E-ISSN:2319-3050

Research Article

Psychology

International Journal of Research Pedagogy and Technology in Education and Movement Sciences

2025 Volume 14 Number 01 JAN-MAR

Publisher

www.theuniversityacademics.com

Understanding the Association between Trait Emotional Intelligence and Physical Activity Levels in Female Adolescents

Singh H[1*†], Singh A[2†]

DOI:https://doi.org/10.55968/ijems.v14i01.377

[1*†] Harmandeep Singh, Assistant Professor, Department of Physical Education, Sr Government College, Amritsar, Punjab, India.

[2†] Amandeep Singh, Associate Professor, Department of Physical Education, Guru Nanak Dev University, Amritsar, Punjab, India.

Background: Participation in regular physical activity is influenced by several factors, including psychological aspects. However, the association between Trait emotional intelligence and physical activity levels remains relatively unexplored. Aim: The aim of this research is to examine the association between the levels of physical activity and trait emotional intelligence. Methods: A total of 240 female adolescent students took part in the study. TEIQue was utilized for assessing Trait EI and PAQ (A) for Physical Activity Levels. Spearman's rho was applied to observe the association between the two variables. Results: Significant positive correlations were found between physical activity levels and Global Trait Emotional Intelligence and its sub-variables viz. Well Being, Self-control, Sociability, and Emotionality. Conclusions: There exists a significant but weak to moderate association between PA levels and Global Trait EI along with all its sub-variables

Keywords: trait, emotional, intelligence, physical, activity, association

Corresponding Author

Harmandeep Singh, Assistant Professor, Department of Physical Education, Sr Government College, Amritsar, Punjab, India.

Email: harmankamboj91@gmail.com

How to Cite this Article

Singh H, Singh A. Understanding the Association between Trait Emotional Intelligence and Physical Activity Levels in Female Adolescents. ijems. 2025;14(01):34-38.

Available From

https://ijems.net/index.php/ijem/article/view/377/

To Browse

Manuscript Received	Review Round 1	Review Round 2	Review Round 3	Accepted
2024-01-23	2024-01-27	2024-02-09	2024-02-24	2024-02-28

Conflict of Interest	Funding	Ethical Approval	Plagiarism X-checker	Note
Authors state no conflict of interest.	Non Funded.	The conducted research is not related to either human or animals use.	11	All authors have accepted responsibility for the entire content of this manuscript and approved its submission.

Introduction

The importance of consistent physical activity has been extensively studied and established in prior research (1). Numerous studies have explored the connection between physical activity and various psychological aspects, including mental toughness, mental health indicators like anxiety and depression, bodily distress, social adjustment, mortality, and health-related quality of life (2,3,4,5,7). Additionally, emotions have been found to significantly influence sports performance (8, 9) and the levels of physical activity (11). While emotions are often considered momentary, researchers have also noted a more consistent, underlying emotional nature in individuals (9).

The concept of 'Emotional Intelligence' (EI), introduced by Goleman (1995) (10), has gained considerable attention across various research areas due to its potential impact on human performance, relationships, and overall well-being (13). In the context of leisure-time physical activity, motivation plays a vital role in sustaining engagement (4), and social interactions, such as gym buddies or fitness trainers, often influence individuals' behaviour, which can be partially guided by emotional intelligence.

Recent evidence suggests that Emotional Intelligence significantly affects sport performance (14) and physical activity levels (15). Understanding the operationalization of this concept in these contexts is crucial for practitioners seeking evidence-based interventions to improve sport performance or exercise adherence. While previous studies have examined emotional intelligence dimensions in relation to various health components and behaviours (6), most have focused on general Emotional Intelligence concerning physical activity. However, given the limited research on the link between physical activity and trait emotional intelligence, this study aims to address this gap.

Methods and Procedures

Sample and Variables

240 female adolescents were recruited from the different private and government schools to participate in the study. They were given two questionnaires: Physical Activity Questionnaire (Adolescents) to gauge their levels of physical activity, and TEIQue (Short Form) (21) to measure

The trait emotional intelligence. PAQ (A) is appropriate for administration on 13 to 19-year-olds. It consists of 8 items that provide physical activity data of the last seven days. Each item is scored on a 5-point scale.

