

PalArch's Journal of Archaeology
of Egypt / Egyptology

IMPACT OF SPORTS PARTICIPATION UPON SOCIAL INTELLIGENCE OF COLLEGE PLAYERS

*Bilal Ahmad¹, Dr. Mohibullah Khan Marwat², Dr. Yasmeen Iqbal³, Dr. Rahila Nizami⁴,
Muhammad Shah⁵, Samera Saman⁶, Kashif Mehmood⁷*

^{1,2,3,4,6,7}Department of Sports Sciences & Physical Education, Faculty of Allied Health
Sciences, The University of Lahore

⁵Lecturer, Department of Physical Education & Sports Abdul Wali Khan University Mardan

Email: 1bilal70628@gmail.com, 2mohibullah.khan@ed.uol.edu.pk,
3yasmeen.iqbal@ahs.uol.edu.pk, 5muhammadshah@awkum.edu.pk,
6samerasaman83@gmail.com, 7kashif.mehmood@sports.uol.edu.pk

**Bilal Ahmad, Dr. Mohibullah Khan Marwat, Dr. Yasmeen Iqbal, Dr. Rahila Nizami,
Muhammad Shah, Samera Saman, Kashif Mehmood. Impact Of Sports Participation
Upon Social Intelligence Of College Players-- Palarch's Journal Of Archaeology Of
Egypt/Egyptology 19(2), 1263-1274. ISSN 1567-214x**

**Keywords: Social Intelligence, Sports Participation, College Players, Individual Sports,
Team Sports**

ABSTRACT

Background:

Socialization is the process by which an individual learns a variety of social trends, beliefs, and habits through schooling and training. Sports play a positive role in the life of young students

Objectives: The present study aimed to identify the role and effect of sports participation of different domains of social intelligence of college level players.

Methodology:

This study employed cross-sectional research design, in which college level male players of 16-18 years of age participated. Data was collected from different colleges of Lahore, Pakistan. Simple random sampling technique was used. Sports participation level and the dependent variables for this study were measured by using a social intelligence scale. The relationship between sports participation and social intelligence. Pearson Correlation Coefficients was used

to measure the relationship between these two variables. The Paired Samples T-Test was utilized to report the differences in the level of sports participation and subscales of social intelligence ANOVA was used to measure the impact of sports participation on social intelligence.

Results:

The mean age of the players was calculated as 16.66 ± 0.65 . There were 50.50% 11th grade students and 49.50 12th grade students. Mean score of 11th grade students on sports participation was 86.7. A significant difference was found between sports participation and all three subscales of social intelligence social information ($p=0.000<0.05$), social awareness ($p=0.000<0.05$) and social skills ($p=0.000<0.05$). A significant association was existed between sports participation and social intelligence. Moreover, there was a significant impact of sports participation on social intelligence ($p=0.000<0.05$). There was a significant impact of different domains of social intelligence (Social Awareness, Social Processing, and Social Skills) on sports participation. Whereas, different domains of social intelligence differently affected individual and team sports

Conclusion:

Though a significant effect of sports participation is evident on social intelligence, the participants of individual and team sports showed different effects on social intelligence.

INTRODUCTION

Socialization is the process by which an individual learns a variety of social trends, beliefs, and habits through schooling and training. Sports play a positive role in an individual's life, not only among the youth and their gatherings of their peers but also among young and old alike. In addition to leading a good and healthy life, socialization is also seen as a component that encourages people to participate in sports. Sports clubs, wellness facilities, and playful zones in the neighborhoods are ready for social interaction and people who use such areas have more active investment in socialization. In this regard, it is seen that there is a strong connection between sports and social skills. Especially in sports that involve having the same environment with others or collaborating that require social skills. For example, learning social norms, regulating behavior, respect for others, communicating with others, collaborating with groups, taking responsibility, and giving feedback for further learning.

