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PREDICTORS OF EMOTIONAL INTELLIGENCE AMONG DIFFERENT CULTURES: SYSTEMATIC REVIEW AND META-ANALYSIS

Azadeh Mousavi[1]
Universiti Putra Malaysia[1]
adeh20120@gmail.com[1]

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Abstract: Regulation among different cultures to improve mental health and wellbeing. In thisregards the systematic review was conducted on original published articles using 'religiosity 'critical thinking' 'thinking style' and 'emotional intelligence' as keywords which were collected from Google Scholar, Science Direct, Web of Science, and PubMed by (Mendeley Reference Manager) for relevant articles written in English. Also, a manual search of Iranian articles in the Persian databases, such as Noormags, was carried out. All articles were searched from 1997 till 2021. Among the 21 articles in the review of religiosity, 20 critical thinking, and13 thinking style, with the separate identifying role of each variable in regulating emotion that gathered according to the inclusion and exclusion criteria of SIGN checklist and analyzed by Comprehensive Meta-Analysis software version 3 (CMA 3) critical thinking showed the highest correlation with emotional regulation (critical thinking r = 0.365) (religiosity r = 0.310) (criticalthinking r = 0.365) (thinking style r = 0.324). Therefore, training the ways of thinking criticallyis a pathway to catch emotional wellbeing.

Keywords: Emotional Intelligence, Regulating Emotion, Religious, Belief, Critical Thinking,Thinking Style, Culture.

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INTRODUCTION

Nowadays, enhancing the level of wellbeing has been one of the most interesting issues of study in developmental psychology. The ability to identify and understand one's feelings as well as that of others to improve mental health

[1] Universiti Putra Malaysia, Malaysia; adeh20120@gmail.com

is emotional intelligence (EQ) (Golman, 1989). According to (WHO), internalizing problems, feelings of loneliness, and depression increased by 14%. Consequently, investigating the differences in emotional capabilities is a way to reduce depression and isolation (Davis, et al, 2019). Therefore, finding the contributors to developing (EQ) in both the areas of emotional self-competency and emotional skills ability is a pathway to enhance wellbeing.

Religious organizations such as churches, synagogues, and mosques can support emotional well-being by providing social networks (through prayer and common religious beliefs) fostering a sense of communal belonging for followers (Kosher, H et al., 2017). Based on the outcomes of research conducted by Nesami et al., (2015), religion can provide a context that is framed in children's emotions. Also, improving (EQ) through religious education can improve social relationships, thus contributing indirectly to a higher quality of health care. Besides, the meaning of religious belief is changing across the course of development from a more conceptual belief in childhood to a broader abstract belief in adolescence.

Critical thinking is another valuable element that makes a link between intelligence and emotions and determines the quality of (EQ) (Elder, 1997). As Goleman (1998) emphasized, emotions come to form the basis of thoughts, so we should not consider them as different concepts. Thinking critically requires a range of understandings, skills, and abilities. Some of these are still developing in adolescence; identifying those helps to inform expectations regarding adolescent thinking and provides some guidance as to how adolescents may be further developed educationally (Ellerton, 2020).

The third item that could enhance (EQ) is thinking style. Thinking styles are known as the ability to govern owned felling and others in different ways. Empirically and theoretically thinking style is divided into five dimensions: function, form, level, scope, and learning, and 13 styles (Zhang, 2003).

Kosher (2017) found a stronger association between emotional wellbeing and religion amongst Asian-Christian/Buddhist children than with Hindu children. As Santrock et al., (2008) mentioned, Latinos and African Americans presented with a greater level of involvement in religion than Caucasian Americans. Religious beliefs are an important aspect of American adolescents' lives. Youniss, et al., (1999) testified that more than 60% of high school seniors stated religion as a "pretty important" or "very important" factor to them. A general age trend for religiosity was found to decrease from childhood through adolescence (King, Elder, & Whit beck, 1997).

In a study by Stedman et al. (2007) on 164 Undergraduate students of leadership (131: female, 59: male) in the USA, a positive relationship was found between managing emotions r= .25, p<.05, self-awareness (r = 0.27, p<0.05) and critical thinking. Besides, Elder (1996) in his book, found that critical thinking is known as a vehicle of emotional intelligence. Hanna (2013) in a review paper suggests that most approaches to teaching critical thinking do not integrate cognitive-emotional criteria in the teaching method, which is problematic for social work education. According to a study by Akbari Lakeh et al. (2015) among 50 Iranians, a positive correlation was found between critical thinking skills and (EQ)r=0.181p<0.001. Hülya Kaya et al. (2017) fromIstanbul, found in a Longitudinal study among 179 University students, a significant relationship between self-motivation and critical thinking (r=0.18 p<0.001). A Study by Hasanpour et al. (2017) among 169 Iranians in an age range of 18-50, could not find a significant correlation between critical thinkingskills and (EQ)(p=0.62, r=0.038) By contrast, Karimi et al.(2015), found strong, positive correlation between the two variables (r=.71,p < .0005) among 75 Iranians in an age range of 18-24. Accordingly, Murphy (2008) in a study among 308 African employees, found a 15% correlation between thinking styleand emotional intelligence. Haghani et al. (2010) from Iran, in a descriptive study among 69 university students, found that responsibility and critical thinking have a significant relationship (r=0.45p=0.001), but not in any other aspect. Ghanizadeh and mafia (2011) found a significant correlation between (EQ) and CT among 62 Iranian EFL learners (r = 0.378, *p < 0.05). Vahedi and Imanzadeh (2014) in a descriptive study among 200 Iranians, found that (EQ) and critical thinking are significantly related (r=0.23p<0.005). Leasa (2014) in a study of 69 Indonesians, found that the contribution of (EQ) to critical thinking skills is very low (Rsquere= 0.000, 0.001). Madadkhani et al. (2015) among 130 Iranian nurses, found that there is a significant relationship between critical thinking and emotional intelligence (r=0.120.p=0.001). Bagheri et al. (2018) in a study among 100 Iranian nursing students, found a significant correlation (p<0.012, r=0.225). Omidi et al. (2019) among174 nursing students, found a positive relationship between (EQ) and critical thinking (p<0.0000, r = 0.62). Abou Hashish (2018) from Saudi Arabia, in a study of 300 nursing students, found high levels of (EQ)(54.9%) and moderate (66.4%) disposition towards critical thinking (r = 0.594, p< 0.001). Ighbalnia and Ghorbani (2016) found a significant relationship between (EQ) and critical thinking among123 Iranian university students (r=0.75, p<0.001). Arbabisarju (2018) among 50 Iranian university students, found the thinking style and (EQ) had poor coefficients.

