

Emotional Intelligence and Cognitive Styles: Moderating Role of Emotional Stability and Openness to Experience

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Abstract

The current study investigated the moderating role of Emotional Stability and Openness to Experience personality traits on EI and Cognitive Styles. Ten Item Personality Inventory (TIPI; Gosling, Rentfrow, & Swann, 2003), Self-Report Measure of Emotional Intelligence (SRMEI; Khan & Kamal, 2008), and Object-Spatial Imagery and Verbal Questionnaire (OSIVQ; Blazhenkova & Kozhevnikov, 2009) were administered to collect data from 3500 students. Emotional Stability moderates the relationship of EI and Cognitive Styles. On the other side openness to experience negatively moderates the relationship of object cognitive style with emotional self-regulation; and positively moderates the relationship of verbal cognitive style with emotional self-awareness and of spatial cognitive style with Interpersonal skills significantly.

Keywords. Moderating; Emotional intelligence; cognitive styles; emotional stability; openness to experience

Introduction

The fundamental features for defining the term of personality has contain all those characteristics, which are compiled by different theoretical constructs related to personality domain. American Psychological Association (APA; 2016) define the term personality as the differences existed among individuals in characteristic patterns of emotions, thoughts, and actions. Personality deals with two broad areas; 1) recognizing the individual differences with respect to personality characteristics, 2) considerate the compilation of different parts of a person. Different schools of thought (i.e., psychoanalytic, humanistic, trait theory etc.) defines personality through the specific pattern of individual's thinking, actions, and perception of emotional state (Myers, McCaulley, Quenk, & Hammer, 1998). Among all the theories of personality "trait theory" is the most influential and renowned personality theory. Theorist of trait theory explains

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personality of an individual in terms of their underlying dynamics related to behavior/actions. Traits are basically those specific characteristic patterns of behavior that determine individual's ways of action and feeling, which ultimately generate the individual difference. Researchers assume that personality traits are the permanent aspects of any individual's personality (Myers, 1998).

The major focus of the trait psychology was to investigate the individual's status on one or more than one aspects of trait personality (e.g., intelligence, introversion, anxiety) after investigating the comparative differences of individual with each other under conditions/circumstances. According to Allport's (father of personality psychology) trait theory, personality is consistent and unique in nature because these traits were considered as the descriptors of durable and constant disposition for a particular behavior/action, which differentiate individuals from each other (as cited in Chishti, 2002; Costa & McCrea, 1982).

The theoretical basis of Big Five Personality Factor Model (also named as *Five Factor Model*) is empirical because it derives from the findings of early research work done by Cattell, Allport, Eysenck and Hans on personality traits (as cited in Stys & Brown, 2004). Experimental and the differential method were used to develop the five-factor model of personality. The experimental method is helpful for describing the general laws related to personality, while the differential method was used for the description of individual differences among specific. Both methods are opposite to each other.

The Five Factor Model based on five personality types: extroversion, conscientiousness, neuroticism/emotional stability, openness to experience, and agreeableness. The present study focuses on Emotional Stability and Openness to Experience personality traits. *Openness to Experience* personality trait differentiates the imaginative and creativity oriented people from the conformist people having down to earth approach of life. They have high intellectual curiosity, beauty conscious, appreciative of art, aware about their emotional state, and hold exceptional beliefs about things. Low scorers always prefer clear, uncomplicated, and plain things (Hall, Lindzey, & Compbell, 1998; Rayckman, 2004). *Emotionally stable* persons are more resilient and have fewer tendencies to experience higher level of anxiety and negative reactions. Low scorers on emotional stability personality trait are more prone to experiencing anxiety and negative reactions (Costa & McCrae, 1992). Some researchers theorize that personality measures and cognition of individual are inter-linked with the help of cognitive styles (Ridding & Cheema, 1991; Sternberg & Grigorenko, 1997).

According to Witkin, Moore, Goodenough, and Cox Cognitive styles based on those individual variances which in turn create differences in people's way of perception, solving problems, thinking, learning, and relate to others (as cited in Kozhevnikov, 2007). In previous literature different researchers define cognitive styles differently according to their observations and research findings. Such as Goldstein and Blackman explained cognitive styles as assumed construct, which mainly developed for the explanation of mediating role of cognitive abilities in the relationship of stimuli with responses (Ridding & Cheema, 1991). According to them cognitive styles are basically information transformation process, which use objective stimuli for the interpretation of meaningful schema.

Various levels of information processing are used for the identification of these cognitive styles, from the Meta-cognitive to the perceptual (Kozhevnikov, 2007). Life experiences modify cognitive styles gradually (Hayes & Allinson, 1998; Leonard & Straus, 1997; Sternberg, 1997), so adaptive changes occurred in response to the changes in external environment (Zhang & Sternberg, 2005). Klein introduced the term of cognitive style for explaining the potential associations of individual differences in perception and personality. According to him perceptual attitudes are those different methods which are used by different persons to grips with reality. It was assumed that the people of different cultures use a wide range of cognitive styles according to the diverse contexts for performing different cognitive tasks. Later on, it was found that the preference of cognitive style often varies according to the task and context (as cited in Lavenda & Schultz, 2013).

