

# The impact of socio-emotional intelligence training on teacher's performance

**Jamshid Ali Turi**

*University Malaysia Pahang, Malaysia*

**Muhammad Faizal A. Ghani**

*University of Malaya, Malaysia*

*mdfaizal@um.edu.my*

**Shahryar Sorooshian**

*University Malaysia Pahang, Malaysia*

**Qaiser Abbas**

*University of Peshawar, Pakistan*

## **Abstract**

Researchers and practitioners suggest acquisition of socio-emotional intelligence skills and competencies for the teacher in the age of stresses, individualism, and materialisms; to improve teacher's effectiveness and performance and to raise a socially and emotionally intelligent child. The study contains an investigation of the impact of socio-emotional intelligence training on teacher performance and productivity. Results indicate that socio-emotional intelligence has a positive correlation with teacher performance. Results show positive impacts of Socio-emotional intelligence training on teachers' performance and productivity. Data were analyzed for gender and qualification variable using SPSS, Cronbach Alpha was calculated, and descriptive statistics were used for data analysis.

*Keywords:* performance and productivity, teachers performance, socio-emotional intelligence, training and development

## **1. Introduction**

Every organization wishes to develop its human resources and keep them engaged in different training and developmental programs to enhance their proficiency in their domains. Organizations believe on the philosophy of Sharif (2002), to develop a training management

### *Citation:*

Turi, J. A., et. al. (2017). The impact of socio-emotional intelligence training on teacher's performance. *Global Business and Economics Research Journal*, 6(2): 18-31.

*Submitted: September 2017 | Accepted and Published: October 2017*

© Global Business and Economics Research Journal. Available online at <http://www.journal.globejournal.org>

system and arrange need-based skill development sessions to develop hard and soft skills of their workers. The education sector in Pakistan has gone through many reforms, have practiced different policies, projects, and programs to enhance teacher performance. Pre-service and in-service training, workshops, refresher courses, field visits are the evidence in which public and private sector have a keen interest to develop teacher's proficiencies. Different governmental and non-governmental organizations are putting their hearts and minds to bring up the hidden potentials of the teachers for its best utilization.

Training in its origin and meaning carry a significant value and message. The most important philosophy behind this is 'Nothing is still and constant but change itself'. Therefore, training is arranged to meet the changing demand of the sector. It is a planned, organized and scheduled activity, designed to enhance individual and organizational performance. Performance means to improve workers' working capacities, capabilities, effectiveness, and efficiency in the required domain. To maintain the good, even the best image in the market, in the eyes of the customer, the organization has to equip its workers with the latest models, methods, and techniques. Training and development is a tool to reshape the lives of the workers, give them strength and hope, increase the efficacy and effectiveness, give them new horizons, resolution, and determination. Major firms of the world spent huge financial resources on research, training and development activities of their workers. According to one research findings, 1\$ billion dollars is spent on human assets development program by big firms of the world.

### ***1.1. Problem Statement***

Generations are built in the hands of the teacher and socio-emotionally, and socially charged teachers can give better direction, hope, enthusiasm, philosophy, and resolution to the whole nation. This vital component in learning processes lacks which is one of the fundamental capacities in the contemporary world for a teacher. Different researchers and practitioners suggest acquisition of socio-emotional intelligence skills and competencies for the teacher in the age of stresses, individualisms, and materialisms; to improve teacher's effectiveness and students' performance (Hena & Sharabi, 2014; Dolev & Leshem, 2016).

### ***1.2. Objectives of the Study***

The main objective of this study was to evaluate the workshop which focused on fostering socio-emotional intelligence skills in the teacher teaching in school and college level and to investigate the impact of socio-emotional intelligence training on teacher's Performance in Abbottabad, KPK; Pakistan. The main focus was identifying perception and need of socio-

emotional intelligence's benefits in educational settings, how teacher's and organizational competencies and performance can be increased by giving them socio-emotional intelligence training.

### ***1.3. Limitations of the Study***

The study is limited to the elements of human resource management, particularly in the area of training and development. This study was carried out in Teacher training workshop conducted in Army Burn Hall College, in which 255 teacher and lectures at school and college level participated.

