Pakistan Journal of Psychological Research Vol. 20, Nos. 3-4, 2005, 93-111

RELATIONSHIP OF ATTRIBUTIONAL STYLES AND SELF CONCEPT WITH DEPRESSION IN SCHOOL GOING CHILDREN[#]

Saiqa Khan, Nargis Asad, Sadia Mahmud & Shafquat Rozi
Aga Khan University Hospital
Karachi, Pakistan

The self-concept and causal attributions are both centrally implicated in various psychological disorders including depression. These patterns have been observed in both adult and children population. The present study attempted to explore this dynamic relationship in seventh and eighth grade school children. It was hypothesized that optimistic attributional style and self-concept would moderate children's scores on depression. Eighty children completed questionnaires on attributional styles, self-concept, and depression. The results did not support the hypothesis and children's scores on attributional styles were not related to depression. Both boys and girls tended to attribute negative events to external, stable, and specific causes. These differences in interrelationship of attributions and depression could be related to different cultural orientations which many studies have reported. Furthermore, self-concept emerged as a significant mediator to depression.

The prevalence of depression in child and adolescent population has been increasing steadily in recent years (Burke, Burke, Rae, & Regier, 1991; Klerman et al., 1985). Several theories have been proposed to explain these age related differences in cognition, emotion, behaviour, and physical development of children and adolescent sample in the etiology of depression (Garber 2000; Kaslow, Adamson, & Collins, 2000). Turner and Cole (1994) and Nolen-Hoeksema, Girgus, and Seligman, (1992) have suggested that cognitive vulnerability to depression emerges during the transition from middle childhood to early adolescence when children develop the capacity for abstract reasoning and formal operational thought. Studies conducted within the framework of several cognitive vulnerability theories support this developmental hypothesis (see, for example, Abela & Veronneau-McArdle, 2002; Nolen-Hoeksema et al., 1992; Turner & Cole 1994). These theorists argue that the types of cognitions most relevant to depression (e.g., attributional style, self-

---

[#] Correspondence concerning this article should be addressed to Saiqa Khan, Assistant Professor, Department of Psychology Aga Khan University Hospital, Stadium Road Karachi. <saiqa.khan@aku.edu>

[##] The authors thank the school of administration teachers and students who participated in the study.

worth) do not emerge until middle childhood when children begin to develop a more stable and less concrete sense of self (Garber, 2000; Rholes, Blackwell, Jordan, & Walters, 1980;). It is not until middle childhood that children use stable personality traits to explain behaviour (Corrigan, 1995), have more differentiated self-views (Harter, 1986, 1990) and develop the cognitive capacity to develop hopelessness (Kaslow et al., 2000). The present study focused on understanding how children's cognitions and their perception of self-worth (self concept) influence depression. As these constructs do not emerge until transition of middle childhood to adolescence, the research focused on 7th to 8th grade children.

Casual Attributions

Extensive literature supporting the cognitive relationship of vulnerability factor to depression suggests that an individual's explanation for causes of events that befall him or her (known as attribution theory) effect the person's subsequent feelings and actions (Heider, 1958; Kelley, 1973; Weiner, 1986). According to Weiner (1986), people attribute events to factors that are internal or external and stable or unstable, producing four prototypical attributions: ability, effort, task difficulty, and luck. These attributions have different emotional and motivational consequences (Weiner, 1980; Weiner, Russel, & Lerman, 1979). Recent research suggests that the three attributional dimensions that influence feelings of well being are internality, stability, and globality (Abramson, Seligman, & Teasdale, 1978; Peterson, & Seligman, 1984).

Empirical data suggests that individual differences in attributional styles are an essential factor underlying depression. Depressive individuals attribute negative events to internal, global, and stable factors (Abramson et. al., 1978; Brewin, 1985; Martin, & Clark, 1985; Peterson & Seligman, 1987) and tend to explain pleasant life experiences as external, specific, and unstable factors (Peterson & Seligman, 1987). This self-deprecating attributional style which develops from early life experiences may cause an individual to hold rigid and inappropriate beliefs or attitudes towards oneself and the world. These attributions include the need for perfectionist achievement and constant approval by others may place individuals at greater risk for depression (Barnett & Gotlib, 1988; Beck, Rush, Shaw, & Emery, 1979). Similar patterns have been reported in child and adolescent samples (Nolen-Hoeksema, et al., 1992; Yu & Seligman, 2002).

