

Risk Factors of Health Risk Behaviors in Intermediate Students

Tahera Anwar and Iram Fatima

University of Punjab

Jamil A. Malik

Quaid-i-Azam University

Relationship of parental bonding, college connectedness, emotional intelligence, and academic stress with health risk behaviors was examined in 11 and 12 grade science and humanities group students ($N = 225$) with age range of 16 to 19 years. Mediating role of emotional intelligence, college connectedness, and academic stress was also tested for the relationship of parental care and control with health risk behaviors in students. Along with demographic information, data were collected on Urdu versions of Parental Bonding Instrument (Pedersen, 1994), College Connectedness Scale (Resnick et al., 1997), Educational Stress Scale for Adolescents (Sun, Dunne, Hou, & Xu, 2011), Emotional Intelligence Scale (Batool & Khalid, 2009), and Health Risk Behaviors Questionnaire (Anwar, 2012). Results reveal that parental care was positively related to emotional intelligence and negatively related to health risk behaviors. Parental control was positively related to academic stress and health risk behaviors. Emotional intelligence was negatively related to academic stress and health risk behaviors; and academic stress was positively related to health risk behaviors. Moreover, emotional intelligence mediated between parental care, academic stress, and health risk behaviors. Further, academic stress mediated between college connectedness and health risk behaviors. Findings have important implications for parental training programs to focus on appropriate parenting patterns of more care and less control.

Keywords. Parenting, college connectedness, emotional intelligence, academic stress, health risk behaviors

Tahera Anwar, and Iram Fatima, Institute of Applied Psychology, University of the Punjab, Lahore, Pakistan.

Jamil A. Malik, National Institute of Psychology, Quaid-i-Azam University, Islamabad, Pakistan.

Correspondence concerning this article should be addressed to Tahera Anwar, Institute of Applied Psychology, University of the Punjab, Lahore, Pakistan. E-mail: tahera_anwar1@hotmail.com

During the whole course of educational career, students may come across various challenges and issues resulting in stress. Specifically, shift to college from the school brings lots of pressures to students with which they have to cope. Major pressure the students have to face is regarding academics. Academic stress is a type of performance stress in which people feel pressurized to show high performance, to meet time targets, and to fulfill high expectations (McGraw, Moore, Fuller, & Bates, 2008). Though, all students in a particular class face same type of work load, yet some of them experience stress, while, their other fellows do not. Those going through stress are more prone to engage in activities which are likely to endanger their psychological and physical health (Lee & Larson, 2000; Lou & Chi, 2000). Such activities, for example, taking drugs, sleeping less, eating junk food, impulsive behaviors, etc., are broadly termed as health risk behaviors (Guzman & Bosch, 2007). These behaviors may cause diseases and ultimately death. Risk behaviors also adversely affect youth by disturbing their usual development and day-to-day functioning.

One may infer varying role of personal and environmental factors as risk factors causing stress and health risk behaviors in fresh college students (McGraw et al., 2008). Following is review of literature suggesting role of parents in development of academic stress and health risk behaviors in student through emotional intelligence and college connectedness; and how the stress leads the students to get involved in health risk behaviors.

Parenting and Academic Stress

To begin with, it would be important to consider the role of parent-child relationship for healthy living. Parent-child bonding is important for the effective social and psychological functioning of children (Bowlby as cited in Lezin, Roller, Bean, & Taylor, 2004), which is defined as an attachment between the child and his/her father and mother. Low bonding with parents can disturb social and mental functioning of a child (Steinberg, 2001). Two important dimensions of parental bonding are parental care and parental control. *Parental care* refers to fathers' and mothers' emotional warmth; empathy and closeness of parents to their children. Lack of parental care refers to apathy, coldness, indifference, and ignorance. *Parental control* refers to the over-protection and over intrusion by parents (Parker, Tupling, & Brown, 1979). Depression can be caused by low levels of parental care (Gerlsma, Emmelkamp, & Arrindell, 1990). Parental over-

protection in interaction with low care is highly related to mental illness (Canetti, Bachar, Galili-Weisstub, De Nour, & Shalev, 1997; Sato et al., 1998). Initially, Parker (1981) and later Leon and Leon (1990) examined strong relationships between anxiety and low levels of parental care. Thus, disturbed parental bonding may be considered as risk factor of academic stress.