## **2. Literature Review**

Training and development is the best tool for the acquisition of new knowledge, skills and technique to enhance worker's capacities and capabilities (Masadeh, 2003; Noe, 2010; Virtual University of Pakistan, 2015). It has become an integral part of individual and organization's lives in knowledge economy to at least maintain their position in the market and the eyes of customers. As with the passage of time demands and requirement changes, testes and wishes of the population changes in every walk of life, therefore it is indispensable for every organization to equip their workers with the latest skill, knowledge, and techniques, which are only possible via skill development training workshops, tours, field visits, focus-grouped discussion and seminars. It carries equal value for individuals, groups, and organizations (The World Bank, 2007; Kessels, 2004). Sims (2002) proclaimed that training is designed to meet the present jobs' demands, always futuristic, preparing their workers for the fourth coming challenges, problems, projects, and opportunities. Individual are the building blocks of the organizations; their skills enhancement means overall organizational grooming in productivity. There are certain informal ways also of workers grooming like deputations, job rotation, and transfer and among these training is considering highly planned, organized, scheduled and structured approach for workers' development (UN, 2013; Kessels J. W., 2001). Organizations have made their HR departments whose major functions are to give orientation to the new workers, do survey needed for soft and hard skills and accordingly designed professional training programs. Such training programs give superior logic, evidence, understanding, cognition and develop human assets of the organization. The skilled human asset is the main capital of any organization which is better possible through formal training.

Training gives a sense of belongingness, ownership, and association to the worker. It has been noticed quite often that workers with bigger salaries moved to multi-culture and multi-national organization just for the sake of their personal development. Because they know that training can bring out the hidden skills and potentials and make them more productive in future. In the age of knowledge economy, where life-long learning has become a slogan of almost every organization, operating in any domain, is not possible without training and refresher courses (The World Bank, 2007; Masadeh, 2003). Both active and over-learning need should be catering for in training. So that it can be repeated and replicated in the desired way and new scenario also.

### ***2.1. Training and Development in Educational Settings***

Education is the most rapidly changing profession of life. On daily basis new techniques, models, and theories are presented by different theorists and scientists. To equip better our younger generation with up to date skills and techniques, we have to focus on the inclusion of latest materials in curriculum's and teacher training's workshops. Innovative strategies need to incorporate in teaching-learning processes to transfer knowledge and skill in best possible, feasible, optimal and economical way (OECD, 2014; Department of Education & Training, 2005). Teacher professional development impacts teachers and students' performance, the educational institution, society and economy (Villegas, 2003). Therefore, the teacher needs to be equipped with both hard and soft skills to meet the needs of the new century, to face the challenges of the new era boldly (Weert, 2006; Lundahl, 2010; Mikre, 2011).

