

Imaginal Processes, Coping Behaviour and Mental Health of Adult Students of Lahore City

Maryam F. Munir,
Kinnaird College for Women, Lahore
Nosheen K. Rahman, & Sohail Chand
University of the Punjab, Lahore

Researchers have long been interested in the coping styles of individuals who display symptoms of various psychopathologies. Recently, Psychopathology and Coping Behaviours have been associated with Imaginal Processes. The present research examines the relationship of symptoms of Psychopathology in a nonclinical college population with their Imaginal Processes, and Coping Behaviour. A pilot study was conducted on 30 students. The suggestions gathered from the pilot study were incorporated into the main study. In the main study, 1000 students, 451 males and 549 females studying in F.A/F.Sc, (376), B.A/B.Sc,(268) and M.A/ M.Sc (356) within the age range of 16 to 23 years were taken. They completed three questionnaires measuring Coping Behavior, Imaginal Processes, and Psychopathology. The results indicated that the students scoring higher on Positive Constructive Daydreaming, Problem Focused Coping, and Emotion Focused Coping reported less symptoms of Psychopathology. The findings of the study may be helpful to the college and school counselors to screen non-clinical student population for their use of habitual coping styles and imaginal processes as indicators of potential health problems. Further research in the area is required to establish the findings of the present study.

Keywords: coping, imagery, psychopathology, mental health.

Since young adulthood is a transition from education to employment, it might have implications for health (Mulye et al., 2009). Taking into consideration the pattern of young adults' health, neuropsychiatric disorders are the main cause of burden even in high-income countries, especially in those aged 15 to 24 years (Gore et al., 2011). It is also evident from increasing number of students seeking counseling services for various problems including self injurious behavior, learning disabilities, eating disorders, illicit drug use, on campus sexual assaults. Approximately one-fifth of counseling centre clients reported severe psychological problems (Kitzrow, 2003). In a national survey in US, twenty-eight percent of freshman reported feeling frequently overwhelmed, and 8% reported feeling depressed. Although distress levels peak during the first year and then declines for most students, still a subset of students manifest severe, chronic levels of distress that does not decrease over time (Verger et al., 2009).

Furthermore, the literature suggests that psychopathology has a significant association with imaginal processes (Gruis, 2005) and coping behaviors, used in stressful situations (Compas et al., 2001; Garmezy, 2001; Uehara et al., 1999; Clark & Hovanitz, 1989). There is a lack of published research in this area in Pakistan. If mental health problems are left unrecognized and untreated, it may lead students to drop out from college or fail their studies. It may also lead them to attempt or commit suicide, or engage in other risky or dangerous behaviors that may result in serious injury, or disability. Monitoring the health of college students in Pakistan may help discover problems early on, and may help in initiating services or interventions to cope with these problems.

The status of mental health can be measured by various tools. Some of them are more appropriate for measuring short-term changes such as the widely used General Health Questionnaire (GHQ), an extensively used screening instrument of varying length that is appropriate for detecting non-psychotic psychological morbidity including anxiety and depression in the general population (Fryers et al., 2004). Whereas, Symptom Checklist-Revised (SCL-R) is an indigenous tool in Urdu language extensively used for screening Anxiety, Depression, Obsessive Compulsive Disorder, Schizophrenia, Somatoform, and Level of Frustration Tolerance in general population (Rahman, Dawood, Jagir, Mansoor, & Rehman, 1997). Mental health can be operationalized as lesser symptoms of anxiety, depression, somatoform, schizophrenia, obsessive compulsive disorder and level of frustration tolerance.