Path from parental care and control to academic stress may be through emotional intelligence which is defined as the ability to understand personal and others' feelings to cope with the stressful social situations (Bar-On, 2000). More caring and less controlling parents encourage their children for emotional expressiveness, hence, play a positive role in emotional stability of their children (Linden, Klaveren, & Dunkel, 2015; Salimynezhad, Poor, & Valizade, 2015). High emotional intelligence, in turn, leads to better stress management and lower levels of psychological distress (Forushani & Besharat, 2011; Por, Barriball, Fitzpatrick, & Roberts, 2011; Slaski & Cartwright, 2002; Sunil & Rooprai, 2009) and depression (Dawda & Hart, 2000).

Parents may also play their role in helping their children to deal with educational stress through connectedness with institute. Feeling of care and sense of closeness to environment of educational institute that a student is attending is referred as connectedness to educational institute (Resnick et al., 1997). Caring parents are more concerned in selection of institution of their children and may play a positive role in affiliation to an institution by providing a positive feedback for the choice of their children. Contrary to that, controlling parents simply give their opinion and try to influence selection of institution regardless of the choice of their children. Parental care and control has been observed to relate to students' attachment with their educational institute (Rutter, Graham, Chadwick, & Yule, 1976; Shochet, Homel, Cockshaw, & Montgomery, 2008). Lack of association with educational institute can also be a risk factor of academic stress in students. McGraw et al. (2008) concluded from their study that students who did not feel connected to their educational institutions were more likely to be distressed and anxious.

Parenting and Health Risk Behaviors

Social and personal factors have been identified as risk factors that cause health related problems in students. As mentioned earlier, parental bonding has been found as a significant factor in well-being of students (Field, Diego, & Sanders, 2002). So, students who perceive their parents as loving and caring engage less in health risk

behaviors than those who did not experience love and support by parents (Cella, Iannaccone, & Cotrufo, 2014; Tetley, Moghaddam, Dawson, & Rennoldson, 2014). Further, parental care has been observed to help children learn to engage in healthy behaviors (Ray, Kalland, Lehto, & Roos, 2013).

It has already been described that parents play a major role in emotional stability of their children. Emotional intelligence of students has been observed to be related to positive attitude towards health. Specifically, interpersonal emotional intelligence leads to better health (Ciarrochi & Deane, 2001), and health-related quality of life (Austin, Saklofske, & Egan, 2005; Extremera & Fernández-Berrocal, 2005). Highly emotionally intelligent individuals have been observed to cope with peer pressure more effectively (Austin et al., 2005; Tsaousis & Nikolaou, 2005). In general, high emotional intelligence has been found to be related to better health, while, lower emotional intelligence was associated with lack of internal control and psychological disorders (Matthews, Zeidner & Roberts, 2002; Schutte, Malouff, Thorsteinsson, Bhullar, & Rooke, 2006). In another study, researchers (Trinidad, Unger, Chou, Azen, & Johnson, 2004) examined the relationship between emotional intelligence and risk factors of smoking behavior. They observed that emotional intelligence helped in protecting from factors related to smoking behavior.

Path from parenting to involvement in health risk behaviors has also been suggested through college connectedness. It has been examined that attachment with educational institute leads the students to adopt healthy behaviors, which may have a positive influence on their physical health. For example, Bond et al. (2007) examined that participants with low connectedness with educational institute were more prone to anxiety and drug addiction. In the same vein, Bonny, Britto, Klostermann, Hornung, and Slap (2012) found that there was a negative association between connectedness with educational institute and involvement of students in unsafe behaviors for health.

Number of factors have been delineated which lead to students' involvement in risky behaviors regarding their health. Academic stress has also been found an important factor in creating health related problems in students (Hall, Chipperfield, Perry, Ruthig, & Goetz, 2006; Lund, Reider, Whiting, & Prichard, 2010; MacGeorge, Samter, & Gillihan, 2005; Marshall, Allison, Nykamp, & Lanke, 2008; Misra & Castillo, 2004). Students who go through academic stress have been found to engage in self and other harming behavior (Ang & Huan, 2006; Ma, 2001; McCormack, 1996; Steptoe, Wardle, Pollard, Canaan, & Davie, 1996; Weidner, Kohlmann, Dotzauer, & Burns,

1996). In Pakistan, Shafiq et al. (2006) found significant relationship between academic stress and risky behaviors regarding health in medical students.

In general, the studies described above point to the role parenting plays in developing emotional intelligence and feeling of affiliation with the educational institute, which may serve as contributing factors for academic stress and health risk behaviors. The stress also may make a person vulnerable to health risk behaviors. Given the high sensibility of academic stress, it is expected that personal and environmental determinants of health risk behaviors may have their reflection on health risk behaviors through academic stress. The present study intends to assess relationship between risk factors of academic stress and health risk behaviors in intermediate students.

