

Teachers' Emotional Social Intelligence and its Relationship with Students' Cohesiveness in Classroom Learning Environment

Fazle Khaliq* Amir Zaman† Abdul Ghaffar‡



Abstract *The purpose of the study is to investigate teachers' emotional social intelligence and its relationship with students' cohesiveness in classroom. The main objectives of the study were to; find students' perception of emotional social intelligence level of university teachers, find students' cohesiveness in classroom, and measure the relationship of teachers' emotional social intelligence with the students' cohesiveness in classroom learning environment. Research questions were formulated. Population of the study was teachers and students (8775) of all universities (29) of Khyber Pakhtunkhwa. The Sample of the study wa taken from nine (9) universities' teachers and students (900) through simple random and purposive sampling techniques. Questionnaires and interview were used as research instruments to collect data from the concerned participants and informants. Descriptive and inferential statistics were employed for the analysis of the data. It was found that there is a significant correlation between social emotional intelligence of teachers and students' cohesiveness in classroom learning environment. It is recommended that research studies should be conducted at different level with different variables relating to emotional social intelligence.*

Key Words:

Intelligence,
Emotional
Intelligence,
Social
Intelligence,
Learning,
Learning
Environment,
Classroom
Learning
Environment

Introduction

Intelligence is the ability of the individual to act with determination and purpose (Wechsler, 1958). Social intelligence was first coined by Thorndike in 1920. It focused on describing, defining and assessing socially competent behaviour (Doll, 1935; Moss & Hunt, 1927; Thorndike, 1920). Social intelligence is the ability to understand others, manage people, and act wisely in social contexts (Gardner, 1983; Sternberg, 1985; Thorndike, 1920). Bar-On (2006), Salovey and

*PhD Scholar (Education), Department of Education, Abdul Wali Khan University Mardan, Mardan, KP, Pakistan. Email: Khaliq78@yahoo.com

†Assistant Professor, Department of Education, Abdul Wali Khan University Mardan, Mardan, KP, Pakistan.

‡Assistant Professor, Department of Education, Abdul Wali Khan University Mardan, Mardan, KP, Pakistan.

Mayer (1990) and Goleman (1995) presented the construct of emotional intelligence. Emotional intelligence is the intelligent use of emotions. Emotional intelligence is an arrangement of capacities, patterns, and behaviours to recognize and regulate the emotions of self and others toward successful environmental adaptation. Researchers started to move their attention from describing and assessing social intelligence to understanding the purpose of interpersonal behaviour and the role it plays in actual compliance (Zirkel, 2000). Emotional intelligence is the part of social intelligence and both concepts are interrelated and are the components of the same construct (Salovey & Mayer, 1990).

The word 'environment' has numerous meanings. In the context of the classroom, two common aspects of environment exist: the physical environment (which includes the material setting of the classroom, such as the furniture, lighting and all objects in the classroom); and the human environment (which involves students and teachers and their interactions with each other). Fraser (2015) defines the learning environment as referring to "the social, psychological, and pedagogical contexts in which learning occurs and which affect students' achievement and attitudes" and this environment involves the shared perceptions of the students and sometimes the teachers within that environment. Because students would have spent on an average about 20, 000 hours in classrooms by the time they graduate from university (Fraser, 2015), what happens in these classrooms and students' reactions and perceptions of their school experiences are of great importance. It is indeed worthwhile to find out what could be improved in the environment within a classroom as there is strong evidence that effective learning is related to a positive classroom environment (Brophy & Putnam, 1978).

Statement of the Problem

The purpose of this study is to present, describe and examine the impact of emotional social intelligence (ESI) of teachers on the classroom learning environment. There are three models of ESI- the Salovey-Mayer Model, the Goleman Model and Bar-On model. The researcher will adopt Bar-On model as it is both teachable and learnable. A promising field of recent research that may help guide teachers in whole student education in classroom learning environment is in the development of social and emotional ability. The concept of emotional and social intelligence (ESI) is presented as the necessary, justifiable improvement of individual ability to employ emotional information, behaviours, and qualities to accelerate preferred social outcomes. Taking into consideration the discussion in the introduction section about the significant impact of teachers' emotional social intelligence in establishing an environment favourable for learning in the classroom, this study aims to investigate emotional

social intelligence (ESI) of teachers and its relationship with the classroom learning environment.

