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# EXPLORING THE RELATIONSHIP BETWEEN TRAIT EMOTIONAL INTELLIGENCE AND PHYSICAL ACTIVITY LEVELS IN MALE UNIVERSITY STUDENTS

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#### **Abstract:**

**Background:** The participation in regular physical activity depends upon various factors including psychological parameters. The emerging construct of Trait emotional intelligence is not yet been widely studied in relation to physical activity. Accordingly, the objective of this study is to correlate physical activity level and trait emotional intelligence.

**Methods:** A total of 221 male university students were included in the study. The participants filled two questionnaires: TEIQue for Trait EI and IPAQ (long form) for Physical Activity Levels. Spearmen's correlation was employed to examine the relationship between two variables.

**Results:** Significant positive correlations were found between physical activity level and Overall Trait Emotional Intelligence (r<sub>s</sub>=0.178) and subscale Emotionality (r<sub>s</sub>=0.163). Conversely, there were significant correlations between Physical Activity Levels and subscales Well-being, Self-Control and Sociability.

**Conclusions:** There exists a significant but weak relationship between PA level and Overall Trait EI along with subscale Emotionality.

Keywords: trait emotional intelligence, physical activity level, university, students

#### 1. Introduction

The significance of regular physical activity has been well documented (Lee et al., 2012). There is an extensive evidence of relationship of physical activity with psychological parameters such as mental toughness (Eskandarnejad, 2015, Stamp, 2015); mental health scales such anxiety, somatic distress, social dysfunction (Soltanian, 2011), health related quality of life (Wu, 2018) depressive symptoms (Cooney et al., 2014) and mortality rate

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(Kodama et al., 2013). Emotions pervade effective performance in sports (Jones, 2012; Laborde et al., 2013) and physical activity level (Mohiyeddini et al., 2009; Wang, 2011). There is an agreement among the researchers that emotions are pretty momentary in nature (Lazarus, 2000; Scherer, 2005), but academics have also indicated the presence of a more steady, predominant level that reveals emotional natures of an individual (Lazarus, 2000; Laborde et al., 2013). The notion of 'Emotional Intelligence' (EI) – propagated by Goleman (1995) has prospered in various research spheres, fundamentally for the reason that of its likelihood to impact human performance, affiliations, and well-being (Stough et al., 2009).

In the perspective of leisure-time physical activity, motivation is the crucial factor to endure engagement in physical activity (Kodama et al., 2013) and most practices of physical activity encompass certain level of interactive communication (e.g., gym fellows, fitness trainers). In every situation, behavior might be directed partially by emotional intelligence (Mayer & Salovey, 1997; Petrides & Furnham, 2003). There is a mounting figure of evidence to recommend that Emotional Intelligence plays a significant part in sport performance (Laborde et al., 2014) and physical activity (e.g., Solanki & Lane, 2010), and a critical understanding of this constructs' operationalization in these contexts is particularly important to practicing consultants targeting the implementation of evidence-based interventions that enhance sport performance or exercise adherence. The earlier studies have inspected the emotional intelligence dimensions that can explicate several physical, general and mental health components, and numerous classifications of health-related conducts (Fernández-Abascal, 2015). The majority of above discussed researches verified the associations of physical activity only with general Emotional Intelligence. However taking into account the scarcity of research pertaining to the relationship between physical activity level and trait emotional intelligence, this study is an attempt to fill this gap.

### 2. Methods and procedures

### 2.1 Sample and variable

A total of 221 male University students were approached to participate in the study. They were provided with two questionnaires to assess their physical activity level and trait emotional intelligence. Physical activity level was assessed by using International Physical Activity Questionnaire (long form) (www.ipaq.ki.se. 2005). This instrument comprises of 27 questions that assess the physical activity level of a typical week. The metabolic cost was measured in Metabolic Equivalent of Task (MET). The energy cost of particular activity was assigned using compendium of physical activity (Ainsworth, 1993).

Trait Emotional Intelligence was assessed by administering TEIQue (Short Form) (Petrides, 2009). This instrument consists of 30 questions that provide score for four subscales viz. Well-Being, Self-Control, Sociability and Emotionality along with the Overall Trait Emotional Intelligence score.

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### 2.2 Statistical procedure

The descriptive statistics were expressed as mean and standard deviation. Normality of data was tested by employing Shapiro-Wilk test. Since, the data were skewed, hence, a non-parametric Spearman's Correlation was applied to examine the relationship of Physical activity level with Trait emotional intelligence and its subscales. The Alpha level was put at 0.05.

#### 3. Results

**Table 1:** Descriptive statistics of physical activity levels and Trait Emotional intelligence and its subscales among male University students

Variable	N	Mean	Std. Deviation
Well-Being	221	4.2533	1.14350
Self-Control	221	4.3950	1.31000
Sociability	221	4.8118	1.32138
Emotionality	221	4.9390	1.32877
Overall Trait Emotional Intelligence	221	4.5492	0.58334
Physical Activity Level	221	1817.0543	1157.68443

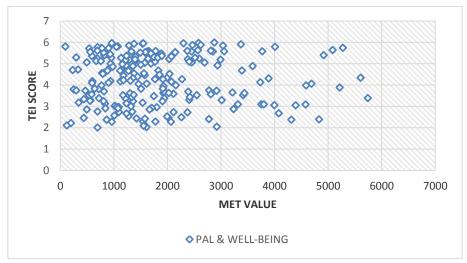
Table 1 depicts the mean and standard deviation physical activity levels and Trait Emotional intelligence and its subscales among University students. It can be seen from the table that mean and standard deviation of subscale Well-being, Self-control, Sociability, Emotionality, Overall Trait Emotional Intelligence and Physical Activity Level were 4.2533±1.14350, 4.3950±1.31000, 4.8118±1.32138, 4.9390±1.32877, 4.5492±0.58334 and 1817.0543±1157.68443 respectively.

