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Review Article

A Systematic Review and Meta-Analysis on the Relationship Between Emotional Intelligence and Academic Achievement

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Abstract

The notion of emotional intelligence and its association with academic outcomes have been a field of intense interest for quite a long time. The current study's aim is to explore the effect level of emotional intelligence on academic achievement by using a meta-analytic approach. To this end, SCOPUS, Education Resources Information Center (ERIC) and Academic Search Ultimate databases were searched for relevant studies published between January 2015 and June 2020. The correlation coefficient *r* was determined as the criterion for the articles examining the link between emotional intelligence and academic achievement. After a systematic review, a total of 20 studies with 6057 participants were included in the study for the further steps of the meta-analysis conducted through Comprehensive Meta-Analysis (CMA) software. Findings revealed that the selected studies were heterogeneous and, accordingly, random-effects model was applied. The results showed that the overall effect size of emotional intelligence on academic achievement was .73, which corresponds to the medium size effect. In other words, high emotional intelligence was found to be related to higher academic achievement. The findings of the study confirm the prevalent assumptions and salient findings in the related literature, suggesting that emotional intelligence has a positive impact on academic achievement.

Keywords

Emotional intelligence • academic achievement • effect size • random-effects model

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The concept of emotional intelligence has been a field of intense interest for quite a long time (Astetke, 2018; Fatum, 2008; Garg et al., 2016; James et al., 2012; MTD Training, 2010; Salovey & Grewal, 2005) among psychologists as well as educators. Though being a relatively new concept, emotional intelligence dates back to the time of Darwin, who theorised that emotional expression was an indispensable form of survival and that emotions hold a biological purpose as they warn the body when the things are not in order and the needs are not satisfied (MTD Training, 2010). The outlines of emotional intelligence were first constructed in the related literature with the work of Salovey and Mayer (1990), addressing a psychological framework which focuses on the differences of individuals' talents regarding emotions and they defined the term as "the ability to monitor one's own and others' feelings and emotions, to discriminate among them and to use this information to guide one's thinking and actions" (Salovey & Mayer, 1990, p. 189). Goleman (1995), who made the term popular, suggests that emotional intelligence, in some respects, could be far more powerful than intelligence quotient (IQ), and after reviewing related studies, he concludes that "at best IQ contributes about 20 percent to the factors that determine life success, which leaves 80 percent to other forces" (Goleman, 1995, p. 34).

Treated as an inclusive notion for certain noncognitive traits used for adaptation purposes (Zysberg & Kasler, 2017), emotional intelligence has been a subject with many attempts to define. Mayer et al. (2000) define it as a reference to a skill to comprehend the content of emotions and their associations and to an ability of solving problems and reasoning that depends upon them. In this sense, emotional intelligence is associated with perceiving emotions, assessing the message they convey and manage them. Gardner (1999) claims that emotional intelligence, asserted by Goleman (1995), fits his notions of interpersonal – considering one's own feelings and sentiments – and intrapersonal intelligence – considering others' feelings and sentiments – and thus, to him, the term is, in a way, a combination of the two kinds of intelligences. Bar-On (2000) describes the term as a multifaceted group of interconnected emotional, personal, and social talents which affect individuals' total faculties to tackle the daily demands. Similarly, Bharwaney (2007) connotes that emotional intelligence is "the essential mix of emotional, personal, and social competencies that influences our ability to be personally effective and professionally productive" (Bharwaney, 2007, p.184). Highlighting the psychological aspects of the term, Ciarrochi et al. (2012) assert that emotional intelligence helps individuals protect themselves from the undesirable impacts of stress and thus making them feel safe from depression, anxiety, and hopelessness. In sum, emotional intelligence combines the domains of emotions and intelligence by viewing that emotions serve a particular function of making the social environment more meaningful and easier to handle (Salovey & Grewal, 2005).

