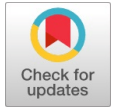


# Analyzing the Influence of Emotional Intelligence on Investor Behavior in Developing Regions: A PRISMA Systematic Review

Denise Chambers, Deshea Simon



**Abstract:** *Background:* This article aims to systematically review studies analyzing the influence of emotional intelligence (EI) on investor behaviors in developing countries (as defined by the United Nations Development Program) using PRISMA. In developing nations, the lack of investigation in this area is prevalent and nonexistent in some nations. *Methods:* EI and investor behavior-related papers in English were selected from ProQuest, EBSCO, and Google Scholar database searches in developing countries. *Results:* The review included 19 studies covering eight developing countries, extending the conclusion of a positive correlation between EI and investment decisions in growing regions. However, inconsistencies and gaps exist in the EI model adoption and investor behaviors. *Evidence Limitation/Implications:* Limitations include the need for extended EI and investor behavior dimensions and more geographic coverage. Important implication highlights include how EI helps investors enhance investment decision-making. *Originality/value:* This unprecedented PRISMA review of a comprehensive set of literature on the influence of EI on investor behavior in developing countries extends the current evidence base in this area.

**Keywords:** Developing Countries, Emotional Intelligence, Investor Behavior, PRISMA, Systematic Review.

## I. INTRODUCTION

Emotional intelligence (EI) involves comprehending, exploring, and showing emotions that control actions and decisions [21]. In addition, research suggests that investor EI is a critical factor in financial decision-making [5], [15], [20], [25]. Despite the importance of this topic, the body of knowledge on the impact of EI on investor behavior is limited [6]. Contemporary researchers recommend expanding future EI and investor behavior studies [2], [10] [11]. In some developing nations, the lack of investigation in this area is prevalent and nonexistent in some countries [3]. The objective of this review is to investigate the influence of EI on investor behavior in developing countries (as labeled by the United Nations [12] [13].

Development Program (UNDP)) [26], adopting the Preferred Reporting Items for Systematic Reviews and Meta-Analyses (PRISMA) [18].

The research questions for this study include: what is the influence of EI on investor behavior in developing countries, and which EI components positively significantly impact investor behavior? The review will proceed with an outline of the methodology used and follow with a presentation of the results.

## II. METHODOLOGY

The researchers' systematic review methodology adopted to search, screen, select, and collect data from the studies is detailed in Table- I [18] [23] [24] [27] [28].

Table- I: Methods Checklist items

Topic	Checklist Item
Eligibility Criteria	The researchers included the English language quantitative published papers and dissertations from the database search in EI and investor behavior in developing countries (as defined by the United Nations Development Program (UNDP)). Other areas, duplicates, Abstract only papers, theses, Conference Proceedings, and reviews, were excluded.
Search Strategy	The "(emotional intelligence OR EQ) AND (investor* OR investment* OR investing)" search string was used and filtered by abstracts in EBSCO and ProQuest. The eight search strings were used in Google Scholar filtered by title: "emotional intelligence investor, emotional intelligence investors, emotional intelligence investment, emotional intelligence investing, EQ investor, EQ investors, EQ investment, and EQ investing."
Information Sources	One researcher searched three popular business databases, EBSCO, ProQuest, and Google Scholar, to identify studies on April 14, 2022, exported search results to Excel, and removed duplicates. A second researcher cross-checked the extracted data.
Screening, Selection, and Data Collection Process	One researcher used the narrative approach to screen each record abstract and title for EI and investor behavior subject area and then for full-text report retrieval, then for selection for inclusion in the study papers on the topic with developing countries (as defined by the United Nations Development Program (UNDP)). Excel worksheet was used for the selection process and recording decisions. A second researcher cross-checked the extracted data.
Data Items	One researcher extracted data items from full-text journal articles selected for inclusion in the study and documented them in the excel worksheet (author, title, year of publication, objective, methodology, EI variables, country, findings, number of participants, sample population, scale, instrument). A second researcher cross-checked the extracted data.

Manuscript received on 25 July 2022 | Revised Manuscript received on 30 July 2022 | Manuscript Accepted on 15 August 2022 | Manuscript published on 30 August 2022.

\* Correspondence Author

Denise Chambers\*, Department of Business, Hampton University, Virginia, USA. Email: [denise.chambers@my.hamptonu.edu](mailto:denise.chambers@my.hamptonu.edu)

Dr. Deshea Simon, Department of Business Hampton University, Virginia, USA. Email: [DeSHEA.SIMON@HAMPTONU.EDU](mailto:DeSHEA.SIMON@HAMPTONU.EDU)

© The Authors. Published by Blue Eyes Intelligence Engineering and Sciences Publication (BEIESP). This is an open access article under the CC-BY-NC-ND license <http://creativecommons.org/licenses/by-nc-nd/4.0/>



III. RESULTS

A. Study Selection and Results

One researcher recorded search, screening, and selection process results (from the 585 records identified in the ProQuest, EBSCO, and Google Scholar database search) to obtain the nineteen studies included in the review) see the PRISMA flow diagram [18] (see Fig.1)