Previously the most recognized cognitive styles are verbal and visual styles (e.g. Paivio, 1971; Richardson, 1977). Maximum previous researches done on verbal and visual cognitive styles basically assume that these are two different information processing systems (Blazhenkova & Kozhevnikov, 2009). The old model of Visual Verbal cognitive style is re-examined with the help of current findings on neuroscience and behavioral researches. Kozhevnikov (2007) critically reviewed the existing trends and theoretical perspectives of researcher in the field of cognitive style. It is also based on research work done in different psychological fields by using multiple methods of modern neuroscience. So, after the revision of previous researches and based on the Kozhevnikov's (2007) own findings, it was found that cognitive styles are those special types of heuristics with the help of which surrounding environment is processed by individuals. Kozhevnikov, Kosslyn, and Shephard (2005) proposed the new model for explain cognitive style named as "Object Spatial Verbal Theoretical Model". The present study based on this model, which comprised on three independent thinking dimensions: two visual dimension; *object* (deals with visual appearance of entities, such as their shapes, colors, and textures), *Spatial* (deals with location of

objects, their movements, and their spatial relationships); and one is *verbal* dimension (deals with how spoken language develops, how comprehension and language writing occurs; Blazhenkova & Kozhevnikov, 2009). Emotional intelligence (EI) is an integral part of both cognitive style and personality traits because these constructs have many common or interrelated constructs.

EI is the combinations of all those capabilities which are required for better management of one's own and others' emotions (Goleman, 1995, 1998). The ways in which people deal themselves, others, their work, and life is predicted by how many times a person demonstrates their fundamental competencies/capabilities (Boyatzis, Goleman, & Rhee, 2000). EI is the ability to: 1) recognize, express oneself and be aware of themselves; 2) understand and be aware of others; 3) Control and deal with impulses and strong emotions; and 4) change adaptation and solution of personal/social problems (Bar-On, 2002).

Thorndike's work on social intelligence acts as distal roots, while Gardner's work on multiple intelligences acts as the proximal roots in the history of EI (as cited in Mayer, Salovey, & Caruso, 2004). In early 1990s Salovey and Mayer first introduced the term EI as a form of social intelligence, which deals with those abilities of individuals which helped them to read others' and one's own emotions as well as the management of these feelings (Salovey & Mayer; as cited in Ogurlu, 2015). They considered EI as an interactional bridge between emotion and cognition (Mayer, Salovey, & Caruso, 2004). The most influential book, which popularized the construct of EI, was written by Goleman (1995). So, after appearing the Salovey and Mayer's model of EI and publishing the book of Goleman, many new models of EI appeared.

The two main models, Ability and mix model, play most significant role in defining the term of EI. A key difference between these two models is that the ability models focus solely on emotions of individual, while mixed models focus on multiple competencies (DTS International, 2013). The *ability* model was given by Mayer, Salovey, Caruso, and Sitarenios (2001), which assumes that in order to make sense of social environment one's emotions are useful sources of information (Salovey & Grewal, 2005). The *mix* model (introduced by Bar-On) emphasizes how the overall well-being of individual is influenced by their personality traits and cognition. Goleman's (1995) model EI deals with both personality aspects and cognitive capability. Goleman define four main constructs of EI in his model; a) Self-management, b) Relationship Management, c) Social awareness, and 4) Self-awareness (as cited in Boyatzis, Goleman, & Rhee, 2000). The present study focuses on three aspects of Goleman's Model of EI: *Emotional Self-Regulation* (effective coping with unpleasant event without showing harmful behavior), *Emotional Self Awareness* (better recognition and

identification of one's feelings and its affect on their lives), and *Interpersonal Skills* (judgment of others' emotions, especially negative emotions). EI has close relationship with personality traits. Brackett and Mayer (2003) found high significant correlations of Bar-On's EI model with extraversion, neuroticism, conscientiousness, and agreeableness factors, but EI significantly moderately linked with openness to experience trait. Similarly, Sala, (2002) found significant correlation of Goleman's EI model with openness, extroversion, and conscientiousness, while significant moderate relationship with both agreeableness and neuroticism traits.