As a notion studied and searched meticulously, emotional intelligence has been measured by various assessments. However, the related literature essentially focuses on two main constructs: the ability and trait emotional intelligence. The ability model handles emotional intelligence in the form of cognitive abilities and it includes intelligence as well as comprehension and management of emotions. In other words, it connotes the idea that the model is ability-based (MTD Training, 2010). On the other hand, pointing at assessing, regulating and stating emotions, trait emotional intelligence refers to personality traits and expresses individuals' insights for their emotional world and it is associated with individuals' potential in coping with emotion related situations (Brannick et al., 2009; Di Fabio & Saklofske, 2014; Fiori, 2009; James et al., 2012; Mayer & Salovey, 1997; Petrides, 2011; Petrides & Furnham, 2000; Thomas et al., 2017). To Brannick et al. (2009), ability emotional intelligence implies the line between reason and emotions and trait emotional intelligence contains non-cognitive abilities. In this sense, an item for the former model could be showing a picture of a person and asking the participant for the emotion it displays. On the other hand, trait emotional intelligence could be measured by a statement, "I generally know what other people are

feeling" (Brannick et al., 2009, p. 1062). Although the two models differ in their conceptualizations, both have shown strong associations with academic success (Thomas et al., 2017).

The intense interest in emotional intelligence for quite a long time along with its theoretical framework has set ground for emerging a number of research studies examining its association with academic outcomes. This is in line with Goleman's (1995) assumption that emotional intelligence is a core competency for academic success, which was once attributed merely to cognitive domain. Given higher emotional intelligence's positive impact on mood states, it is especially helpful when individuals face difficulties while working on and facing challenging duties by making the tension, frustration, helplessness, etc. manageable. In this sense, especially students, can control and regulate their emotions which may induce any kind of low achievement (Schutte et al., 2001). A body of empirical research also indicates that emotional intelligence is an important component of success in education. A study by Schutte et al. (2001) revealed that individuals with higher emotional intelligence solved far more problems than the ones with lower emotional intelligence. Similarly, Bukhari and Khanam (2016) found that emotional intelligence was a significant predictor of academic achievement among university students. Further, AkbariLakeh et al. (2018), Chen et al. (2012), Costa and Faria (2015), Dewi et al. (2016), Ferrando et al. (2011), Joibari and Mohammadtaheri (2011), Ramana and Devi (2018), Wijekoon et al. (2017) found that the relationship between emotional intelligence and academic achievement was positive and significant. On the other hand, the findings of Kashani et al. (2012), Olatoye et al. (2010), as well as Zirak and Ahmadian's (2015) studies revealed that there was no statistically significant relationship between emotional intelligence and school grades.

In the light of the interpretation of the related literature, emotional intelligence has been postulated as a core component of academic outcomes in that it helps individuals regulate their psychological moods by balancing their cognition and emotions. In addition, it enables individuals to be acquainted with their and others' emotions. It, thus, makes them more competent in managing their emotions and accordingly in reaching success throughout their educations and careers. Hence, emotional intelligence and its associations with success, particularly in terms of academic outcomes, have come into prominence as it is crucial for educational systems and processes to provide students with required qualifications and needs. After all, being able to live with change in today's world, adapt to it properly, accept it as it is and capture the Zeitgeist require cognitive skills as well as the ability to control and balance emotions. Taking into consideration the prominence of the concepts and their significant roles in almost every aspect of life, the present study has been, accordingly, designed to explore the effect level of emotional intelligence and academic achievement. As a consequence, it is thought that the need for an in-depth study of the issue is essential in that portraying emotional intelligence and its association with success along with the effect level of it on academic achievement in details will yield to an additional insights of the terms in question. Furthermore, the current study is unique in that it provides academics and other stakeholders involved in educational systems with a holistic outlook on the topic. Thus, it is thought that the study would be helpful both in theory and application throughout educational processes. In this context, the present study aims at finding an answer to the following question: What is the effect level of emotional intelligence on academic achievement?

Methods

For the purpose of acquiring a holistic view of the suggested association between emotional intelligence and academic achievement as well as developing a better understanding of the issues, in the present study, a meta-analysis as a method has been applied. It is assumed that, as the method enables the

researcher to collect information from plentiful contexts and samples, interpreting the accumulated data to have a holistic viewpoint would yield to a confident generalization in terms of the relationship in question. In addition, to reach a more reliable and valid generalization, gathering data from multiple sources would be far more helpful to analyse instead of depending on a specific study or finding. Further, the purpose of meta-analyses is to provide researchers with strong evidence regarding the subject matter. The method itself enhances the power of reliability, improves accuracy, and makes the research less subject to relative evaluations and appraisals, which altogether make the findings of the present research distinct. That is to say, the aim of the study is to build a far more comprehensive portrait of the extent to which emotional intelligence affects academic achievement. It is, thus, the meta-analysis method applied in the current study to explore the assumed link between emotional intelligence and academic achievement.