Hypotheses

1. Parental care is likely to be positively related to college connectedness and emotional intelligence, and negatively related to academic stress and health risk behaviors in students.
2. Parental control is likely to be negatively related to college connectedness and emotional intelligence, and positively related to academic stress and health risk behaviors in students.
3. Academic stress is likely to be positively related to health risk behavior of students.
4. College connectedness and emotional intelligence inversely predict academic stress and health risk behaviors in students.
5. Emotional intelligence and college connectedness are likely to mediate the relationship between parental care and control and academic stress as well as health risk behaviors.
6. Academic stress is likely to mediate the relationship between risk factors (parental bonding, college connectedness, and emotional intelligence) and health risk behaviors in students.

Method

Sample

The sample consisted of 225 students of class 11 ($n = 110$, 48.89%) and class 12 ($n = 115$, 51.11%). Data were collected from

students of science ($n = 121$, 53.78%) and humanities group ($n = 104$, 46.22%) including 108 (48%) boys and 117 (52%) girls. Age range of the students was 16 to 19 years ($M = 17.41$, $SD = 0.95$). Students were selected from public sector colleges of Lahore. Participants were day scholars and were reared by their both parents from birth to the minimum age of 16 years. Eight students were excluded on the basis of selection criteria. Demographic information was obtained through demographic data sheet.

Measures

Parental Bonding Instrument (PBI). The short form of the PBI (Pedersen, 1994) translated into Urdu, following forward and back translation procedures, was used to measure both maternal and paternal parenting style in terms of perceived parental behavior, care, and overprotection. PBI consisting of 25 items is a self-reported questionnaire that elicits memory-based responses to questions regarding how the respondents are reared during the first 16 years of their childhood. Participants rated each statement on a four-point Likert scale ranging from 0 = *strongly disagree* to 3 = *strongly agree*. Higher scores on the Care subscale suggested warmth and understanding; while lower scores indicated coldness and rejection. Higher scores on the Control subscale indicated over-protection; while lower scores suggested parents allowing personal independence. The Cronbach's alpha of PBI for sample in present study ranged from .66 to .70 for Care and Control subscales, respectively.

School Connectedness Scale (SCS). The strength of attachment of students with their college was measured by SCS consisting 5 items (Resnick et al., 1997) that was translated into Urdu following forward and back translation procedures. Responses were to be given on 5-point Likert scale ranging from 0 = *strongly disagree* to 3 = *strongly agree*. Higher scores indicate higher level of affiliation with educational institute. The Cronbach's alpha coefficient of the scale for present study was .75.

Scale of Emotional Intelligence (SEI). To assess various aspects of emotional intelligence like interpersonal skill, self-regard, assertiveness, emotional self-awareness, empathy, impulse control, flexibility, problem solving, stress tolerance, and optimism, SEI consisting of 56 items (Batool & Khalid, 2009) was used. The scale has been developed in Urdu in Pakistan. Participants rated each item on four-point Likert scale ranging from 0 = *strongly disagree* to 3 = *strongly agree*. High score indicated high emotional intelligence and

the low score indicated low emotional intelligence. The Cronbach's alpha coefficient of the scale for this study was .82.

Educational Stress Scale for Adolescents (ESSA). Sixteen Item Scale (Sun, et al., 2011) was translated into Urdu following forward and back translation procedures, to measure five dimensions of academic stress: Pressure From Study, Workload, Worry about Grades, Self-expectation, and Despondency. Participants rated each item on four-point Likert scale where 0 = *strongly disagree* to 3 = *strongly agree*. Higher scores on ESSA indicate more academic stress. The Cronbach's alpha coefficient of the scale in current study was .67.

Health Risk Behavior Questionnaire (HRBQ). To measure particular kind of behaviors of students that can negatively affect their health, HRBQ developed in Urdu by Anwar (2012) was used. The 31-item HRBQ contains five aspects: Impulsive Behaviors, Improper Dietary Habits, Poor Hygiene, Misuse of Leisure Time, and Anxiety ($\alpha = .77$). Participants rated each item on four-point Likert scale ranging from 0 = *strongly disagree* to 3 = *strongly agree*. The Cronbach's alpha coefficient of the scale in current study was .77.

Procedure

Permission was sought from the respective authors of the measures used in this research. Prior permission from principles of public sector colleges was sought for data collection. Researcher was permitted to collect data from students in their free time when they were not having classes. Researcher took the consent from the participants of the study. Researcher informed about the nature of the research and ensured them about the confidentiality of information they were going to provide by giving them written consent form. Students who met the inclusion criteria and agreed to participate in research were requested to fill the questionnaires. The questionnaires were completed in the researcher's presence. Response rate was 86 %. It took 55-60 minutes approximately for a student to fill entire questionnaires.