Rationale of the Study

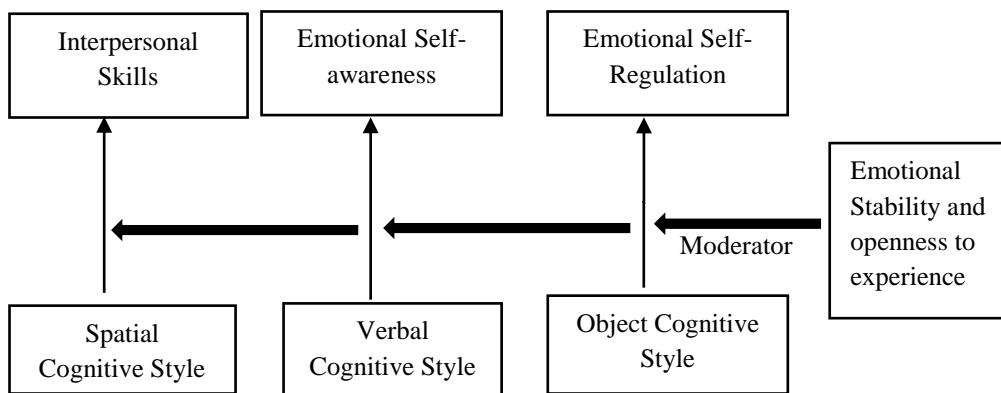
The current research mainly focuses on investigating the moderation effects of Emotional Stability and Openness to Experience personality traits between EI and cognitive styles of university students. An enormous number of research work has been done on EI with different variables; such as EI with cognitive intelligence (Sahin, Guler, & Basim, 2009), leadership styles (Parrish, 2013) etc. Like EI, many researches have been done on personality traits with different constructs, such as with leadership (Judge, Bono, Ilies, & Werner, 2002), with consumer behavior (Sarker, Bose, Palit, & Haque, 2013) etc. Unlike EI and personality traits, very little research work is available on cognitive styles especially on spatial cognitive styles (Blajenkova, Kozhevnikov, & Motes, 2006; Blazhenkova, Becker, & Kozhevnikov, 2011).

It's very important to study the relationship among EI, cognitive styles, and personality traits because cognition, emotions, and the self made the major psychological subsystems. In this research the sample of university students were taken because the emotional intelligence and their thinking styles may take very crucial role for their social acceptance as well as social life. Currently our young generation has poor relationship and they can't hold relationship in healthy way for a long period of time. Present research will help these individual to keep their relationship healthy for prolong period because previous researches revealed that both emotional intelligence and cognitive styles contribute towards solving the interpersonal conflict plus facilitation of relationships development. Similarly, personality traits also have strong link with both emotional intelligence and cognitive styles because the selection of cognitive style and emotional management is heavily based on personality predisposition of students. This research provides a picture regarding the best suitable combination of these variables for the development of relationship and resolution of conflicts both interpersonal and intrapersonal. After making critical review of existing literature on these variables it was decided to explore the moderation of personality trait between the relationship of EI and cognitive styles. The most important aspect of

this research is that it is specifically conducted on the students of Pakistani culture. The sample of students was selected specifically because cognitive styles play a significant role in students' academic performance that's why in previous literature the researcher use cognitive styles and learning styles synonymously.

Conceptual Model of the Current Study

The hypothesized conceptual framework of the current study based the objectives and consulted literature (See following figure).



Note: Emotional Stability and openness to experience moderate the relationship of emotional intelligence (Emotional Self-awareness, Emotional Self-Regulation, and Interpersonal Skills) with cognitive styles (Verbal Cognitive Style, Object Cognitive Style, and Spatial Cognitive Style).

Methodology

Phasing of the Study

The current research was comprised of two stages:

- 1) Stage I: Pilot study
- 2). Stage II: Main study

Stage I: Pilot Study

Objective

To compute the psychometric properties SRMEI, TIPI, and OSIVQ questionnaires.

Operational Definitions of Variables

Cognitive Styles: Cognitive styles are those psychological proportions, which characterize by permanent attitudes of an individual in its manner of cognitive functioning, especially regarding their way of processing information (Ausburn & Ausburn; as cited in Kozhevnikov, 2007). The present research study three cognitive styles of 'The New Object-Spatial-Verbal Cognitive Style Model; *Object*, *Spatial*, and *Verbal* (for details see introduction part). All these styles are operationalized based on individual's scores on subscale of Object-Spatial Imagery and Verbal Questionnaire (OSIVQ).

Personality Traits: American Psychological Association (APA; 2016) define the term personality as the individual variations in specific patterns of emotions, thoughts, and actions. The current research investigates only two personality traits; Emotional Stability and Openness to Experience (for details see introduction part). These traits are operationalized on the scores of subscales of Ten Item Personality Inventory (TIPI).

Emotional Intelligence (EI): EI is the combination of all those abilities that enable an individual to manage himself/herself as well as others (Goleman, 1995, 1998). The present study focusses on three aspects of Goleman's Model of EI: Emotional Self-Regulation, Emotional Self Awareness, and Interpersonal Skills (for details see introduction). These aspects are operationalized on the scores of Self Report Measure of Emotional Intelligence's (SRMEI) subscales.

Sample

University students with sample size $N=500$ (women $n = 239$, and men $n = 261$), were selected after using convenient sampling technique. The age range of the current sample was from 18--40 years old. Sample was approached personally by the researcher from the government/public sector Universities located in Islamabad, Rawalpindi, Lahore, Multan, Sargodha, Peshawar, Hazara, and Faisalabad.

Instruments

Self-Report Measure of Emotional Intelligence (SRMEI): SRMEI (Khan & Kamal, 2008) has 60 items. Its response format is five-point Likert scale (from 1= never to 5= always). It measures three dimensions of EI (Emotional Self-Awareness Scale, Emotional Self-Regulation Scale, and Interpersonal Skills Scale). There are 27 positive and 33 reverse items.