This attributional style also serves as a defensive function in some individuals allowing them to attribute negative outcomes externally and to avoid low self-esteem (Bentall, Kinderman, & Kaney, 1994; Keny & Bentall, 1992; Kinderman & Bentall, 2000),

Self-Concept representation

The self-concept has a central role in the regulation of affect (Brewin, 1996). Although there have been many different approaches to conceptualizing the self (Wylie, 1979), self concept is probably best viewed as a multidimensional construct which plays a significant role as a mediator in maladaptive behaviour patterns (Fox, 1992; Marsh, 1993). The multifaceted self-concept emphasizes that people have different perceptions of themselves in specific domains of life such as physical, social, and work (Fox, 1997; Harter 1985; Marsh, & Shavelson, 1985). Self concepts are multidimensional beliefs that people have about specific characteristics (Brunett, 1996). These can be descriptive/affective (I like, I enjoy) and evaluative/comparative/ cognitive (good at; do well at). The major characteristics that have been studied and related with intervention studies are physical appearance, activities, social relations, and academics (Butler, 1987). These researches have indicated that in children, positive self concept correlates significantly with achievement oriented behaviour and self esteem and attributions. Gender differences have also been reported in adolescents self-esteem with boys reporting higher level of self-esteem relative to girls (Brack, Orr, & Ingersoll, 1988; Polce-Lyuch, Kliewer, & Myers, 1994; Wade, Thompson, Tashakkori, & Valente, 1989).

There is a close relationship between causal attributions and self-concept. Fitch (1970) and Ickes and Layden (1978) found that people scoring high on self-concept measures tend to make internal attributions for positive events but not for negative events, where as the opposite is true for low self-concept. Causal attributions are not only affected by self-esteem, but also appear to be important in regulating self-concept. People who tend to make internal attributions for negative events tend to report lower trait levels of self esteem (Flett, Pliner, & Blankstein, 1995). In experimental studies, internal (self-blaming) attributions for negative events are associated with a negative impact on self-esteem (Jussim, Yen, & Aiello, 1995; Kerr & Beh, 1995). Individuals who believe that their behaviour has no impact on outcomes are likely to avoid challenging situations and fail to persist (Dweck & Leggett, 1988). This can result in a cycle of failure in which negative beliefs result in lack of persistence, which leads to failure and potentially lowered self-esteem. Failure and low

self-concept confirm the negative belief, and the cycle continues resulting in depression.

Overall, there exists a dynamic and circular relationship between self representation and attribution in which representation of the self influences attributions which could predispose individuals to depression.

Substantial evidence exists that rates of depression are particularly high in Pakistan and especially in women (Ali & Ammanullah, 2000; Ali, Reza, & Khan, 1998). However, these trends have not been reported with children and adolescent samples. The present study aimed to investigate whether causal attributions and self concepts mediate depression in children. It was hypothesized that there would be an inverse relationship between depression, pessimistic attributional style, and various facets of self-concept. As gender differences in rates of depression and attributional style have been well documented in adults as well as adolescents an attempt was also made to explore these differences with the present sample.

METHOD

Sample

Eighty students from grades 7 to 9 from private schools situated in an upper middle class urban locality of Karachi were included in the study. 33 boys and 47 girls were involved in the study. Their age ranged from 11 to 16 years with a mean age of 13 years.

Instruments

Demographic information was obtained regarding child's age, present grade, gender, number of siblings, parent's ages, and occupations.

Self Concept Scale

The Self-Concept Scale developed by Burnett (1994, 1996) was administered. This is a 44 item self-reported scale which comprises 10 subscales. Sound construct validity determined by factor analysis and high reliability (global self-esteem; .91; physical appearance self concept. 78; physical ability self concept. 79; peer relation self concept. 67; relationship with mother self concept. 83; relationship with father self concept. 95; reading self concept. 87; mathematics self concept. 84; learning self concept. 82; and school work self concept 81) were reported by Burnett (1994).

Children's Attributional Style Questionnaire

Children's Attributional Style Questionnaire (CASQ; Seligman et al., 1984) is a 48-item forced choice measure of attributional style for children aged 8 – 13 years. The CASQ includes items divided equally between positive (you get an "A" on a test) and negative events (you break a glass). The scale uses both forced choices and a dimensional approach. Respondents select between two possible causes of events and each option represents the presence or absence of one attribution dimension (e.g., an internal or external cause). Attributions for each dimension are computed by running the number of internal, stable, or global responses. Internal consistency of the CASQ is adequate and improves when the separate dimensions are combined into a single composite. Internal consistency reliability in the non clinical samples is moderate, ranging from .47 to .73 for positive composite scores and .42 to .67 for negative composite scores. The internal reliability of the overall composite score is reported to be .62 (Gladstone, 1995).