A meta-analysis can be defined as the analysis of the analyses which includes the steps of examining previously published studies. In other words, it is a statistical analysis of previous research and it unites multiple findings with the objective of reaching a more reliable and valid overall conclusion. In this quantitative method, a number of scientific research studies which address the same subject area are gathered to acquire a holistic view from the pooled data which, on occasions, could offer variability. Therefore, a meta-analysis, using specific measures, presents the opportunity for more valid, accurate, powerful, objective, and systematic criteria to synthesize all relevant findings on a particular topic. In this sense since the method uses results across a number of studies, unlike the findings of a single study, it allows the researchers to reach generalization with ease (Ahn & Kang, 2018; Gogtay & Thatte, 2017; Shelby & Vaske, 2008).

Data Collection

After formulating the research question, the articles related to the aim of the current study were examined and analysed. For this purpose, SCOPUS, Education Resources Information Center (ERIC) and Academic Search Ultimate databases were scanned and the related research papers published between January 2015 and June 2020 were searched on July 12, 2020. The search keywords were “emotional intelligence”, “academic achievement”, “academic performance”, “academic success” and “GPA-grade point average”.

The inclusion criteria for the articles were as follows: (i) Articles are required to be published in a peer-reviewed journal; (ii) have a full-text; (iii) have a data collection tool of emotional intelligence published in a journal article; (iv) describe study groups; (v) report a measure academic achievement (e.g., GPA, test scores); (vi) report the correlation coefficients between emotional intelligence and academic achievement. On the other hand, the articles were excluded from the analysis if they (i) were analysed in qualitative forms; (ii) measured academic achievement subjectively; (iii) were updated versions of a previously published article; (iv) were not suitable to extract data. As correlation coefficient *r* was determined as the measure of effect sizes of the articles examining the link between emotional intelligence and academic achievement, the studies that did not meet this criterion were excluded.

A total of 182 articles were obtained from the mentioned databases. After eliminating records for being duplicates, having qualitative data and not applying correlational analysis, 20 studies were included in the review for the further steps of the analysis.

Data Analysis

To identify the effect size of emotional intelligence on academic achievement, a meta-analysis, as the method of the study, was put into practice. It is a method “that uses a quantitative measure, effect size,

to indicate the strength of relationship between the treatments and dependent measures of studies making up that synthesis" (Gliner et al., 2013, p. 1376). The necessary statistical steps to calculate the individual and the overall effect sizes, which enable the researchers to compare the magnitude of studies (Thalheimer & Cook, 2002), were carried out through Comprehensive Meta-Analysis (CMA) software. In order to interpret effect sizes, the scale which was suggested by Cohen (1992) and can also be applied to Hedges' *g* was used. According to the scale, the classification of the effect sizes are as follows: - 0.15 ≤ Hedges' *g* < 0.15 negligible, 0.15 ≤ Hedges' *g* < 0.40 small, 0.40 ≤ Hedges' *g* < 0.75 medium, 0.75 ≤ Hedges' *g* < 1.10 large, 1.10 ≤ Hedges' *g* < 1.45 very large, 1.45 ≤ Hedges' *g* excellent.

To determine whether there is variability among the studies included in the analysis, the heterogeneity test was performed following the calculation of the individual studies' effect sizes. During this process, the *p* and *Q* values which determine the homogeneity or heterogeneity are specified. It is suggested that the meta-analysis performed is heterogeneous if the *p* value is less than .05 or if the *Q* value is greater than the *df* value in the χ^2 table. In such a case, the analysis should be carried out in accordance with the random-effects model. On the other hand, when the *p* value is greater than .05 and the *Q* value is less than the value in the χ^2 table, this indicates that there is no statistically significant difference between the studies and the studies are homogeneous. In this case, fixed effects model should be used (Dinçer, 2014; Thalheimer & Cook, 2002).

Results

In this part, the descriptive statistics of the studies included in the analysis, the list of the studies, the Funnel plot of the effect sizes of the studies, the individual along with the overall effect sizes of the studies, the results of the heterogeneity test and the analysis of sample sizes are described. Table 1 shows the descriptive statistics of the studies included in the analysis.