The TEIQue (Short Form) (21) comprises 30 questions and delivers data for four sub-variables: Well-Being, Self-Control, Sociability, and Emotionality. Global Trait Emotional Intelligence scores are derived by calculating the average of its four sub-variables.

Statistical Procedure

Mean and standard deviation were calculated to express the descriptive statistics. The normality of the data was tested using the Kolmogorov–Smirnov test, which indicated that the data were skewed. Therefore, Spearman's rho, which is a non-parametric test, was used to explore the association between the levels of physical activity and global trait emotional intelligence, including its sub-variables. The significance level was set at 0.05.

Results

Table 1: Descriptive statistics of PA levels and Trait Emotional intelligence among female adolescents

Variable	Mean	Std. Deviation
Physical Activity Levels	2.83	0.94
Well Being	4.25	1.14
Self-control	4.41	1.36
Sociability	4.87	1.32
Emotionality	4.98	1.32
Global Trait Emotional Intelligence	4.63	0.74

In Table 1, the mean and standard deviation values can be observed for physical activity levels, trait emotional intelligence, and its subscales within a cohort of female adolescents. The data in the table indicates that the mean and standard deviation for the variable Physical Activity Levels was 2.83±0.94; whereas it was 4.25±1.14 for Well Being, 4.41±1.36 for Self-control, 4.87±1.32

For Sociability, 4.98±1.31 for Emotionality, and 4.63±0.74 for Global Trait Emotional Intelligence.

Table 2: Descriptive statistics of PA levels and Trait Emotional intelligence among female adolescents

Variable	Physical Activity Levels	
	Spearman 's rho	P-Value
Well Being	0.41	0.001*
Self-control	0.63	0.001*
Sociability	0.35	0.001*
Emotionality	0.27	0.001*
Global Trait Emotional Intelligence	0.67	0.001*

**** Indicates significant at 0.05 levels***

Table 2 reveals the associations between Physical Activity Levels and Overall Trait Emotional Intelligence, as well as its individual subscales: Well-Being ($r = 0.41$, $p < 0.05$), Self-Control ($r = 0.63$, $p < 0.05$), Sociability ($r = 0.35$, $p < 0.05$), Emotionality ($r = 0.27$, $p < 0.05$), and Global Trait Emotional Intelligence ($r = 0.67$, $p < 0.05$). The data clearly demonstrates significant positive correlations between Physical Activity Levels and all the subscales, namely Well-Being, Self-Control, Sociability, Emotionality, and Global Trait Emotional Intelligence.