Children's Depression Inventory

Children's Depression Inventory (CDI; Hammen & Gotlib, 1992) is a 27 item self report measure of depression in children of 7 to 17 years. It measures cognitive, affective, and behavioural symptoms of depression. For each item, the children are asked to describe how they have been thinking and feeling during the past two weeks. It is reported to have a high reliability i.e., .83.

RESULTS

To assess whether attributional styles and self-esteem contribute to variability in depression, initially univarite regression analysis were performed separately for boys and girls. Interestingly, the pattern of relationships for both genders suggested that there was significant inverse relationship between depression and global self-concept.

Table 1

Means and Standard Deviation for All Measures (N = 80)

	Girls ($n = 47$)		**Boys** ($n = 33$)	
	M	*SD*	*M*	*SD*
Depression	18.55	10.71	22.03	11.36
CASQ – Optimistic	12.81	3.94	11.64	2.80

Continued...

CASQ – Pessimistic	8.55	3.34	10.30	2.36
CASQ-Global	3.60	4.36	2.09	3.57
Self esteem subscale	31.43	7.80	31.21	6.71
Physical Appearance	20.87	27.74	14.55	3.08
Self Concept Subscale				
Physical Ability	15.36	4.02	16.52	2.79
Self-Concept Subscale				
Peer Relations	17.28	2. 58	16.52	2.81
Self-Concept				
Mother Relations	18.02	2.42	18.18	2.30
Self-Concept Subscale				
Father Relations	18.34	2.10	17.94	2.82
Self-Concept Subscale				
Reading Self-Concept	18.26	22.30	12.94	3.81
Sub scale				
Mathematics Self-Concept subscale	13.19	4.69	14.36	3.75
Learning	16.53	2.71	15.73	3.14
Self-Concept subscale				
School Work Self-Concept Subscale	15.36	3.07	14.21	2.69

Table 2

Multiple Regression Analysis Predicting Depression in Boys and Girls (N = 80)

Variable	R Square	Beta	*p*
Boys			
Depression	.219		
Self-Concept		-.747	.011
Attributional Styles		1.245	.654
Girls			
Depression	.270		
Self-Concept		-.270	.000
Attributional Styles		1.245	.654

Table 2 shows that contrary to expectation there was non significant relationship between attributional styles and depression.

The strength of relationship of various subscales of self-concept to depression varied for boys and girls. In the final multiple regression model, only global self-esteem related with depression for girls. In other words for every 10 points increase in global self-concept the estimated mean depression score decreased by 7.1 points (Table 2: $p<$ 0.001). However, for boys significant association was reported between global self-concept, school work, reading, and physical appearance self-concept. Thus for every 10 point increase in global, reading, and school-work self-esteem the estimated mean depression scores decreases by 5.4, 5.7 and 10.1 points respectively ($p<.001$).

Results from the above regression analysis indicated that optimistic and pessimistic attributional styles were not associated with depression. This contradicted earlier findings. Thus post analysis was done to compare optimistic and pessimistic attributional style scores for boys and girls by performing Repeated Measures ANOVA, with attributional style (optimistic/pessimistic) as the within subject factor and gender as the between subject factor.

Table3

Repeated Measures ANOVA for Attributional Styles X Gender (N =80)

		df	*F*	*p*
Within Subject				
	Pessimistic/Optimistic Attributional Style	1	1	.000
Between Subjects				
	Gender	1	.23	.623
Interactions	Attributional Styles X Gender	1	11.4	.001

Table 3 shows a significant interaction between attributional style and gender (p-value < 0.001). Least Significant Difference (LSD) multiple comparison procedure was performed to analyze the interaction using at 0.05 level of significance. Among girls, mean optimistic attributional style score (12.8) was significantly higher than the mean pessimistic attributional style score (8.6). Also for boys, mean optimistic attributional style score (11.6) was significantly

higher than the mean pessimistic attributional style score (10.3). This difference was more pronounced among girls. Comparing boys and girls, there was non significant difference in the scores for optimistic attributional style; however the pessimistic attributional style score was significantly higher among boys.

DISCUSSION

The current study examined the role of attributional styles and self–concepts in mitigating depression. It was hypothesized that optimistic attributional style and high self-concept would moderate children's scores on depression. The results partially support this hypothesis. Amongst various dimensions of self concept, self esteem appeared to moderate the influence of depression. However, no main effects were noted with attributional styles. Interestingly these patterns did not vary with gender.