Table 1. *Descriptive statistics of the studies in the analysis*

	Articles by years		*Sample size by years*	
Years	Frequency	Percentage	Frequency	Percentage
2015	3	15	373	6.1
2016	2	10	624	10.3
2017	5	25	653	10.8
2018	4	20	1092	18.1
2019	5	25	2008	33.1
2020	1	5	1307	21.6
Total	20	100	6057	100

Table 1 demonstrates the descriptive statistics of the individual studies involved in the analysis. The majority of the studies were carried out between 2017 and 2019 (*n* = 14; 70%). From the distribution of studies by years, it is observed that the lowest number of relevant researches was conducted in the first half of 2020 (*n* = 1, 5%) and 2016 (*n* = 2, 10%). As for the sample sizes, 2019 (*n* = 2008, 33.1%), 2018 (*n* = 1092, 18.1%) and 2020 (*n* = 1307, 21.6%) are the years when studies with the highest sample sizes were published.

Table 2 shows detailed information about the studies examining the correlation between emotional intelligence and academic achievement.

Table 2. *Details of the studies included in the analysis*

Study	*Date*	*Sample size*	*r*	*Measures of Emotional Intelligence*	*Measures of Academic Achievement*
Aithal et al.	2017	200	.51	Trait Emotional Intelligence Questionnaire – Short Form (TEIQue-SF)	MMBS Examination Average Marks
AkbariLakeh et al.	2018	50	.47	Bar-On model of emotional-social intelligence (ESI)	Grade point average (GPA) of two semesters
Astetke	2018	283	.48	Emotional Intelligence Questionnaire (EIQ)	Cumulative grade point average (CGPA) of WCTE
Di Fabio & Palazzeschi	2015	133	.53	Trait Emotional Intelligence Questionnaire (TEIQue)	GPA
Eyong & Rathee	2017	121	.04	Trait Emotional Intelligence questionnaire (TEIQue)	GPA
Garg et al.	2016	299	.9	Emotional Quotient Inventory EQ-i	GPA
Jan & Anwar	2019	725	.29	Schutte Emotional Intelligence Scale	GPA
Johar et al.	2019	347	.12	Quick Emotional Intelligence Self-Assessment Questionnaire	The marks in the last professional examination
Joo & Cho	2015	157	.12	WLEIS, Wong & Law Emotional Intelligence Scale	GPA
Kim	2018	199	.04	Emotional Intelligence Scale	GPA
Koç	2019.	259	.03	Assessing Emotions Scale (AES)	GPA
Li	2020	1307	.21	Trait Emotional Intelligence Questionnaire –Short Form (TEIQue–SF)	Matriculation English Test (MET)
Maguire et al.	2017	91	-.13	Trait Emotional Intelligence Questionnaire short form (TEIQue-SF)	GPA
Malik & Shahid	2016	325	.13	Trait Emotional Intelligence Questionnaire-Short Form (TEIQue-SF)	GPA
Rabha & Saikia	2019	400	.59	Emotional Intelligence Scale	H.S.L.C examination
Thomas et al.	2017	141	.18	Schutte Emotional Intelligence Scale	GPA
Wilson et al.	2019	277	.01	Trait Emotional Intelligence Questionnaire (TEIQue-SF)	GPA
Wurf & Croft-Piggin	2015	83	.23	Swinburne University Emotional Intelligence Test – Self Report Version	GPA
Zhoc et al.	2018	560	.02	Schutte Emotional Intelligence Scale	GPA
Zysberg & Kasler	2017	100	.8	Schutte Emotional Intelligence Scale	SAT Scores and GPA

Note. r = correlation coefficient

The individual effect sizes along with the overall effect size of the studies examining the link between emotional intelligence and academic achievement are presented in Figure 1.