**Table 2:** Relationships between physical activity levels and Trait Emotional intelligence and its subscales among male University students

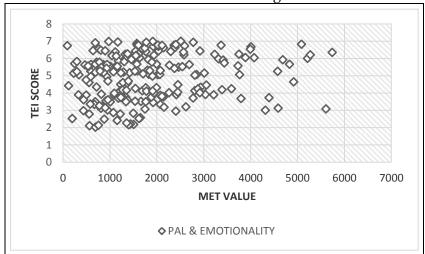
Variable	Physical activity level		
	Spearman's rho	Sig.	
Well-being	0.030	0.654	
Self-control	0.040	0.557	
Sociability	0.030	0.661	
Emotionality	0.178*	0.008	
Overall Trait Emotional Intelligence	0.163*	0.015	

<sup>\*</sup> Significant 0.05 alpha level

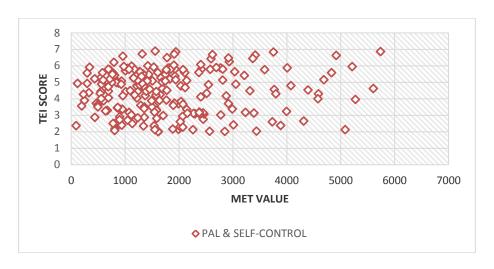
Table 2 uncovers the relationship of Physical Activity Level with Overall Trait Emotional Intelligence and its subscale: Well-Being, Self-Control, Sociability, and Emotionality. It is evident from table 2 that significant positive correlations were assessed between Physical Activity Level and Emotionality ( $r_s$  (221) = 0.178, p<0.05) and Overall Trait Emotional Intelligence ( $r_s$  (221) = 0.163, p<0.05). On the other hand, no significant correlations were observed between Physical Activity Level and the subscales: Well-Being ( $r_s$  (221) = 0.030, p>0.05), Self-Control ( $r_s$  (221) = 0.040, p>0.05), and Sociability ( $r_s$  (221) = 0.030, p>0.05).



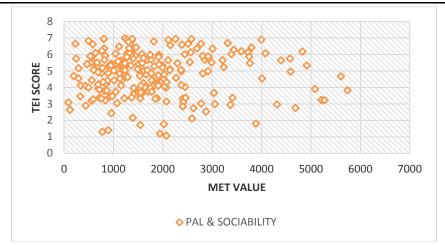
**Figure 1:** Correlation between Physical activity level and subscale Well-Being



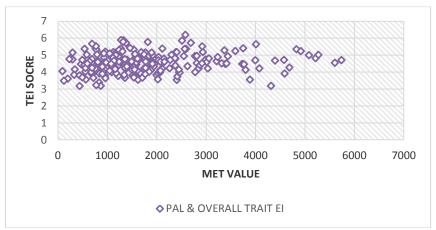
**Figure 2:** Correlation between Physical activity level and subscale Emotionality



**Figure 3:** Correlation between Physical activity level and subscale Self-Control



**Figure 4:** Correlation between Physical activity level and subscale Sociability



**Figure 5:** Correlation between Physical activity level and subscale Overall Emotional Intelligence

#### 4. Discussion

The aim of this study was to explore the relationship between physical activity level and Trait emotional intelligence among male University students. It is evident from table 2 that no correlations were seen between physical activity level and the subscale Well-Being, Self-Control and Sociability. On the other hand, significant correlations were observed between physical activity level and the subscale Emotionality (r<sub>s</sub>=0.178) and Overall Trait Emotional Intelligence (r<sub>s</sub>=0.163). However, the strength of relationship is very weak; the study is in line to some extent with the earlier studies which discovered that higher trait emotional intelligence was associated to higher levels of physical activity and affirmative attitudes toward physical activity. While studying gym goers, (Solanki & Lane, 2010) observed that having a higher trait emotional intelligence is related to optimistic beliefs in the usefulness of workout as a mood-regulating approach. Saklofske et al, (2007) conducted a cross-sectional study on undergraduate students and found that trait emotional intelligence was not associated to positive exercise attitude, however, it was associated to positive exercise behaviour.

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These similar findings were observed in a sample of 364 undergraduate students (Saklofske et al., 2007). A positive correlation between trait emotional intelligence and exercise regularity was detected in two another studies (Tsaousis & Nikolaou, 2005; Magnini et al., 2011). Similarly, Li et al., (2009) revealed that those who achieve recommended levels of physical activity also own higher trait emotional intelligence scores as compared to those who were insufficiently active, and the latter had higher trait emotional intelligence scores as compared to inactive individuals.

More studies are required with a large sample and on both genders in order to establish the clearer picture of relationship between these two variables.

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