Figure 1: Association between Physical activity levels and subscale Well-Being

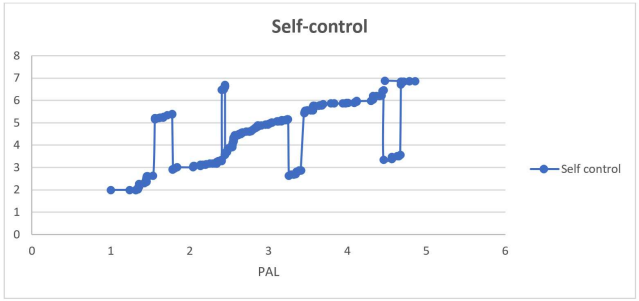

Figure 2: Association between Physical activity levels and subscale Self-Control

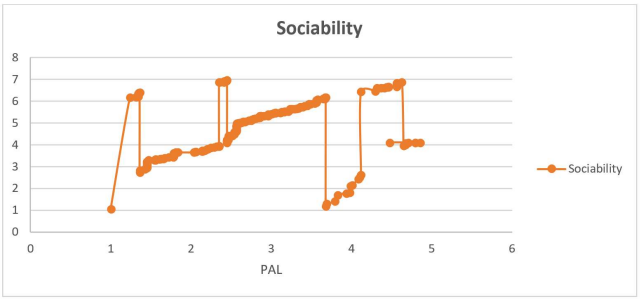

Figure 3: Association between Physical activity levels and subscale Sociability

Figure 4: Association between Physical activity levels and subscale Emotionality

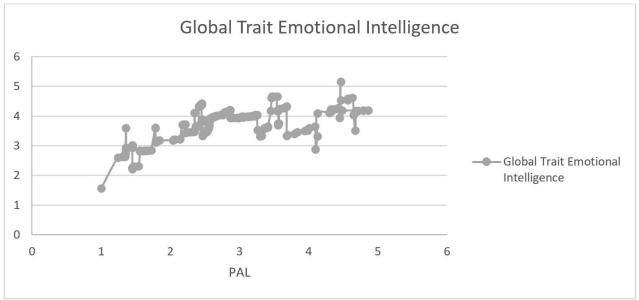

Figure 5: Association between Physical activity levels and subscale Global Emotional Intelligence

Discussion

The objective of this research was to examine the link between physical activity levels and Trait emotional intelligence among female adolescents. Table 2 reveals that there were significant

Correlations observed between physical activity levels and the Global Trait Emotional Intelligence and its sub-variables. A high correlation was found between physical activity levels and Global trait emotional intelligence along with the sub-variable Self-control. However, other sub-variables showed weak to moderate correlation with the physical activity levels.

Despite the relationships being quite weak in selected sub-variables, this study aligns with previous research indicating that higher trait emotional intelligence is linked to greater levels of physical activity and positive attitudes towards exercise. For instance, in a study focusing on gym-users, Solanki and Lane (2010) (15) found that possessing a high global trait emotional intelligence was associated with more optimistic beliefs regarding exercise's role in regulating mood. Another study on male university students revealed almost similar results (20). On the other hand, Saklofske et al. (2007) (16), in their investigation on undergraduate students, did not find a direct association between trait emotional intelligence and optimistic attitude towards exercise, but it was associated with positive exercise behaviour. Similar findings were observed in another study involving undergraduate students (16). Two other studies detected a positive correlation between trait emotional intelligence and exercise consistency (17, 18). Similarly, another study found that individuals who achieved the optimal levels of physical activity displayed higher scores in trait emotional intelligence compared to those who did not meet the activity guidelines. However, even those who were insufficiently active still showed higher trait emotional intelligence scores than individuals who were entirely inactive (19).

To gain a clearer understanding of the relationship between these two variables, further research with a larger sample size and considering both genders is needed. Moreover, a comparative study may be conducted among private and government school students to explore the association between physical activity levels and trait emotional intelligence.

Conclusion

In nutshell, our findings shed light on the importance of physical activity in nurturing emotional intelligence among female adolescents.

The positive correlations found between physical activity levels and various aspects of emotional intelligence underscore the need to incorporate physical fitness initiatives within educational and societal frameworks. By acknowledging and implementing these findings, young females can be empowered to lead healthier and emotionally enriched lives, ultimately contributing to their overall well-being and personal growth.

Conflict of Interest: None

References

Lee IM, Shiroma EJ, Lobelo F, Puska P, Blair SN, Katzmarzyk PT. Effect of physical inactivity on major non-communicable diseases worldwide: an analysis of burden of disease and life expectancy. Lancet 2012: 380: 219–229. . *[Crossref][Google Scholar]*

Cooney G, Dwan K, Mead G. Exercise for depression. JAMA 2014: 311: 2432–2433. . *[Crossref][Google Scholar]*

Stamp, Elizabeth and Crust, Lee and Swann, Christian (2015) Relationships between mental toughness, physical activity and barriers to exercise in undergraduate students. In: British Psychological Society Department of Sport and Exercise Science Conference, 14 - 15 December 2015, Leeds. . . *[Crossref][Google Scholar] [Crossref][Google Scholar]*

Kodama S, Tanaka S, Heianza Y, Fujihara K, Horikawa C, Shimano H, Saito K, Yamada N, Ohashi Y, Sone H. Association between physical activity and risk of all-cause mortality and cardiovascular disease in patients with diabetes: a metaanalysis. Diabetes Care 2013: 36: 471–479. . *[Crossref] [Google Scholar]*