Study name	Hedges' *g*	Stand. Error	Lower limit	Upper limit	Var.	*Z*	*P*	R. weight
Aithal et al. (2017)	1.18	0.16	0.85	1.50	0.02	7.15	0.00	5.05
AkbariLakeh et al. (2018)	1.05	0.32	0.41	1.69	0.10	3.23	0.00	4.19
Astetke (2018)	1.10	0.13	0.83	1.36	0.01	8.08	0.00	5.17
Di Fabio & Palazzeschi (2015)	1.24	0.20	0.84	1.64	0.04	6.04	0.00	4.86
Eyong & Rathee (2017)	0.08	0.18	-0.27	0.43	0.03	0.43	0.66	4.97
Garg et al. (2016)	4.11	0.26	3.59	4.64	0.07	15.48	0.00	4.54
Jan & Anwar (2019)	0.60	0.07	0.45	0.76	0.00	7.81	0.00	5.35
Johar et al. (2019)	0.24	0.10	0.02	0.45	0.01	2.22	0.02	5.27
Joo & Cho (2015)	0.24	0.16	-0.07	0.56	0.02	1.52	0.12	5.07
Kim (2018)	0.08	0.14	-0.19	0.36	0.02	0.61	0.53	5.15
Koç (2019)	0.07	0.12	-0.17	0.31	0.01	0.57	0.56	5.21
Li (2020)	0.43	0.05	0.32	0.54	0.00	7.61	0.00	5.39
Maguire et al. (2017)	-0.26	0.21	-0.67	0.15	0.04	-1.22	0.22	4.82
Malik & Shahid (2016)	0.26	0.11	0.04	0.48	0.01	2.38	0.01	5.26
Rabha & Saikia (2019)	1.46	0.12	1.21	1.70	0.01	11.77	0.00	5.22
Thomas et al. (2017)	0.36	0.17	0.02	1.70	0.03	2.11	0.03	5.02
Wilson et al. (2019)	0.02	0.12	-0.21	0.25	0.01	0.16	0.86	5.23
Wurf & Croft-Piggin (2015)	0.46	0.22	0.02	0.91	0.05	2.05	0.04	4.75
Zhoc et al. (2018)	0.04	0.06	-0.12	0.20	0.00	0.47	0.63	5.33
Zysberg & Kasler (2017)	2.64	0.33	1.98	3.30	0.11	7.87	0.00	4.13
Random	0.73	0.13	0.01	0.46	1.00	5.26	0.00	

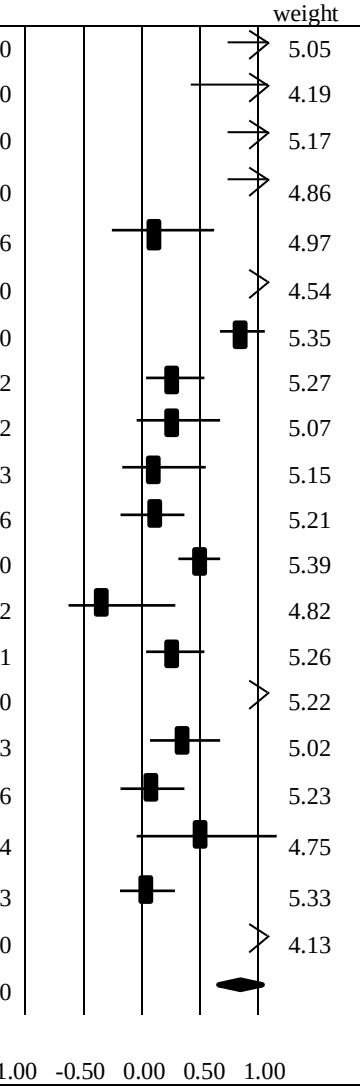

Figure 1. *Effect sizes of individual studies included in the analysis*

In Figure 1, the lower and upper limits of the effect sizes in the 95% confidence interval of the individual studies included in the analysis are presented. As can be seen, except for one, all the studies show a positive correlation between emotional intelligence and academic achievement. Upon examining the studies individually, it can be observed that the highest effect size value is 4.119 whereas the lowest effect size value is -0.260.

After the analysis of the individual effect sizes of the studies, a heterogeneity test, which can be described as the occurrence of the variability in the data and specifies the heterogeneous or homogeneous characteristics of the studies in the analysis, was applied. Performing this step enables the researcher to be able to select the appropriate model that can be used to calculate the overall effect. The findings of the heterogeneity test are presented in Table 3.