Results

Bivariate correlations were calculated through Pearson product moment method to assess relationship between study variables. Further, Path analysis was conducted using structural equation modeling through AMOS to assess if emotional intelligence and college connectedness mediates the relationship between parental care and control and academic stress as well as health risk behaviors and to

see if academic stress mediates the relationship between risk factors (parental bonding, college connectedness, and emotional intelligence) and health risk behaviors in students.

Results from bivariate correlations suggest that academic stress does not correlate with parental caring behavior, yet significantly and positively correlate with parental control. College connectedness does not appear to relate to any of the study variables except for mother's care. However, emotional intelligence positively correlate with parental caring behavior, whereas, negatively correlate with only mothers controlling behavior. Emotional intelligence also negatively correlates with academic stress. Health-risk behaviors negatively, correlate with parental caring behavior for both mothers and fathers, and positively correlate with parental controlling behavior. Health-risk behaviors also positively correlate with academic stress, whereas, negatively correlate with emotional intelligence.

Table 1
Bivariate Correlations across Study Variables

	1	2	3	4	5	6	7	8
1 Mother Care	-							
2 Father Care	.62***	-						
3 Mother Control	-.27***	-.21**	-					
4 Father Control	-.24***	-.23***	.62***	-				
5 Academic Stress	-.12	-.08	.14*	.17**	-			
6 College Connectedness	.13*	.09	.01	-.07	.12	-		
7 Emotional Intelligence	.23***	.25***	-.14*	-.08	-.19**	.08	-	
8 Health-Risk Behaviors	-.20**	-.25***	.25***	.23***	.21**	-.08	-.48***	-
<i>M</i>	25.24	24.17	19.40	18.30	28.14	9.80	68.00	37.03
<i>SD</i>	5.50	5.57	4.72	4.77	6.06	3.34	1.56	9.79

* $p < .05$. ** $p < .01$. *** $p < .001$.

To determine a clear picture of health-risk behaviors, the mediational model was constructed. Based on our assumptions, a latent variable mediational model was developed and tested using AMOS version 19. Both parental control and parental care were estimated as latent variables consisting of mothers' and fathers' observed scores on care and control. College connectedness and individuals' scores on emotional intelligence were used as observed mediators for effect of parenting on academic stress and health-risk behaviors. Furthermore, academic stress was introduced as a mediator for the effect of emotional intelligence and college connectedness on

health-risk behaviors. Model fit indices as presented in Table 2 show that the model fit of data well yet evaluation of estimates presented some nonsignificant parameters in the model. The model was revised by constraining the following non-significant regression paths to zero; (a) parental control to emotional intelligence and college connectedness; (b) parental care to college contentedness, academic stress, and health risk behaviors; and (c) college connectedness to health risk behaviors. The resulting model is showing a substantial improvement over the hypothesized model with a decrease in Browne-Cudeck criterion (BCC) index for nested models as shown in Table 2.

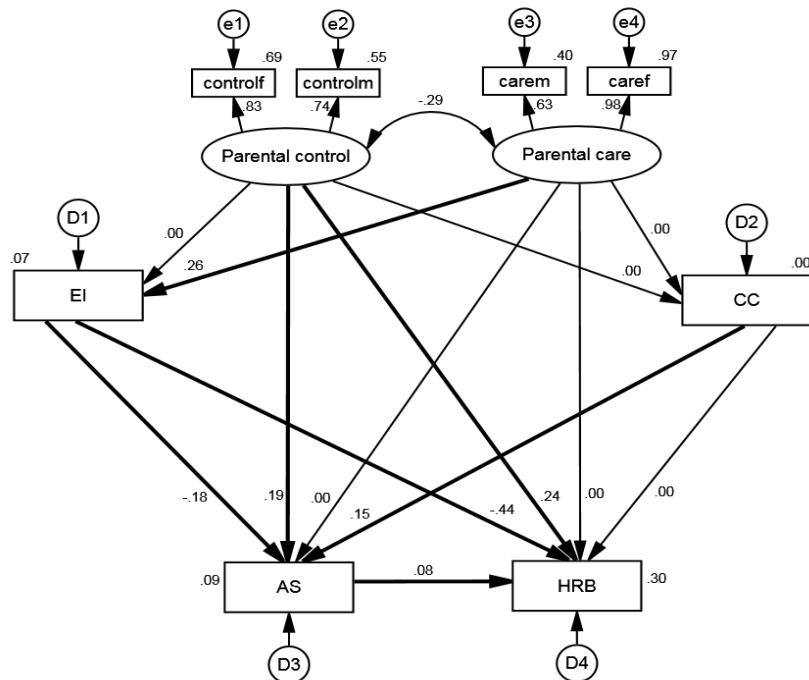


Figure 1. M 2-Complete mediational model for risk factors of health risk behaviors. EI= Emotional Intelligence; CC = College Connectedness; AS = Academic Stress; HRB = Health Risk Behaviors.