Thinking styles and (EQ) are structures that can be a bridge between personality and cognition (Zhang, 2001). Having a strong left-brained thinking style is associated with less emotional awareness and emotional management, and ultimately, low total (EQ) (Kirby,1997). There is conceptual agreement among many researchers that the right-brain thinking style is positively related to emotional awareness and emotional management (Leary et al., 2009). For example, Nutt (1986) found that individuals with right-brain thinking styles can be aware and manage the emotion and interaction with others who had a different thinking style. Likewise, Leary et al., (2009) found evidence of a significant and positive relationship between the 'Feeling' dominance associated with a right-brain thinking style and an interpersonal (EQ) scale. According to Jokić and Puricćd (2019), trait (EQ) had a strong positive correlation with extraversion, rationality, and experiment thinking style, and low positive correlations with greenness and conscientiousness, but not correlated with honesty, and openness. According to Saxena et al., (2013) monarchic and hierarchic teachers have higher (EQ) than oligarchic and anarchic thinking styles without differences between sexes. According to Herbst et al., (2008) people who prefer the limbic left thinking mode are conservative reactions and managing emotion, and people who prefer the limbic rightthinking mode are sensitive to others' feelings and awarding to emotion. According to Arshadi et al., (2006), girls and boys show a high relationship with legislative thinking style while the low relationship with introspective thinkingstyle and judging thinking style respectively among boys and girls. Besides, Darvish and Ayagh (2012) found, four thinking style components including functions, levels, scope, and learning have a meaningful impact on (EQ) but not in the case of forms. Iqbalnia and Ghorbani (2007) found a positive relationship between critical thinking style and (EQ) in both genders. According to Mahmoudi et al., (2010) external thinking style (r = 0.429) and hierarchical thinking style (r = 0.212) respectively showed the highest and lowest correlation with (EQ) among girls. Parallel, legislative thinking style (r = 0.60), and hierarchical thinking style (r = 0.59) is the most correlated, and external thinking style (r = 0.320) showed the lowest amount of correlation with (EQ) among boys. Therefore, boys and girls are exactly contrary to each other in the case of subscales of thinking style and emotional intelligence. Correspondingly, thinking style could predict 37% of (EQ) among girls and 60% among boys.

According to Murphy et al., (2016), positive, correlations were found between the hierarchical (r = .32, p <. 001), liberal (r = .32, p < .001) and legislative (u = .3 I, p < .001) and thinking style the result is similar to (Mahmoodi et al., 2010).According to Megreya et al.,(2013), five criminal thinking styles (mollification, cutoff, power orientation, cognitive indolence, and discontinuity) negatively correlated with emotional intelligence. On the other hand, productive criminal thinking, entitlement, super optimism, and sentimentality were not associated with emotional intelligence.

In conclusion, this meta-analysis shows that if each component of (religiosity, critical thinking, and thinking style) has a significant relationship with (EQ)? Is there any gender or cultural effects in the case of the effect of each variable and (EQ)? And which one of these components (religiosity, critical thinking, and thinking style) has the highest correlation with (EQ).

METHODS

Articles were screened by The Rayyan (2016) software (26) as well as being manually searched amongst Iranian databases such as Sivilika, Magiran, Irandoc, Noormags. Secondly, in the case of controlling the quality of studies, STROBE and SIGN checklists were used. Finally, to analyze the data, Comprehensive Meta-Analysis software version3 (CMA3) was used.

The current review incorporated studies that covered the noted criteria: emotional intelligence (EQ) was the outcome analyzed; (a) religiosity, critical thinking, and thinking style was assisted as a predictor, and (b) the one of cross-sectional/comparative, cohort/longitudinal, qualitative, or quantitative was used as a research design. Studies were disqualified if: (a) they were non-English andnon-Persian publications; (b) they did not explore the straight association of religiosity critical thinking and thinking style with (EQ); (c) the sample contained LGBTS or clinical patients, which cannot be generalized to the current study samples; and (d) other concepts such as religious doubt.

A total of articles were identified manually in Sivilika, Magiran, Irandoc, and Noormags. Firstly, in the base of inclusion criteria, the titles and abstracts of articles were screened. Accordingly, the full-text papers werecomprehensively screened and only articles that involved all relevant variablesand were selected for the final review.

Religious and (EQ) (Western studies=4, Non-Western studies=15) Critical thinking and (EQ) (Western studies = 2, Non-Western studies = 18),

thinking style and (EQ) (Western studies = 1, Non-Western studies = 12) (see Table.in appendix).

These article review papers are used for systematic review but in part of Metanalysis, only cross-sectional or longitudinal studies are used. Grey or unpublished materials were not used as part of the selection. As such, 1) studies did not examine the direct or indirect correlation between religion, critical thinking, thinking style, and emotional intelligence; 2) samples of the studies were clinical samples were excluded (see Figure.1).