Attributional or explanatory styles are a manner in which a person explains the causes of positive and negative events in their lives. An individual with a pessimistic attributional style tends to attribute negative events to internal causes (it's my fault), to stable causes ("it will last for ever") and to global causes (it affects all parts of my life), (Peterson & Seligman, 1984). Numerous studies have highlighted that maladaptive, pessimistic attributional styles may result in depression, learned hopelessness, and deficits in self–esteem, both in children and adults (Abramson, Metalsky, & Alloy, 1989; Ficham & Cain, 1986; Gillham, Shatle, & Freves, 2000; Seligman, Schulman, DeRubeis, & Herllon, 1999; Yu & Seligman, 2002). Gladstone and Kaslow's (1995) Meta analysis established that higher levels of depressive symptoms are associated with internal, stable, and global attributions for negative outcomes and external, unstable–specific attributions for positive outcomes. These patterns are also reported in intervention based studies (Gillham, et al., 2000; Seligman et al., 1999; Yu & Seligman, 2002).

Extensive literature assessing attributional patterns suggests the mediating influence on depression (Abramson et al., 1978; Gladstone, 1995). The present study did not support this pattern. Both girls and boys reported high scores on optimistic attributional style suggesting that they tend to view negative events to external, stable, and specific causes. These differences could be explained in the light of different cultural orientations. Studies have reported that individual's perception of success and failure varies across interdependent and independent cultures. In independent cultures emphasis is on

autonomous and bounded sense of self, distinct from others, and the environment. Thus a positive self view requires the self to be seen as effective and in control. Thus adaptive attributional styles would be those which promote this self–view, whereas maladaptive attributional styles are those that contradict it.

In contrast, in interdependent cultures, there is much greater emphasis on the interrelatedness of the individuals to others and the environment. The self is meaningful primarily in the context of social relationships, duties, and roles. Thus Failure in life is more seen as a result of external situational factors which are not in the control of individual self rather than internal stable attributes. Thus in the light of present findings, it can be speculated that attributional styles might be significant when assessed from interpersonal situations rather than personal situations. This link between interpersonal events, situational attributions, and depression may be more predictive of distress in interdependent cultures, is worth further investigation. Although, the reported patterns have limited genrizability, it raises questions regarding what role does attributional thinking play in children predisposition to psychological distress which would further lead to identification of areas for interventions.

The present findings highlight the role of situational factors in determining psychological distress. In the light of the cultural context, it is not surprising that depression would be more related to self-esteem (which is largely influenced by external factors) rather than attributions. As multidimensional aspects of self-representations were studied, an attempt was also made to explain their interrelationship to depression, Self esteem emerged as a significant and important mediator to depression for this sample. Other studies have also reported similar relationship, particularly with depression in adolescent samples (see, for example, Martineze & Dukes, 1991; Simmons & Rosenberg, 1975). Interestingly, within different self concept domains for boys, physical appearance, school achievement and reading self-concepts were also related to depression. However, no such effects were reported for girls. The social projection of male and female images has undergone a change in the recent past. For instance, media projects males not only as the traditional figure but also as fashion oriented and well groomed, within the social fabric. Physical appearance and contemporary fashions, which were thought to be linked to female gender are now becoming true for males too. Hence, the males' preoccupation with the physical self and its' relationship to depression may not be a surprising trend.

Results of several studies indicate that gender differences exist within specific domains of self concept, which contribute to global self evaluations (Alpert-Gillis & Connell, 1989; Harter, 1990; Harper & Marshall, 1991). These differences have been explained in the light of gender role socialization. Girls' self esteem is derived primarily from perceived success in interpersonal functioning, where as boys' self esteem is more contingent on perceived success in domains such as athletic functioning (Knox, 2004). Boys have higher self evaluations in the domains of physical ability, appearance and math, where as girls have higher self evaluations in areas of verbal ability and school performance (Marsh, 1989). Similarly Byrne and Shavelson (1987), found that adolescent boys general self concept was closely related to mathematic self concept. These findings suggest that the domains of self concept that relate to global self esteem and depression may have different implications for boys and girls. Thus for boys poor self esteem may be closely related to poor perceived performance in traditionally masculine domains and thus result in depression. Whereas low self esteem in girls may be suggestive of poor perceived functioning in areas of social functioning. These patterns can be understood further through varied sources of self-concept and self-esteem that different cultures value and influence the development of identity. Pakistani culture is predominantly patriarchial, hierarchial and family oriented and stresses externally sanctioned rules of ethical conduct. There exist marked differences in socialization experiences and child rearing practices of boys and girls. Girls are trained to develop qualities of modesty, orderliness, obedience and devotion to families (Haque, 1978). In contrast boys are encouraged to develop traits of courage, hard working and independence. Boys are considered as future support providers for their families. Thus more emphasis is placed on there educational and vocational choices. The present grades that children are very crucial, in determining their future career goals. Thus it is not surprising that boys scores of depression would be related to their academic achievement, as compared to girls who are not expected to adopt a vocational career. It would be interesting to explore how much do peer and family support influences boys perceptions of themselves and there body image and its relationship to depression.