Ten Item Personality Inventory (TIPI): TIPI was developed by Gosling, Rentfrow, and Swann in 2003. This scale contains upon 10 items with rating on 7-point likert scale. TIPI measures the Big Five personality traits (Extroversion, Agreeableness, Conscientiousness, Emotional Stability, and Openness to Experience). It has 5 positive and 5 reverse items.

Object–Spatial Imagery and Verbal Questionnaire (OSIVQ): OSIVQ (Blazhenkova & Kozhevnikov, 2009) has 45 items with response category of five-point likert scale (ranging from totally disagree= 1 to totally agree=5). This scale assesses three cognitive styles (object, spatial, and verbal). It has 41 positive and 4 reverse items.

Procedure

500 university students were selected within the public/government sector universities located in Islamabad, Rawalpindi, Faisalabad, Sargodha, Multan, Peshawar, Hazara, and Lahore. Informed consent form, SRMEI, OSIVQ, and TIPI were administered on sample and they were instructed to complete the scales and give response on each item of all questionnaires.

Results

For determining the psychometric properties of OSIVQ, SRMEI, and TIPI; the reliability coefficients, inter-scale, and item-total correlation of these instruments were computed. All the scales are internally consistent as the alpha coefficient values for all questionnaires are above average. The reliability coefficient value for SRMEI was .93, while .78 to .87 was the range of alpha reliability coefficient for its subscales. For OSIVQ alpha value was .88, while .64 to .85 was the range of alpha values its subscales. TIPI had .76 alpha value, and .62 to .96 was range of alpha values for its subscales. The construct validity of all scales is above average, as the significant results of both item total correlation analyses and inter-scale correlation analyses emerged on SRMEI, OSIVQ, and TIPI.

Discussion

In the present study the psychometric properties of SRMEI, TIPI, and OSIVQ indicated that all scales possessed higher level of internal consistency (as indicated by their alpha coefficient values) and have above average construct validity (as indicated by significant results of item-total and inter-scale

correlation analyses on all scales). So, these scales can be administered on larger sample size in main study for analyzing hypotheses.

Stage II: Main Study

Objectives

To investigate the role of Openness to Experience and Emotional Stability personality traits as moderator in the association of EI with cognitive styles.

Hypotheses

The present research test following hypotheses:

1. Emotional Stability and Openness to experience will positively moderate the relationship Object Cognitive Style has with Emotional Self-Regulation.
2. Openness to experience and Emotional Stability will act as positive moderator in the association of Verbal Cognitive Style and Emotional Self-awareness.
3. Emotional Stability and Openness to experience will have positive moderating effect on the relationship of Interpersonal Skills and Spatial Cognitive Style.

Sample

3500 university students (men $n = 1750$, women $n = 1750$), with age range of 18-40 years, were selected through convenient sampling technique from public universities of Lahore, Islamabad, Rawalpindi, Multan, Sargodha, Peshawar, Hazara, and Faisalabad.

Instruments

In main study three instruments (SRMEI, TIPI, and OSIVQ) were administered. For detail descriptions of these questionnaires see Phase-I.

Procedure

3500 university students were approached personally by the researcher within the premises of government/public universities located in Islamabad, Rawalpindi, Faisalabad, Sargodha, Multan, Peshawar, Hazara, and Lahore. SRMEI, TIPI, and OSIVQ were distributed among sample of university students along with

Informed Consent Form. It was instructed to fill all the questionnaires and do not skip any item of any instruments. After data collection appropriate statistical analyses were done to test hypotheses.

Results

In the second stage of the research the data of 3500 university students have been analyzed. The alpha value for OSIVQ scale was .85, and for its subscales the range of alpha values was from .74 to .86. SRMEI had .92 alpha value, while its subscales have .77 to .85 range of alpha values. TIPI had .78 and from .62 to .94 was range for its subscales. Alpha values showed that all scales had above average reliability confident value. Significant results of Item total and Inter-scale correlation analysis revealed that all questionnaires have above average construct validity.

Table 1

Hierarchical Multiple Regression Analyses Predicting Emotional Self-Regulation from Object Cognitive Style and Emotional Stability Personality Trait (N = 3500)

Predictor	ΔR^2	β
Step I	.44*	
Object		.67*
Step II	.10*	
Object		.56*
Emotional Stability		-.12*
Step III	.02*	
Object		.55*
Emotional Stability		-.12*
Object * Emotional Stability		.13*
Total R^2	.56*	

* $p < .001$

Table 1 shows that object cognitive style and emotional self-regulation scale (ESRS) are significantly positively related with each other, 44% variance was explained by former in the later. In the next step, ESR also predicted by emotional stability and explained 10% additional variance in ESR. Lastly, in the last step, ESR was significantly predicted in positive direction by the interaction of both object cognitive style and emotional stability personality trait and explained about 2% additional variance. It provides evidence that emotional stability personality trait on moderate the relationship of ESR and object cognitive style (see Figure 1).