Objectives of the study

The objectives of the study were:

1. To find students' perception of emotional social intelligence level of university teachers.
2. To find students' cohesiveness in classroom at university level
3. To measure the relationship of teachers' emotional social intelligence with students' cohesiveness in classroom.

Research Questions

1. What is the perceived level of emotional social intelligence of teachers at university level?
2. Which type of students' cohesiveness in classroom exist at university level?
3. Is there a relationship between emotional and social intelligence of teachers and classroom learning environment?

Literature Review

Intelligence is the aptitudes and capabilities of the human brainpower in the sense of a person's potential and the sequential active meanings. Intelligence is defined as a universal concept for perceptive talent constructs that are in general effective for the completion of varied responsibilities, glitches, and state of affairs. Later on intellectuals have introduced different terminologies like academic intelligence, social intelligence and emotional intelligence (Arghode, 2014).

Emotional intelligence faced severe criticism from different corners. Some researchers criticized that it only renaming the old concepts- alexithymia, emotional regulation, appraisal of emotions, or even social intelligence (Hedlund & Sternberg, 2000). While other intellectuals started finding faults on the validation, significance and rationalization of emotional intelligence as an intelligence construct (Neubauer & Freudenthaler, 2005). Thus, emotional intelligence caught the eagle eyes of so many researchers and more than thousand article, books, research papers, and dissertations were published between 2000 and 2006. The whole credit goes to Goleman (1995) who focussed his attention on the emotional intelligence and wrote a book with the name "Emotional intelligence – Why it can matter more than IQ". Although emotional intelligence was coined by Salovey and Mayer (1990), but it was familiarized by Goleman's book in 1995. The practicality of both SI and emotional intelligence cannot be put to question now a days. The present day researchers are trying for substitute

of SI and emotional intelligence to get success in academic life, at work and even in private life. Today zeitgeist is no longer in conflict with cognitive reasoning to emotional or social skills, but rather give values to the contributions of both SI and emotional intelligence to a comprehensive appreciation of human resources.

Social intelligence is application of cognitive abilities in social settings. There are two types of components, one is cognitive and the other is behavioural. The behavioural part of SI presents the social intelligence. Furthermore, the cognitive aspect of SI is segmented into rational, recollection, insight, creativeness, and knowledge necessities. Rational requirements clearly signify the comprehensive domain, and are branded as social understanding. Understanding, construing, *arbitrating*, *having vision*, *forecasting*, and *grasping* all speak undistinguishable intellectual operations. In comparison, *identifying*, *deciphering*, recognizing seem to discourse diverse cognitive operations that need less information processing but rather equal perceptual functions. Social intelligence is defined as a social problem solving to attain social goals. Social problem solving refers to both cognitive requirements and additional behavioural components. Social intelligence is the reflection of problem solving schemes, plans, and practical regulations used for handling social information mirrored in knowledge constructions. Plans comprise concepts of oneself, others, and social sittings. Social understanding, social memory, social perception, social creativity and social knowledge are the different aspects of SI (Lee, Day, Meara, & Maxwell, 2002).

Cohesiveness means how well something goes together. The quality of making united whole is called cohesiveness. It also means team work. In other words, it cooperation among students. Co-operation means when learners come together willingly in order to attain combined interests and objectives in the all fields irrespective of religion, culture and race (Salleh, Arshad, Shaarani, & Kasmuri, 2008). The purpose is only to refine their standard of learning and enjoying the educational services delivered. The magnitude of cohesiveness will determine the effectiveness of learners' activities (Sapran, 2010). In theory, group cohesiveness has come to play an imperative role in the study of group dynamics. Researchers have studied this notion in order to know what decides the progress of cohesiveness and the special effects of improved or reduced cohesiveness on the learners' performance. The construct of group cohesiveness was offered by Carron in 1982. Carron (1982) defined cohesion as a dynamic procedure which is mirrored in the inclination for a group to cling together and remain integrated in the chase of its objectives.