Coping has been shown to be a determinant of mental health. The individuals' coping styles may buffer them from the adverse outcomes associated with significant stressors (Somerfield & McCrae, 2000). Learning more about how people successfully cope with stressors may provide strategies for psychologists to intervene with at-risk individuals in order to help them cope more successfully (Rahman, 2004). Lazarus and Folkman defined coping as constantly changing cognitive, and behavioral efforts to manage specific external and internal demands that are appraised as exceeding the resources of the person (as cited in Somerfield & McCrae, 2000). The factor structure of coping style inventories: problem vs. emotion-focused coping correlate reasonably with psychological symptom inventories (Endler & Parker, 1990). The literature highlights three styles of coping e.g. active coping, emotion oriented coping, and avoidant strategies employed for coping. Active coping strategies are either behavioral or psychological responses used to change the nature of the stressor itself or how one thinks about it, whereas avoidant coping strategies lead people into activities such as alcohol use, or mental states such as withdrawal, that keeps them from directly addressing stressful events. Generally, active coping strategies: active planning, seeking instrumental social support, and emotion oriented coping strategies: seeking emotional social support, positive reinterpretation and religion, are considered better ways to deal with stressful events (Vollrath, Alnaes, & Torgerson, 2003), whereas avoidant coping strategies appear to be psychological risk factor for adverse responses in stressful situations (Holahan & Moos, as cited in Psychosocial Working Group, 1998).

Furthermore, the studies of college students have also shown that coping is also strongly related with imaginal processes, as well as mental illness (Endler & Parker, 1990; McCrae & Costa, 1986). Imaginal processes include Positive Constructive Daydreaming (PCD), Guilt and Fear of Failure (GFF), and Poor Attention Control (PAC). Individuals scoring higher on PCD believe that daydreams are worthwhile, solve problems, help generate pleasant emotions; whereas, individuals scoring higher on GFF have fantasies of winning awards, being expert and in a recognized group, have fantasies of fearing responsibilities and letting down loved ones, becoming angry, getting even, feeling guilty etc. Moreover, PAC daydreamers have tendencies towards mind wandering, they easily loses interest, gets board, as well as are easily distracted (Huba, Singer, Aneshensel, & Antrobus, 1982).

Furthermore, a review of the gender differences reveals that males use problem-focused coping strategies, planned and rational actions, positive thinking as well as personal growth, humour, day-dreaming and fantasies (Vingerhoets & Heck, 2009). However, women prefer emotion-focused coping solutions, self-blame, expression of emotions/seeking of social support, and wishful thinking/emotionality (Matud, 2004; Vingerhoets & Heck, 2009). Men are found to have more emotional inhibition than the women, and the women score significantly higher than the men on somatic symptoms and psychological distress (Matud, 2004). There is no published research studying the education level differences in coping, imaginal and mental health.

Most of the researchers have focused on outcomes that are western-based and lacking in sensitivity to community and cultural factors that contextualize how imaginal processes and coping behaviors exist in eastern cultures. Also the literature review reveals that there is limited published research in the last decade studying the association between daydreaming, coping, and psychopathology in college students. As a result, there has been little cross-cultural validation of findings, in non-western cultures. There have been few studies in Pakistan studying the impact of coping behaviors on mental health (Kausar, 2010) and no study identifying the role of imaginal processes with gender and education level.

As such, understanding imaginal processes and coping behaviors may prove to be critical in developing preventative treatments for a wide spectrum of neuropsychiatric diseases, with a subsequent decrease in physical and economic burden on society. Therefore, following hypotheses were formulated in the light of the literature.

Hypotheses

1. Positive Constructive Daydreaming, Problem Focused Coping, Emotion Focused Coping will negatively correlate with Depression, Anxiety, Obsessive Compulsive Disorder, Level of Frustration Tolerance, and Schizophrenia.
2. Guilt and Fear of Failure Daydreaming, Poor Attentional Control, and Less Useful Coping will positively correlate with Depression, Anxiety, Obsessive

3. Male students will score higher on Positive Constructive Daydreaming, Problem Focused Coping, Emotion Focused Coping as compared to female students.
4. Male students will score lower on Guilt and Fear of Failure Daydreaming, Poor Attentional Control, Less Useful Coping, Depression, Anxiety, Obsessive Compulsive Disorder, Level of Frustration Tolerance, and Schizophrenia as compared to female students.
5. The higher the level of education the higher will be the score on Positive Constructive Daydreaming Problem Focused Coping and Emotion Focused Coping and lower on Depression, Anxiety, Obsessive Compulsive Disorder, Level of Frustration Tolerance, and Schizophrenia.