Social skills (SS) improves interaction and is effective in maintaining participation in sports activities. These skills, on the other hand, are communication skills related to an individual's verbal or non-verbal behavior that are in accordance with social norms while contracting the scope of society. These skills also help the individual to establish appropriate relationships with other people and to have a positive effect on them. In addition, they include skills such as understanding signals from the social sphere, interpreting clues according to different situations, demonstrating appropriate behaviors that suit those situations, and the individual in social relationships. Increases efficiency. To predict and interpret human behavior, a specific area is created by interpersonal situations and behavior of a person in such situations, in other words, managing and solving problems where an important role is played by

the factor of social contacts of people. One of the salient features used to describe and predict such behavior is social intelligence (SI). Moreover, other concepts like emotional intelligence (EI) and interpersonal intelligence are overlapping concepts. Without any doubt, SI is a multifaceted construct having three different components: perceptual, cognitive-analytical and behavioral. In this sense, the socially intelligent individuals are capable of producing acceptable behavior for the purpose of achieving desired social goals in social situations.

The concept of SI includes an individual's abilities to understand others' behavior in terms of mental states, which involve thoughts, behaviors, wishes, intentions, desires, and beliefs to interact in an individual's environment. The environment or society includes both the complex social groups and close relationships, which predict how others will feel, think, and behave. So, it is individual's bank of knowledge towards the social matters of the society. Examples of SI include knowing when to talk or listen, what to say, and what to do. Timing is a big part of SI, for example, someone who is imperceptive, may tell a funny joke but at the wrong time, or not showing enough interest when meeting a new person.

Social insight is the capacity to comprehend and oversee others to act carefully in outlining social relationship. Socially wise individuals are believed to be innovative, with well relational abilities and benevolent. Social insight is a more extensive term that features the build including social abilities, being wise in making relationship which has center around the effective associations with different people. Social insight is firmly identified with the standards of the general public and it is hard to look at social knowledge on various scales. Social knowledge is viewed as an element of a specific culture where the individual lives. All in all, practices and attributes considered socially wise in one culture may not be viewed as socially canny in other culture. In various societies, there might be various points and destinations of the practices expected to be as socially insightful.

The situation of individuals in the organization of connections influences their future turn of events. Youths with elevated level of SI can take care of numerous issues of their companions while young people having low societal position stay in danger of taking care of the issues. Famous understudy is generally supportive of social and helpful so the standards and qualities for conduct of interest in his friend gathering. Youths' associations with peers are connected with numerous sides of improvement and change, and profoundly social teenagers acquire numerous advantages in light of their status in various ways. Social connectedness is only one of the quantifiable results of social insight emphatically associated with prosperity. Coming up next is a fractional rundown of advantages found in the writing, some of which allude explicitly to social insight, and some of which allude to one of numerous parts of social knowledge.

Determinants of high level of SI or societal position in the bunch of friends improve the advancement of teenagers in various everyday issues. The idea of SI in this examination will be talked about based on three components including

social data measure, social aptitudes and social mindfulness. Capacity to acknowledge verbal and nonverbal correspondence is thought as Social Information Processing (SIP); Social Skills (SS) incorporate the information on fundamental relational abilities and Social Awareness (SA) gauges the conduct of the respondent in various circumstance of the general public.

Youths who have a significant level of SI can improve accomplishment in their examination. They acquire thoughts from their friends and society. They are self-persuaded from their general public. They endeavor to set up their relations who are strong and predictable with their own advantage and conduct. In a learning climate, social aptitudes are needed in creating and keeping up sure connections and overseeing debates among understudies. Learning foundations are battling increasingly more for creating social expertise in their understudies. This will assist them with performing better in their commonsense life.

Almost all the sports require flexibility, agility, endurance and anthropometric characteristics to execute certain fundamental skills. It has also been reported that psychological qualities (PQ) have significant role as far as sports performance is concerned. These PQ like self-concept, self-awareness, social recognition, intelligence and social skills play a significant role in determination of the performance in any sports but SI is probably foremost important at all levels of the sports participation (SP) as SP many increase the level of SI, which in turn can play an important role in making correct and timely decisions, proper performance implementation, increase morale and motivation of the athletes through effect on the quality of the relationship between the teammates and understanding the mutual emotions during competition.

As mentioned above that individuals with high level of SI appear to experience a rich and meaningful life, as opposed to truncated affective experiences. Furthermore, aspects of SI have been found to be associated with enhanced social problem-solving abilities, experienced leadership, and positive interpersonal experience. Based on these evidences the significance of present research is to analyze the SI and its sub-scales among college level players. Moreover, the concept of SI is rarely studied in the area of sports sciences. Thus in the light of sports participation in mind, the researcher will attempt to investigate “The influence of sports participation on Social Intelligence of College Players”.