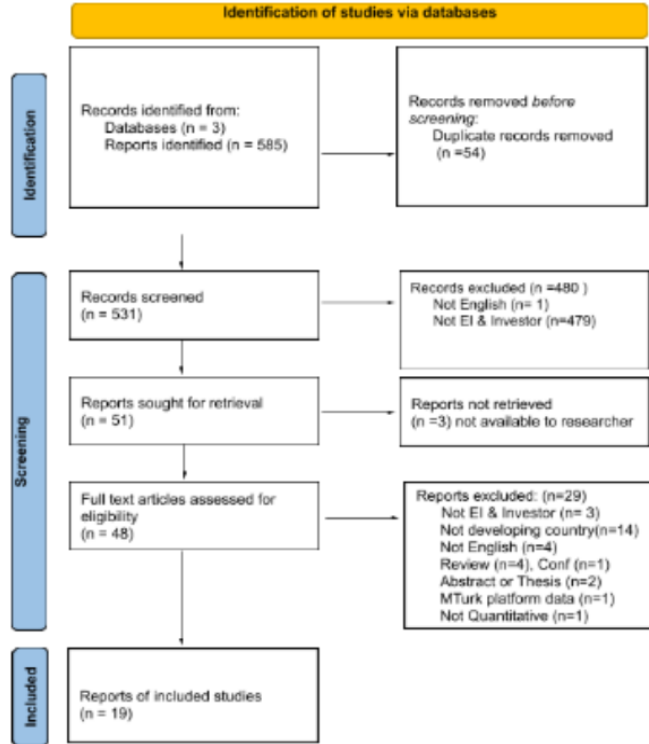


Fig.1. Search, screening, and selection process results in PRISMA flow diagram (Page et al., 2021)

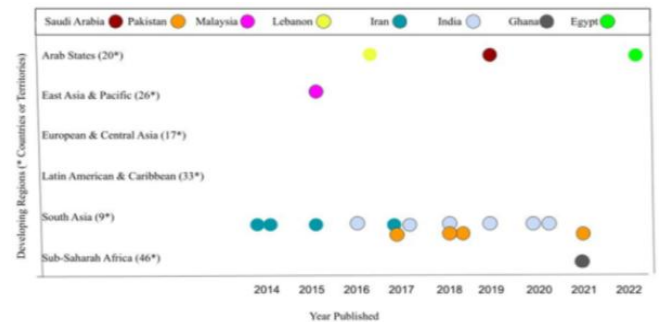
The researcher also cited and presented the characteristics of each included study in Table- II. The published dates were between 2014 and 2022. There were eight developing countries in the evidence. Developing regions not represented in the review body of literature included the seventeen European and Central Asia countries and the thirty-three Latin American and Caribbean countries or territories (see Fig. 2).

Table- II: Characteristics for each included study

#	Cite	Year Pub	Sample Size	Country	Behavioral bias focus
1	(Ahmad, 2018)	2018	455	Pakistan	Investor behavior <sup>a</sup>
2	(Arora, 2016) <sup>c</sup>	2016	740	India	Behavioral, risk preferences, and stock market participation
3	(Asamoah et al., 2021)	2021	255	Ghana	Investor behavior and decisions <sup>b</sup>
4	(Dhiman & Raheja, 2018)	2018	500	India	Risk tolerance <sup>b</sup>

5	(El-Chaarani, 2016)	2016	197	Lebanon	Portfolio performance <sup>a</sup>
6	(Gupta et al., 2019)	2019	454	India	Investment decisions <sup>a</sup>
7	(Hadi, 2017)	2017	150	Pakistan	Investment decisions
8	(Jamil & Bashir 2021).	2021	294	Pakistan	Decision making
9	(Johnsi & Sunitha, 2019)	2019	120	Saudi Arabia	Investor behavior <sup>b</sup>
10	(Lubis et al., 2015)	2015	320	Malaysia	Investment decision
11	(Munir & Kumar, 2018)	2018	300	Pakistan	Investment behavior
12	(Munir, 2020)	2020	300	India	Investment behavior
13	(Pirayesh, 2014)	2014	270	Iran	Investment decisions.
14	(Pour, A. Z., & Miladiyan)	2014	1394	Iran	Financial behavior
15	(Raheja & Dhiman, 2020)	2020	500	India	Investment decisions <sup>b</sup>
16	(Salehi & Mohammadi, 2017)	2017	150	Iran	Decision-making quality
17	(Sashikala, 2017) <sup>c</sup>	2017	430	India	Risk aversion, behavioral factors, and investment intention.
18	(Saweris et al., 2022)	2022	212	Egypt, data only	Investment decisions
19	(Varzaneh & Aliahmadi, 2015)	2015	105	Iran	Decision-making styles

<sup>a.</sup> adopts fragments of Mayer EI 4 Dimension Model, <sup>b.</sup> Adopts a Goleman EI 4- or 5-Dimension Model, <sup>c.</sup> Dissertation.