Method

Participants

A cross-sectional study was carried out with 1000 college students of Intermediate, Bachelor's and Master's degree. The participants were 451 males and 549 females, which included 376 from Intermediate, 268 from Bachelors, and 356 from Masters falling within an age range of 16 to 23 years. The sample was selected purposively from the colleges in Lahore, which granted permission to collect data.

Measures

The participants filled three paper and pencil instruments.

Short Imaginal Processes Inventory (SIPI): The SIPI assesses aspects of daydreaming on three scales: Positive Constructive Daydreaming (PCD), Guilt and Fear of Failing Daydream (GFF), and Poor Attentional Control (PAC). It consists of 45 items with a five alternate response format: 1 meaning very true to 5 meaning definitely untrue. The coefficients alpha for internal consistency is 0.80, 0.82, and 0.83 for Positive Constructive Daydreaming, Guilt and Fear of Failing Daydream, and Poor Attentional Control respectively. All the items of each scale showed a significant correlation at $p < 0.001$ with all the items of their own scale. There is a low correlation with the items of the other scales (Huba, Singer, Aneshensel, & Antrobus, 1982).

Coping Orientation to Problems Experienced (COPE): The full COPE (Carver, Scheier, & Weintraub, 1989) is a 60-item instrument reflecting three coping styles: Problem Focused Coping, Emotion Focused, and Less Useful Coping styles. Each item is rated on a 4-point Likert-Type Scale that ranges from 1 meaning "I usually don't do this at all" to 4 meaning "I usually do this a lot". The alpha reliability for the COPE ranges from 0.62 to 0.92 at $p < 0.01$. Test-retest reliability has been reported as ranging from 0.46 to 0.86 (Allen & Rosse, 2004).

Symptom Checklist-R (SCL-R). SCL-R (Rahman, Dawood, Jagir, Mansoor, & Rehman, 1997): It is based on six scales: Depression, Anxiety, Somatoform, Obsessive Compulsive Disorder, Schizophrenia, and Level of Frustration Tolerance (LFT). It consists of total 139 items: 24 are of Depression, 34 of Somatoform, 27 of Anxiety, 15 of OCD, 15 of Schizophrenia, and 24 are of LFT. Reliability ranges from 0.79 to 0.92 for the non-psychiatric sample. The correlation coefficient between Beck Depression Inventory, and Depression Scale was found to be 0.73 at $p < 0.05$ ($n = 32$); Somatoform Scale and Somatic Hysteria Scale of Crown Crisp Experimental Inventory was 0.74 at $p < 0.05$ ($n = 18$); Anxiety and State Trait Anxiety Inventory was 0.47 at $p < 0.05$ ($n = 20$); Obsessive Compulsive Disorder and Padua Inventory was 0.21 at $p < 0.05$ ($n = 18$); Schizophrenia and PANSS was 0.31 at $p < 0.05$ ($n = 32$); LFT scale of SCL-R and Level of Frustration Tolerance Inventory was 0.68 at $p < 0.05$ ($n = 120$).

Procedure

The two questionnaires used in the present research i.e. SIPI and COPE were translated into Urdu language following the standard procedure of translation and back translation. A pilot study was conducted on 10 students of Intermediate, 10 students of B.Sc (Hons) , and 10 students of Masters. The participants were told that there was no correct or incorrect answer. Each item was to be answered how closely it related to each individual. They were ensured about the confidentiality of the given information. In the study, the data was collected in the form of groups of 15 to 30 students. Each participant filled a consent form. After filling in the demographics of age, sex and education level the participants responded on three measuring instruments.