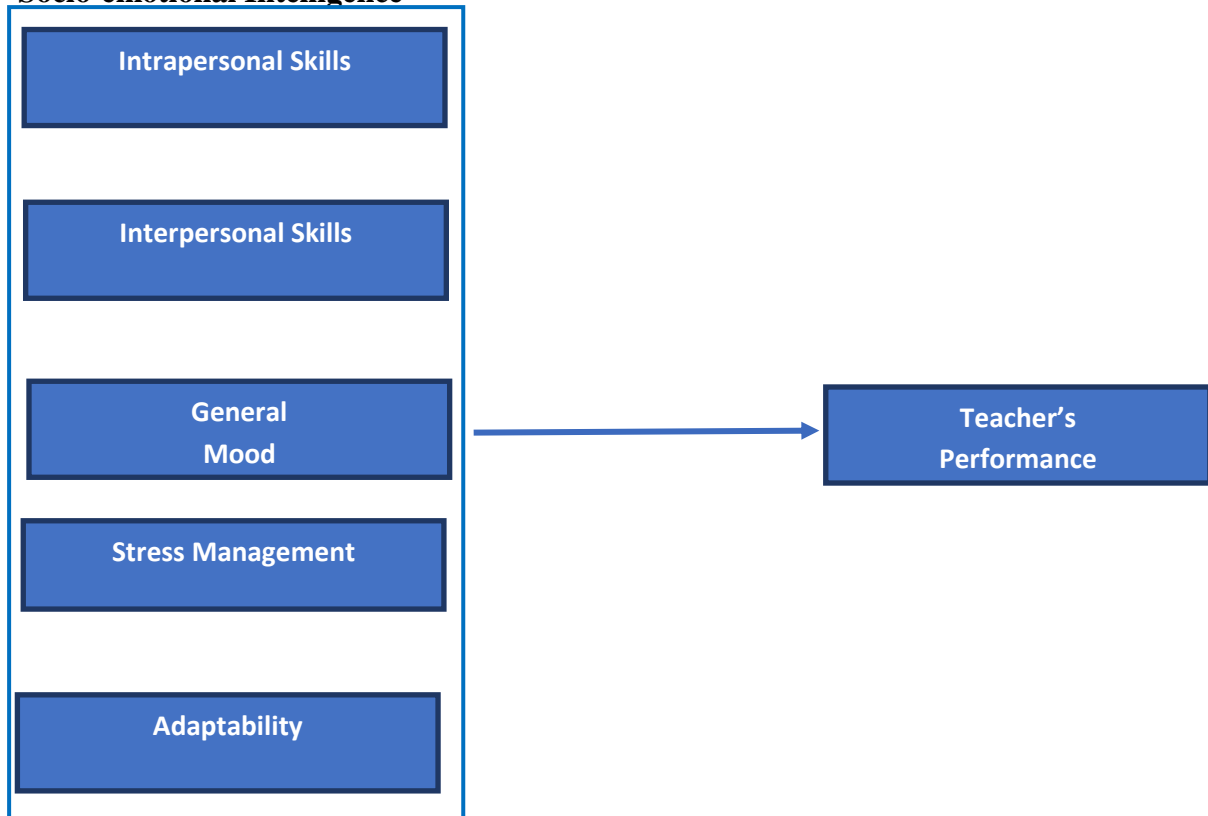
### ***2.2. Need of Socio-Emotional Intelligence Training for Teachers***

Among many soft skills, emotional and social intelligence is one of the major pre-requisite of the teaching profession for the social, emotional and psychological development of the learners (Dolev & Leshem, 2016). Learning and importing education is a social and emotional process. Therefore social and emotional teacher set the tempo of the classroom (Hen & Sharabi-Nov, 2014). It improves certain traits of the personality and behaviors of the student by inculcating civic and empathetic sense in them. Motivation, self-recognition, social awareness, better general mood, better managing strategies for stress prepare the learner for better academic achievement, and these all can be created by a socio-emotional intelligent teacher among students. Socio-emotional intelligence is considering as a predictor of performance (Nasir & Masrur, 2010), a pre-requisite for academic performance and achievements, develop intrinsic motivations among the student not only for short-term achievement but also for long-term (Preeti, 2013). It is of equal importance for all level and

age of the student, like university level (Fayombo, 2012), more demanding and fruitful in medical sciences (Zain & Hassan, 2013), need integration in engineering education (Riemer, 2003) and similarly at primary and secondary levels, to provides better academic performance (Chamundeswari, 2013). Socio-emotional intelligence, when tested among socially advantaged and disadvantaged student, it proved its positive correlation with academic performance (Ghosh, 2014) and also helps in behavior modifications for ill-behavioral students (Petrides, Federickson, & Furnham, 2004). However, it does not mean that Socio-emotional Intelligence is the only and single contributor in academic performance as compared to IQ. Some are mixed in agreeing to the fact that EI contribution in academic performance (Barchard, 2003; Costa & Faria, 2015; Goroshit & Hen, 2012). Some of the research studies do not agree that SEI has no links to academic's contributions (Shipley, Jackson, & Segrest, 2003; Austina, Evansb, Goldwatera, & Pottera, 2005). According to other research studies, SEI contributes to the personality which further enhances their academic performances (Brackett, Rivers, & Salovey, 2011). A study conducted on university students resulted that only managing and understanding emotions had very little positive correlation with academic performance (Ladrazo & Barchard, 2013). Hen & Goroshit (2014) Study concluded that SEI has an indirect effect on academic performance by mediating self-efficacy. In reading comprehension, the correlation if IQ was better than SEI in a study conducted by (Ghabanchi, 2014) and by no means SEI (EQ) can be a substitute of IQ in academics (Feinberg, 1941). After consulting research studies, it is suggested for the curriculum developers, policy makers, planners, and psychologists to focus on SEI to improve the performance of the students and equip them better for practical lives (Arockia & Sangeetha, 2013).