LITERATURE REVIEW

Initially created in the mid-20th century by Edward Thorndike, the construct of social intelligence (SI) started to demonstrate an individual's capacity to comprehend and act with astuteness and adequacy in relational assignments (Barber, 2018). In this definition, the prevailing thought of insight, combined with a high IQ, loses importance, featuring the individual's capacity to oversee effective social communications and human relations (Schmidt, 2019). Somewhere in the range of 1920 and 1980, the investigation of this construct was described by a progression of vicissitude in its arrangement and numerous authors characterized it as general intelligence applied to social circumstances (Kundu, 2017).

It is not easy to define SI mainly because of other overlapping concepts, such as emotional intelligence or mutual intelligence. Therefore, a fundamental difficulty in the study of SI is that different researchers have described this construct in different ways for the last many years (Boute, 2017). Many research scholars defined SI differently in the last four decades. Ford (1992) defined SI in terms of “behavioral outcomes” and succeeded in supporting a separate SI domain. He defined SI as an ability to achieve relevant goals in specific social settings. Marlowe (1986) equated SI with social competence. He defines social intelligence as the ability to understand the emotions, thoughts, and behaviors of individuals, including oneself, in interpersonal situations, and to act appropriately on that understanding. More recently, Goliman divided SI into two broad categories: social awareness and social convenience. He defined social awareness as “what we think of others” and described social convenience as “what to do with ease in social situations” (Perard, 2015). Several other definitions of SI have been offered by theorists, but all share two common components: a) the awareness of others and b) their response and adaptation to others in social situations.

The positive communication of an individual with others prompts a crucial function in his prosperity or disappointment in word related and public activity since he lives in an interlocked climate of connection, and the SI conduct is described with its advantage in individuals, rehearsing acknowledged conduct from society, and holding with great associations with others, so the accomplishment of an individual doesn't rely upon psychological knowledge or passionate insight however on SI (Kaur, 2018). The markers of the SI show up through the capacity of the person in understanding the others, the proper reaction with those of various thought processes, creating fellowships, the capacity in cooperation with others, and carrying on admirably with them, the accomplishment of the person in life essentially relies upon the level of discernment and comprehension the multi factors towards the issues that the individual appearances in his day to day existence (Barber, 2018).

Dewey was the first scholar to suggest that the “ultimate moral motives and forces are nothing more or less than social intelligence the power of observing and comprehending social situations” (Schmidt, 2019). Of course, SI is a multifaceted construct, and, among others, Amdurer & Osterman, (2014) argued that SI has three distinct components: perception, cognition, and behavior. In this sense, they view the socially intelligent individual as a person who has the ability to create appropriate behaviors for the purpose of achieving the desired social goals.

The research in the area of SI started by Thorndike when he presented a triple classification with three dimensions for intelligence (Kundu, 2017). This classification includes the mechanic intelligence, abstract intelligence; and social intelligence: mechanic intelligence identifies the ability to deal with materials, tools, and instruments, while abstract intelligence deals with theoretical behavior and the ability to deal with symbols, verbs, and forms, and social intelligence indicates the nature of interaction with others. (Eisenberg, 2017).

The concept of SI refers to the ability to understand thoughts, feelings, and behaviors of others in different social situations, it also consisted of the skills which enable individuals to solve social problems (Dutton, 2018). The importance of SI as an enabler of performance and flexibility in human relationships is becoming increasingly valued in today's world. The ability to engage in 'complex' relationships with other humans leads to social success. Such practical intelligence is required in the existing knowledge (Boyatzis, 2017). The creative Principals were characterized by the ability to adapt to changes realistic thinking, and their ability to establish thinking model based upon imagination, construction synthesis, analysis, organization, and evaluation, they also should have the ability to accept changes, cope with crises, committed to performing work and accept others opinion. Many studies were conducted to investigate the role of SI and creative and problem solving behavior in school students.