Statistical Analysis

The scores on each item of SIPI, COPE and SCL-R were entered in Statistical Package of Social Sciences. Pearson-Product Moment Correlation among the subscales of SIPI, COPE and SCL-R was conducted. Moreover, independent samples t-test was carried out to test the difference in mean scores between male students and female students on SIPI, COPE, and SCL-R. Finally One-way ANOVA was computed for the mean difference among levels of education: Intermediate, Bachelor's, and Master's on SIPI, COPE, and SCL-R.

Results

All the three aspects of Daydreaming (Positive Constructive Daydreaming, Guilt and Fear of Failure and Poor Attentional Control) were significantly and positively correlated with coping styles (Problem Focused Coping, Emotion Focused Coping, and Less Useful Coping) as well as with the six subscales of SCL-R (Depression, Somatoform, Anxiety, Obsessive Compulsive Disorder, Level of Frustration Tolerance and Schizophrenia). The two of the coping styles (Emotion Focused coping and Less Useful coping) also positively significantly correlated with all the three aspects of Daydreaming and six subscales of SCL-R. However, the third coping style, Problem Focused Coping showed significant positive correlation only with the three Daydreaming styles, Emotion Focused Coping style, and Obsessive Compulsive Disorder (Table 1).

Table 1

Correlation between the Subscales of SIPI, COPE, and SCL-R

	PCD	GFF	PAC	PFC	EFC	LUC	DEP	SOM	ANX	OCD	LFT	SCH	EDU
PCD	--												
GFF	.57**	--											
PAC	.49**	.50**	--										
PFC	.28**	.14**	.27**	--									
EFC	.25*	.21**	.26**	.66**	--								
LUC	.22**	.38**	.24**	-.02	.23**	--							
DEP	.12**	.31**	.20**	-.05	.07*	.33**	--						
SOM	.13**	.27**	.16**	-.00	.07*	.25**	.68**	--					
ANX	.16**	.30**	.23**	.02	.14**	.28**	.73**	.84**	--				
OCD	.15**	.37**	.22**	.06*	.16**	.31**	.58**	.57**	.61**	--			
LFT	.18**	.37**	.27**	.04	.19**	.31**	.70**	.65**	.77**	.66**	--		
SCH	.18**	.38**	.20**	.02	.13**	.30**	.52**	.57**	.58**	.62**	.60**	--	
EDU	-.01	-.05	-.077**	.01	.01	.05	-.042	-.102**	-.101**	-.094**	-.051	-	-

Note: PCD = Positive Constructive Daydreaming, GFF = Guilt & Fear of Failure, PAC = Poor Attentional Control, PFC = Problem Focused Coping, EFC = Emotion Focused Coping, LUC = Less Useful Coping , DEP = Depression, SOM = Somatoform, ANX = Anxiety, OCD = Obsessive Compulsive Disorder, LFT = Level of Frustration Tolerance, SCH = Schizophrenia, EDU = Education level, $p^* < .05$, $p^{**} < .01$.

Table 2

Student's t test and F-test for significance testing of difference in means of variables