These patterns are supported by other studies where gender difference were reported on physical self-concept and its relationship to depression (Fox & Corbin, 1980; Marsh, 1989; Sonstroem, Speliotis, & Fava, 1992). Hayes, Crocker, & Kowalski (1999) suggested that in many physical self-concept studies the reason why women report lower self-perception level is not clear. Thus further

research is needed to explore how factors such as cultural expectations and differential opportunities to demonstrate competence, influence physical self-perceptions.

CONCLUSION

The present findings support available literature that being a part of collectivistic culture, the boundary between "self" and the social world is a fine one; self is not distinct from the social context which sets the ground for 'external' as more plausible and causal explanation for events in ones life. Thus domains of personal achievement and interpersonal relationships may not be sharply distinguished from one another.

Attributions vary across cultures which if addressed earlier in life can help identify and prevent emotional problems. The present findings highlight the trends which are limited by their generalizability. These findings need to be replicated with larger and more representative samples (e.g., urban versus rural school children; government run versus private schools etc.) before it can be interpreted with confidence. Research is also needed on the efficacy of teaching healthy attributional styles to children at school age to prevent depressive patterns. School teachers can be trained to promote mental health in school age children by teaching strategies for adaptive attributions and healthy conceptions of self.

Furthermore, as the manner in which individuals define their selves the sense of self-worth and explanatory styles vary across cultures, cultural sensitivity of these instruments needs to be addressed to explore there relationships. Future research should also explore the explanatory styles and a broad range of resilience and vulnerability factors to help develop a deeper understanding of the factors that confer vulnerability and resilience to depression in children.

REFERENCES

Abela, J. R. Z., & Veronneau-McArdle, M. (2002). The relationship between self-complexity and depressive symptoms in third and seventh grade children. A short term longitudinal study. *Journal of Abnormal Child Psychology, 30,* 155-166.

Abramson, L. X., Seligman, M. E. P., & Teasdale, J. D. (1978). Learned Helplessness in humans: Critique and reformulations. *Journal of Abnormal Psychology*, 78, 40-74.

Abramson, L. Y., Metalsky, G. I., & Alloy, L. B. (1989). Hopelessness Depression: A theory based subtype of depression. *Psychological Review, 96*, 358-372.

Abramson, L.Y., Seligman, M. E. P., & Teasdale, J. (1978). Learned helplessness in humans: Critique and reformulation. *Journal of Abnormal Psychology, 87,* 49-74.

Ali, B. S., & Amanullah, S. (2000) Prevalence of anxiety and depression in an urban squatter settlement of Karachi. *Journal of College of Physicians and Surgeons Pakistan, 10*, 4-6.

Ali, B. S., Reza, H., & Khan, M. M. (1998) Development of an indigenous screening instrument in Pakistan: The Aga Khan University Anxiety and Depression Scale. *Journal of Pakistan Medical Association, 48,* 261-65.

Alpert-Gillis, L., & Connell, J. P. (1989). Gender and sex role influences on children's self-esteem. *Journal of Personality, 57,* 97-114.

Barnett, P. A., & Gotlib, I. H. (1988). Psychosocial functioning and depression: Antecedents, concomitants and consequences. *Psychological Bulletin 104*(1), 97-126.

Beck, A. T., Rush, A. J., Shaw, B. F., & Emery, G. (1979). *Cognitive therapy of depression*. New York: Guilford Press.

Bentall, R. P., Kinderman, P., & Kaney, S. (1994). The self attributional processes and abnormal beliefs: Towards a model of persecutory delusions. *Behaviour Research and Therapy, 32,* 331-341.

Brack, C., Orr, D., & Ingersoll, G. (1988). Pubertal maturation and adolescent self esteem. *Journal of adolescent Health Care, 9,* 280-285.

Brewin, C. R. (1985). Depression and Casual attributions: What is that relation? *Psychological Bulletin, 98*, 297-309.

Brewin, C. R., & Furnham, A. (1986). Attirubtional versus preattributional variables in self-esteem and depression: A comparison and test of learned helplessness theory. *Journal of Personality and Social Psychology, 40,* 1013-1020.

Brewin, C. R. (1996). Theoretical foundations of cognitive-behaviour therapy for anxiety and depression. *Annual Review of Psychology, 47,* 33-57.

Brown, G. W., & Harris, T. (1978*). Social origins of depression: A study of psychiatric disorder in Women*. New York: Free press.

Burden, R., & Burnett, P. C. (1999). Burnett Self Scale. In N. Frederickson & R. J. Camerson (Eds). *Psychology in Education Portfolio.* NFER-Nelson: London.

