Emotional Intelligence, Anxiety and Procrastination in Intermediate Science Students

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The present study examined the relationship among emotional intelligence, anxiety and procrastination of intermediate science students. It was hypothesized that there would be negative relationship between emotional intelligence and procrastination. It was further hypothesized that there would be a positive relationship between anxiety and procrastination. Furthermore, it was expected that anxiety and emotional intelligence would predict procrastination. Furthermore, it was expected that anxiety and emotional intelligence would predict procrastination. Passive Procrastination Scale (Chu & Choi, 2005), Schutte Self-Report Emotional Intelligence Test (Schutte et al., 1998) and State-Trait Anxiety Inventory (Spielberger, Gorsuch & Lushene, 1970) were administered on a sample of 102 female students from science faculty of public sector colleges. Results from Pearson product moment correlation revealed no relationship of emotional intelligence with procrastination and anxiety. However, a positive relationship was found between trait anxiety and procrastination. Regression analysis revealed that trait anxiety predicted procrastination after taking into account the emotional intelligence and state anxiety.

Keywords: emotional intelligence, procrastination, anxiety

College and university life is filled with excitement and fun for the students but along with that, the students have to face the pressure of assignments, projects, term papers as well as meeting deadlines. Most of the students put off until tomorrow what can be done today, leading to a common phenomenon known as procrastination. Procrastination is the lack or absence of selfregulated performance and the behavioral tendency to delay what is necessary to reach a goal. As the work load increases in the final year and greater level of effort is required from the students, they feel pressured. Some students cope with this pressure by acting wisely and managing their tasks timely, whereas some students fail to maintain a timed schedule. They fail in making choices related to their academic work. The present study aimed to investigate the relationship of emotional intelligence and procrastination, specifically passive procrastination with anxiety in intermediate science students.

According to Ferrari, Johnson and McCown (1995) the term procrastination directly comes from the Latin verb procrastinate, meaning to put off or delay until another day. Harriott and Ferrari (as cited in Morales, 2007) have found procrastination to be a phenomenon prevalent in the general population, constantly affecting a substantial portion of adults as well as university students.

Academic procrastination involves the delaying of academic tasks due to some reason. Solomon and Rothblum (1984) have described academic procrastination as holding up primary academic tasks such as preparation for exams, completion of term papers, administrative responsibilities related to school and duty of attendance.

Ferrari (2000) classified procrastinators into three types, based on the reason they delay things: a) arousal types get thrilled when they become successful in beating a deadline. They find it challenging and exciting, b) avoiders put off things as a result of low self-efficacy which is an attempt to reduce anxiety, c) decisional procrastinators lack the ability to make a decision within a specific period of time. Chu and Choi (2005) divided procrastination into active and passive procrastination. Active procrastinators are capable of managing their tasks in a timely manner. However, they suspend their actions on purpose and concentrate on other important tasks at hand. Passive procrastinators are procrastinators in the typical sense. Cognitively, passive procrastinators do not intend to procrastinate, but they often end up delaying tasks because they are incapable of making decisions and thereby acting on them quickly.

Factors of procrastination may be situational or personal. The cause of procrastination has been a major concern for many theorists. Among the situational factors, the work load of assignments and improper time management by the students has been considered important causes of academic procrastination (Sultan & Hussain, 2010). Research studies have revealed that personal dispositional factors associated with fear of failure, such as depression and anxiety often lead to procrastination (Chang, 2014; Milgram & Toubiana, 1999; Senecal, Koestner, & Vallerand, 1995). A significant relationship has also been observed between academic procrastination and anxiety (Bilal, 2009; Farran, 2004; Glick, Millstein, &Orsillo, 2014; Milgram &Toubiana, 1999). Individuals procrastinate on the tasks that they find anxiety provoking and as a result they delay the tasks. Anxiety is a psychophysiological phenomenon experienced as a foretold fear or threat to human being whether the threat is generated by internal, real or imagined danger (Emilien, Durlach, Lepola & Dinan, 2002). Akinsola, Tella, and Tella (as cited in Olubusayo, 2010) also suggested that students resist completing the assignments and deadlines that create tension and anxiety. They prefer delaying such tasks, resulting in procrastination. This can be explained in the light of the Appraisal-Anxiety-Avoidance (AAA) model presented by Lazarus and Folkman (1984). It states that procrastination is the consequence of cognitive evaluation of the task. People analyze whether a given situation is threatening to them and whether they have the resources to deal with this threat efficiently. If the situation is anticipated to be threatening and their resources are not ample enough, they react with stress reactions, including anxiety. As a result, they try to

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escape from the situation. Escape takes the form of delaying the task in hand that provokes anxiety. Avoiding the task reduces the stress and anxiety (Milgram, Mey-Tal & Levison, 1997).