Table 3. *The heterogeneity test of the analysis*

Model	*N*	*Estim.*	*SE*	*Var.*	*95% CI*		*Z*	*p*	*Q*	*df (Q)*	*p*	I^2
					Lower limit	*Upper limit*						
Fixed	20	0.48	0.03	0.001	0.430	0.538	17.59	.000	438.11	19	.000	95.66
Random	20	0.73	0.14	0.019	0.460	1.005	5.27	.000				

In Table 3, the *Q* and *p* value were found 438.11 and .000, respectively. As the *Q* value is 38.58 in χ^2 significance table for *df* =19, and 438.107 is greater than the significance ranges (38.582, $p < .05$), it can be concluded that the studies included in the analysis are heterogeneous. In addition, *p* value being .000 also supports the finding. In line with the results, random-effects model was applied to the analysis and the overall effect size was figured out as .73. According to the classification of the effect sizes, this value (.73) corresponds to the medium size effect. In other words, the overall effect size of emotional intelligence on academic achievement is medium. When the fixed effects model is analysed, it is observed that the overall size effect is .48 which can similarly be interpreted as the medium effect size.

In addition to the overall effect size value, the meta-analysis of the sample size of the studies was also conducted. Table 4 presents the values of effect sizes in terms of sample sizes.

Table 4. *The analysis of sample sizes*

Sample size (k)	*N*	*Hedges's g*	*95% CI*		*Q*	*df (Q)*	*p*
			Lower limit	*Upper limit*			
0-250	10	0.63	0.51	0.80			
Over 250	10	0.74	0.48	1.52	19.01	1	.000
Overall	20	0.69	0.55	0.81			

The values of effect sizes in terms of sample sizes are presented in Table 4. Upon considering the table, it is observed that the effect size of the studies whose sample sizes are up to 250 has been found 0.63 while the effect size of the studies with over 250 samples is 0.74. Accordingly, it can be concluded that sample size is an important variable and the sample sizes over 250 have a higher effect value than the ones having less sample.

Further, in order to determine the validity and reliability as well as identifying the publication bias of the meta-analysis, funnel plot and Rosenthal's Safe *N* method were carried out. Figure 2 demonstrates the funnel plot of the effect sizes of the included studies.

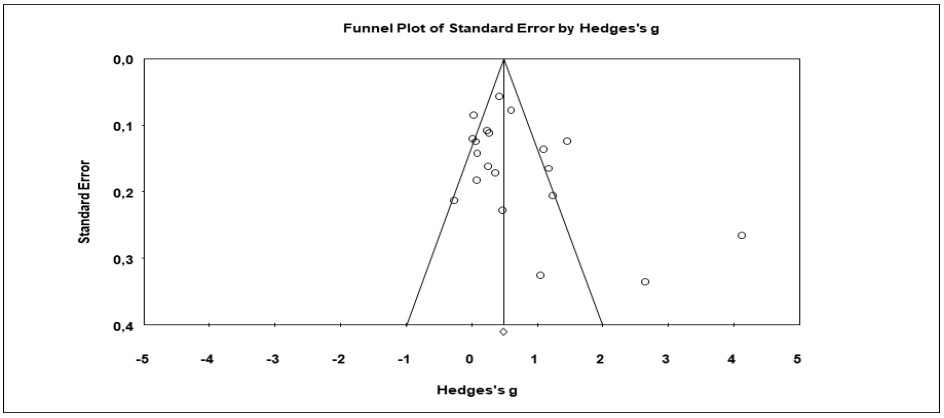

Figure 2. *The funnel plot of the studies*

It is suggested that when the effect size of each individual study is scattered in the funnel lines symmetrically, it does not refer to publication bias which denotes that the studies are more possibly to have statistically significant findings than the studies demonstrating non-significant findings. As it is seen in Figure 2, much as there are few dots outside the funnel lines, most of the others are close to a symmetrical shape and it can be concluded that the scattering shows that the publication bias is low (Dinçer, 2014). Following this, Classic Fail-Safe *N* analysis was carried out to identify how many studies having zero effect size are needed to have the meta-analysis lost its statistical significance. Table 5 presents the findings of the analysis.