### 2.3. Conceptual Frameworks for the Study

#### Socio-emotional Intelligence



Source: Self Developed

### 3. Research Methodology

This study was experimental and quantitative, used the questionnaire as an instrument for data collection. Data was collected from 255 respondents in a teacher training workshop conducted in Army Burn Hall College for Boys, Abbottabad. Where three sessions workshops were conducted on the role and importance of socio-emotional intelligence on teacher's performance in an academic environment. Total 255 teachers participated in the survey, among them 131 were BS, 91 were MS and 33 were Ph.D. teachers were degree holders among them 98 (38%) were female, and 157 (62%) were male. In study efforts were made to give proper proportion to all teachers with different degrees and gender Data was analyzed on 5 Linkert scale showing (1=Strongly Disagree, 2= Disagree, 3=Neutral, 4= Agree, and 5=Strongly Agree). SPSS was used for data analysis.

## 4. Results and analysis

### 4.1. Reliability Analysis

Table 1 shows the reliability of the instrument used for the collection of data. It was checked using Cronbach's Alpha, and all the construct were found reliable and consistent. Reliability for Intrapersonal skills was 0.727 for 12 items, for Interpersonal 0.735 for 12 items, for General Mood 0.746 for 12 items, for Adaptability 0.775 for 12 items and stress management 0.725 for 12 items.

**Table 1.** Reliability analysis

Variable	Cronbach's Alpha	No of Items
Intrapersonal	.727	12
Interpersonal	.746	12
General Mood	.735	12
Adaptability	.775	12
Stress Management	.725	12

### 4.2. Descriptive Statistics

**Table 2.** Descriptive Statistics

	N	Minimum	Maximum	Mean	Std. Deviation
Class results	255	2.30	3.91	3.2751	.40518
Intrapersonal	255	2.08	4.50	3.3578	.54703
General Mood	255	2.58	4.83	3.7180	.45133
Interpersonal	255	2.31	4.13	3.1392	.37559
Stress Management	255	2.00	4.63	3.0902	.54550
SEI	255	2.44	4.30	3.3263	.34940
Valid N (list wise)	255				

Data were analyzed with 5-Likert scale (1= strongly disagree, 2= Agree, 3= Neutral, 4= Agree, 5= Strongly Agree). Minimum response for class result response 2.30(showing disagree) and the maximum value was 3.91(representing strongly agree), and the mean value for the class result is 3.2751 represents that tendency of responses is “Agree” and the standard deviation is 0.42168 which shows less variation in the data. For all constructs lies near means values and very less dispersion in responses are shown, which means that respondents agree and confirm the effects of Socio-emotional Intelligence on academic performance.

### 4.3. Correlation Analysis

All constructs were positively correlated with academic performance. Intrapersonal skills, Interpersonal, General Mood, Adaptability, Stress management and overall socio-emotional intelligence (SEI) are moderate positively correlated with academic performance, which shows the influence of independent variable and their sub-variables on the dependent variable.

**Table 3.** Correlation Analysis

Correlations		CLASS RESULTS
Class Results	Pearson Correlation	1
Age	Pearson Correlation	.265**
Intrapersonal	Pearson Correlation	.501**
General Mood	Pearson Correlation	.396**
Interpersonal	Pearson Correlation	.047
Stress Management	Pearson Correlation	.096
Adaptability	Pearson Correlation	.331**
SEI	Pearson Correlation	.398**

### 4.4. Regression Analysis

**Table 4.** Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.398 <sup>a</sup>	.158	.155	.37248

a. Predictors: (Constant), EI

#### ANOVA

Model		Sum of Squares	Df	Mean Square	F	Sig.
1	Regression	6.598	1	6.598	47.559	.000 <sup>b</sup>
	Residual	35.101	253	.139		
	Total	41.699	254			

a. Dependent Variable: CLASS RESULTS

b. Predictors: (Constant), SEI

**Table 5.** Coefficients

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	1.617	.242		6.693	.000



SEI	.499	.072	.398	6.896	.000
-----	------	------	------	-------	------

Table 4 shows the fitness of the model. Residual sum of square is 35.101 which shows the unexplained deviation of dependent variable, i.e., academic performance (class results) from its estimate. The F-statistics is 47.559 at .000 sig level which is less than the cutoff of 0.05. This shows a significant relationship between the independent variables and dependent variable. The significance value shows that the model is fit for this study.