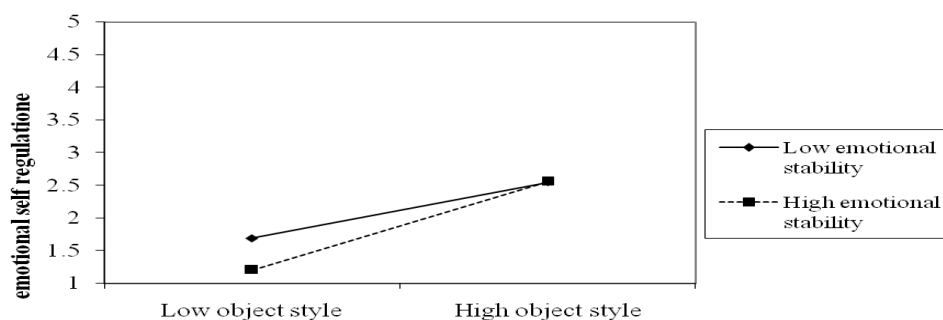


Figure 1. Emotional stability act as moderator in the relationship of ESRS and object cognitive style.

Figure-1 reveal that ESR and object cognitive positively linked more powerfully for those individuals whose are higher scorers on emotional stability personality trait. Object cognitive style, emotional stability, and their interaction overall explained 56% variance in ESR.

Table 2

Hierarchical Multiple Regression Analysis Predicting Emotional Self Regulation Scale from Object Cognitive Style and Openness to Experience Personality Trait (N = 3500)

Predictor	ΔR^2	β
Step I	.44*	
Object		.67*
Step II	.04*	
Object		.53*
Openness to Experience		.15*
Step III	.17*	
Object		1.63*
Openness to Experience		-.83*
Object * Openness to Experience		-.63*
Total R^2	.65*	

* $p < .001$

Table 2 shows that ESRS and Object cognitive style are significantly related with each other in positive direction; 44% variance explained by the object cognitive style in the value of ESRS. In the next step, ESRS is also predicted by Openness to Experience and explained 4% additional variance in ESRS. Finally, in the last step, the collaboration of Object cognitive style and Openness to Experience predicted interpersonal skill significantly negatively after explaining about 17% additional change in ESRS. It proves that positive and significant moderating role

is performed by the Openness to Experience personality trait between ESRS and object cognitive style (see Figure 2).

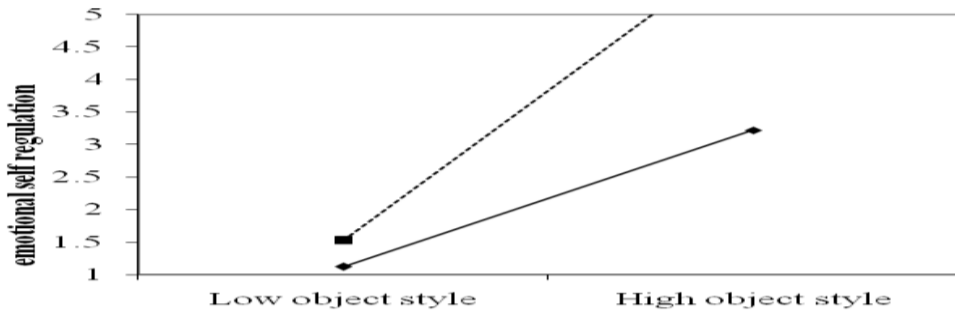


Figure 2. Openness to Experience as moderator in the relationship of ESRS and object style.

Figure 2 indicates that ESRS and object cognitive style have strong positive relationship only for those individuals who are low in openness to experience. In sum, object cognitive style, openness to experience, and their interaction created 65% variance in ESRS.

Table 3

Hierarchical Multiple Regression Analysis Predicting Emotional Self-Awareness from Verbal Cognitive Style and Emotional Stability Personality Trait (N = 3500)

Predictor	ΔR^2	β
Step I	.04*	
Verbal		.20*
Step II	.32*	
Verbal		.16*
Emotional Stability		-.57*
Step III	.04*	
Verbal		.64*
Emotional Stability		.15*
Verbal * Emotional Stability		.20*
Total R^2	.40*	

* $p < .001$

Table 3 shows that verbal cognitive style and emotional self-awareness scale (ESAS) have significant positive relationship with each other and about 4% variance explained by verbal cognitive style ESAS. In the next stage, ESAS is

also predicted by emotional stability and explained 32% variance additionally in ESAS. In the last stage, both verbal cognitive style and emotional stability combine significantly predicted ESAS in positive direction and create an additional variance of about 4%. It is evident that emotional stability moderates the relationship of ESAS with verbal cognitive style (see Figure 3).

