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Perceived Emotional Intelligence and Academic Adjustment in Transition Phase: Examining the Mediating Role of Personality

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The goal of the present study was to explore the relationship between emotional intelligence and academic adjustment over and above personality. The sample comprised of 243 adolescents studying in 11th standard. The respondents completed self report measures of emotional intelligence, academic adjustment, and personality. Results indicated that overall emotional intelligence was correlated with neuroticism, extraversion, openness, and conscientiousness. Overall emotional intelligence was also correlated with overall academic adjustment; however, this relationship was not independent of the personality dimensions that were significantly related to overall emotional intelligence. Further analysis showed that overall academic adjustment and all its subscales were correlated significantly with neuroticism, agreeableness, and conscientiousness, but insignificant with extraversion and openness; there was one exception that openness was correlated significantly with mental health component of academic adjustment.

Keywords: Perceived emotional intelligence; Academic adjustment; Personality; Adolescents.

Nowadays it is becoming more important to achieve academic success in order to survive in the highly competitive world. Students are facing tremendous pressure in order to meet these requirements. Some students have academically sound motives to study, whereas others are confused and stressed this may result in poor health, physically as well as mentally thus withdrawal from school is likely. It is believed that emotional intelligence might play an important role in the life of the students who enter the college life for the first time.

Emotional intelligence

There are different theories on emotional intelligence (EI). Some authors propose it as ability model (Mayer & Salovey, 1997) and others include aspects of personality and ability (Bar-On, 1997). EI from the ability perspective is conceptualized as ability to perceive (e.g., identification of emotion from the facial expression), use (using emotion for constructive thought processes), understand (e.g., understanding the transition of emotion from one component to the other), and regulate emotions of own as well as others (Mayer & Salovey, 1997). Ability model is measured through ability measure (e.g., Mayer-Salovey-Caruso Emotional Intelligence Test, MSCEIT, Mayer et al, 2002) as well as self-report measures (e.g., Schutte, Malouff, Hall, Haggerty, Cooper, & Golden, 1998). The MSCEIT is reliably measured at the four branch levels and there is some evidence for convergent, divergent, and incremental validity (see, Mayer, Salovey, Caruso, 2004). However, whether EI is a type of intelligence is still a matter of debate among the academic community. Besides, the question of whether EI is providing a new avenue for meaningful research is also a matter of concern for many serious psychologists (see, Thingujam, 2004; Zeidner, Roberts, & Matthews, 2008). We believe that more research in the area of

convergent, discriminant, and incremental validity of the measures of EI should be carried out to answer this question empirically in different cultural context such as India.

Academic adjustment: It could refer to the adjustment of the students in their college life that may include academic time table, college social life, interaction with peers and teachers, and its outcomes on mental health and academic achievement. Academic adjustment is extremely important for students who are in the 11th standard as they are in the transition stage of their academic life. After passing out of the 10th standard they face totally different academic environment which requires proper adjustment. They have to interact with new friends, new teachers, and new academic systems. According to Ramsay, Barker and Jones (1999), academic adjustment is the achievement toward the fit between the students and their academic environment. In this study, we are interested to examine the linkage between students' academic adjustment and ability to identify, understand, use, and manage emotions which are considered as the major components of EI by Mayer and Salovey (1997).

Emotional intelligence (EI) and academic adjustment: Overall EI as assessed by ability measure was correlated with college grade point average (GPA) and high school rank (Brackett & Mayer, 2003). Lower EI measured by ability test has been related to greater use of alcohol, drugs, and higher deviant behaviour of young college male students (Brackett, Mayer, & Warner, 2004). Among the college students ability to manage emotions was positively correlated with the quality of social interactions (Lopes, Brackett, Nezlek, Schutz, Sellin, & Salovey, 2004). Students with higher scores on overall EI ability, perceiving emotions, using emotions, understanding emotions, and managing emotions tended to show lower score on negative interaction with close friend. Further, this study found that managing emotion ability of the students was related to positive relations with others and self-perceived social skills (Lopes, Salovey, & Straus, 2003). Self-reported managing self emotion of the young students was significantly and negatively correlated with hassles, suicidal tendency, depression, and hopelessness (Ciarrochi, Deane, & Anderson, 2002). The literature reviewed so far indicate that different aspects of EI are important in the life of the college students.