Table 2

Fit Indices of the Mediational Models

	$\chi^2(df)$	IFI	TLI	CFI	RMSEA	BCC	$\Delta\chi^2(df)$
M1	17.25(11)	0.98	0.95	0.98	0.05	69.35	-
M2	21.95(17)	0.99	0.98	0.99	0.04	61.54	4.7(6)

Note. M1 = Hypothesized model of the study; M2 = Modified model with constraints on nonsignificant parameters.

Table 3

Direct and Indirect Effects Estimated by SEM for hypothesized Model of the Study

	Emotional Intelligence		College Connectedness		Academic Stress						Health Risk Behaviors					
	Direct Effect		Direct Effect		Direct		Indirect		Total		Direct		Indirect		Total	
	β	p	β	p	β	p	β	p	β	p	β	p	β	p	β	p
Parental Care	.24	.00	.08	.13	.00	.47	-.03	.05	-.03	.34	-.08	.10	-.11	.00	-.19	.01
Parental Control	-.06	.31	-.03	.33	.18	.01	.01	.37	.19	.00	.21	.01	.04	.17	.25	.01
Emotional Intelligence					-.18	.01			-.18	.01	-.42	.00	-.02	.03	-.43	.00
College Connectedness					.15	.03			.15	.03	-.04	.29	.01	.04	-.02	.35
Academic Stress											.09	.05			.09	.05
R ²		.07		.01						.09						.31

Direct and indirect effect and their significance were estimated for the hypothesized model using bootstrap confidence intervals. As presented in Table 3, our results suggest a significant direct effect of parental care on emotional intelligence explaining a total of 7% variance in emotional intelligence. Academic stress appears to be directly predicted by parental control, emotional intelligence, and college connectedness, whereas, only indirectly and negatively predicted by parental care, while explaining at total of 9% variance in academic stress. Finally, analysis of direct and indirect effect on health risk behaviors show a significant incremental direct effect from parental control and college connectedness and a significant negative direct effect of emotional intelligence. Additionally, significant incremental indirect effect of college connectedness, whereas, significantly negative indirect effect of parental care and emotional intelligence were evidenced on health risk behaviors, explaining a total 31% variance in health risk behaviors.

Discussion

The current research was conducted to explore the relationship of parental bonding, college connectedness, and emotional intelligence with academic stress and health risk behaviors in students. Further, it aimed to assess college connectedness and emotional intelligence as mediators between parental bonding and academic stress. The study also aimed to assess the role of academic stress in link between college connectedness, emotional intelligence, and health risk behaviors.

Results revealed that emotional intelligence mediated the relationship between parental care and academics stress. Emotional intelligence also mediated the relationship between parental care and health risk behaviors. Parents' concerns and support make a child emotionally strong, enhance self-efficacy, reduce resentment, and help in better communication with parents in terms of discussing issues, so he/she can deal with academic issues in better way and protect one from indulging in self-damaging health risk behaviors. The findings are in line with the previous findings (see e.g., Ang & Huan, 2006; Field et al., 2002; Gerlsma et al., 1990; Leon & Leon, 1990; Parker, 1981; Leung, Yeung, & Wong, 2010). It was also observed that emotional intelligence indirectly predicted health risk behaviors through academic stress. More emotionally intelligent the student was better he or she was able to handle academic stressors and less he or she was involved in health risk behaviors.

Further, results revealed that students who perceived more parental control were more academically stressed in line with studies (Canetti et al., 1997; Sato et al. 1998) and got more involved in health risk behaviors consistent with previous findings (Cella et al., 2014; Ray et al., 2013; Tetley et al., 2014). Excessive control and less care by parents may turn into traumatic parental experiences of adolescents in their childhood which lead to formation of maladaptive schemas (Cooper, Wells, & Todd, 2004), negative emotions, and rebelliousness, thus, hindering educational adjustment and healthy behaviors.