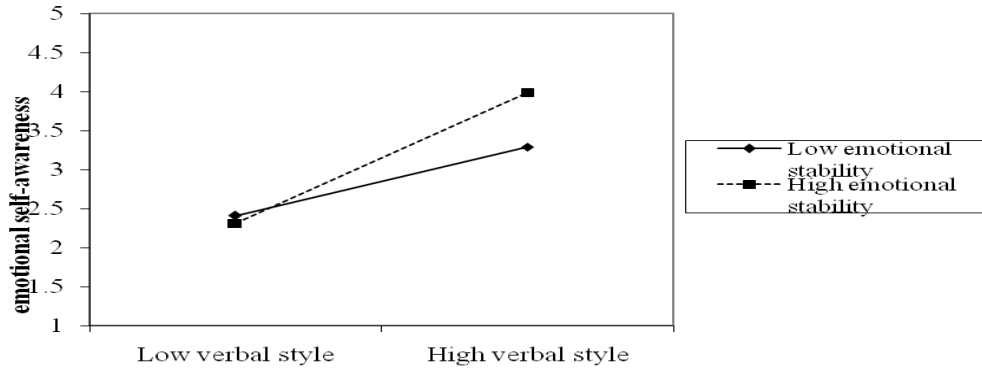


Figure 3. Emotional stability acts as moderator in the association of ESAS and verbal cognitive style.

ESAS and verbal cognitive style more positively related with each other in those individuals who are higher scorers on emotional stability as shown in Figure 3. A total 40% variance in ESAS was observed because of verbal cognitive style, emotional stability, and their interaction.

Table 4

Hierarchical Multiple Regression Analysis Predicting Emotional Self-Awareness from Verbal Cognitive Style and Openness to Experience Personality Trait (N = 3500)

Predictor	ΔR^2	β
Step I	.04*	
Verbal		.20*
Step II	.49*	
Verbal		.14*
Openness to Experience		.70*
Step III	.01*	
Verbal		.15*
Conscientiousness		.71*
Verbal * Openness to Experience		.05*
Total R^2	.54*	

* $p < .001$

Table 4 indicates that verbal cognitive style and ESAS are significantly positively related with each other, where the former created about 4% change in the ESAS. Table also shows in second step that Openness to Experience also predicted ESAS and creates 49% variation in the value of ESAS additionally. In the last phase, the combination of verbal cognitive style and Openness to Experience predicted ESAS significantly positively and create additional 3% variation in the value of ESAS. This result provides evidence that the Openness to Experience significantly moderate the link existed between ESAS and verbal cognitive style (see Figure 4).

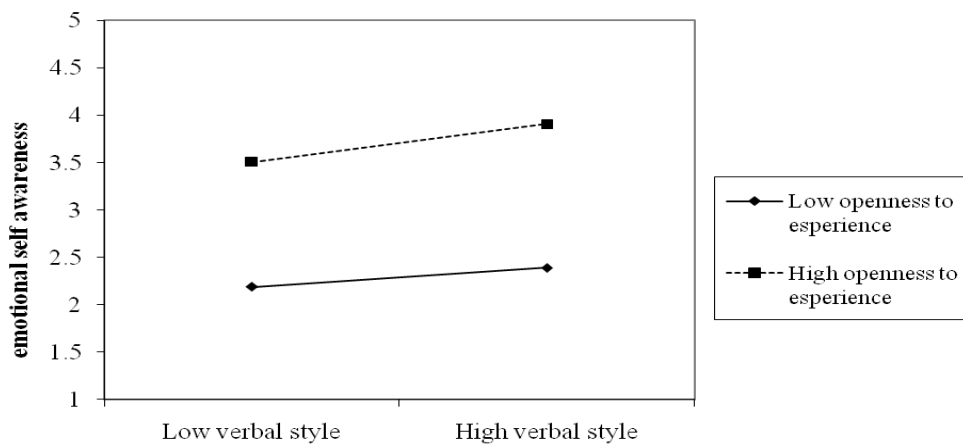


Figure 4. Openness to Experience moderates the relationship between ESAS and verbal style.

Figure 4 depicts positive relationship between ESAS and verbal cognitive style. It shows that this relationship between ESAS and verbal cognitive style is valid more for those individuals who are higher scorers on Openness to Experience personality trait. Verbal cognitive style, Openness to Experience, and their blend created an overall 54% variance in ESAS.

Table 5

Hierarchical Multiple Regression Analysis Predicting Interpersonal Skill Scale from Spatial Cognitive Style and Emotional Stability Personality Trait (N = 3500)

Predictor	ΔR^2	β
Step I	.05*	
Spatial		.23*
Step II	.27*	
Spatial		.23*
Emotional Stability		-.52*
Step III	.05*	
Spatial		.45*
Emotional Stability		-.18*
Spatial * Emotional Stability		.24*
Total R^2	.37*	

* $p < .001$

Table 5 reveals that spatial cognitive style and interpersonal skills scale (ISS) are linked significantly positively, and special cognitive style explained about 5% variance in ISI. The next step indicated that emotional stability also predicted ISS create 27% additional variance in the value of ISI. In the last step, the combination of emotional stability and spatial cognitive style significantly predicted ISS positively and explained 5% added variance in ISI. This analysis provides support for the positive moderating role emotional stability in the link of ISS and spatial cognitive style (see Figure 5).