Table 5 shows that Socio-emotional Intelligence has a significant value (.000) which means that there is a direct and positive relationship between socio-emotional intelligence and teacher performance. The analysis shows that independent variable has a significant impact on the dependent variable academic performance.

To see the impact of socio-emotional intelligence on teacher performance on the basis of gender, ANOVA was used, whose results are shown in the below table 6. The significant difference is seen of socio-emotional intelligence on teacher’s performance by gender on all constructs of the study. It means that impact of socio-emotional intelligence is different for male and female.

**Table 6.** ANOVA for Gender

		Sum of Squares	Df	Mean Square	F	Sig.
CLASS RESULTS	Between Groups	10.495	1	10.495	85.092	.000
	Within Groups	31.204	253	.123		
	Total	41.699	254			
Intrapersonal	Between Groups	7.612	1	7.612	28.159	.000
	Within Groups	68.394	253	.270		
	Total	76.007	254			
General Mood	Between Groups	4.542	1	4.542	24.350	.000
	Within Groups	47.196	253	.187		
	Total	51.738	254			
Interpersonal	Between Groups	.110	1	.110	.782	.377
	Within Groups	35.721	253	.141		
	Total	35.831	254			
Stress Management	Between Groups	.158	1	.158	.531	.467
	Within Groups	75.424	253	.298		
	Total	75.582	254			
SEI	Between Groups	1.082	1	1.082	9.145	.003
	Within Groups	29.927	253	.118		
	Total	31.009	254			

Mean comparison table 7 shows that female teachers have more “Intrapersonal skills” (Mean=3.57), better in managing “General Mood” (M=3.88), and overall they are having

better socio-emotional skills (M=3.40) as compared to male teachers with Mean scores 3.22, 3.61 and 3.27 respectively. In contrast, Male teachers have more interpersonal skills (M=3.15) and better able to manage stress (M=3.10) as compared to female teachers (M=3.11) and (3.05) respectively.

**Table 7.** Mean Comparison

Gender		Intrapersonal	General Mood	Interpersonal	Stress Management	Socio-emotional intelligence
Female	Mean	3.5765	3.8869	3.1129	3.0587	3.4087
Male	Mean	3.2213	3.6125	3.1557	3.1099	3.2748
Total	Mean	3.3578	3.7180	3.1392	3.0902	3.3263

To see the impact of socio-emotional intelligence on teachers’ performance on the basis of Academic qualification, ANOVA was used, whose results are shown in the below table 8. The significant difference is seen in the level of socio-emotional intelligence on teachers’ performance by academic qualification on all constructs of the study. It means that impact of socio-emotional intelligence is different for the teachers with different qualifications.

**Table 8.** ANOVA for Qualification

		Sum of Squares	df	Mean Square	F	Sig.
CLASS RESULTS	Between Groups	8.664	2	4.332	33.046	.000
	Within Groups	33.035	252	.131		
	Total	41.699	254			
Intrapersonal	Between Groups	5.879	2	2.940	10.564	.000
	Within Groups	70.127	252	.278		
	Total	76.007	254			
General Mood	Between Groups	3.934	2	1.967	10.370	.000
	Within Groups	47.804	252	.190		
	Total	51.738	254			
Interpersonal	Between Groups	3.348	2	1.674	12.989	.000
	Within Groups	32.483	252	.129		
	Total	35.831	254			
Stress Management	Between Groups	9.122	2	4.561	17.294	.000
	Within Groups	66.460	252	.264		
	Total	75.582	254			
SEI	Between Groups	4.465	2	2.233	21.197	.000
	Within Groups	26.543	252	.105		
	Total	31.009	254			