Role of personality

Five dimensions of personality are taken into consideration for examining the role of personality in the emotional intelligence-academic adjustment linkage. The different personality dimensions are neuroticism (emotional instability), extraversion (extraverted, outgoing, active, and high-spirited), openness (being open to new experiences, having broad interests in life, and highly imaginative), agreeableness (being eager to cooperate and avoid conflict, compassionate, and good-natured), and conscientiousness (being well-organized, having high standards and striving for achieving goals) (Costa & McCrae, 1992). EI assessed by ability measure showed that the above mentioned personality dimensions are correlated either insignificantly or significantly (low to moderately) with overall EI (see, Thingujam, 2004 for extensive review). However, in most of the studies the correlation between self-reported EI and these personality dimensions are significant in the range of low, moderate, and high across the studies (cf. Thingujam, 2004).

Till date there is no study that examines the relationship between perceived (self-reported) EI and academic adjustment controlling Five-Factor dimensions of personality. It is important to control personality for understanding whether EI is related to academic achievement independent of personality which is already

well-studied before the introduction of the concept of EI. On the basis of the literature reviewed the following hypotheses were framed:

a) Emotional intelligence (EI) is positively correlated with academic adjustment.

b) Emotional intelligence (EI) is correlated with academic adjustment over and above personality.

Method

Sample:

The present sample consisted of 243 students of which 126 were males and 117 females. The age group ranged from 15 to 18 years (*M* = 16. 24, *SD* = .73). All participants were students in class 11th in Junior colleges in Pune. In Maharashtra students who are in 11th and 12th are generally considered to be in junior college. The entire test was administered in English. Only those students were selected whose medium of instruction was English at school and college level. The sample was cosmopolitan comprising students from different communities of India. In order to make the sample representative students from arts, science and commerce streams were selected.

Measures:

Emotional intelligence (EI): It was assessed by Swinburne Emotional Intelligence Test-Adolescent Version (Adolescent SUEIT; Palmer, Stough, & Luebbers, 2003) which is a self report measure of ability model of EI by Mayer and Salovey (1997). It contains 57 items to be responded to on a 5 point scale ranging from "very seldom" to "very often". There are four subscales for the measurement of emotional recognition and expression, understanding emotions of others, emotions direct cognitions (EDC), and emotional management and control. The reliability coefficients for subscales ranged from .75 to .81. Composite SUEIT adolescent had alpha co-efficient reliability of .85. A higher score indicates higher EI.

Academic adjustment: The college inventory of academic adjustment by Borow (1949) was employed for the measurement of academic adjustment and it is designed to identify certain important attributes, apart scholastic aptitude, that have been shown to relate to college student's academic performance. The 90-item scale spread over six diagnostic categories, that is, curricular adjustment (adjustment with chosen curriculum and college routine), maturity of goals and level of aspiration (adjustment in life goals, efforts to achieve them, and sense of values), personal efficiency and planning use of time (adjustment in the area of scheduling and carrying out daily activities effectively), study skills and practices (ability to develop good study skills and practices), mental health (emotional adjustment), and personal relations (ability to establish good relation with faculties and associates). Students are required to respond to in a 3-point rating scale, that is, "Yes", "No", and "Undecided". The test retest reliability coefficients ranged from 0.81 to .89 for the sub-scales and for composite inventory it was 0.92. The spilt half reliability coefficients for the composite inventory were .92 for males and .90 for females.

Personality: It was assessed by NEO Five–Factor Inventory (NEO-FFI; Cost & McCrae, 1992) which is a concise measure of 5 major dimensions of personality, that is, neuroticism (N), extraversion (E), openness (O), agreeableness (A), and conscientiousness (C). There are 60 items to be responded to on a five-point scale, that is, "strongly disagree", "disagree", "neutral", "agree", and "strongly agree". Internal consistency coefficients were above .70 except for A (alpha = .68). It is psychometrically sound and widely used in India and all over the world.

Procedure:

Junior Colleges in the city of Pune were identified randomly; Permission to administer the tests was sought from the Principals. The students were requested to participate in the study. A brief explanation about the purpose of the study was given to them. Rapport was established with the students and they were assured about the confidentiality of the results. The students were given the standard set of instructions and were requested to fill in personal details. Students were required to respond to questions on booklets. Meanings to difficult words were provided separately on the booklets. Students were encouraged to ask doubts. The test was administered in batches of 30 students in a formal setting in the classrooms. The duration of the entire administration of the tests in each session lasted for one hour and fifteen minutes approximately.