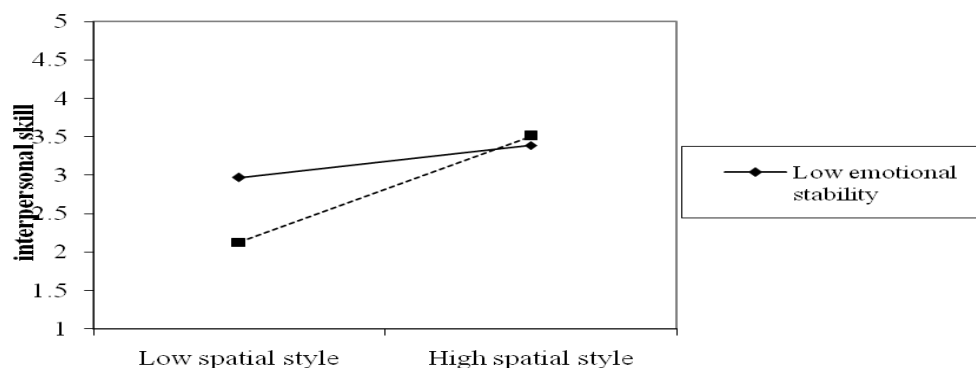


Figure 5. Emotional stability as moderating variable for the relationship of ISS and spatial cognitive style.

Figure 5 indicates that the positive association of spatial cognitive style and ISS is more valid for those individuals only who have higher tendency of emotional stability trait. Emotional stability trait, spatial cognitive style, and the interaction of both variables create 37% change in ISS.

Table 6

Hierarchical Multiple Regression Analysis Predicting Interpersonal Skill Scale from Spatial Cognitive Style and Openness to Experience Personality Trait (N = 3500)

Predictor	ΔR^2	<i>B</i>
Step I	.05*	
Spatial		.23*
Step II	.47*	
Spatial		.04*
Openness to Experience		.71*
Step III	.02*	
Spatial		.08*
Openness to Experience		.71*
Spatial * Openness to Experience		.15*
Total R^2	.54*	

* $p < .001$

Significant positive association emerged between spatial cognitive style and ISS, in which about 5% change in ISI is created by spatial cognitive style as shown in Table 6. It is found that Openness to Experience too predicted ISS and made 11% additional variance in ISI. In the last phase, ISI is also significantly predicted in positive direction when both Openness to Experience and spatial cognitive style interact with each other and create about 1% extra change in ISI. So, these results showed that Openness to Experience significantly moderates the existing relationship of spatial cognitive style and ISS (see Figure 6).

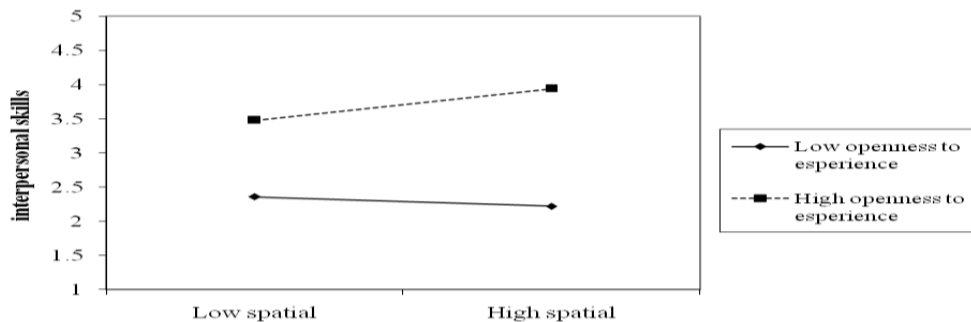


Figure 6. moderation of Openness to Experience in relationship between ISS and spatial cognitive style.

The results of Figure 6 showed that spatial cognitive style and ISS linked with each other significantly in positive way and this significant relationship is more valid for those people who are higher on Openness to Experience trait. So, in total 54% change in ISI appeared as result of effect of Openness to Experience, spatial cognitive style, and interaction of both.

Discussion

In the present research sample of 3500 university students were taken. The present research explored the moderation of Emotional Stability and Openness to Experience personality traits on EI (Emotional Self-Regulation, Emotional Self-Awareness, and Interpersonal Skill) and cognitive styles (Object, Verbal, and Spatial). The alpha coefficient value for OSIVQ scale was .85, while .74 to .86 was the range of alpha values for its subscales. SRMEI had .92 alpha value, and its subscales have .77 to .85 range of alpha coefficients. Similarly, Alpha coefficient of TIPI was .78; and its subscales had range from .62 to .94. It shows that all scales have higher internal consistency. Significant results of Item total and Inter-scale correlation analysis revealed that all questionnaires have above average construct validity.

For measuring the moderation of Emotional Stability and openness to Experience personality traits on EI and cognitive styles Hierarchical Multiple Regression Analysis was carried out. The findings of this analysis support the first hypothesis after exploring emotional stability personality trait play significant role of positive moderator for the positive association of object cognitive style and emotional self-regulation (see Table 1, Figure 1). The results also revealed that the both object cognitive style and emotional self-regulation are linked significantly positively with each other. This analysis also explored that emotional stability personality trait positively predict emotional self-regulation. In addition, it is also revealed that both emotional stability personality trait and object cognitive style significantly predicted emotional self-regulation positively. These findings provide support and evidence that the positive interaction of object cognitive style and emotional self-regulation grips more firmly for inly the higher scorer individuals on emotional stability scale. Object cognitive style, emotional stability, and their combination create changes in the value of emotional self-regulation significantly.