Soltanian AR, Nabipour I, Akhondzadeh S, Moeini B, Bahreini F, Barati M, et al. Association between physical activity and mental health among high-school adolescents in Boushehr province: A population based study. Iran JPsychiatry. 2011;6(3):112–6. *[Crossref][Google Scholar]*

Fernández-Abascal E. G. , Martín-Díaz M. D. *Dimensions of emotional intelligence related to physical and mental health and to health behaviors. Front. Psychol. 2015: 6:317 10.3389/fpsyg.2015.00317 [Crossref][Google Scholar]*

Wu, Xiu Yun et al. ,The Influence of Physical Activity, Sedentary Behavior on Health-Related Quality of Life among the General Population of Children and Adolescents: A Systematic Review. ' Ed. Jacobus P. *van Wouwe. PLoS ONE 12.11 (2017): e0187668. PMC. 2018: Web.. [Crossref][Google Scholar]*

Jones MV. Emotion regulation and sport performance. The Oxford handbook of sport and performance psychology. New York, NY: Oxford University Press, 2012: 154–172. *[Crossref] [Google Scholar]*

Laborde S, Raab M, Dosseville F. Emotions and performance: valuable insights from the sports domain. In: Mohiyeddini C, Eysenck M, Bauer S, eds. Handbook of psychology of emotions: recent theoretical perspectives and novel empirical findings. *New York, NY: Nova, 2013: 325–358 [Crossref][Google Scholar]*

Goleman D. Emotional intelligence. New York, NY; England: Bantam Books, Inc, 1995. . *[Crossref] [Google Scholar]*

Wang X. The role of anticipated negative emotions and past behavior in individuals' physical activity intentions and behaviors. Psychol Sport Exerc 2011: 12: 300–305. . *[Crossref][Google Scholar]*

Scherer KR. What are emotions? And how can they be measured? Soc Sci Inform 2005: 44: 695–729. . . *[Crossref][Google Scholar] [Crossref][Google Scholar]*

Stough C, Saklofske DH, Parker JDA. Assessing emotional intelligence: theory, research, and applications. New York, NY: Springer Science, 2009: 85–101. . *[Crossref][Google Scholar]*

Laborde S, Dosseville F, Guillén F, Chávez E. Validity of the trait emotional intelligence questionnaire in sports and its links with performance satisfaction. Psychol Sport Exerc 2014a: 15: 481–490. . *[Crossref][Google Scholar]*

Solanki D, Lane AM. Relationships between exercise as a mood regulation strategy and trait emotional intelligence. Asian J Sports Med 2010: 1: 195–200. . *[Crossref][Google Scholar]*

Saklofske DH, Austin EJ, Galloway J, Davidson K. Individual difference correlates of health-related behaviours: preliminary evidence for links between emotional intelligence and coping. Pers Individ Dif 2007: 42: 491–502. . *[Crossref][Google Scholar]*

Tsaousis I, Nikolaou I. Exploring the relationship of emotional intelligence with physical and psychological health functioning. Stress Health 2005: 21: 77–86. . *[Crossref][Google Scholar]*

Magnini VP, Lee G, Kim B. The cascading affective consequences of exercise among hotel workers. Int J Contemp Hosp M 2011: 23: 624–643. . *[Crossref] [Google Scholar]*

Li GSF, Lu FJH, Wang AHH. Exploring the relationships of physical activity, emotional intelligence and health in Taiwan college students. J Exerc Sci Fit 2009: 7: 55–63. . *[Crossref][Google Scholar]*

Singh, H. Exploring the relationship between trait emotional intelligence and physical activity levelss in male university students. European Journal of physical education and sport science 2018: 4 (3), 141-148. . *[Crossref][Google Scholar]*

Petrides, K. V. (2009). Psychometric Properties of the Trait Emotional Intelligence Questionnaire (TEIQue). *In: Parker, J., Saklofske, D., Stough, C. (eds) Assessing Emotional Intelligence. The Springer Series on Human Exceptionality. Springer, Boston, MA. [Article][Crossref][Google Scholar]*