Table 5. *Classic Fail-Safe N analysis*

Z-value for observed studies	19.33
p-value for observed studies	.00
Alpha	.05
Z for alpha	1.95
Number of observed studies	20
Number of missing studies that would bring *p*-value to > alpha	1926

In Table 5, the findings of Classic Fail-Safe *N* analysis demonstrate that *p* value is less than the alpha value, which indicates that the publication bias of the analysis is acceptable, valid and also reliable. The table also demonstrates that in order to nullify the findings of the present meta-analysis, 1926 additional non-significant studies (which effects should be zero) have to be added to increase the *p* value so that it will be greater than the alpha value, and thus, invalidating the findings.

Discussion

The aim of the current research was to interpret and synthesize the findings of the previous studies examining the correlation between emotional intelligence and academic achievement. To this end, studies were selected through specific inclusion and exclusion criteria and 20 studies with 6057 participants were chosen for the further steps of the analysis. The analysis proved to be heterogeneous and after applying the random-effects model, the overall effect size was found .73 which is interpreted as a medium size effect. The findings revealed that possessing higher emotional intelligence paves the way for higher academic achievement at schools.

The findings of the current study that revealed the positive and significant effect of emotional intelligence on academic achievement have been supported by many researchers. It has been argued that, in some ways, emotional intelligence might be far more influential than IQ in determining life success and it is considered as a core competency of academic success, which was once attributed solely to the cognitive domain (Goleman, 1995). A meta-analysis study conducted by MacCann et al. (2020) also puts supportive and solid evidence for this assumption. In their study, MacCann et al. (2020) and her colleagues examined 158 studies with 42.529 participants from multiple cultures and found that, irrespective of the age, individuals who have higher emotional intelligence had higher grades and test scores than the others. The researchers concluded that students who develop high levels of emotional intelligence could handle unexpected and adverse situations and emotions, which may trigger failure, better than the ones with lower emotional intelligence scores. This connotes that those with higher emotional intelligence are generally good at adapting to their environment, coping with social pressure around them, getting away from frustration, anxiety, excitement etc., and creating healthy relationships with other people, which altogether

provide much better opportunities for success in life. Similarly, there are many other studies verifying the positive and significant correlation between emotional intelligence and academic achievement (Costa & Faria, 2015; Dewi et al., 2016; Fallahzade, 2011; Ferrando et al., 2011; Joibari & Mohammadtaheri, 2011; Mohzan et al., 2013; Ramana & Devi, 2018; Stankovska et al., 2018; Wijekoon et al., 2017).

On the other hand, the study examining the link between emotional intelligence and academic achievement by Olatoye et al. (2010) revealed an insignificant and negative relationship. Likewise, Ranjbar et al. (2017) in their meta-analysis reported a weak correlation between the variables among Iranian university students. The researchers state that the education system in the country focuses more on memorizing and learning abilities rather than personal abilities such as emotional intelligence and this could be a point for the inverse finding. Similarly, Meshkat's (2011) study, conducted among university students, also revealed an insignificant link between emotional intelligence and academic success.

All in all, despite the presence of few studies revealing an insignificant association between these two variables, prevalent assumptions and salient findings in the literature lay emphasis on the idea that individuals who manage to comprehend and direct their emotions efficiently are far more successful both at their school and their social environments. Although the roles of intelligence and learning abilities cannot be neglected and disregarded, the part that emotional intelligence plays has a substantial influence on success in life. As MacCann (2019) asserts, being smart and working hard, alone, are not enough for success, students still need the ability to recognize and manage both their and others' emotions.

The interpretation of the body of literature suggests that emotional intelligence has been proposed as a significant factor for success in several respects. Thus, the educational systems necessarily should focus on the issues such as promoting the well-being and emotional skills of students. In this sense, additional training programs for teachers as well as policy makers should be integrated to the curricula so that the educators can instil into their students' mind how to feel empathy with someone, how to sustain positive attitudes, how to be motivated despite outer pressure, how to be aware of their own emotions and manage them, how to promote self-awareness, how to be social and how to create better relationships with others.

The current meta-analysis is subject to some limitations. First of all, during the selection process of articles, the correlation coefficient was set as a criterion index for the effect size and accordingly several of the studies were eliminated as they did not pose the required data. Extending the research criteria, and thus increasing the number of studies involved in the analysis would yield to present a far more reliable holistic view and a confident generalization regarding the link in question. Further, in order to hold a view of the association in terms of cultural and regional differences, future research could emphasize on the comparison of the findings that gathered from multiple settings.

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