The results of Table 2 depict that Openness to Experience personality trait also predicted Emotional Self Regulation Scale and explained 4% added change in Emotional Self-Regulation Scale. Additionally, the findings also revealed that the when both Object cognitive style and Openness to Experience personality trait interact with each other, they significantly negatively predicted interpersonal

skill and create 17% change in Emotional Self-Regulation Scale. It shows that individuals having low level of openness to experience personality characteristics will have more strong positive association between emotional self regulation and object cognitive style. In total % change in emotional self-regulation scale was observed because of, object cognitive style, openness to experience personality trait, and their combination (see Figure 2).

The analyses revealed emotional stability personality trait being as positive moderator between verbal cognitive style and emotional self-awareness. The third hypothesis of the current research was supported by the results of this analysis, which assume that emotional stability personality trait significantly moderates the link existed between verbal cognitive style and emotional self-awareness in positive way (see Table 3, Figure-3). These results indicated that both verbal cognitive style and emotional self-awareness linked with each other significantly positively and revealed emotional self-awareness is significantly predicted by emotional stability personality trait. The collaboration of both emotional stability personality trait and verbal cognitive style significantly predicted emotional self-awareness positively. It is inferred from these results that the positive association of verbal cognitive style and emotional self-awareness is more applicable only on those people who have higher characteristics of emotional stability personality trait. In general, 40% significant change observed in result of effect of verbal cognitive style, emotional stability personality trait, and their interaction.

Table 4 portrays significant positive association between emotional self-awareness and verbal cognitive style and found that Openness to Experience personality trait also anticipated emotional self-awareness by creating 49% variance in it. It is also explored that the combination of verbal cognitive style and Openness to Experience personality trait significantly anticipated emotional self-awareness positively and creating an additional variance of about 3%. This positive relationship between emotional self-awareness and verbal cognitive style emerged more firmly for individuals who got higher scores Openness to Experience personality trait (see Figure-4). Overall, verbal cognitive style, Openness to Experience personality trait, and their collaboration created 54% change in emotional self-awareness.

The findings of Table 5 revealed that emotional stability personality trait is a significantly positively moderate the association between spatial cognitive style and interpersonal skill (see Figure-5). These results support the fourth hypothesis of this research which supposes emotional stability personality trait will significantly moderate the relationship between spatial cognitive style and interpersonal skills. Spatial cognitive style and interpersonal skills had significant

association with each other in positive direction; also found that interpersonal skills can be predicted by emotional stability personality trait. The analysis explored that the collaboration of both spatial cognitive style and emotional stability personality trait significantly predict interpersonal skills positively. These results act as evidence that this positive correlation between spatial cognitive style and interpersonal skill emerged more strongly in those individuals who have higher scorers on emotional stability personality trait. Inclusively, emotional stability personality trait, spatial cognitive style, and combination of both made significant variation in the value of interpersonal skills.

The analysis of the Table 6 stated that spatial cognitive style and interpersonal skills are significantly positively related with each other and Openness to Experience personality trait predicted interpersonal skill by creating 11% variation in interpersonal skills. The collaboration of both spatial cognitive style and Openness to Experience personality trait significantly positively predicts interpersonal skill after creating 1% change in interpersonal skills. This positive association of spatial cognitive style and interpersonal skill will be stronger in those individuals who possessed higher tendencies of Openness to Experience personality trait. Overall, spatial cognitive style, Openness to Experience personality trait, and their combination create significant 54% variance in interpersonal skill (see Figure-6).

Conclusion

The results of present study concluded that emotional stability personality trait creates significant positive moderation, while openness to experience personality trait create significant negative moderation in the relationship of object cognitive style with emotional self regulation scale. Another conclusion of this research is that Emotional stability and openness to experience personality traits significantly positively moderate the relationship of verbal cognitive style with emotional self awareness, and spatial cognitive style with Interpersonal skills.

Limitations and Suggestions

The present research was carried out to investigate the moderating effect of emotional stability and openness to experience personality traits on EI and cognitive styles on just university students with the help of self-report questionnaires. The future research should be studying the moderating effect of other personality traits on different age group with the help of some other assessment techniques along with self-report questionnaires.

Implications

The conclusions of this research have many major implications in educational, management, and organizational fields. Previous studies explored that differences in cognitive style also influence the way of perception, communication, problem solving, interpersonal functioning, learning, decision making, and creativity (Kirton, 2003; Sadler-Smith, 1998). According to the available literature on Personality traits, EI, and cognitive styles, they are considered as autonomous variables/constructs but in actual they are inter-related constructs. Riding and Wigley (1997) stated that behavior is the combination of different levels of a personality source, and the cognitive styles are the combinations of addition or subtraction of the component of personality. The main results generated by the current research also helpful in predicting that whether the higher level of emotional intelligence will lead to better dealing with many daily routine problems (such as drug problems, arguments, and interpersonal violence) or not. In this view point, the findings of the current study not only have great practical implications but also gave enhancement in the existing literature on these variables regarding the interaction's effects on each other with respect to Pakistani population.

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