From the mean comparison table 9, it is shown that MS degree holder teachers are having more intrapersonal skills, interpersonal skills and better able to manage mood (Mean=3.53, Mean= 3.27, & Mean=3.86) as compared to BS (Mean=3.21, Mean=3.03 & Mean=3.59) and PhD degree holder teachers (Mean=3.45, Mean=3.19 & Mean= 3.79) respectively in our study. PhD degree holder teachers are having more stress management skills and overall better socio-emotional skills (Mean= 3.53 & Mean= 3.49) as compared to MS (Mean =3.12 & Mean=3.449) and BS degree holder teachers (Mean=2.95 & 3.19).

**Table 9.** Mean Comparison

Program of Study		Intrapersonal	General Mood	Interpersonal	Stress Management	Socio-emotional Intelligence
BS	Mean	3.2118	3.5986	3.0305	2.9523	3.1983
MS	Mean	3.5321	3.8608	3.2761	3.1277	3.4492
PhD	Mean	3.4571	3.7980	3.1932	3.5341	3.4956
Total	Mean	3.3578	3.7180	3.1392	3.0902	3.3263

## 5. Limitations, Conclusion, and Recommendations

### 5.1. Limitations

Study's data was collected from school and college teaching faculty present in a workshop in Army Burn Hall College for Boys. The study can be extended and replicated to pre-school and university teacher in different regions with better data and respondent.

### 5.2. Conclusion

Training and professional workshops add to individual and organizational capacities and capabilities and produce individual and organizational effectiveness and efficiency. Training provides means opportunities for self and organizational development and leads them towards self-actualization. Social and socio-emotional skills are fundamental for an empathetic profession like teaching. Therefore, besides hard and technical skills, teachers should be equipped soft skills also. Socio-emotional intelligence produces better social, socio-emotional, psychological skills in teachers and directly and indirectly develops teacher proficiencies and performance.

### 5.3. Recommendations

The study is unique in its nature and result. Because first-time teachers were given training regarding socio-emotional intelligence and teachers found it helpful for the social, socio-emotional, psychological development, instructional and professional development. Empathetic soft human skills are the major requirement for the teaching like professions,

where human skills are developed and constructed. Which off-course improve academic performance and productivity both on the student, teacher, and overall organizational horizons. Therefore, it is strongly recommended that socio-emotional intelligence should be made part of teachers' pre-service and in-service training and besides this refresher courses and workshops should be organized for better academic results.

## References

- Arockia, M., & Sangeetha, R. (2013). The Relationship between Socio-emotional Intelligence and the Academic Performance among Final Year under Graduates. *Universal Journal of Psychology, 12*(7), 41-45.
- Austina, E. J., Evansb, P., Goldwatera, R., & Pottera, V. (2005). A preliminary study of socio-emotional intelligence, empathy and exam performance in first year medical students. *Personality and Individual Differences, 39*, 1395–1405.
- Barchard, K. A. (2003). Does Socio-emotional Intelligence Assist in the Prediction of Academic Success? *Educational and Psychological Measurement, 63*(40), 23-45.
- Brackett, M. A., Rivers, S. E., & Salovey, P. (2011). Emotional Intelligence: Implications for Personal, Social, Academic, and Workplace Success. *Social and Personality Psychology Compass, 5*(1), 88–103.
- Chamundeswari, D. S. (2013). Socio-emotional Intelligence and Academic Achievement among Students at the Higher Secondary Level. *International Journal of Academic Research in Economics and Management Sciences, 2*(4), 178-188.
- Costa, A., & Faria, L. (2015). The impact of Socio-emotional Intelligence on academic achievement: A longitudinal study in Portuguese secondary school. *Learning and Individual Differences, 37*, 38–47.
- Department of Education & Training. (2005). *Professional Learning in Effective Schools*. Melbourne: Leadership and Teacher Development Branch.
- Dolev, N., & Leshem, S. (2016). Teachers' socio-emotional intelligence: The impact of training. *International Journal of Socio-emotional Education, 4*(2), 75-95.
- Fayombo, G. A. (2012). Relating socio-emotional intelligence to academic achievement among university students in Barbados. *The International Journal of Socio-emotional Education, 4*(2), 43-54.
- Feinberg, H. (1941). IQ correlated with EQ. *Journal of Educational Psychology, 3*(5), 617-623.