It is in reality, association among individuals based on performance. Therefore, students' cohesiveness is regarded as one of the most significant parameter and is commonly associated with students' performance. It also means team work. Teamwork is defined by Luca and Tarricone (2001, p. 5) "*as a cooperative process that allows ordinary people to achieve extraordinary*

results". A team has a common aim where students can improve operational, shared associations to accomplish joint objectives. Teamwork throw light upon learners functioning jointly in a supportive environment to acquire shared objectives through sharing of understanding and talents. The literature has concentrated only on shared aim which is sole purpose of team work and through which students' cohesiveness can be achieved (Johnson & Johnson, 1999). Successful teamwork depends on eclecticism prevailing between all students producing an atmosphere where they are all enthusiastically to give and partake in order to encourage and cultivate a constructive, actual cohesiveness for the achievement of common goal. There must be flexibility, cooperation, group effort and social interdependence rather than personalized, competitive objectives (Luca & Tarricone, 2001).

Students' cohesiveness has some feature while achieving objectives under the umbrella of social emotional intelligence. These are commitment, motivation, interdependence, cooperation, interpersonal skills, honesty, trustworthiness, respect, caring, open hearted communication, constructive feedback, listening capability, concerns for others, suitable team formation, forbearance for constructive criticism, role awareness, accountability, knowledge of team procedures, innovation of ideas, strong relationship, and effective leadership for common decision-making and problem solving, for the achievement of successful aims at supreme level which are common to all in a congenial atmosphere respecting the expertise of each individual (Johnson & Johnson, 1999). Individuals support and raise the spirits of their fellow team members to attain, give, and hit the books.

Methodology

The study was mixed method research in nature. It is the blend of numerical and non-numerical methodologies in one study (Creswell, 2013). Explanatory sequential was used.

Population of the Study

The population was all teachers and students (8775) of public and private sector universities of Khyber Pakhtunkhwa.

Sample of the Study

Probability and non-probability sampling techniques were used for selection of sample. Simple random sampling techniques were adapted for selection of sample to get quantitative data. Purposive sampling techniques were adopted for selection of students for interviews to gain qualitative data. 900 teachers and students constituted the sample of the study.

Data Collection Tools

Questionnaires and in-depth interview were used as research instruments to collect data from the concerned participants and informants.

Data Analysis

R.Q.1: - What is the perceived level of emotional social intelligence of teachers at university level?

Table 1. Self-Awareness as Component of ESI among University Teachers

S.No	Statements	M	Std
1	I can list my three emotional weak points.	3.97	.855
2	I can list my three emotional strong points.	3.97	.855
3	I remain aware of my own weaknesses and openly discuss them with associates.	3.97	.855
4	I am always conscious of my inner most thoughts	3.97	.855
5	I know how my emotional expressions affect my interactions with students	3.97	.855
6	It is easy for me to understand perspectives that are different from mine	3.97	.855
7	I always want to know why I feel bad about something	3.97	.855
8	When I am sad, my body feels weak	4.12	.936
	Overall	4.12	.884

Table 1 shows that respondents are “strongly agreed” with the five statements of self-awareness construct having mean scores 3.97, 3.97, 3.97, 3.97, 3.97, 3.97, 3.97 and 4.12 which come in the (Range from 3.51 to 4.50) among teachers. All these statements mean scores come in the range (3.51 – 4.50) indicate that respondents are agreed with self-awareness as a component of emotional social intelligence. The overall mean score 4.12 also comes in the range (3.51 – 4.50) shows that all the respondents are agreed with the construct of self-awareness of emotional social intelligence. The mean scores further show that the most of the teachers at university level are self-aware and have the attribute of self-awareness, which is the prime component of emotional social intelligence.