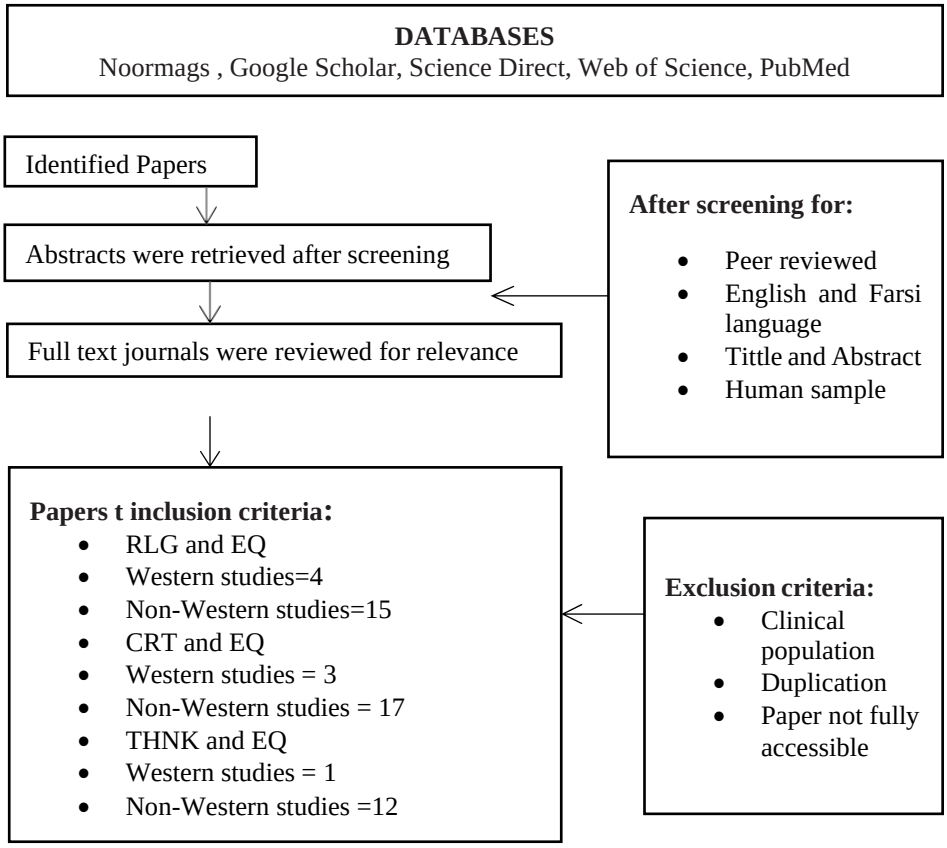


Figure 1.
Evidence of synthesis of articles related to Emotional Intelligence

FINDINGS AND DISCUSSIONS

Religiosity and (EQ)

Determining the effectiveness of the religiosity in raising (EQ) in both Western and non-Western countries are calculated in Table 1. Consequently, as shown in Table 1, 14 studies utilized one variant of the intervention while the other 2 utilized another variant. Yadav and Yadav (2018) researched in India amongst 490 males and females which noted a significant positive relationship between religiosity and (EQ) and shows 2

as a score the highest weight in the table. In addition, another study conducted by Randal (2014) reported that the score of - 1.51 weights is in the second rank and belongs to Western studies. The study was conducted on 156 clergymen in the Church of England which found a negative relationship between (EQ) and religious-based actions. The study showed an overall random effect of 0.310 in non-Western studies and 0.081 in Western studies Table 1, P-value of Western countries is 000 but the P-value of non-Western studies after subgrouping is 50. Therefore, H1: is accepted and Western and non-Western countries are different in the case of the relationship between religiosity and EQ.

Table 1.
Subgroup Analysis According to Western and Non-western Studies

Model	W/N W	Study	G	W (EQ) ght	Correlation	Lower limit	Upper limit	Z-Value	p-Value
		Randall	3	-1.51	-0.050	0.26	0.108	-0.619	0.536
		Hendron	3		0.210	0.082	0.31	3.183	0.001
Random	1				0.085	-0.171	0.330	0.650	0.516
	2	Arbabisarjo	3	0.32	0.410	0.328	0.486	8.938	0.000
	2	Neysiani	2	0.29	0.410	0.194	0.588	3.566	0.000
	2	Naami	3	0.00	0.340	0.245	0.428	6.700	0.000
	2	Karimi	3	-1.12	0.063	-0.021	0.146	1.477	0.140
	2	Nauli	3	-1.20	0.026	-0.166	0.216	0.264	0.792
	2	Yadav	3	2	0.700	0.652	0.743	9.140	0.000
	2	Pradhan	3	0.87	0.525	0.415	0.620	8.102	0.000
	2	Abbasi	1	-0.55	0.201	0.014	0.374	2.108	0.035
	2	Rostami	3	-0.66	0.180	0.089	0.268	3.848	0.000
	2	Touranloo	2	0.79	0.440	0.283	0.574	5.108	0.000
	2	Khalili	1	0.37	0.510	0.394	0.610	7.550	0.000
	2	Hoveyda	3	-0.24	0.440	0.095	0.691	2.454	0.014
	2	Bagheri	3	0.79	0.282	0.180	0.378	5.281	0.000
	2	Mohamadi	3	0.32	0.510	0.394	0.610	7.550	0.000
Random Overall					0.374	0.245	0.490	5.378	0.000
					0.310	0.193	0.418	5.017	0.000

(W) 1=Western, (NW) 2=Non-Western,(G)Gender: 1=female, 2=male,3=mixed

Table 2
Subgroup Analysis According [to] gender difference

Model	Study	G	Correlation	Lower limit	Upper limit	Z-Value	p-Value
	Abbasi	1	0.201	0.014	0.374	2.108	0.035
	Khalili	1	0.510	0.394	0.610	7.550	0.000
Random			0.370	0.037	0.629	2.166	0.030
	Neysiani	2	0.410	0.194	0.588	3.566	0.000
	Touranloo	2	0.440	0.283	0.574	5.108	0.000
			0.429	0.304	0.539	6.225	0.000
	Randall	3	-0.050	-0.206	0.108	-0.619	0.536
	Hendron	3	0.210	0.082	0.331	3.183	0.001
	Arbabisao	3	0.410	0.328	0.486	8.938	0.000
	Naami	3	0.340	0.245	0.428	6.700	0.000
	Karimi	3	0.063	-0.021	0.146	1.477	0.140
	Nauli	3	0.026	-0.166	0.216	0.264	0.792
	Yadav	3	0.700	0.652	0.743	19.140	0.000
	Pradhan	3	0.525	0.415	0.620	8.102	0.000
	Rostami	3	0.180	0.089	0.268	3.848	0.000
	Hoveyda	3	0.440	0.095	0.691	2.454	0.014
	Bagheri	3	0.282	0.180	0.378	5.281	0.000
		3	0.321	0.167	0.459	3.982	0.000
Random Overall			0.382	0.290	0.467	7.615	0.000