- Ghabanchi, Z. (2014). The Correlation of IQ and Socio-emotional Intelligence with Reading Comprehension. *The Reading Matrix*, 14(2), 135-145.
- Ghosh, D. S. (2014). Socio-emotional Intelligence and Academic Achievement among Advantage and Disadvantage Children. *The International Journal of Indian Psychology*, 3(3), 111-118.
- Goroshit, M., & Hen, M. (2012). Socio-emotional Intelligence: A Stable Change?. *International Journal of Teaching and Learning in Higher Education*, 24(1), 31-42.
- Hen, M., & Goroshit, M. (2014). Academic Procrastination, Socio-emotional Intelligence, Academic Self-Efficacy, and GPA: A Comparison Between Students With and Without Learning Disabilities. *Journal of Learning Disabilities*, 4(81), 21-29.
- Hen, M., & Sharabi-Nov, A. (2014). Teaching the teachers: socio-emotional intelligence training for teachers. *Teaching Education*, 1-17.
- Kessels, J. (2004). The knowledge revolution and the knowledge economy: the challenge for HRD. *New Frontiers in HRD*, 4(5), 165-179.
- Kessels, J. W. (2001). Learning in organisations: a corporate curriculum for the knowledge economy. *Futures*, 3(6), 497-506.
- Lundahl, I. E. L. (2010). Setting Things Right? Swedish Upper Secondary School Reform in a 40-Year Perspective. *European Journal of Education*, 12(5), 46-59.
- Ladrazo, A. C. L. M., & Barchard, K. A. (2013). *How is Socio-emotional Intelligence Related to Academic Performance?* Las Vegas: University of Nevada.
- Masadeh, M. (2003). Training, education, development and learning: what is the difference? *European Scientific Journal*, 13(2), 62-69.
- Mikre, F. (2011). The Roles of Information Communication Technologies in Education: Review Article with Emphasis to the Computer and Internet. *Ethiopian Journal of Education and Sciences*, 23(6), 121-132.
- Nasir, M., & Masrur, R. (2010). An Exploration of Socio-emotional Intelligence of the Students of IIUI in Relation to Gender, Age and Academic Achievement. *Bulletin of Education and Research*, 32(1), 37-51.
- Noe, R. A. (2010). *Employees training and development*. Ohio: The Ohio State University.
- OECD. (2014). *Innovation strategy for education and training*. Paris: OECD.
- Petrides, K., Federickson, N., & Furnham, A. (2004). The role of trait socio-emotional intelligence in academic performance and deviant behavior at school. *Personality and Individual Differences*, 36, 277-293.

- Preeti, B. (2013). Role of Socio-emotional Intelligence for Academic Achievement for Students. *Research Journal of Educational Sciences*, 1(2), 8-12.
- Riemer, M. (2003). Integrating socio-emotional intelligence into engineering education. *World Transactions on Engineering and Technology Education*, 2(2), 189-195.
- Shipley, N. L., Jackson, M. J., & Segrest, S. L. (2003). The effects of socio-emotional intelligence, age, work experience, and academic performance. *Research in Higher Education Journal*, 5(11), 231-244.
- The World Bank. (2007). *Lifelong Learning in the Global Knowledge Economy: Challenges for Developing Countries*. Washington: The World Bank.
- UN. (2013). *Human Resources Management and Training*. USA: United Nation.
- Villegas, E. (2003). *Teacher professional development: An international review of literature*. Paris: UNESCO.
- Virtual University of Pakistan. (2015). *Training and development*. Lahore: Virtual University of Pakistan.
- Weert, T. J. (2006). Education of the twenty-first century: New professionalism in lifelong learning, knowledge development and knowledge sharing. *Education and Information Technologies*, 11(3-4), 217–237.
- Zain, A. M., & Hassan, F. (2013). Socio-emotional intelligence and academic performance in first and final year medical students: a cross-sectional study. *BMC Medical Education*, 13(44), 1-10.