However, all the STD scores reflect that all the respondents are coming together in their opinions about the statements of self-awareness component.

Table 2. Self-Management among University Teachers

S. No	Statements	M	Std
1	Although I get appropriately anxious, I feel confident and relaxed in my role.	3.68	.946
2	I monitor my actions during teaching	3.56	1.03
3	I muster up courage to control my emotions in adverse situation	3.81	1.08
4	I come to class well prepared to build up my confidence.	4.13	.763
5	I am able to manage my emotions and feelings in healthy ways	4.31	.833
6	I effectively set limits with students firmly, yet respectfully	3.89	.869
7	I frequently get upset when students provoke me	4.12	.908
8	I use my free time in a good way	4.27	.868
	Overall	3.97	.921

Table 2 indicates that respondents are “agreed” (Range from 3.56 to 4.31) with eight statements. The overall mean score 3.97 follows the range (3.51 - 4.50) shows that all the respondents are agreed with all the statements. The mean scores further show that the leaders at university level have self-management, which is the key component of emotional social intelligence. However, most of the STD scores reflect that all the respondents are unanimous on their opinions about the statements relating to self-management.

Table 3. Social awareness among university teachers

S. No	Statements	M	Std
1	I can handle my emotions while dealing with others.	4.09	.871
2	I always feel for others and have interest.	4.14	.888
3	I have confidence in social situations.	3.81	1.03
4	I know how my emotional expressions affect my interactions with students	4.02	.971
5	I make an effort to ensure that my instruction is culturally sensitive	3.58	.996
6	I frequently acknowledge activities of students	3.47	1.03
7	I am aware of how all of my students are feeling	3.76	1.09
8	I recognize how people feel by looking at their facial expressions.	4.10	.782

	Overall	3.87	.957
--	---------	------	------

Table 3 points out that respondents are “agreed” (Range from 3.47 to 4.14) as come in range of agreed (3.51 to 4.50) with all statements. The overall mean score 3.87 move toward the range (3.51 - 4.50) shows that all the respondents were agreed with all the statements. The mean scores further show that the teachers at university level are socially aware within the outskirts of the university and have the quality of social awareness, which is an important component of emotional social intelligence. On the other hand, the standard deviation scores reflect that all the respondents are unanimously agreed in their opinions about the statements of social awareness.

Table 4. Relational Management Among University Teachers

S.No	Statements	M	Std
1	I let others know who I truly am as a person.	4.33	.821
2	I admit my mistakes to others.	3.94	.830
3	I appreciate others' efforts in establishing good relations.	4.14	.886
4	I often make decisions without considering its effect on others	4.32	.826
5	I nearly always stay calm when a student upsets me	4.11	.885
6	I take criticism without getting angry	4.15	.886
7	I work well with students of diverse backgrounds	3.86	1.03
8	I treat all students equally	4.08	.934
	Overall	4.12	.887

Table 4 describes that respondents are “agreed” (Range from 3.86 to 4.33) with the all eight statements as it follows the range of (3.51 to 4.50). The overall mean score 4.12 trails the same range (3.51 - 4.50) displays that all the respondents are agreed with all the statements. The mean scores further show that the teachers at university level are strong in relational management, which is a major component of emotional social intelligence. Moreover, most of the standard deviation scores reflect that all the respondents are exclusive in their opinions about the statements relating to relational management.

R.Q. 2: - Which type of student cohesiveness in learning environment exist at university level?

Table 5. Students’ cohesiveness among university students in learning environment

S. No	Statements	M	Std
1	I make friendship easily among students in this class.	4.59	.662
2	I know other students in this class.	4.49	.809
3	I am friendly to members of this class.	4.49	.809
4	Members of this class are my friends.	4.48	.809
5	I work well with other class members.	4.49	.809
6	I help other class members who are having trouble with their work.	4.68	.646
7	Students in this class like me.	4.69	.647
8	In this class, I get help from other students.	4.70	.686
	Overall	4.53	0.75

Table 5 describes that respondents are “strongly agreed” (Range from 4.48 to 4.70) with the all eight statements as it follows the range of (4.51 to 5.00). The overall mean score 4.53 trails the same range (4.51 - 5.00) displays that all the respondents are strongly agreed with all the statements. The mean scores further show that the students at university level have strong cohesiveness, which is a major component of classroom learning environment. Moreover, most of the standard deviation scores reflect that all the respondents are exclusive in their opinions about the statements relating to student’s cohesiveness.