Unexpectedly, college connectedness neither mediated between parental care and academic stress nor it mediated between parental control and academic stress. It seems that in Pakistan, parental care and concern with children is not transferred to their connectedness with their educational institute. This also throws light on lack of importance given to the educational institutions. Further, college connectedness was found to be positively related to academic stress, contrary to earlier findings that suggest that students who report high levels of depression, anxiety, and stress, have lower levels of connectedness to educational institute (McGraw et al., 2008). Further, college connectedness did not predict health risk behaviors in contrast to previous work of Bond et al. (2007) and Bonny et al. (2012). However, college connectedness predicted health risk behaviors through academic stress showing that students who feel more connected to their college experience more academic stress, which in turn lead them to get involved in health risk behaviors. It seems as if the educational institutions in Pakistan are not playing their role in shaping the behaviors of the students. The findings should be interpreted in the light of academic systems in colleges in Pakistan which are focused on completion of syllabi and good results with little focus on understanding of the content of syllabi and personal grooming. More studies need to be done to unravel this phenomenon.

Results of current research also showed that students with high level of academic stress reported to be involved in more health risk behaviors. Previous literature also found that students, who have high level of academic stress engage more in self-harming behavior (Ang & Huan, 2006; Ma, 2001; McCormack, 1996; Shafiq et al., 2006; Steptoe, et al., 1996; Weidner, et al., 1996). However, the result in current study was only marginally significant, showing a very weak relationship between academic stress and health risk behaviors. Inclusion of other stronger predictors of health risk behaviors in the model may be one reason for this weak link.

Limitations and Suggestions

Correlational nature of the study hinders from drawing the cause and effect relationships. Longitudinal studies can be more helpful in understanding the paths from parental bonding to academic stress and health risk behaviors. Due to the use of self-report measure, there is a chance that participants may not have responded truthfully. Therefore, careful generalizability of the findings is required.

Conclusion and Implications

Current research reveals the importance of indirect role of parental care in academic stress and health risk behavior through emotional intelligence of the intermediate college students. Direct role of parental control in academic stress and health risk behaviors can also be observed. It further reveals the role of college connectedness in academic stress of students, which in turn leads to health risk behaviors. Findings have important implications for parental training programs to focus on appropriate parenting patterns of more care and less control. Further, educational institutions need to work on their environment, the connectedness to which seems to be hazardous to students' mental health aspects.

References

- Ang, R. P., & Huan, V. S. (2006). Relationship between academic stress and suicidal ideation: Testing for depression as a mediator using multiple regressions. *Child Psychiatry and Human Development*, 37(2), 133-143.
- Anwar, T. (2012). *Risk factors of academic stress and health risk behaviors in intermediate students* (Unpublished M. Phil Thesis). University of the Punjab, Lahore, Pakistan.
- Austin, E. J., Saklofske, D. H., & Egan, V. (2005). Personality, well-being, and health correlates of trait emotional intelligence. *Personality and Individual Differences*, 38(3), 547-558.
- Bar-On, R. (2000). The Emotional Quotient Inventory (EQ-I): A Test of emotional intelligence. In R. Bar-On, & J. Parker (Eds.), *The handbook of emotional intelligence* (pp. 343-362). San Francisco: Jossey-Bass Inc.
- Batool, S. S., & Khalid, R. (2009). Low emotional intelligence: A risk factor for depression. *Journal of Pakistan Psychiatric Society*, 6(2), 65-72.
- Bond, L., Butler, H., Thomas, L., Carlin, J., Glover, S., Bowes, G., & Patton, G. (2007). Social and school connectedness in early secondary school as