(G)Gender: 1=female, 2=male, 3=mixed

The subgroup studies by gender are discussed in Table 2. The correlation ratewas 0.40 in the study of Neyestani which was focused on male participants. While in astudy by Abbasi et al., (2010) on females, the correlation was (r=-0.55) and Khalili (2016) observed a correlation coefficient (r=20) among females in another study which might explain the high heterogeneity. Although most studies denoted a significant positive relationship between religiosity and (EQ), there are fundamental differences in how the studies were conducted. At the same time, some other studies have shown a significant negative relationship whilst some have shown a significant positive relationship between those two variables. Therefore, this study is dividing and subgrouping studies by gender to find the impact of heterogeneity. In gender-based subgrouping, the overall P-value did not change among studies focused on males or

both genders, while the P-value among studies on females changed to P = 0.03 (Table 2). A review of Table 4 and a comparison of the P-value of gender and geographical locations highlights that gender, as one of the factors, has a smaller share of heterogeneity than the environmental and cultural factors. Furthermore, the design of the studies can also be a determining factor in relation to heterogeneity. In the subgrouping process, the intergroup heterogeneity analysis decreased for the subgroupof the geographical locations, but not for gender as another subgroup Table 4, which indicates that meta-analysis has been able to highlight the differences between groupson a regional scale, but has not been successful in the gender factor area. This may be because gender differences play a less important role than geographical locations. Therefore, the second hypothesis is rejected.H2: gender moderates the relationship between religiosity and (EQ), and gender and difference do not play a significant role in the relationship between religiosity and (EQ).

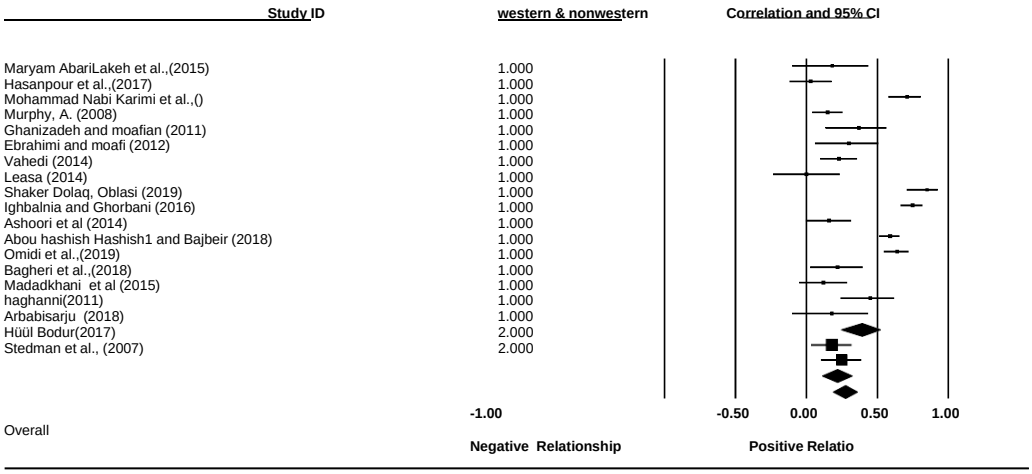
Critical Thinking and (EQ)

As can be seen in (Fig.2) all confidence intervals of studies are entirely on the positive side of zero. In traditional terminology, these studies show a statistically significant positive effect. Composite moderate and statistically significant effect size (r) was observed in the relationship between critical thinking style and emotional intelligence (r = 0.365, P=0.000) (95% CI [0.237, 0.481], which means that:

H3: The positive relationship between critical thinking and emotional intelligence is accepted, as well as suggesting that greater emotional intelligence is mostly associated with critical thinking.

The total I square is 91.95 which means that heterogeneity among studies is high. In the case of finding the reason for heterogeneity among studiessubgroup analysis is used which is shown in (Fig.2). In subgroup analysis, western and non-western countries are divided into subscales. Even so, the I square of both western (91.5464) and non-western (92.1706) countries is high. This means that heterogeneity is not due to geographical places and different cultures. And H4: shows that any impact that cultural differences have on the effect of critical thinking on emotional intelligence is rejected. Heterogeneity maybe be because of different kinds of design of the study, sample size, gender difference, etc. But the weight of studies in (fig.2) shows that studies by

Shaker Dolaq, Oblasi (2019) are (2.48), which means that most of the heterogeneity is due to this study. I look at the characteristics of this study in (table2, appendix), it can be seen that it is an experimental study with convinced sampling on 30 females. So, as mentioned before, part of heterogeneity is due to the design and sampling method. In addition, a study by Ighbalnia and Ghorbani (2016) has 1.96 weights and is a descriptive correlational study with both gender studies showing a high correlation of (0.71) among students of the university. Consequently, it means that all weights of studies are affected by the study by Shaker Dolaq, Oblasi (2019) because of the method of design and sampling used.



1=Nonwestern 2=Western

Figure 2. Forrest Plot Critical Thinking Style and Emotional Intelligence

Thinking style and (EQ)

According to fig 3, the fix number is high (16.87) so it means that homogeneityis moderate and the effect size (r) that observe in the relationship between thinking style and emotional intelligence r = 0.324 (95% CI [0.28, 0.35], p<.000) statistically is significant. Therefore, H5: positive relationship between thinking style and emotional intelligence is proved. As well as suggesting that greater emotional intelligence is mostly associated with conservative, legislative, extravagant thinking styles. Figure 3 shows the number of trials is small, so there is a high probability that departures from the ideal funnel shape may occur due to chance. Furthermore, the study is homogeneous as shown in the shape of a scatter plot. Consequently, the thinking style has a significant positive effect on emotional intelligence

among western and nonwesterncountries.