Results

For academic adjustment internal consistency reliabilities are a little lower than the rule of thumb suggested by Nunnaly (1978) for three subscales, that is, personal efficiency and planning use of time, study skills and practices, and mental health but far lower for the remaining subscales, that is, curriculum adjustment, maturity of goals and level of aspiration, and personal relations. But the internal consistency reliability for the overall academic adjustment is high. In the case of EI too the internal consistency reliabilities are a bit lower for overall emotional intelligence and understanding emotions of others, but pretty low for emotional recognition and expression, emotions direct cognition, and emotional management and control.

Table 1 indicates EI's correlation with academic achievement and personality. It is observed that overall EI is correlated with neuroticism, extraversion, openness, and conscientiousness. Overall EI is also correlated with overall academic adjustment. One interesting observation from Table 3 is that overall academic adjustment and all its subscales are correlated significantly with neuroticism, agreeableness, and conscientiousness, but insignificant with extraversion and openness; there is one exception that openness is correlated significantly with mental health component of academic adjustment. At the subscale levels, emotional management and control is the only component of EI that is significantly correlated with all the subscales of academic adjustment. The other three sub-scales of EI, that is, emotional recognition and expression, understanding the emotions of external, and

Table 1. Emotional intelligence's correlation with academic adjustment and personality

	EI	EREXP	UEX	EDC	EMC
CA	0.13	0.08	0	-0.01	0.15*
MGLA	0.27**	0.21**	0.12	0.03	0.24**
PEPUT	0.29**	0.21**	0.13*	-0.08	0.35**
SSP	0.30**	0.12	0.16*	-0.04	0.37**
Mental health	0.21**	0.07	0.11	-0.14*	0.39**
Personal relation	0.23**	0.13	0.15*	0.09	0.14*
AA	0.33**	0.21**	0.15*	-0.07	0.41**
Neuroticism	-0.32**	-0.13	-0.15*	0.17*	-0.54**
Extraversion	0.22**	0.16*	0.15*	-0.03	0.19**
Openness	0.21**	0.05	0.22**	0.03	0.08
Agreeableness	0.11	0.01	0.07	-0.1	0.18**
Conscientiousness	0.34**	0.08	0.29**	0	0.37**

** p<.01 * p <.05

emotions direct cognition show mixed results in their linkage with components of academic adjustment because some of the correlations are significant while others are insignificant.

One surprise finding observed from Table 3 is that while checking interrelationship of the subscales only the emotional management and control subscale is significantly correlated with other subscales although all the subscales are significantly correlated with the overall EI; so the four subscales of the Adolescent SUEIT in the present data do not go hand in hand to fall under one common construct called EI. This finding is largely opposite to the one reported by Luebbers, Downey, and Stough (2007) because these researchers found all the subscales to be significantly correlated to each other. However, as one can see from Table 5 the subscales of the Academic Adjustment Inventory are all significantly correlated with each other, so it can be concluded that these subscales tend to go hand in hand to jointly measure academic adjustment.

As some personality dimensions are significantly correlated with EI partial correlation was computed and found that the EI-academic adjustment linkage (*pr* =. 11, *p* =.19, *N* =148) did not remain statistically significant after controlling for neuroticism, extraversion, openness, and conscientiousness.

Discussion

The goal of the present study was to explore the relationship between EI and academic adjustment in transition phase over and above personality dimensions. In the present study, EI is considered as perceived

Table 2. Correlation between academic adjustment and personality

	CA	MGLA	PEPUT	SSP	MH	PR	AA
Neuroticism	-0.24**	-0.34**	-0.37**	-0.38**	-0.57**	-0.28**	-0.5**
Extraversion	0.08	0.07	0.03	0.12	0.07	0.06	0.1
Openness	-0.01	0	0	-0.01	-0.15*	0.1	0
Agreeableness	0.29**	0.15*	0.19**	0.21**	0.25**	0.27**	0.3**
Conscientiousness	0.26**	0.4**	0.35**	0.43**	0.41**	0.22**	0.49**

N = 203 to 230 ** *p*<.01 * *p* <.05

CA = Curriculum adjustment, MGLA = Maturity of goals and level of aspiration, SSP = Study skills and practices, PEPUT = Personal efficiency and planning use of time, MH = Mental health, PR = Personal relations, AA = Total Academic adjustment

Table 3. Correlation among subscales of Swinburne University Emotional Intelligence Test (SUEIT)

	EI	EREXP	UEX	EDC
EREXP	.51**			
UEX	.75**	0.05		
EDC	.23**	0.02	0.12	
EMC	.63**	0.2	.28**	-.25**

N = 194-221 ** *p*<.01

Emotional recognition and expression = EREXP, Understanding the emotions of external = UEX, Emotions direct cognition = EDC, Emotional management & control = EMC, EI = overall emotional intelligence