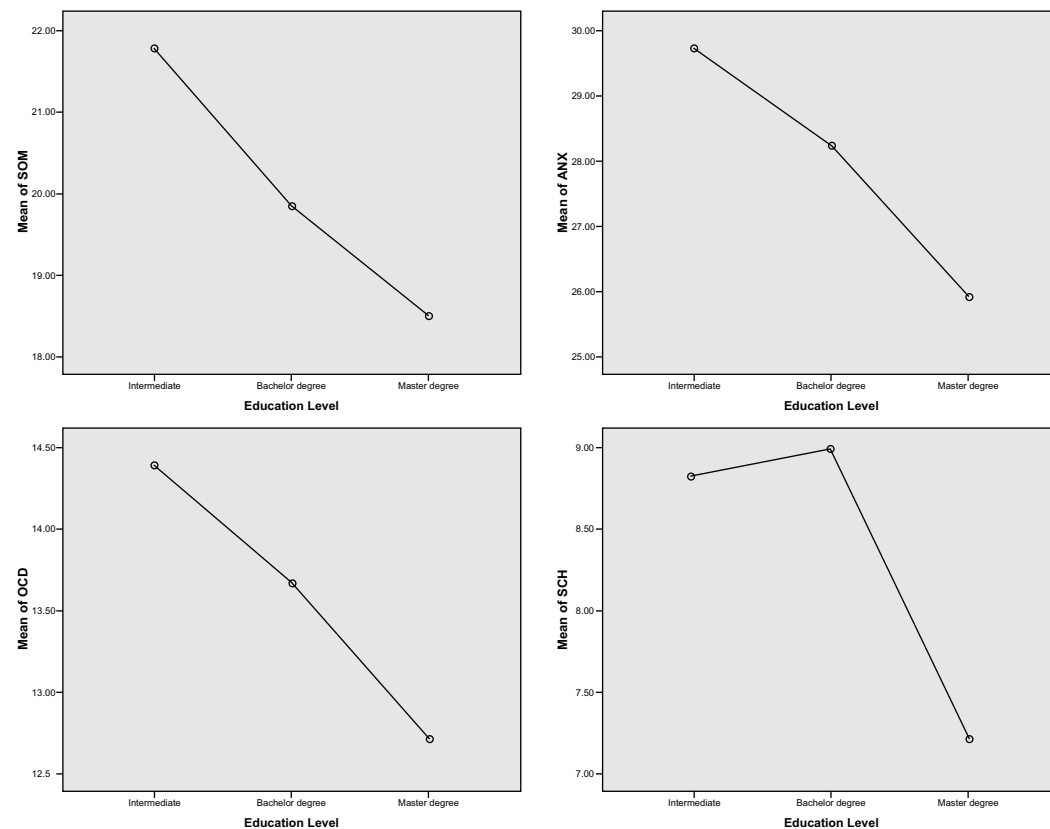
	Gender		Education Level	
	<i>t</i>	<i>p</i>	<i>F</i>	<i>p</i>
PCD	-1.79	0.03	0.59	0.55
GFF	4.69	0.00**	1.36	0.25
PAC	-0.74	0.23	3.00	0.05
PFC	-0.69	0.24	0.19	0.82
EFC	-0.86	0.19	0.12	0.87
LUC	3.37	0.00**	1.71	0.18
DEP	1.12	0.13	1.24	0.28
SOM	2.15	0.01*	5.31	0.00**
ANX	-1.61	0.05	5.19	0.00**
OCD	6.56	0.00**	4.47	0.01*
LFT	0.15	0.43	1.29	0.27
SCH	6.29	0.00**	7.59	0.00**

Note: PCD = Positive Constructive Daydreaming, GFF = Guilt and Fear of Failure, PAC = Poor Attentional Control, PFC = Problem Focused Coping, EFC = Emotion Focused Coping, LUC = Less Useful Coping, DEP = Depression, SOM = Somatoform, ANX = Anxiety, OCD = Obsessive Compulsive Disorder, LFT = Level of Frustration Tolerance, SCH = Schizophrenia.

Significant gender differences were found in Less Useful Coping, Somatoform, Obsessive Compulsive Order, Guilt & Fear of Failure, and Schizophrenia. Male students have endorsed significantly greater level in all the above discussed variables as compared to female students.

The results of F-ratio (Table 2) are based on One-way Analysis of Variance for the factor Education level. It can be observed that significant differences among various education levels are found only for the four of the subscales of SCL-R i.e. Somatoform, Anxiety, Obsessive Compulsive Disorder, and Schizophrenia. The Tukey's test showed that Master level students are significantly different to Intermediate level students with respect to these four subscales. For all of these subscales (Somatoform, Anxiety, Obsessive Compulsive Disorder and Schizophrenia) Master level students have shown significantly lower scores on these subscales as compared to Intermediate level students but no significant differences are found between Master and Bachelor level students except for Schizophrenia (Figure-1).