Carvalho, (2016) directed an investigation that planned to realize the SI level among high school students and its impact upon stress. The outcomes indicated that the degree of SI among school students was high, the scholarly stress was mid and there was a significant level of stress ascribed to SI. The investigation of Peixoto, (2015) meant to explore the connection between SI and individual qualities of high school students, the sample comprised of 250 students. The consequences of the examination showed measurable significant differences in SI level and individual characteristics of the school students and a positive relationship between SI and individual attributes were noticed. The investigation of Fassnacht, (2017) utilized 200 educators to locate the degree of SI and its relationship with certain methodologies for classroom control. The outcomes showed that: the degree of SI increments with age and a positive connection between classroom control techniques and SI. In another investigation, it was discovered that the degree of SI among college students was high, and their capacity to make choices in different situations was additionally high. Kihlstrom, (2016) found that the SI level among school students was high and there was a positive connection between SI and students' accomplishment. The investigation of Kihlstrom, expected to explore the connection between SI and taking care of issues among college students, the sample of the examination comprised of 400 understudies, the examination showed a positive relationship between SI and critical thinking, and there were no significant differences in SI credited to sex, scholarly field and scholastic level. Nagra, (2014) led an investigation that planned to discover the connection between SI, basic reasoning, and a few factors, the sample of this examination comprised of 381 students. The consequences of the examination demonstrated that the SI level was low, the basic reasoning level was mid and there was a significant relationship between SI and basic reasoning. The investigation of Scholte, (2017) showed that more than 70% of the administrators concurred that school chiefs assume an extraordinary part in creating imaginative conduct. The investigation of Zbihlejšová, (2017) decided the elements that improve inventive conduct at schools: decency assessment, urge instructors to work unafraid, uphold educators, and furnish them with imaginative hierarchical way.

In this sense, Soares, (2018) receives an integrative way to deal with the idea, alluding to SI as the capacity to investigate, dissect and decipher data, to take

care of issues, accomplish objectives, and make purposeful, arranged, and fruitful choices about relational circumstances. This definition received in this investigation and has its foundations in an intellectual and relevant way to deal with operationalizing social insight in the individual climate connection, as per three parts: (a) the cycle of critical thinking, (b) information, and (c) the perspectives. The critical thinking measure incorporates disentangling and comprehension of data about the social issue and the plan of a settlement plan, its usage, and assessment (Sternberg, 2013). The information mirrors the communicated and dormant substance of the relational circumstance, and furthermore the significant characteristics in interpreting and gathering data about the circumstance. At last, perspectives incorporate self-discernment about degrees of inspiration, commonality, and trust in the social circumstances.

METHODOLOGY

The main focus of the study was to identify the impact of sports participation on social intelligence of college students. This study employed cross-sectional research design, in which college level male players of 16-18 years of age participated. Data was collected from different colleges of Lahore, Pakistan. Simple random sampling technique was used. Sports participation level and the dependent variables for this study were measured by using a social intelligence scale. The relationship between sports participation and social intelligence. Pearson Correlation Coefficients will be used to measure the relationship between these two variables. The Paired Samples T-Test was utilized to report the differences in the level of sports participation and subscales of social intelligence ANOVA was used to measure the impact of sports participation on social intelligence.

RESULTS

The mean age of the players was calculated as 16.66 ± 0.65 . There were 50.50% 11th grade students and 49.50 12th grade students. Mean score of 11th grade students on sports participation was 86.7. A significant difference was found between sports participation and all three subscales of social intelligence social information ($p=0.000<0.05$), social awareness ($p=0.000<0.05$) and social skills ($p=0.000<0.05$). A significant association was existed between sports participation and social intelligence as shown in Table-1. There was a significant impact of sports participation on social intelligence ($p=0.000<0.05$) as shown in Table-2. There was a significant impact of different domains of social intelligence (Social Awareness, Social Processing, and Social Skills) on sports participation. Whereas, different domains of social intelligence differently affected individual and team sports.