Burke, K. C., Burke, J. D., Rae, D. S., & Reiger, D. A. (1991). Comparing age at onset of major depression and other psychiatric disorders by birth cohorts in five US community populations. *Archives of General Psychiatry*, *48,* 789-796.

Burnett, P. C. (1994). Self concept and self-esteem in elementary school children. *Psychology in the schools*, *31*, 164-171.

Burnett, P. C. (1996). Sex and grade differences in upper elementary school children's descriptive and evaluative self-statements and self-esteem. *School Psychology International*, *17*, 159-170.

Butler, R. (1987). Task – involving and ego-involving properties of evaluation: Effects of different feedback conditions on motivational perceptions, interest, and performance. *Journal of Educational Psychologist, 79*(4), 150-156.

Byrne, B., & Shavelson, R. (1987). Adolescent self-concept: Testing the assumption of equivalent structure across gender. *American Educational Research Journal, 24,* 365-385.

Campbell, J. D., Chew, B., & Stratchley, L. S. (1991). Cognitive and emotional reactions to daily events: The effects of self esteem and complexity. *Journal of Personality*, *59,* 473-505.

Cardemil, E.Y., Reivich, K. J., & Seligman, M. E. P. (2002). The prevention of depressive symptoms in low-income minority middle-school students. *Prevention and Treatment*, 5, Article 8. Available world wide web http://journals.apa.org/prevention/ volume5/ pre0050008a.html

Cole, D. A., & Turner, J. E., Jr. (1993). Models of cognitive mediation and moderation in child depression. *Journal of Abnormal Psychology*, *102,* 271-281.

Corrigan, R. (1995). How infants and young children understand the causes of negative events. In N. Ebiseberg (Ed.). *Social Development* (pp: 1-26) Thousand Oaks, CA: Sage.

Dweck, C. S., & Leggett, E. L. (1988). A social cognitive approach to motivation. *Psychological Review*, *95,* 256-273.

Fincham, F. D., & Cain, K. M. (1986). Learned helplessness in humans: A developmental analysis. *Developmental Review*, *6,* 301-333.

Fitch, G. (1970). Effects of self-esteem, perceived importance and choice on causal attributions. *Journal of Personality and Social Psychology, 16,* 311-315.

Flett, G. L., Pliner, P., & Blankstein, K. R. (1995). Preattributional dimensions in self esteem and depressive symptomatology. *Journal of Social Behaviour and Personality, 10,* 101-122.

Fox, K. R. (1992). Physical education and development of self-esteem in children. In N. Armstrong (Ed*). New directors in physical education*-Leeds: Human Kinetics.

Fox, K. R. (1997). The physical self and process in self-esteem development. In K. R. Fox (Ed). The physical self-form motivation to well-being. Champaign, IL*: Human Kinetics*

Fox, K. R., & Corbin, C. B. (1980). The physical self-perception profile: Development and preliminary validation. *Journal of Sports and Exercise Psychology, 11,* 408-430.

Friedberg, R. D., & Dalenberg, C. J. (1991). Attributional processes in young children: Theoretical, methodological and clinical considerations. *Journal of Rational Emotive and Cognitive Behavior Therapy, 9,* 173-183.

Friedlander, S., Traylor, J. A., & Weiss, D. S. (1987). Depressive symptoms and attributional style in children. *Personality and Social Psychology Bulletin, 12,* 442-453.

Garber, J. (2000). Development and depression. In A. J. Sameroff, M. Lewis, & S. M. Miller (Eds.) *Handbook of developmental Psychopathology*, (pp. 467-490). New York: Kluwer.

Gillham, J. E., Shatle, A. J., & Freves, D. R., (2000). Preventing depression: A review of cognitive-behavioural and family interventions. *Applied and Preventive Psychology, 9,* 63-88.

Gladstone, T. R. C., & Kaslow, N. J. (1995). Depression and attributions in children and adolescents: A meta-analytic review. *Journal of Abnormal Child Psychology, 23*(5), 597-606.

Hammen, C. L., & Gotlib, L. H. (1992). *Psychological aspects of depression.* New York: Wiley.

Haque, A. (1978). *Trait attribution of mothers as a function of sex role values in Pakistani society.* Paper presented at the Third Annual Conference of Pakistan Psychological Association. Lahore.

Harper, J. F., & Marshall, E. (1991). *Adolescents' problems and their relationship to self-esteem. Adolescence, 26,* 799-808.

Harter, S. (1985). The self-perception profile for children: Revision of perceived competence scale for children (manual). Denver, CO: University of Denver.