Figure 1: Means plot of significant variables against levels of education



Discussion

Associations previously observed in coping behaviors, and psychopathologies were partially replicated in the current research. Consistent with the earlier work the results of the present study indicates that there is a significant positive relationship between Positive Constructive Daydreaming, and adaptive coping strategies. Whereas, Guilt and Fear of Failure, and Poor Attentional Control daydreaming is significantly positively correlated with Less Useful Coping (Greenwald & Harder, 2003), and psychopathology (Klinger, Henning, & Janssen 2009; Giambra & Traynor, 1978; Greenwald & Harder, 1991; Starker & Singer, 1975). However, it was interesting to note that the fantasies at times seem to, although minimally, serve as a substitute for behaviors in actual situations, which is reflected by the positive correlation between Positive Constructive Daydreaming with Less Useful Coping, as well as of Guilt and Fear of Failure, and Poor Attentional Control with Problem Focused Coping. This means that under certain situations daydreams are inversely related to coping behaviours in actual situations.

There were significant gender differences in Less Useful Coping, Guilt & Fear of Failure, Somatoform, Obsessive Compulsive Order, and Schizophrenia, where male students have endorsed significantly greater level in all the above discussed variables as compared to female students. This result is consistent with the findings of Taylor, Fulcomer, and Taylor (1978). Traditional gender roles define masculinity as having power and being in control. The acceptable male behaviors include competitiveness, independence, and assertiveness. There is a gender role stress when there is a discrepancy between how one believes he or she should act, based on gender role expectations and how one actually behaves. Situations that typically produce stress for men are those which challenge their self-identity and cause them to feel inadequate. Their concept of gender identity has to match with a traditional male role, otherwise they will experience stress in situations requiring subordination to women (Gender issues in Mental Health, 2006). As there is a social change in the traditional structure of our Pakistani society since the beginning of the 20th century, the male members of the society may experience gender role stress i.e. male students have to compete on an open merit with female students for admissions in colleges and universities. There are more female students in every class and generally the top positions are secured by females in the exams. Females even have more representation than boys in curricular and co-curricular activities. In addition, female students give male students a tough competition in the job market.

Therefore, women are more in executive positions than before whereas men are working as subordinates, not in control of the various situations faced in daily life. Due to such transition, men may be experiencing constraints of resources - not able to express their emotions. Since they are supposed to put up a tough image in stressful situations this may lead them to resort to expressing their fears and inadequacies in the form of daydreaming like Guilt and Fear of Failure. Therefore, men are found to have more emotional inhibition than the women (Matud, 2004). In the present study this has been

reflected in a way as men endorsed the use of Less Useful Coping, and scored higher on psychopathology: Somatoform, Obsessive Compulsive disorder, and Schizophrenia.

It can be observed that significant differences among various education levels are found only for the four of the subscales of SCL-R i.e. Somatoform, Anxiety, Obsessive Compulsive Disorder, and Schizophrenia. The Tukey's test shows that Master level students are significantly different to Intermediate level students with respect to these four subscales. For all of these subscales (Somatoform, Anxiety, Obsessive Compulsive Disorder and Schizophrenia) Master level students have shown significantly lower scores on these subscales as compared to Intermediate level students but no significant differences are found between Master and Bachelor level students except for Schizophrenia. This is consistent with the findings of Drossman et al. (2000) who reported similar trends in his research.