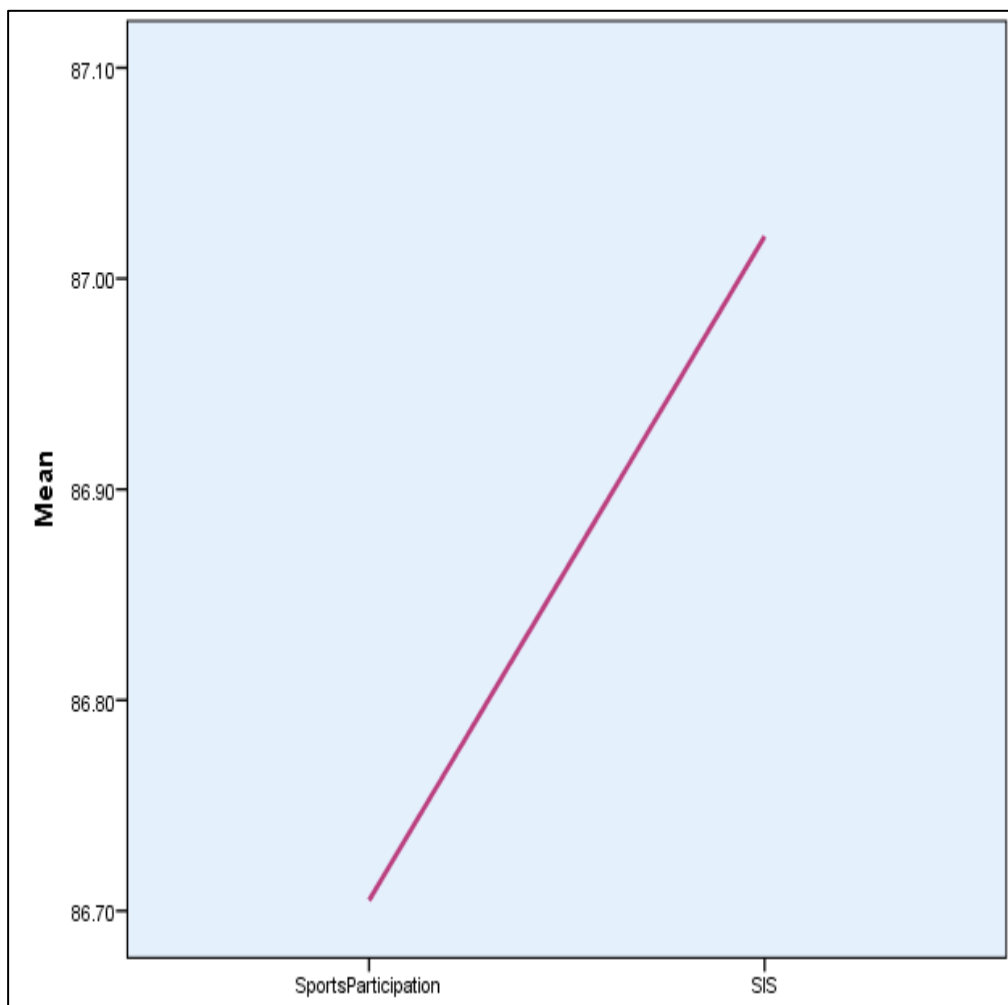
Table-1: Association between Sports Participation and Social Intelligence

		Sports Participation	SIS
Sports Participation	Pearson Correlation	1	.978**
	Sig. (2-tailed)		.000
	N	200	200

SIS	Pearson Correlation	.978**	1
	Sig. (2-tailed)	.000	
	N	200	200

There was a strong association between sports participation and social intelligence ($r=0.97$, $p=0.000$) as shown in Table-1.

Figure-1 Association between Sports Participation and Social Intelligence



An increase in the scores of sports participation shows an increase in social intelligence. Thus, it can be concluded that there is a significant and positive association between sports participation and social intelligence

Table-2: Impact of Sports Participation on Social Intelligence

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	29036.420	47	617.796	90.686	.000

Within Groups	1035.500	152	6.813		
Total	30071.920	199			

A significant impact of sports participation on social intelligence ($p=0.000<0.05$) as shown in Table-2.

DISCUSSION

According to our research results, no statistical significance was found in terms of sports participation and social intelligence levels. It can be assumed that sports positively affects the social intelligence score and that there is no difference between the education level in terms of social intelligence score (Dutton, 2018). No statistical significance was found between 'social information processing', 'social skills processing', and 'social awareness' scores as to individual and team players (Kundu, 2017). The research results of Barber, (2018) indicated that there was no statistical significance among the mean scores of the groups in terms of gender.