However, some individuals have the ability to understand their emotions clearly and regulate them in order to cope with negative events. Salovey and Mayer (1990) define emotional intelligence (EI) as understanding and managing one's own and others' emotions in order to solve the problems. Anxiety is an emotional state that is likely to be experienced in negative events. Research studies have revealed that a negative relationship exists between emotional intelligence and anxiety (Ciarrochi, Chan, &Bajgar, 2001; Fernandez-Berrocal & Extremera, 2006; Slear & Connor, 2010; Sunil & Rooprai, 2009). Emotions directly influence thought to facilitate better decision, thinking and action. Whereas, reasoning and thinking operate on emotional information. There are some basic principles of how emotions influence thinking. When we are in a negative mood, we focus more on details and tend to be more critical and the search for errors increases. Whereas, being in positive mood helps us see more outcomes resulting in a better yield. It further promotes having an open and extensive view of the world (Emmerling, Shanwal, & Mandal, 2008). Emotional Intelligence has also been found to have a negative relationship with procrastination (Chow, 2011; Deniz, Tras, & Aydogan, 2009; Heward, 2010) Emotionally intelligent individuals pay greater attention to their own emotions, have greater emotional clarity and are capable of emotional repair and thus are able to complete their tasks in time (Heward, 2010).

Viewing the above mentioned research studies and keeping their findings in mind, the present study aimed to investigate the relationship of emotional intelligence and anxiety with procrastination of intermediate science students. It further focused on how anxiety and emotional intelligence predict procrastination. The following hypotheses were purported. (a) There is likely to be a negative relationship between emotional intelligence and procrastination. (b) There is likely to be a positive relationship between procrastination and both state and trait anxiety (c) There is likely to be a negative relationship between emotional intelligence and both state and trait anxiety. (d) Emotional intelligence and state and trait anxiety are likely to predict procrastination.

Method

Sample

Convenient sampling strategy was adopted to collect the data. The sample comprised of 102 female intermediate final year premedical and pre-engineering students (M age= 17.41, SD= 0.73) from 10 public sector colleges of Lahore. In the sample, 96 % of the students were day scholars, while 4 % were those who were living in the hostels. Moreover, 54% of the students belonged to premedical faculty, while 46% of them were from pre-engineering faculty.

Instruments

Demographic information questionnaire. It assessed the demographic variables such as age, faculty, regular or hostel students.

Schutte self-report emotional intelligence test. It measures the four factors of emotional intelligence, 1) the appraisal of emotion in self and others, 2) the expression of emotion, 3) the regulation of emotion in self and others, and 4) the application of emotion in problem solving. The questionnaire comprised of 33 items (e.g., "I know when to speak about my personal problems to others.") using a 5-point likert scale extending from 1 = "strongly disagree" to 5 = "strongly agree". Items 5, 28, and 33 were reverse scored before calculating the total score on emotional intelligence. High score indicated high level of emotional intelligence (Schutte et al., 1998). Cronbach's alpha for the current study was .90.

Passive procrastination scale. Passive procrastination scale was used to assess the level of procrastination. The scale measures the procrastination construct in the sense that those with high scores are those who are hindered by their indecision and often fail to complete tasks on time. It consists of 5 statements (e.g., Even after I make a decision I delay acting upon it.") in which respondents were asked to rate their level of agreement on a 7-point scale ranging from 1 = "Not at all True" to 7 = "Very True" (Chu & Choi, 2005). The Cronbach's alpha coefficient for the current study was found to be .67.

State-trait anxiety inventory. Anxiety was assessed using the State-Trait Anxiety Inventory (Spielberger, Gorsuch & Lushene, 1970). It consists of separate self-report scales for measuring two distinctive concepts: the state anxiety (A-state) and trait anxiety (A-trait). The STAI A-trait scale consists of 20 statements (e.g., I feel calm.") that ask people to describe how they generally feel. The A-state scale also constitutes 20 statements (e.g., I wish I could be as happy as others seem to be.") but the instructions require subjects to indicate how they feel at particular moment in time. Scoring was done on 4-point scale ranging from 1= Not at all to 4= Very much so. The internal consistency of STAI for the current study was found to be .76.

Procedure

Students were approached in their colleges after the formal permission from heads of the institutes. The students, who were free at the time of study and willing to participate, were asked to fill in the questionnaires. The participants were informed about the nature and purpose of the research and were ensured of privacy regarding their identity. They were also ensured that they could leave the study whenever they wanted to. Total of 120 participants were approached. Out of which 22 refused with the total response rate of 82%. The participants took maximum 30 minutes to complete the given questionnaires. At the end of data collection the respondents were thanked for their cooperation.

Results

Descriptive statistics were computed for emotional intelligence, procrastination and state-trait anxiety scores. Pearson productmoment correlation was used to assess the relationship of state-trait anxiety with emotional intelligence and procrastination

Zero order correlations in Table 1 show that unexpectedly emotional intelligence was not found to significantly correlate with state and trait anxiety. However, as assumed, positive relationship was observed between trait anxiety and procrastination. In addition, no relationship was found between emotional intelligence and procrastination.