R.Q 3. Is there a Relationship between Emotional and Social Intelligence of Teachers and Student’s Cohesiveness in classroom Learning Environment?

Table 6. Pearson Product Moment Correlations between ESI Components and SC

Correlations						
		SC	SA	SM	SOA	RM
Students cohesiveness	Pearson Correlation	-	.702**	.751**	.692**	.950**
	Sig. (2-tailed)		.000	.000	.000	.000
	N		900	900	900	900
Self-awareness	Pearson Correlation		-	.731**	.730**	.702**
	Sig. (2-tailed)			.000	.000	.000

	N			900	900	900
Self-management	Pearson Correlation			-	.647**	.751**
	Sig. (2-tailed)				.000	.000
	N				900	900
Social awareness	Pearson Correlation				-	.692**
	Sig. (2-tailed)					.000
	N					900
	Pearson Correlation					
Relational management	Sig. (2-tailed)					
	N					900

***. Correlation is significant at the 0.01 level (2-tailed).*

The above table illustrates that all components of emotional social intelligence have correlation for students cohesiveness (r value .702, .751, .692 and .950) which is significant at .000 while the lowest correlation for social awareness (.692) and highest correlation was found for relational management (r value .950) which is significant at .000.

RQ. 3:-Is there a Relationship between Emotional and Social Intelligence of Teachers and Student's Cohesiveness in Classroom Learning Environment?

Table 7. Pearson Product Moment Correlations between ESI and SC

Correlations			
		Authentic leadership attributes	Organizational development (Teachers professional development)
Emotional social intelligence	Pearson Correlation	-	.483**
	Sig. (2-tailed)		.000
	N		900
Students cohesiveness	Pearson Correlation		-
	Sig. (2-tailed)		
	N	900	900

***. Correlation is Significant at the 0.01 level (2-tailed).*

The connection between ESI and SC was examined applying Pearson product moment correlation coefficient. Initial analyses were made to confirm that no harm of the assumptions of normality, linearity and homoscedasticity was done. Medium positive correlation between the two variables, $r = .483$, $n = 900$, $P < .000$, not as much of .05 indicating the statistical significance of the results. Cohen (1988) suggests the following guidelines: small correlation ($r=.10$ to $.29$) medium correlation ($r=.30$ to $.49$) large correlation ($r=.50$ to 1.0) (pp.79-81). In the light of this suggestion, there is medium correlation ($r=.483$) between emotional social intelligence and student’s cohesiveness.

RQ. 3: - Is there a Relationship between Authentic Leadership Attributes and Organizational Development in Public and Private Sector Universities?

Table 8. Sector-Wise Correlation between Authentic Leadership Attributes and Organizational Development (Teacher Professional Development) in Public and Private Sectors

Correlations						
	Type of organization (binned)	N	Mean	Std deviation	r value	Sig. level
Authentic leadership attributes	public	450	141.8170	7.53612	.357	.000
Teachers professional development						
Authentic leadership attributes	Private	450	135.0424	14.97052	.521	.000
Teachers professional development						

***. Correlation is significant at the 0.01 level (2-tailed).*

The above table illustrates the mean, std deviation, Pearson correlations and significance of the emotional social intelligence and student’s cohesiveness from sector-wise perspective. The mean score of the emotional social intelligence and students’ cohesiveness. in public and private sector universities was 141.8170 and 135.0424 with standard deviation 7.53612 and 14.97052. The r value between emotional social intelligence and students’ cohesiveness in public sector universities is ($r = .357$) which shows medium relationship which is highly

significant as shown by the significant level (.000). The r value between emotional social intelligence and students cohesiveness in private sector universities is ($r = .521$) which is indicative of large correlations as suggested by Cohen (1988) that small correlation ranges from (.10 to .29) medium correlation (.30 to .49) and large correlation (.50 to 1.0) which is highly significant as shown by the significant level (.000). These values show that relationship between emotional social intelligence and students cohesiveness in private sector universities is higher than public sector universities.

