell JE. Age variations in personal agency and self-esteem: the context of physical disability. *Journal of Aging Health* (2001); 13 (2), 155-85.
26. Schwarzer R, & Jerusalem M. (2000) General perceived self efficacy. [Online] available: [http://www.fu-berlin.de/gesund/skalen/Language Selection/Turkish/General Perceived Self-Efficacy/hauptteil_general_perceived_self-efficac.htm](http://www.fu-berlin.de/gesund/skalen/Language_Selection/Turkish/General Perceived Self-Efficacy/hauptteil_general_perceived_self-efficac.htm). Last accessed 3rd Oct 2002.
27. Schwarzer R. (2001). Generalized perceived self efficacy. [Online] available: <http://userpage.fu-berlin.de/~health/selfscal.htm>. Last accessed 3rd Oct 2002.
28. Schwarzer R, & Jerusalem M, (1993). The General Self-Efficacy Scale. [Online] available: <http://userpage.fu-berlin.de/~health/engscal.htm>. Last accessed 3rd Oct 2002.
29. Shnek ZM, Foley FW, LaRocca NG, Gordon WA, DeLuca J, Schwartzman HG, Halper J, Lennox S, & Irvine J. Helplessness, self-efficacy, cognitive distortions, and depression in multiple sclerosis and spinal cord injury. *Annual Behavioral Medicine* (1997); 19 (3), 287-94.
30. Tabassum U, Rehman G, Schwarzer R, & Jerusalem M. (2003). Urdu Adaptation of the General Self-Efficacy Scale. [Online] available: <http://userpage.fu-berlin.de/~health/urdu.htm>. Last accessed 5th Nov 2004.
31. Tate D, Forchheimer M, Maynard F, & Dijkers M.. Predicting depression and psychological distress in persons with spinal cord injury based on indicators of handicap. *American Journal of Phys Med Rehabilitation* (1994); 73 (3), 175-83.
32. Van G K, Schieman S. Looking inward: introspectiveness, physical disability, and depression across the life course. *International Journal of Aging Human Development* (2001); 53(4), 293-310.