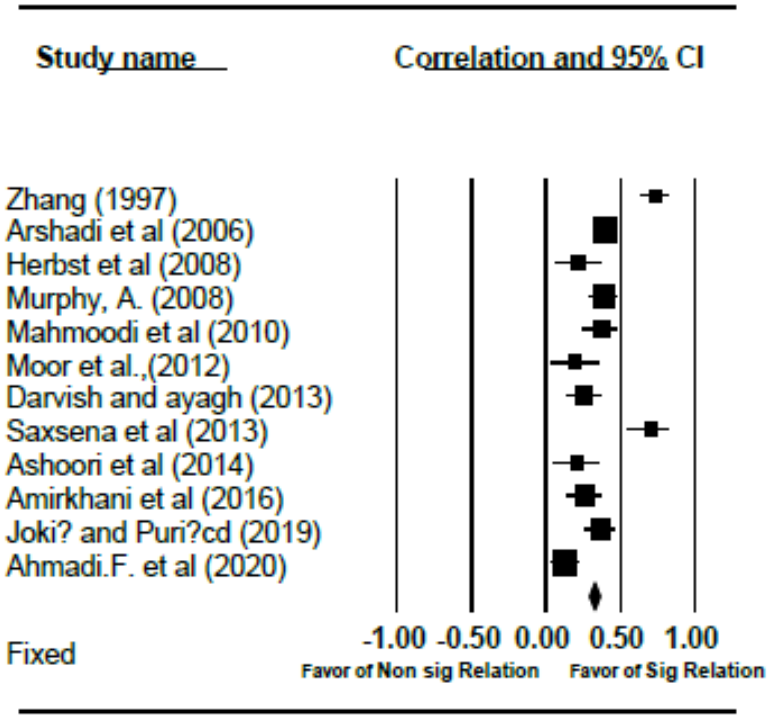


Figure 3. Forrest Plot l Thinking Style and Emotional Intelligence

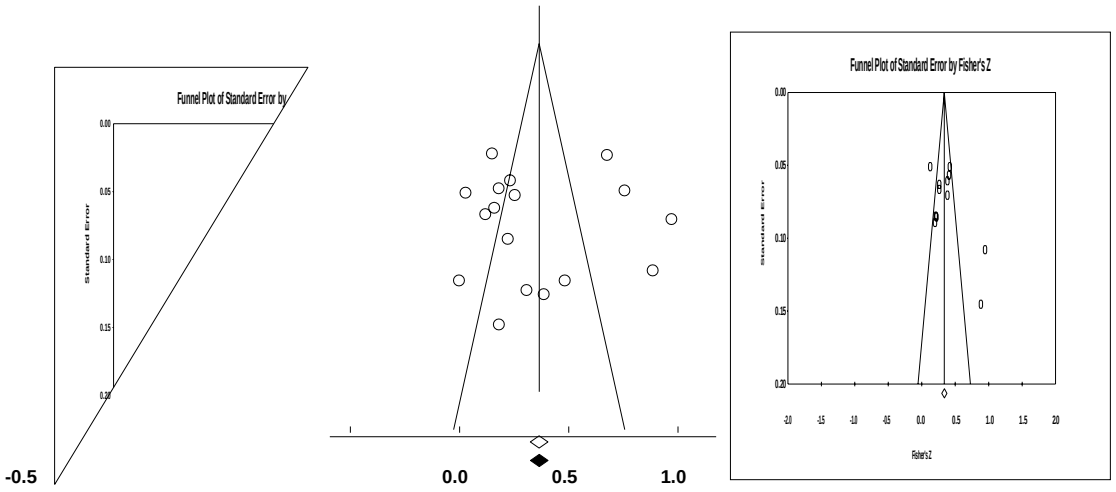
Publication Bias

If you look at Fig. 4, the middle line shows the size of the oral effect, if the studies around the line are equally distributed, and if the white and black diamonds are exactly below each other can conclude that there is no bias in thestudies. Besides, table 3 shows the number of missing studies that would bringp-value to > alpha, the number of articles published (1880, 1850, 1420) respectively for religious and critical thinking and thinking style, with EQ can change the result of this meta-analysis. Finally, there is no publication bias andthe meta-analysis has good robustness.

Table 3.
Classic fail-safe number

Classic fail-safe number EQ and:	Religious	Critical Thinking	Thinking Style

Z-value for observed studies	21.16213	17.51710	16.870
P-value for observed studies	0.0000	0.000	0.0000
Alpha	0.05000	0.0500	0.05000
Tails	2	2	2
Z for alpha	1.95996	1.95996	1.95996
Number of observed studies	16.00000	18	12
Number of missing studies that would bring p-value to > alpha	1850.000	1420.000	1880.0000



Religious and EQ Critical Thinking and EQ Thinking Style and EQ

Figure 4. Funnel plot of the relationship between (Religious –Critical thinking and Thinking stylewith EQ)

FINDINGS AND DISCUSSIONS

Religions and Emotional Intelligence

Islam and other religions suggest that individuals who strongly rely on God when facing challenges have miraculously withstood such difficulties. As Allah in (Yasin / Sura 36, verse 33) said, "faith can protect the mind like a seed which is intensely packed with no space for any kind of negativity or doubts to fit in". Thus, whilst the Holy Quran is a guide for leading mankind to a worthy life, it can also help to enhance EI. Therefore, leaning into religion may help to prevent the lifeboat from sinking. A person with great ideologies and religious practices is like a mustard seed that is packed and therefore restricted from negative thoughts, which is a characteristic that a person with high EI

would show. Consequently, faith will develop a positive mindset, building a staircase to transform the personality (Tony, 2019). People with high emotional intelligence deeply trust their abilities, which enable them to understand themselves and others more accurately. Feelings of emptiness and loneliness are known as symptoms of a lack of faith. Therefore, there is a close relationship/association between faith formation and EI (Tony, 2019). Articles that looked critically at the connection between religious beliefs and EI suggested that religiosity is a known psychological mechanism that counteracts stress (Yedlin, 2012). Trust in God and a feeling of closeness helps people find, and achieve, meaning and purpose in life. Spiritual beliefs form a personal protective tool that counters life challenges and are known as a medicine for boosting mental and physiological well-being. One's mentality has a significant emotional impact on physiology. Having faith in God, optimism, and a positive attitude toward solving the problems of life, combined with benevolent activities, can positively affect emotional awareness. Therefore, a belief in God and the protection of one's soul when facing life's problems can provide a feeling of calmness in children.