Resultantly, there is significant relationship of emotional social intelligence and students' cohesiveness in public and private sector universities of Khyber Pakhtunkhwa. Overall the paper presents a clear description of results obtained from the data collected through research instruments.

Findings

Major findings of the study were:

1. There were eight statements in self-awareness construct of emotional social intelligence. The overall mean score (4.12) showed that majority of university leaders were aware and strongly agreed on this construct of emotional social intelligence (table 1).
2. There were eight statements on self-management where the overall mean score was (3.97) which reflected that majority of university teachers were aware of self-management and considered that self-management was an important construct of emotional social intelligence (table 2).
3. The overall mean score (3.87) of statements related to social awareness showed that majority of the respondents were aware and agreed that social awareness an important construct of emotional social intelligence (table 3).
4. Majority of the respondents were aware and strongly agreed that relational management of emotional social intelligence was an important construct as shown by the cumulative mean score (4.12) of all eight statements on the construct. (table 4)
5. The overall mean score (4.53) showed that majority of students were strongly agreed that student's cohesiveness was an important component of classroom learning environment (table 5).
6. The r values (.702, .751 .692, .950 and .255) which were significant at .000 showed significant positive correlation of emotional social intelligence with student's cohesiveness (table 6).
7. The r value (.483) which was significant at .000 showed significant positive and average level correlations between emotional social intelligence and students' cohesiveness at university level. (table 7).
8. The r value (.357) which was significant at .000 showed a significant positive and average level correlation in public sector universities between

- emotional social intelligence and students' cohesiveness at university level. (table 8)
9. The r value (.521) which was significant at .000 showed a significant positive and average level correlation in private sector universities between emotional social intelligence and students' cohesiveness at university level. (table 8)
 10. Most of the qualitative data support the quantitative data as all the major themes of the qualitative data such as self-awareness, relational transparency, ethical perspectives, positive psychological capital, and balance processing of information of authentic leadership supported the quantitative authentic leadership constructs taken from literature of empirical studies. Similarly, major themes emerged from qualitative data on work engagement supported the quantitative constructs taken from research studies.

Recommendations

In the light of findings and conclusions of the study following recommendations were made:

1. It is recommended that research works may be conducted at secondary and primary level as it deals with psychology of the students and teachers.
2. It is also recommended that this kind of study may be done with different variables of classroom learning environment.

References

- Arghode, V. (2014). Emotional and Social Intelligence competence: Implication for Instruction. *International Journal of Pedagogies and Learning*, 8(2), 66-77. doi:10.5172/ijpl.2013.8.2.66
- Bar-On, R. E., & Parker, J. D. (2000). *The handbook of emotional intelligence: Theory, development, assessment, and application at home, school, and in the workplace*. Jossey-Bass.
- Bar-On, R. (1988). *The development of a concept of psychological well-being*. Unpublished doctoral dissertation, Rhodes University, South Africa.
- Brophy, J. E., & Putnam, J. G. (1978). Classroom Management in the Elementary Grades. Research Series No. 32.
- Carron, A. V. (1982). Cohesiveness in Sport Groups: Interpretations and Considerations. *Journal of Sport psychology*, 4(2), 123-138.
- Herrmann, E., Call, J., Hernández-Lloreda, M. V., Hare, B., & Tomasello, M. (2007). Humans have evolved specialized skills of social cognition: The cultural intelligence hypothesis. *science*, 317(5843), 1360-1366.
- Holekamp, K. E. (2007). Questioning the social intelligence hypothesis. *Trends in cognitive sciences*, 11(2), 65-69. Bar-On, R., Tranel, D., Denburg, N. L., & Bechara, A. (2004). Emotional and social intelligence. *Social neuroscience: key readings*, 223.
- Boyatzis, R. E., Goleman, D., & Hay Group (2001). *The Emotional Competence Inventory (ECI)*. Boston: Hay Group.
- Chapin, F. S. (1942). Preliminary standardization of a social impact scale. *American Sociological Review*, 7, 214-225.
- Doll, E. A. (1935). A generic scale of social maturity. *American Journal of Orthopsychiatry*, 5, 180-188.
- Fraser, B. (2015). Classroom learning environments. In *Encyclopedia of Science Education* (pp. 154-157). Springer Netherlands.