- predictors of late teenage substance use, mental health, and academic outcomes. *Journal of Adolescent Health*, 40(4), 357-357.
- Bonny, A. E., Britto, M. T., Klostermann, B. K., Hornung, R. W., & Slap, G. B. (2012). School disconnectedness: Identifying adolescents at risk. *Pediatrics*, 106(5), 1017-1021.
- Canetti, L., Bachar, E., Galili-Weisstub, E., De Nour, A. K., & Shalev, A. Y. (1997). Parental bonding and mental health in adolescence. *Adolescence*, 32(126), 381-394.
- Cella, M., Iannaccone, M., & Cotrufo, P. (2014). How perceived parental bonding affects self-concept and drive for thinness: A community-based study. *Eating Behaviors*, 15(1), 110-115
- Ciarrochi, J. V., & Deane, F. P. (2001). Emotional competence and willingness to seek help from professional and nonprofessional sources. *British Journal of Guidance and Counseling*, 29(2), 233-246.
- Cooper, M. J., Wells, A., & Todd, G. (2004). A cognitive model of Bulimia Nervosa. *British Journal of Clinical Psychology*, 43(1), 1-16.
- Dawda, D., & Hart, S. D. (2000). Assessing emotional intelligence: Reliability and validity of the Bar-on Emotional Quotient Inventory (EQ-i) in university students. *Personality and Individual Differences*, 28(4), 797-812.
- Extremera, N., & Fernández-Berrocal, P. (2005). Perceived emotional intelligence and life satisfaction: Predictive and incremental validity using the trait meta-mood scale. *Personality and Individual Differences*, 39(5), 937-948. doi:http://dx.doi.org/10.1016/j.paid.2005.03.012
- Field, T., Diego, M., & Sanders, C. (2002). Adolescents' parent and peer relationships. *Adolescence*, 37(145), 121-130.
- Forushani, N. Z., & Besharat, M. A. (2011). Relation between emotional intelligence and perceived stress among female students. *Procedia-Social and Behavioral Science*, 30, 1109-1112. doi:http://dx.doi.org/10.1016/j.sbspro.2011.10.216
- Gerlsma, C., Emmelkamp, P. M., & Arrindell, W. A. (1990). Anxiety, depression, and perception of early parenting: A Meta-analysis. *Clinical Psychology Review*, 10(3), 251-277.
- Guzman, M. R., & Bosch, K. R. (2007). *High-risk behaviors among youth*. University of Nebraska – Lincoln. Retrieved from <http://www.ianrpubs.unl.edu/pages/publicationD.jsp?publicationId=786>
- Hall, N. C., Chipperfield, J. G., Perry, R. P., Ruthig, J. C., & Goetz, T. (2006). Primary and secondary control in academic development: Gender-specific implications for stress and health in college students. *Anxiety, Stress, and Coping*, 19(2), 189-210.
- Lee, M., & Larson, R. (2000). The Korean examination hell: Long hours of studying, distress, and depression. *Journal of Youth and Adolescence*, 29(2), 249-271. doi:10.1023/A:1005160717081

- Leon, C., & Leon, A. (1990). Panic disorder and parental bonding. *Psychiatric Annals*, 20(9), 503-508.
- Leung, G. M., Yeung, K. C., & Wong, D. K. (2010). Academic stressors and anxiety in children: The role of paternal support. *Journal of Children and Family Studies*, 19(1), 90-100. doi:10.1007/s10826-009-9288-4
- Lezin, N., Roller, L. A., Bean, S., & Taylor, J. (2004). *Parent-child connectedness: Implications for research, interventions, and positive impacts on adolescent health*. Santa Cruz, CA: ETR Associates.
- Linden, D. van der, Klaveren, D. van & Dunkel, C. S. (2015). Emotional intelligence (EI) is an indicator of a slow life history strategy: A test of ability and trait EI. *Personality and Individual Differences*, 73(1), 84-87
- Lou, W., & Chi, I. (2000). The stressors and psychological well-being of senior secondary school students. *Psychological Science*, 23(2), 156-159.
- Lund, H. G., Reider, B. D., Whiting, A. B., & Prichard, J. R. (2010). Sleep patterns and predictors of disturbed sleep in a large population of college students. *Journal of Adolescent Health*, 46(2), 124-132.
- Ma, X. (2001). Bullying and being bullied: To what extent are bullies also victims? *American Educational Research Journal*, 38(2), 351-370.
- MacGeorge, E. L., Samter, W., & Gillihan, S. J. (2005). Academic stress, supportive communication, and health. *Communication Education*, 54(4), 365-372.
- Marshall, L. L., Allison, A., Nykamp, D., & Lanke, S. (2008). Perceived stress and quality of life among doctor of pharmacy students. *American Journal of Pharmaceutical Education*, 72(6), 137.
- Matthews, G., Zeidner, M., & Roberts, R. D. (2002). *Emotional intelligence: Science and myth*. Cambridge, MA: MIT Press.
- McCormack, A. S. (1996). Drinking in stressful situations: College men under pressure. *College Student Journal*, 30(1), 65-68.
- McGraw, K., Moore, S., Fuller, A., & Bates, G. (2008). Family, peer and school connectedness in final year secondary school students. *Australian Psychologist*, 43(1), 27-37. doi:10.1080/00050060701668637
- Misra, R., & Castillo, L. G. (2004). Academic stress among college Students: Comparison of American and international students. *International Journal of Stress Management*, 11(2), 132-148. doi:10.1037/1072-5245.11.2.132
- Parker, G., Tupling, H., & Brown, I. B. (1979). A Parental Bonding Instrument. *British Journal of Medical Psychology*, 52(1), 1-10.
- Parker, G. (1981). Parental reports of depressives: An investigation of several explanations. *Journal of Affective Disorder*, 3(2), 131-140. doi:http://dx.doi.org/10.1016/0165-0327(81)90038-0
- Pedersen, W. (1994). Parental relations, mental health, and delinquency in adolescents. *Adolescence*, 29(116), 975-975.