Critical Thinking and Emotional Intelligence

The major findings of the study are that there is no difference between western and non-western countries or genders in the case of a relationship between critical thinking and EQ in all places and cultures, critical thinking affects eq. The concept of regulating emotions is defined as the internal form of control exercised by the individual. Those who can control their emotions can adapt to unexpected situations and changes are open to new ideas, approaches, and knowledge, take responsibility related to emerging outcomes, question themselves rather than blame others, and cope better with problems in life. This makes it imperative to raise their critical thinking and emotional intelligence skills to function as safe, competent, intuitive, and innovative individuals in a constantly changing environment.

Thinking Styles and Emotional Intelligence

The findings from the 13 papers suggest that (i.e., right vs. left-brained) thinking styles are related to emotional intelligence. Moreover, results indicated that left-brained thinking was negatively related to emotional awareness but not too emotional management. In contrast, right-brained thinking styles were positively related to awareness and management of emotional intelligence.

CONCLUSION AND RECOMMENDATION

Meta-analysis findings showed that geographical dimensions and culture are the primary factors contributing to regulating emotion and it is in line with the study by (Mousavi and Juhari, 2019). Based on the results, the religions of Eastern countries showed a stronger effect on their people's emotional regulation compared to the religions of Western countries. As reported, 16 papers that studied the predictors showed a positive significant relationship between religiosity and EI among both Western and non-

Western cultures. The most impactful outcome of the current study is that higher levels of religiosity in children are strongly related to greater psychological well-being in non-Westerncultures, as compared to Western cultures.

H1: The positive relationship between religious and emotionalintelligence is accepted.
H2: The hypothesis that culture makes a difference between the effects of religion on emotional intelligence is accepted.

Besides, there were no significant differences across academic levels and age range regarding their perception of both emotional intelligence and critical thinking disposition levels. This means that the more practice critical thinking as they are maturing, the higher will be their disposition to develop emotional intelligence.

H3: The positive relationship between critical thinking and emotional intelligence is accepted.
H4: The hypothesis that culture makes a difference between the effects of critical thinking on emotional intelligence is rejected.

Also, this investigation was to examine the relations between thinking style and emotional intelligence. The findings from the 13 papers suggest that (i.e., right vs. left-brained) thinking styles are related to emotional intelligence.Moreover, results indicated that left-brained thinking was negatively related to emotional awareness but not too emotional management. In contrast, right- brained thinking styles were positively related to awareness and management ofemotional intelligence. Therefore, it is suggested that the right brain thinking style was an asset in both emotional intelligence management and emotional intelligence awareness. Furthermore, the similarity in both Western and Non- western countries, the legislative thinking styles, has the highest ability to predict emotional intelligence. The important point is that in Iran, extroverted thinking styles among girls and hierarchical thinking style among boys is predictors of emotional intelligence (Mahmoodi, 2009). And, the difference is that in Western countries, the scope of extroverted thinking has the highest predictive power but in non-western countries, this scope has seen only in girlsand in boys hierarchical thinking style is the most powerful predictor of emotional intelligence maybe it is because of collectivism culture of non- western countries especially eastern and individualism culture of western countries.

H5: The positive relationship between thinking style and emotional intelligence is accepted.
H6: The hypothesis that culture makes a difference between the types of thinking style that affects emotional intelligence is accepted.

Above and beyond, according to the results of comprehensive Meta- Analysis software version 3 (CMA 3), critical thinking showed the highest correlation with emotional regulation (critical thinking r = 0.365) (religiosity r=0.310) (critical thinking r = 0.365) (thinking style r = 0.324). Thus, teaching the ways of thinking critically is a passageway to catch emotional wellbeing.

In summary, this study was one of the very few studies which examined the relationship between religion, critical thinking, thinking style, and emotional intelligence disposition in the context of western and non-western studies. The results showed that in all studies, in both individualist and collectivist cultures, critical thinking plays an important role in improving emotional intelligence.

The limitations of this study were the lack of studies among the community of bisexual or homosexual and Trans people. Therefore, studying among this group of people makes it clear to have an in-depth understanding of the topic and can think objectively of this research.

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REFERENCES

Abbasi, R., & Roshan, R. (2010). The Relationship between Religious Beliefs and Emotional Intelligence (EQ) in High School Students. *Scientific Journal of Clinical Psychology & Personality*, 1(43), 31-38.

Abou Hashish, E. A., & Bajbeir, E. F. (2018). Emotional intelligence among Saudi nursing students and its relationship to their critical thinking disposition at college of nursing-Jeddah, Saudi Arabia. *American Journal of Nursing Research, 6*(6), 350-358.DOI: 10.12691/AJNR-6-6-2

Ashoori, J. (2014). Relationship between academic achievement and self- efficacy, critical thinking, thinking styles and emotional intelligence in nursing students.https://www.sid.ir/en/Journal/ViewPaper.aspx?ID=436575 AkbariLakeh, M., Naderi, A., & Arbabisarjou, A. (2018). Critical thinking and emotional intelligence skills and relationship with students' academic achievement. *Prensa Med Argentina, 104*, 2. DOI: 10.4172/0032-745X.1000280

BAGHERI, M., & Ghaedi Heidari, F., & Malchi, F., & RABIEI, Z. (2019). The Relationship Between Emotional Intelligence Components and Critical Thinking in Nursing and Midwifery Students of Bushehr University of Medical Sciences. Journal of Urmia Nursing and Midwifery Faculty, 17(2 (115)), 102-110. https://www.sid.ir/en/journal/ViewPaper.aspx?id=773366

Darvish, H., & Ayagh, H. (2013). An empirical study to investigate the effects of thinking styles on emotional intelligence: A case study of Jihad Agriculture Organization of

east Azerbaijan province. *Management Science Letters*, *3*(5), 1363-1368. DOI: 10.5267/j.msl.2013.04.014