Table 4. Correlation among subscales of Academic Adjustment Inventory

	CA	MGLA	PE	SSP	MH	PR
MGLA	.42**					
PEPUT	.39**	.56**				
SSP	.42**	.43**	.57**			
MH	.38**	.49**	.54**	.57**		
PR	.44**	.39**	.38**	.34**	.43**	
AA	.65**	.74**	.82**	.80**	.79**	.65**

N = 212-234 ** *p*<.01

CA = Curriculum adjustment, MGLA = Maturity of goals and level of aspiration, SSP = Study skills and practices, PEPUT = Personal efficiency and planning use of time, MH = Mental health, PR = Personal relations, AA = Total Academic adjustment

EI as we have used self-reported EI measure instead of ability measure such as Mayer, Salovey, Caruso Emotional Intelligence Test (MSCEIT; Mayer et al, 2002). So, EI in our study is not treated as a kind of intelligence. As an additional analysis sex differences were computed for academic adjustment, EI, and personality.

EI and sex: The present finding that there is no significant sex difference in EI is opposite to what Luebbers, Downey, and Stough (2007) found where females reported higher in the subscales of emotions direct cognition, perception and expression of emotion, understanding and analyzing emotions, and overall EI but lower on emotional management and control. So, the relation between sex and EI as assessed by the adolescent SUEIT can not be generalized.

Academic adjustment and sex: In academic adjustment female college students were found to be better academically adjusted in the areas of curriculum adjustment, maturity of goals and level of aspiration, personal efficiency and planning use of time, study skills and practices, and overall academic adjustment. This is evident from the results of the 12th exam of the year 2008 at the national level conducted by CBSE (Central Board of Secondary Examination) in which females perform better than males.

Personality and sex: The finding that there is no sex difference in any of the dimensions of the Five Factor theory of personality is largely different from the one reported by Heaven, Fitzpatrick, Craig, Kelly, and Sebar (2000) as they found sex difference on agreeableness, conscientiousness, and openness to experience. So, the relation between personality and sex can not be generalized.

Academic adjustment and personality: It has also been found out in the present study that young college students who are emotionally stable, more agreeable and conscientious tend to have better curriculum adjustment (e.g., "Studying is usually enjoyable to me"), personal efficiency and planning use of time (e.g., "I customarily anticipate and plan my work for the next several days"), personal relation (e.g., "I find that my Professors are honest and straightforward in their dealings with me"), study skills and practices (e.g., "I do not experience trouble in outlining or note-taking"), maturity of goals and aspiration (e.g., "I feel that I have sound motives for being in college"), and mental health (e.g., "I do not get nervous and upset during examinations so that I can't do my best"). To the best of our knowledge this is the first study that examines the relation between academic adjustment and Five Factor theory of personality among the adolescents in India.

Emotional intelligence and academic adjustment: Although self-reported EI is related to academic adjustment this linkage is not independent of the personality dimensions of neuroticism, extraversion, openness, and conscientiousness. This finding raises one interesting question about the incremental validity of the self-report EI measure. The question is whether personality dimensions of Five Factor theory predominantly represent the aspects of self-reported EI measure that is based on the ability model of EI by Mayer and Salovey (1997). Our view is that the self-report EI measure included in the present study is not adequately reliable in our data as per the rule of thumb suggested by Nunnally (1978). Besides, in other studies we found that self-reported EI was related to marital adjustment (Joshi & Thingujam, 2009) and conflict resolution styles of the industrial employees (Godse & Thingujam, 2010) over and above personality dimensions of the Five Factor theory. However, it may be noted that the self-reported EI measures across these studies are developed by different authors although all of them are based on the ability model by Myer and Salovey (1997). Besides, the study by Joshi and Thingujam found adequate

internal consistency reliabilities of the overall EI and its subscales. Similarly, internal consistency reliability of the overall EI in Godse and Thingujam's study was adequate. So, one can conclude that self-reported EI measure is related to certain aspects of an individual over and above personality dimensions among some groups of people although it may not be the case in other aspect of the individual, that is, academic adjustment among the young college students. It is also suggested that the self-reported EI-academic linkage should be re-examined with the help of adequately reliable measures.

In future research one can factor analyze the present EI scale to examine the suitability of the items and factor structure in the Indian context. Another suggestion is to examine whether the present EI scale and other self reported EI scales are measuring the same construct of EI to facilitate generalization of the findings.

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