To clarify the relationship of emotional intelligence, state anxiety and trait anxiety with procrastination further, regression analysis was conducted with emotional intelligence, state and trait anxiety as predictors and procrastination as criterion variable, using enter method. As can be seen in Table 2 that only trait anxiety predicted procrastination. Overall, the results indicated that more the students were anxious in general, more they tended to procrastinate.

Table 1

Means, Standard deviation and Inter-correlations of Emotional Intelligence, Anxiety and Procrastination (N=102)

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Variables	М	SD	1 2	3	4
1 Emotional Intelligence	122.38	14.90	16	.10	02
2 State Anxiety	44.81	7.67		.39*	.07
3Trait Anxiety	50.07	7.93			.36*
4 Procrastination	20.44	7.30			
* <i>p</i> < .05					

Table 2

Regression Analysis for Predicting Procrastination (N = 102)

Variables	β	р
Emotional Intelligence	08	.39
State Anxiety	10	.32
Trait Anxiety	.41	<.001
F	5.54	.001
R^2	.15	

Discussion

This study was conducted to understand how emotional intelligence and anxiety relate to procrastination in students. Primarily it was hypothesized that there was likely to be a negative relationship between emotional intelligence and procrastination. It was revealed that emotional intelligence and procrastination had no significant relationship. The findings of the present research are inconsistent with the earlier findings (Chow, 2011; Deniz, Traș & Aydoğan, 2009; Heward, 2010). More studies need to be conducted to get a better understanding of this relationship. It may be that some of the dimensions of emotional intelligence rather the whole construct would have been related to procrastination. Moreover, some other factors may be more responsible for procrastination of intermediate students than emotional intelligence. For example, Researchers have reported relationship of self-efficacy with procrastination (e.g. Aremu, Agokei, &Ugoji, 2011, Azizian & Samadi, 2012). Individuals who have high self-efficacy are more earnest to learn activities, magnify their efforts toward activities and may develop more effective problem solving strategies against difficulties they stumble upon.

It was hypothesized that there was likely to be a positive relationship between anxiety and procrastination. It was observed that students with high level of trait anxiety were more prone towards procrastination. The present findings are consistent with the previous findings (Bilal, 2009; Chang, 2014; Farran, 2004; Milgram &T oubiana, 1999; Senecal, Koestner, & Vallerand, 1995; Stoeber & Joormann, 2001). These research findings confirm the appraisalanxiety avoidance (AAA) model. The participants perceived the academic tasks as threatening and avoided performing them in time. This finding seems to be consistent with Freud's psychoanalytic theory. To Freud the individual's ego is threatened because of incomplete duties and avoidance from duties and procrastination appears as a result (Ferrari, Johnson, & McCown, 1995). However, no significant relationship was found between state anxiety and procrastination. The results can be attributed to the fact that at the time of data collection, the colleges from where the data was collected either didn't have any examination scheduled or the students had gotten free from the pre-final examination. So they had nothing to procrastinate at that time, resulting in non-significant correlation between their current anxiety and procrastination.

Analysis of the third hypothesis revealed no significant relationship between both state and trait anxiety and emotional intelligence. The results are not in line with the previous findings (Ciarrochi, Chan, & Bajgar, 2001; Fernandez-Berrocal et al., 2006; Slear& Connor, 2010; Sunil & Rooprai, 2009). These researches followed the same model of emotional intelligence upon which this current study is based. However, the current study included only female participants. Moreover, cultural difference must be kept into account. Ahmad, Bangash, and Khan (2009) found that males have higher emotional intelligence than females indicating that men show more insolence, recognition of self, show more independence and management according to the situations than the women. Emotional intelligence mainly deals with the management and expression of one's emotions as well as social skills. The females of west have freedom of speech and they are better able to understand and manage their emotions. Peeking into the eastern culture, we find suppression of female emotions. Moreover, among Pakistani females there may be other more important factors of procrastination than emotional intelligence which have not been included in the study. Although this research provides support for trait anxiety in determining academic procrastination but some limitations should be acknowledged to be worked upon in future research. The correlational nature of this study precludes making any causal statements. Longitudinal and experimental study should be conducted to find the cause and effect relationship among the variables.

Conclusion.

The present study examined the relationships among emotional intelligence, anxiety and procrastination of intermediate science students in the light of appraisal-anxiety avoidance (AAA) model. Analysis revealed that trait anxiety was the only predictor of procrastination indicating that students who were anxious by disposition tended to procrastinate more. The findings of this research will help in understanding the role of anxiety in procrastination in cultural scenario. The results of this study will assist students in understanding the negative emotions related to procrastination and then dealing with them. With the help of the outcomes of the study, consideration should be given to reduce anxiety that may contribute towards reduction in procrastination.

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