Harter, S. (1986). Processes underlying the construction, maintenance, and enhancement of the self-concept in Children. In. J. Suis, & A. Greenwald (Eds.) *Psychological Perspectives on the* Self (pp. 137-181). Hillsdale, NJ: Erlbaum.

Harter, S. (1990). Causes, correlates, and the functional role of global self-worth: A life-span perspective. In R. J. Steinberg and J. Killigan Jr. (Eds). *Competence considered.* (pp. 67-97). New Haven, CT: Yale University Press.

Harter, S. (1999). The construction of self: A developmental perspective. New York: Guilford.

Hayes, S. D., Crocker, P. R. E., & Kowalski, K. C. (1999). Gender difference in physical self-perceptions, global self-esteem, and physical activity: Evaluation of the physical self-perception profile model: *Journal of Sports Behaviour*, *22,* 1-14.

Heider, F. (1958). *The psychology of interpersonal relations.* New York: Wiley.

Ickes, W., & Layden, M. A. (1978). Attributional styles. In. J. H. Harvey, W. Ickes and R. F. Kidd (Eds*). New directions in attribution Research.* Hillsdale, NJ: Erlbaum.

Jaycox, L. H., Reivich, K. J., Gillham, J., & Seligman, M. E. P. (1994). Prevention of depressive symptoms in school children. *Behaviours Research and Therapy*, *32*, 801-816.

Joiner, T. E., & Wagner, K. D., (1995). Attributional style and depression in children and adolescents: A meta-analytic review. *Clinical Psychology Review*, *15*, 777-798.

Jussim, L., Yen, H., & Aiello, J. R. (1995). Self consistency, self enhancement, and accuracy in reactions to feedback. *Journal of Experimental Social Psychology*, *31,* 322-356.

Kaney, S., & Bentall, R. P., (1992). Persecutory delusions and the self-serving bias. *Journal of Nervous and Mental Disease*, *180,* 773-780.

Kaslow, N. J., Adamson, L. B., & Collins, M. H. (2000). A developmental psychopathology perspective on the cognitive components of child and adolescent depression. In A. J. S., M. Lewis and S. M. Miller (Eds.) *Handbook of developmental psychopathology* (pp. 491-510), New York: Kluwer.

Kelley, H. H. (1973). The process of causal attribution. *American Psychologist, 28,* 107-128.

Kerr, R. H., & Beh, H. C. (1995). Attributions of causality in different grades of Australian Football league players. *Australian Psychologist, 30,* 102-108.

Kinderman, P., & Bentall, R. P. (2000) Self-discrepancies and causal attributions: Studies of hypothesized relationships. *British Journal of Clinical Psychology, 39,* 255-273.

Klerman, G. L., Lavori, P. W., Rice, J., Reich, T., Endicott, J., Andreasen, N. C. et al. (1985). Birth cohort trends in rates of major depressive disorder among relatives of patients with affective disorder. *Archives of General Psychiatry, 42,* 689-693.

Knox, M. (2004). Adolescents' possible selves and their relationship to global self esteem. *Sex Roles: A Journal of Research, July,* 10-27.

Kovacs, M. (1983). The Children's Depression Inventory: A self rated depression scale for school-aged youngsters. Unpublished manuscript, University of Pittsburgh, School of Medicine, Pittsburgh.

Kovacs, M., (1981). Rating scales to assess depression in school children. *Acta Paedopsychiatrica, 46,* 305-315.

Lynch-Polce, M. (1998). Gender and Age patterns in emotional expression, body image and self-esteem: A qualitative analysis. *Sex Roles*. June, 15-20.

Marsh, H. W. (1989). Age and sex effects in multiple dimensions of self-concept: Preadolescence to early adulthood. *Journal of Educational Psychology, 81,* 417-430.

Marsh, H. W. (1993). Physical fitness self concept: Relations to physical fitness to field and technical indicators for boys and girls aged 9-15. *Journal of Sports and Exercise Psychology, 15,* 184-206.

Marsh, H. W., & Shavelson, R. J. (1985). Self concept: It's multifaceted, hierarchical structure. *Educational Psychologist, 20,*107-125.

Marsh, H. W., Richards, G. E., Johnson, S., Roche, L., & Tremayne, P. (1994). Physical self-description questionnaire: Psychometric properties and a multitract multimethod analysis of relations to existing instruments. *Journal of Sports and Exercise Psychology, 16,* 270-305.

Martin, M., & Clark, D. M. (1985). Cognitive Mediation of Depressed Mood and Neuroticism. I. R. C. S. *Medical Science, 13,* 252-3.

Martineze, J. G., Dukes, R (1991). Ethinic and gender differences in self-esteem. *Youth and Society, 22,* 318-338.