Davis, S. K., Nowland, R., & Qualter, P. (2019). The role of emotional intelligence in the maintenance of depression symptoms and lonelinessamong children. *Frontiers in psychology*, *10*, 1672. doi.org/10.3389/fpsyg.2019.01672

Ebrahimi, M. R., & Moafian, F. (2012). Does Emotional Intelligence or Self- Efficacy Have Something to Do with High School English Teachers' Critical Thinking, Considering Demographic Information? *International Journal of Linguistics*, *4*(4), 224.doi:10.5296/ijlv4i4.2662

Elder, L. (1996). Critical thinking and emotional intelligence. *Inquiry: Critical thinking across the disciplines*, *16*(2), 35 49.Link:https://www.pdcnet.org/inquiryct_poiesis/content/inquiryct_poiesis1996_0016_0002_0035_0049

Ellerton, P. (2019). Critical Thinking in Adolescence. *The Encyclopedia of Child and Adolescent Development*, 1 10. doi.org/10.1002/9781119171492.wecad370

Ghanizadeh, A., & Moafian, F. (2011). Critical thinking and emotional intelligence: investigating the relationship among EFL learners and thecontribution of age and gender. link:https://www.sid.ir/en/journal/ViewPaper.aspx?id=247197

Goleman, D. (2005). *Emotional intelligence*. Bantam.

Haghani F, Aminian B, Kamali F, & Jamshidian S (2010). Critical ThinkingSkills and Their Relationship with Emotional Intelligence in MedicalStudents of Introductory Clinical Medicine (ICM) Course in IsfahanUniversity of Medical Sciences.*Iranian Journal of Education in MedicalSciences (Special Issue of Education Development*), *10*(05). https://web.s.ebscohost.com/abstract?direct=true&profile=ehost&scope=site&authtype=crawler&jrnl=16089359&AN=65488408&h=zw117ezMqEYRcKVZ6RsQMzNFVSb5qdg%2bk7aNZ4d8S7Fke51i1lXiIgQIl4Z3e8%2b7e9JBFK6R%2bolIzVuP3OzKjg%3d%3d&crl=c&resultNs=AdminWebAuth&resultLocal=ErrCrlNotAuth&crlhashurl=login.aspx%3fdirect%3dtrue%26profile%3dehost%26scope%3dsite%26authtype%3dcrawler%26jrnl%3d 16089359%26AN%3d65488408

Hanna EP. A cognitive emotional methodology for critical thinking. Advancesin Applied Sociology. 2013 Mar15;3(01):20. https://doi.org/10.1037/a0032257

Herbst, T. H., & Maree, K. G. (2008). Thinking style preference, emotional intelligence and leadership effectiveness. *SA Journal of Industrial Psychology*, *34*(1), 32-41. doi.org/10.4102/sajipv34i1.422

Iqbalnia, Z & Ghorbani,S.A, Investigating the relationship between parents' parenting style and critical thinking and emotional intelligence of elementarystudents city of Mahalat (2018),*The 5th International Conference on Psychology,Education and Life Style*,12Jul (2018).

Karimi, M. N. K., Hashemi, M. R., & Sarbazfard, M. (2016). EmotionalIntelligence and Critical Thinking Ability as Correlates of EFL Learners' Vocabulary Knowledge. *Journal of Research in Applied Linguistics*, 7(1), 75-94.doi:

10.22055/RALS.2016.11778

Kaya H, Şenyuva E, Bodur G. The relationship between critical thinking and (EQ)in nursing students: A longitudinal study. Nurse education today. 2018 Sep 1;68: 26-32. DOI: 10.1016/j.nedt.2018.05.024

Keshavarsi Arshadi F, Emamipur S, Mazaheri Kalharodi NM. The Effect of Thinking Styles and Gender on Emotional Intelligence. *Journal of Andishe varafter*. 2006;1(2):36-48. https://www.ijmedicine.com/index.php/ijam/article/view/1115

King, V., Elder Jr, G. H., & Whitbeck, L. B. (1997). Religious involvement among rural youth: An ecological and life-course perspective. *Journal of Research on Adolescence*, *7*(4), 431-456.https://www.tandfonline.com/doi/abs/10.1207/s15327795jra0704_5

Kosher, H., & Ben-Arieh, A. (2017). Religion and subjective well-being among children: A comparison of six religion groups. *Children and youth services review*, 80, 63-77. doi.org/10.1016/j.childyouth.2017.06.049

LaMothe, R. W. (2010). Types of faith and emotional intelligence. *Pastoral Psychology*, 59(3), 331-344. DOI: 10.1007/s11089-009-0229-3.

Leasa, M. (2018). The correlation between emotional intelligence and critical thinking skills with different learning styles in science learning. In A. Suparmi and D. A. Nugraha (Eds.), AIP Conference Proceedings (Vol. 2014,No. 1, p. 020135). AIP Publishing LLC. https://doi.org/10.1063/1.5054539

McCullough, M. E., & Willoughby, B. L. (2009). Religion, self-regulation, and self-control: Associations, explanations, and implications. *Psychological bulletin*, 135(1), 69. https://doi.org/10.1037/a0014213

Madadkhani, Z., Nikoogoftar, M., & Keramatkar, M. (2014). Emotional intelligence and critical thinking dispositions in nurses Based on demographic characteristic. *Iranian Journal of Psychiatric Nursing*, *2*(3), 24-36. link:http://ijpn.ir/browse.php?a_id=396&sid=1&slc_lang=en

Mahmoudi Gholamreza, Esteki Mahnaz, & Shahrzad Damavandi (2011). The relationship between students' thinking style and emotional intelligence. *Journal of Educational Psychology*, 2, (6),127-130. https://www.sid.ir/en/Journal/ViewPaper.aspx?ID=371569

Megreya, A. M. (2013). Criminal thinking styles and emotional intelligence in Egyptian offenders. *Criminal Behaviour and Mental Health*, *23*(1), 56-71. doi.org/10.1002/cbm.1854