The picture of the more maladjusted college students that emerges from this study is consistent with the findings of Endler, and Parker (1990) that connects neuroticism with maladaptive coping (Compas et al., 2001; Garnezy, 2001; Uehara et al., 1999; Clark & Hovanitz, 1989), and with the findings of McCrae and Costa (1986) which links neuroticism with escapist fantasy, wishful thinking, passivity and indecisiveness (Gruis, 2005). The findings of the study may be helpful since the adaptive coping styles are positively associated with significant health outcomes so the clinician can rely on habitual coping styles and imaginal processes as indicators of potential health problems, in screening nonclinical samples. It is clear, however, that more research on the correlates of male mental health and how these differ from those of females, also the role of education and age needs to be explored. The findings of the present research suggest that daydreaming is not an ordinary activity: instead it is an important dimension of mental life requiring further consideration in mental health research. Further research in the area is required to establish the findings of the present study.

Limitations

The design of the study does not allow conclusions on a causal relationship. The aim was to investigate the association between psychopathology, coping behaviour, and imaginal processes in students. Potential sources of bias in questionnaire surveys may arise from the respondents not answering honestly, or not remembering their particular behaviour. This type of bias was probably not higher than in similar studies using standardized scales, therefore the results of the present study are reasonably comparable with the results of other studies. The timing of data collection about mental health is a critical point in case of university students because their stress level can change during the academic year. A potential source of bias might be due to the collection of data close to the exam period. In order to reduce this type of bias, data were collected in the mid-term of the semester.

Conclusion and Recommendations

Psychological morbidity is seen significantly more in male students of Lahore as compared to females, while level of education is negatively correlated with psychopathology indicating better mental health among students.

The results highlight the importance of further, preferably longitudinal research, on the mental health and behaviour of students in light of their status as future role models of health in their community. Training institutions should enhance training to improve coping skills for all or should provide greater and better targeted services for those who are at high risk for pathology. This will help to improve students' mental health but also increase their future credibility as professionals.

References

- Allen, R. D., & Rosse, W. (2004). Children's response to exposure to traumatic events. *Children, Youth and Environments* 14(1), 233-241.
- Carver, C. S., Scheier, M. F., & Weintraub, J. K. (1989). Assessing coping strategies: a theoretically based approach. *Journal of Personality and Social Psychology*, 56(2), 267-83.
- Clark, A. A., & Hovanitz, C. A. (1989). Dimension of coping that contribute to Psychopathology. *Journal of Clinical Psychology*, 45(1), 28-36.
- Compas, B. E., Connor-Smith, J. K., Saltzman, H., Thomsen, A. H., & Wadsworth, M. E. (2001). Coping with stress during childhood and adolescence: Problems, progress, and potential in theory and research. *Psychological Bulletin*, 127(1), 87-127. doi: 10.1037/0033-2909.127.1.87
- Drossman, D. A., Leserman, J., Li, Z., Keefe, F., Hu, Y. J. B., & Toomey, T.C. (2000). Effects of coping on health outcome among women with gastrointestinal disorders. *Psychosomatic Medicine*, 62, 309-317
- Endler, N. S., & Parker, J. D. (1990). Multidimensional assessment of coping: A critical evaluation. *Journal of Personality and Social Psychology*, 58, 844-854.
- Fryers, T., Brugha, T., Morgan, Z., Smith, J., Hill, T., Carta, M., Lehtinen, V., & Kovess, V. (2004). Prevalence of psychiatric disorder in Europe: the potential and reality of meta-analysis. *Social Psychiatry and Psychiatric Epidemiology*, 39(11), 899-905.
- Garnezy, N. (2001). Stress, Competence, and Development: Continuities in the Study of Schizophrenic Adults, Children Vulnerable to Psychopathology, and the Search for Stress-Resistant Children. *American Journal of Orthopsychiatry Mental Health and Social Justice*, 57(2), 159-174. doi: 10.1111/j.1939-0025.1987.tb03526.x
- Gender issues in mental health. (2006). Gale: Thomson Gale. Retrieved from www.minddisorders.com/index.html.
- Giambra, L. M., & Traynor, T. D. (1978). Daydreaming a measurable concept. *Journal of Clinical Psychology*, 34(1), 14-25. Retrieved <http://search.epnet.com>