- Ganaie, M. Y., & Mudasir, H. (2015). A study of social intelligence and academic achievement of college students of District Srinagar, J&K, India. *Journal of American Science*, 11(3), 23-27.
- George, D., & Kuh, K. J. (2010). *Student Success in College*. London: Jossey Bass.
- Gardner, H. (1983). *Frames of mind*. New York: Basic Books.
- Goleman, D. (1995). *Emotional intelligence*. New York: Bantam Books.
- Goleman, D. (1998). *Working with emotional intelligence*. New York: Bantam Books.
- Hedlund, J., & Sternberg, R. J. (2000). Too many intelligences? Integrating social, emotional, and practical intelligence.
- Johnson, D. W., & Johnson, R. T. (1999). Making cooperative learning work. *Theory into practice*, 38(2), 67-73.
- Lee, J. E., Day, J. D., Meara, N. M., & Maxwell, S. (2002). Discrimination of social knowledge and its flexible application from creativity: A multitrait-multimethod approach. *Personality and Individual Differences*, 32(5), 913-928.
- Luca, J., & Tarricone, P. (2001). Does emotional intelligence affect successful teamwork?
- Mayer, J. D., & Geher, G. (1996). Emotional intelligence and the identification of emotion. *Intelligence*, 22(2), 89-113.
- Mayer, J. D., & Salovey, P. (1997). What is emotional intelligence: In P. Salovey, & D. Sluyter (Eds.). *Emotional development and emotional intelligence: Implications for educators* (pp. 3-31). New York: Basic Books.
- Mayer, J. D., Salovey, P., & Caruso, D. R. (2002). *Mayer-Salovey-Caruso Emotional Intelligence Test (MSCEIT)*. Toronto, Canada: Multi-Health Systems, Inc.
- Moss, F. A., & Hunt, T. (1927). Are you socially intelligent? *Scientific American*, 137, 108-110.

- Neubauer, A. C., & Freudenthaler, H. H. (2005). Models of emotional intelligence. *Emotional intelligence: An international handbook*, 31-50.
- Ritzhaupt, A. R., & Kumar, S. (2015). Knowledge and skills needed by instructional designers in higher education. *Performance Improvement Quarterly*, 28(3), 51-69.
- Salleh, H. M., Arshad, A., Shaarani, A. F., & Kasmuri, N. (2008). Cooperative movement in Malaysia.
- Salovey, P., & Mayer, J. D. (1990). Emotional intelligence. *Imagination, Cognition, and Personality* 9, 185–211.
- Sapran, A. S. (2010). Exploiting cooperative movement strengths. *Pelancar*, 37(4), 10-11.
- Sternberg, R. J. (1985). *Beyond IQ: A triarchic theory of human intelligence*. CUP Archive.
- Thorndike, E. L. (1920). Intelligence and its uses. *Harper's Magazine* 140, 227–235.
- Wechsler, D. (1958). *The measurement and appraisal of adult intelligence (4th ed.)*. Baltimore, MD: The Williams & Wilkins Company.
- Zirkel, S. (2000). Social intelligence: The development and maintenance of purposive behavior. In R. Bar-On and J. D. A. Parker (Eds.), *Handbook of emotional intelligence*. San Francisco.