Additionally, the study by Schmidt, (2019) reported no statistical significance in social intelligence between education levels. While no significance was found in the sub-dimensions of 'social information processing' and 'social awareness', the students' scores for 'social skills were found statistically significantly higher than those of 12th grade students (Fassnacht, 2017). There is no statistical significance in the sub-dimensions of 'social information processing' and 'social skills', whereas there is a statistical significance in favor of team sports in the dimension of 'social awareness' (Boute, 2017). In the study conducted with the participation of prospective sports managers, a statistical significance was found in favor of male participants in the gender variable (Soares, 2018). In the studies by Nagra, (2014), and Carvalho, (2016), there are statistical significance in favor for male players. In other relevant studies, various results have been assumed to be caused by sample groups.

In the current study, statistical significance was observed in terms of social intelligence levels in the level of sports performance. In the sub-dimension of the 'social information processing', the scores of the players were found significantly lower than those of the athletes in tennis. In the sub-dimension of 'social skills processing', statistical significance was found in all categories except for badminton and wrestling. Looking at the scores obtained, the lowest mean scores belonged to the athletes in the wrestling, while the highest mean scores belonged to the athletes in the basketball. In the sub-dimension of 'social awareness', on the other hand, statistical significance was observed in all categories, except for football. The lowest mean scores belonged to the athletes in the athletics category, while the highest mean scores belonged to the athletes in the volleyball. In all three sub-dimensions with a statistical significance, the lowest mean scores belonged to the athletes in the athletics category, while the highest mean scores belonged to the athletes in the **football**. Besides the statistical significance between the scores of those in individual sports and those in team sports, the mean social intelligence scores of those in the individual sports category was found higher (Kaur, 2018).

According to Eisenberg, (2017), the facts that team sports demand more responsibility than the individual sports do, and that camp periods spent with the team for competitions outside of the province and intensive training programs with the team increase socialization among people may affect the social intelligence scores in like manner. Considering the relevant research results, it is believed that the sports category factor alone, will not be enough to explain the changes in the scores of social intelligence.

No statistical significance was found among the athletes in the sub-dimensions of 'social information processing' and 'social awareness' in the variable of years of experience as an athlete specified in the current study. In the sub-dimension of 'social skills processing', the mean scores of the athletes with 3 and more years of experience as an athlete were significantly higher than those with 1-2 years of experience. Individuals with high social skills can easily join in social environments, do not have difficulty in getting along with other people, and easily adapt to social environments (Zbihlejšová, 2016). It is apparent that individuals participating in sports activities have higher mean scores of 'social information processing' and 'social skills processing' than those who do not (Yadava, 2016). Also, the mean social intelligence scores of active athletes were found higher (Richard, 2017). Considering our research and the research results in the related literature, active participation in sports can be deemed important. In the current study, there was no statistical significance among athletes in the sub-dimensions of 'social information processing' and 'social skills processing' in the level of education variable. In the sub-dimension of 'social awareness', the mean scores of the athletes at primary education were found significantly higher than those at secondary education. Different from our research results, a study by Hooda, (2016) concluded that the mean scores- related to social intelligence and its sub-dimensions- of the employees working for an advertising agency did not show statistical significance in terms of their education level. In another study by Gafoori, (2016), it was indicated that the 'social skills', 'social awareness', and general social intelligence levels of the university graduates were significantly higher than those of the high school graduates. The fact that a variety of results have been obtained on the subject under consideration indicates that the level of education itself does not have an effect alone on the development of social intelligence.

REFERENCES

- Amdurer, E., Boyatzis, R. E., Saatcioglu, A., Smith, M. L., & Taylor, S. N. (2014). Long term impact of emotional, social and cognitive intelligence competencies and GMAT on career and life satisfaction and career success. *Frontiers in psychology*, 5, 1447. <https://doi.org/10.3389/fpsyg.2014.01447>
- Barber, S. J., Franklin, N., Naka, M., & Yoshimura, H. (2018). Higher social intelligence can impair source memory. *Journal of Experimental Psychology: Learning, Memory, and Cognition*, 36(2), 545–551. doi:10.1037/a0018406
- Boute, B. J. (2017). Emotional-Social Intelligence: Development During Online and On-Campus Holistic Healthcare Programs.