- Por, J., Barriball, L., Fitzpatrick, J., & Roberts, J. (2011). Emotional intelligence: Its relationship to stress, coping, well-being, and professional performance in nursing students. *Nurse Education Today*, 31(8), 855-860. doi:org/10.1016/j.nedt.2010.12.023
- Ray, C., Kalland, M., Lehto, R., & Roos, E. (2013). Does parental warmth and responsiveness moderate the associations between parenting practices and children's health related behaviors? *Journal of Nutrition Education and Behavior*, 45(6), 602-610
- Resnick, M. D., Bearman, P. S., Blum, R. W., Bauman, K. E., Harris, K. M., Jones, J., & Udry, J. R. (1997). Protecting adolescents from harm: Findings from the national longitudinal study on adolescent health. *Journal of the American Medical Association*, 278(10), 823-832.
- Rutter, M., Graham, P., Chadwick, O. F. D., & Yule, W. (1976). Adolescent turmoil: Fact or fiction. *Journal of Psychology and Psychiatry and Allied Disciplines*, 17(1), 35.
- Salimynezhad, S., Poor, N. Y., & Valizade, A. (2015). The studies of relationship between parental styles with emotional intelligence in elementary schools students of Makoo. *Procedia - Social and Behavioral Sciences*, 205, 221-227. doi:10.1016/j.sbspro.2015.09.063
- Sato, T., Sakado, K., Uehara, T., Narita, T., Hirano, S., Nishioka, K., & Kasahara, Y. (1998). Dysfunctional parenting as a risk factor to lifetime depression in a sample of employed Japanese adults: Evidence for the "affectionless control" hypothesis. *Psychological Medicine*, 28(3), 737-742.
- Shochet, I., Homel, R., & Montgomery, D. (2008). How do school connectedness and attachment to parents interrelate in predicting adolescent depressive symptoms? *Journal of Clinical Child and Adolescent Psychology*, 37(3), 676-681. doi:10.1080/15374410802148053.
- Schutte, N. S., Malouff, J. M., Thorsteinsson, E. B., Bhullar, N., & Rooke, S. E. (2006). A meta-analytic investigation of the relationship between emotional intelligence and health. *Personality and Individual Differences*, 42(6), 921-933.
- Shafiq, M., Shah, Z., Saleem, A., Siddiqi, M. T., Shaikh, K. S., Salahuddin, F. F., ... Naqvi, H. (2006). Perceptions of Pakistani medical students about drugs and alcohol: A questionnaire-based survey. *Substance Abuse Treatment, Prevention, and Policy*, 1(31). doi:10.1186/1747-597X-1-31.
- Slaski, M., & Cartwright, S. (2002). Health, performance, and emotional intelligence: An exploratory study of retail managers. *Stress and Health*, 18(2), 63-68.
- Steinberg, L. (2001). We know some things: Parent-adolescent relationships in retrospect and prospect. *Journal of Research on Adolescence*, 11(1), 1-19. doi:10.1111/1532-7795.00001
- Steptoe, A., Wardle, J., Pollard, T. M., Canaan, L., & Davies, G. J. (1996). Stress, social support and health-related behavior: A study of smoking,

- alcohol consumption and physical exercise. *Journal of Psychosomatic Research*, 41(2), 171-180.
- Sun, J., Dunne, M. P., Hou, X., & Xu, A. (2011). Educational Stress Scale for Adolescents: Development, validity, and reliability with Chinese students. *Journal of Psycho-educational Assessment*, 29(6), 534-546.
- Sunil, K., & Rooprai, K. Y. (2009). Role of emotional intelligence in managing stress and anxiety at workplace. Proceedings of ASBBS, 16(1). Retrieved from <http://asbbs.org/files/2009/PDF/R/- Rooprai.pdf>
- Tetley, A., Moghaddam, N. G., Dawson, D. L., & Rennoldson, M. (2014). Parental bonding and eating disorders: A systematic review. *Eating Behaviors*, 15(1), 49-59.
- Trinidad, D. R., Unger, J. B., Chou, C. P., Azen, S. P., & Johnson, C. A. (2004). Emotional intelligence and smoking risk factors in adolescents: Interactions on smoking intentions. *Journal of Adolescent Health*, 34(1), 46-55.
- Tsaousis, I., & Nikolaou, I. (2005). Exploring the relationship of emotional intelligence with physical and psychological health functioning. *Stress and Health*, 21(2), 77-86.
- Weidner, G., Kohlmann, C., Dotzauer, E., & Burns, L. R. (1996). The effects of academic stress on health behaviors in young adults. *Anxiety, Stress & Coping: An International Journal*, 9(2), 123-133. doi:10.1080/10615809608249396

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