McDowell, I., & Newell, C. (1996). *Measuring Health. A guide to rating scales and questionnaires.* In. edi. Oxford University Press.

Metalsky, G. I., Joiner, T. E., Jr., Hardin, T. S., & Abramson, L.Y. (1993). Depressive reactions to failure in a naturistic setting: A test of the hopelessness and self-esteem theories of depression. *Journal of Abnormal Psychology, 102.* 101-109.

Mumford D. B., Minhas F. A., Akhtar I., et al. (2000) Stress and psychiatric disorders in urban Rawalpindi: Community Survey. *British Journal of Psychiatry, 177.* 557-62.

Mumford, D. B. Saeed, K., Ahmad I., et al (1997). Stress and psychiatric disorders in the rural Punjab. *British Journal of Psychiatry; 170,* 473-78.

Munoz, R. F., & Ying, Y. W. (1993). The prevention of depression: *Research and practice. Baltimore*: Johns Hopkins University Press.

Nolen-Hoeksema, S., Girgus, J. S., & Seligman, M. E. P. (1992). Predictors and consequences of childhood depressive symptoms: A five year longitudinal study. *Journal of Abnormal Psychology, 101,* 405-422

Pelham, B. W., & Swann, J. (1989). From self-conceptions to self-worth: On the sources and structure of global self-esteem. *Journal of Personality and Social Psychology, 57,* 672-680.

Peterson, C., & Seligman, M. E. P. (1984). Causal explanations as a risk factor for depression: Theory and evidence. *Psychological Review, 91,* 347-374.

Peterson, C., & Seligman, M. E. P. (1987). Explanatory style and illness. *Journal of Personality, 55,* 237-265.

Polce-Lynch. M., Kliewer, W., & Myers, B. J. (1994). Gender *differences in early adolescent self esteem: The mediating role of body image.* Unpublished manuscript, Virginia Commonwealth University, Richmond, VA.

Rholes, W. S., Blackwell, J., Jordan, C., & Walters, C. (1980). A developmental study of learned helplessness. *Developmental Psychology, 16,* 616-624.

Seligman, M. E. P., Peterson, C., Kaslow, N. J., Tanenbaum, R. L., Alloy, L. B., & Abramson, L. Y. (1984). Attributional style and depressive symptoms among children. *Journal of Abnormal Psychology, 93,* 235-238.

Seligman, M. E. P., Abramson, L. Y., Semmel, A., & Von Baeyer, C. (1979). Depressive attributional style. *Journal of Abnormal Psychology, 88,* 242-247.

Seligman, M. E. P., Schulman, P., DeRubeis, R. J., & Herllon, S. D. (1999). The prevention of depression and anxiety. *Prevention and Treatment,* 2. Article 8. Available on world wide web: http://www.jouirnals.apa.org/prevention/volume2/pre0020008a,

Simmons, R. G., & Rosenberg, F. (1975). Sex, sex roles, and self-image. *Journal of Youth and Adolescence, 4,* 229-258.

Sonstroem, R. S., Speliotis, E. D., & Fava, J. L. (1992). Perceived Physical competence in adults: An examination of the Physical Self-Perception Profile. *Journal of Sports and Exercise Psychology, 14,* 207-221.

Turk, E., & Bry, B. H. (1992). Adolescents and parent's explanatory styles and parents causal explanations about their adolescents. *Cognitive therapy and Research, 16*(3), 349-357.

Turner, J. E., & Cole, D. A. (1994). Developmental differences in cognitive diatheses in child depression. *Journal of Abnormal Child Psychology, 103,* 15-32.

Wade, T. J., Thompson, U., Tashakkori, A., & Valente, E. (1989). A longitudinal analysis of sex by race differences and self-esteem for African Americans. *Journal of Black Psychology, 22,* 358-373.

Weiner, B. (1986). *An attributional theory of motivation and emotion.* New York: Springer-Verlag.

Weiner, B. (1980). *Human motivation.* New York: Holt, Ronehart and Winston.

Weiner, B., Graham, S., & Chandler, C. C. (1982). Pity, anger and guilt: An attributional analysis. *Personality and Social Psychology Bulletin, 8,* 226-232.

Weiner, B., Russell, D., & Lerman, D. (1979). The cognition-emotion process in achievement related contexts. *Journal of Personality and Social Psychology, 37,* 1211-1220.

Wylie, R. (1979). *The self-concept* (Vol 2). Lincoln: University of Nebraska Press.

Yu, D. L., & Seligman, M. E. P. (2002). Preventing depressive symptoms in Chinese Children: Prevention and treatment. http://journal.apa.org/prevention/volume 6/pre005009a. html.

Received: ***October 02, 2004.***