- Boyatzis, R. E. Card, M. (2017). Emotional and social intelligence competencies: Cross cultural implications. *Cross Cultural Management: An International Journal*, 19(1), 4–18.
- Carvalho, V. (2016). *Applying emotional intelligence: A practitioner's guide*. New York, NY: Psychology Press.
- Dutton, M., & Perry, J. Kiremitci O, Canpolat AM (2018). Determining the role of physical education and sports school students' multiple intelligences areas on metacognitive awareness and problem solving skills. *Hacettepe J. Sport Sci.* 25 (3): 118–126.
- Eisenberg, N., Kupfer, A., Steca, P., Tramontano, C., & Caprara, G. V. (2017). Assessing perceived empathic and social self-efficacy across countries. *European Journal of Psychological Assessment: Official Organ of the European Association of Psychological Assessment*, 26(2), 77–86.
- Fassnacht, G. M. Joseph, C., & Lakshmi, S. S. (2017). Social intelligence, a key to success. *The IUP Journal of Soft Skills*, 4(3), 15-21.
- Gafoori, M., Shahbazi, M., Rastegar, P., and Fathi, E. (2016). Emotional and Social Intelligence: Insights from an Emotion Quotient Inventory. Baron, R. and J. Parker (Eds), *A Handbook of Emotional Intelligence*.
- Hooda, D., Hackworth, C. A., & Brannon, L. A. (2016). Understanding and managing others: The Impact of social intelligence upon social influence. *Communication Research Reports*, 23(3), 171–178. doi:10.1080/08824090600796385
- Kaur, M. Laird, R. D., Jordan, K., Dodge, K. A., Pettit, G. S., & Bates, J. E. (2018). Role of Personality and Emotional Intelligence in Subjective Well-Being of Medical and Engineering Students. *International Journal of Information and Education Technology*, 3(2).
- Kihlstrom, J. F., & Cantor, N. Saxena, S., & Jain, R. K. (2016). Social intelligence of undergraduate students in relation to their gender and subject stream. *Journal of Research & Method in Education*, 1(1), 1-4.
- Kundu, M., Saha, B., & Mondal, B. C. (2017). Adjustment of undergraduate students in relation to their social intelligence. *American Journal of Educational Research*, 3(11), 1398-1401.
- Nagra, V. (2014). Social intelligence and adjustment of secondary school students. *Paripex - Indian Journal of Research*, 3(4), 86-87.
- Peixoto, M. E. (2015). Social intelligence in Portuguese students: Differences according to the school grade. *Procedia - Social and Behavioral Sciences*, 116, 56-62. doi:10.1016/j.sbspro.2014.01.168
- Perard, M., Mittring, N., Schweiger, D., Kummer, C., & Witt, C. M. (2015). A critique of definitions of the cultural and creative industries in public policy. *International Journal of Cultural Policy*, 13 (1), 17-32
- Richard, N, Pigozzi, A Spataro, A Alabiso, A Parisi, M Rizzo (2017). Role of exercise stress test in master athletes. *Br J Sports Med* .39:527–531. doi: 10.1136/bjism.2004.014340.
- Schmidt, M., & Allsup, R. E. (2019). Dual tuning in a supportive context: joint contributions of positive mood, negative mood, and supervisory behaviors to employee creativity. *The Academy of Management Journal*, 605-622.
- Scholte, R. H. J., Segers, E., & Spijkerman, R. (2017). Social intelligence and academic achievement as predictors of adolescent popularity. *Journal of Youth and Adolescence*, 39(1), 62-72. doi:10.1007/s10964-008-9373-9

- Soares, A. B., Francischetto, V., Peçanha, A. P. C. L., Miranda, J. M., & Dutra, B. M. S. (2018). Intelligence and social competence in university adaptation. *Estudos de Psicologia (Campinas)*, 30(3), 317-328. doi:10.1590/S0103-166X2013000300001
- Yadava, A., Hayward, S., & Pjesky, R. (2016). Social learning theory and web-based learning environments: A review of research and discussion of implications. *The Amer. Jnl. of Distance Education*, 23(2), 88–103.
- Zbihlejšová, L. (2016). Social intelligence in the context of personality traits of teachers. *American International Journal of Contemporary Research*, 3(7), 11-17.