Murphy, A. (2008). *Defining the boundaries between trait emotional intelligence and ability emotional intelligence: An assessment of the relationship between emotional intelligence and cognitive thinking styles within the occupational environment* (Doctoraldissertation) link:https://scholar.google.com/scholar?hl=en&as_sdt=2007&q=Murphy+A.+Defining+the+boundaries+between+trait++%28EQ%29and+ability+emotional+intelligence+&btnG=

Mousavi, A., & Juhari, R. (2019). Systematic review of parenting style and children's emotional intelligence: recent updates on western and non-western families. *Malaysian Journal of Medicine and Health Sciences*, 15(101). link: http://mymedr.afpm.org.my/publications/80703

Naami, A., Mehrabizadeh Honarmand, M., Bassak Nejad, S., Hassanvand Amouzadeh, M.,

Asadi, A., & Sanaeenasab, N. (2020). Relationship between Religious Attitude and Prosocial Behavior Considering the Mediating Role of Empathy and Altruism in Nursing and Medical Students. *Journal ofMazandaran University of Medical Sciences*, 29(182), 73-81. DOI: 10.1080/24694193.2019.1578434

Nauli, R. P., & Mulyono, S. (2019). The Correlation between Spirituality Level and Emotional Resilience in School-Aged Children in SDN Kayuringin Jaya South Bekasi. *Comprehensive child and adolescent nursing*, 42(sup1), 135- 146. DOI: 10.1080/24694193.2019.1578434

Nesami, M. B., Goudarzian, A. H., Zarei, H., Esameili, P., Pour, M. D., & Mirani, H. (2015). The relationship between emotional intelligence with religious coping and general health of students. *Materia socio-medica*, *27*(6), 412.doi: 10.5455/msm.2015.27.412-416

Neysiani, Z. M., Asadi, A., Asgari, M., & GhaleNoei, F. (2019). Relationship of religious orientation and spiritual intelligence with emotional self-regulation in women subject to violence. *Journal of Research on Religion & Health*, 5(2), 101-114.

Omidi, N., Nasrollahi, F., & Omidi, M. R. (2019). Modelling of the Relationship between Critical Thinking and Emotional Intelligence of Nurses. *Iranian Journal of Medical Ethics and History of Medicine*, *12*(1), 73-81. link: *https://ijme.tums.ac.ir/browse.php?a_id=5928&sid=1&slc_lang=en*

Pradhan, R. K., & Jena, L. K. (2016). Workplace spirituality and organisational commitment: Role of emotional intelligence among Indian banking professionals. *Journal of Human Resource Management*, *19*(1), 13-2. link: https://ideas.repec.org/a/cub/journl/v19y2016i1p13-23.html

Randall, K. J. (2014). Emotional intelligence: what is it, and do Anglican clergy have it? *Mental Health, Religion & Culture*, *17*(3), 262-270.doi.10.1080/13674676.2013.796916

Shaker, D. A., & Obalasi, A. (2019). The effectiveness of neuro-linguistic programming training on emotional intelligence and critical thinking strategies of teachers.https://www.sid.ir/en/journal/ViewPaper.aspx?ID=743582 Santrock, John W. " Life span development a topical approach to Religion and Spirituality.". 4th ed. *New York: McGraw-Hill*, 2008. 499-501. https://en.wikipedia.org/wiki/Religious_development

Saxena, S., Jain, S., & Jain, R. (2013). Influence of forms of thinking styles on emotional intelligence of teacher educators. *IOSR Journal of Research &Method in Education, 1 (5),* 30-33.link: https://d1wqtxts1xzle7.cloudfront.net/50473609/Influence_of_Forms_of_Thinking_Styles_onwithcoverpagev2.pdf?Expires=1639898881&Signature=Iqa1MtDKpGu0gTQ5yFgsichkGQED2zlpKw6Z2355Icm3Jwusws4cNrmfq64vrmAHSBT~HY8H5qrEEKyG~XZGEVcl3~4uAMmqidi3CKZQigF79v5sPpMtOQqPMMHFoSeU1dBlRPTWN~5l3zJfZQcnjmyahaCDTBmkQdd0IZUu1ZZ2mNt2Yy~e8fjkU~JLI5doSL9Fs~mTjutJPeSKeEqoEP6bcGO~1l~DHF7aPvI9p76HVg~rhtyNuYbkVndOd~k7BVsvVgJSjZuNfC9k73UKFGMdhIO8gAnrPcVVEGFNYp2uu4EMlDC7VTOO84Qi6DM~t6unwqfZ0Aq-Cup81A &Key-Pair-Id=APKAJLOHF5GGSLRBV4ZA

Smith, C. (2003). Theorizing religious effects among American adolescents.

Journal for the scientific study of religion, *42*(1), 17-30. doi.org/10.1111/1468-5906.t01-1-00158

Stedman, N. L., & Andenoro, A. C. (2007). Identification of relationships between emotional intelligence skill and critical thinking disposition in undergraduate leadership students. *Journal of Leadership Education*, *6*(1), 190-208..link: https://eric.ed.gov/?id=EJ1136034

Vahedi, S., Marandi Heydarlou, M., & Imanzadeh, A. (2015). The relationship between emotional intelligence and critical thinking in nursing students of Tabriz University of Medical Sciences. *Development Strategies in Medical Education*, *2*(1), 47-57. link: https://dsme.hums.ac.ir/article-1-83-en.html

Yadav, M., & Yadav, R. (2018). Impact of spirituality/religiousness on cyberbullying and victimization in university students: Mediating effect of emotional intelligence. *Journal of religion and health*, 57(5), 1961-1979. DOI: 10.1007/s10943-018-0637-8

Youniss, J, J, McLellan, and M, Yates, 1999, Religion, community service, and identity in American youth. *Journal of Adolescence 22*: 243-53. doi.org/10.1006/jado.1999.0214

Zhang, H., & Lambert, V. (2008). Critical thinking dispositions and learning styles of baccalaureate nursing students from China. *Nursing & health sciences*, *10*(3), 175-181. DOI. 10.1111/j.1442-2018.2008.00393

Zhang, L. F. (2002). Thinking styles and cognitive development. *The Journal ofGenetic Psychology*, *163*(2), 179-195. doi.org/10.1080/00221320209598676