Each circle in this diagram corresponds to the country of each study included in the evidence base

Fig. 2. Illustration of Evidence Base Mapping by Developing Region



The aim of the first research question was to identify the influence of EI on investor behavior in developing countries. Consistent with contemporary research in this area [2], [5], [6]. EI was concluded to have a positive, statistically significant influence on investor behavior based on the analysis of literature included in this study [1], [4], [17] [16] [19].

The aim of the second research question was to identify the positive impact of the different EI components on investor behavior. Although a large part of the body of literature can be criticized for not analyzing the components of EI, three studies' hypotheses adopt Goleman's five-dimension model of the EI framework, one study's hypothesis adopts Goldman's four-dimension EI model [9], and another study's hypothesis adopts fragments of Mayer's four-domain model.

Although few studies assessed common EI and Investor Behavior variable dimensions, the various EI components assessed positively impacted investor behaviors differently (see Table- III). This is important because EI is a critical factor in maximizing wealth [22] and understanding the effect of each EI component on the Investor Behavior variables can provide insight into the likelihood of achieving more incredible wealth [6]. For example, risk is a vital factor in financial decision-making, and the higher the risk tolerance, the more significant the risk is taken [7]. Investors with self-awareness (SEA) had the most behavioral bias. SEA was correlated positively with risk tolerance [8], risk aversion [14], locus of control, investment decisions [20], herding [4], loss aversion (LOA), excessive trading (EXT), overconfidence, overreaction (OVR), mental accounting, and portfolio switching (POR).

**Table- III: Positively Correlated EI Components to Investor Behavior Bias for Each Study.**

#	Cite	RQ2: Which EI components positively impact IB. EI component (Positively impacted Investor Behavior variable)
3	(Asamoah et al., 2021)	SEA <sup>n</sup> / REM <sup>l</sup> (POR <sup>i</sup> , OVR <sup>j</sup> , EXT <sup>e</sup> , LOA <sup>g</sup> , Herding, Mental Accounting, Overconfidence). REM <sup>m</sup> (portfolio diversification). SEM <sup>o</sup> (Mental Accounting, portfolio diversification)
4	(Dhiman & Raheja, 2018)	SEA/ HAE <sup>f</sup> (Risk Tolerance)
6	(Gupta et al., 2019)	USE <sup>p</sup> / MOE <sup>h</sup> / MAE <sup>r</sup> / PEE <sup>k</sup> (Investment Decisions)
9	(Johnsi & Sunitha, 2019)	SEA (Risk Aversion, Locus of control), EMP <sup>d</sup> (location of control), SOS <sup>p</sup> (Risk Aversion, locus of control, overconfidence), MAE (overconfidence)
1 5	(Raheja & Dhiman, 2020)	SEA/ HAE/ MOT <sup>r</sup> / SOS (Investment Decisions)

<sup>d</sup>. EMP=Empathy, <sup>e</sup>. EXT= Excessive Trading, <sup>f</sup>. HAE= Handling Emotions, <sup>g</sup>. LOA= Loss Aversion, <sup>h</sup> MOE= Managing Others Emotions, <sup>i</sup>. MOT =Motivation, <sup>j</sup>. OVR= Overreaction, <sup>k</sup>. PEE=Perceiving Emotions, <sup>l</sup>. POR= Portfolio Switching, <sup>m</sup>. REM=Relationship Management, <sup>n</sup>. SEA= Self-awareness, <sup>o</sup>. SEM= Self-management, <sup>p</sup>. SOS=Social Skills, <sup>q</sup>. USE=Using Emotions. <sup>r</sup>. MAE=Managing Emotions.

#### IV. DISCUSSION AND CONCLUSION

This study used the PRISMA methodology to review a comprehensive set of literature on the influence of EI on investor behavior in developing countries and extends the body of literature in this area. This review aimed to identify the impact of EI on investor behavior in developing countries and the EI components that positively impact investor behavior. Consistent with previously published research, the results indicate that EI tends to positively impact investor behavior in Developing Countries. The EI components also assessed positively impacted investor behaviors differently. Although the study implies a correlation of EI to investor behavior in developing countries, regions such as Tropical Islands are underrepresented in the evidence base. Another weakness is the lack of depth of EI components and investor behaviors frameworks limiting the ability to analyze across studies and regions. In addition, there is a need to analyze the impact of other variables highlighted in the study outside the scope of this review. Thus, future research can be expanded to unrepresented tropical islands such as Jamaica and expand EI to include the analysis of personality traits, financial literacy, and the anatomy of emotions on investor behavior.

#### REFERENCES

- Ahmad, M. (2018). Impact of neurotransmitters, emotional intelligence, and personality on investor's behavior and investment decisions. *Pakistan Journal of Commerce and Social Sciences (PJCSS)*, 12(1), 330-362.
- Aren, S., & Hamamci, H. N. (2020). Relationship between risk aversion, risky investment intention, investment choices: Impact of personality traits and emotion. *Kybernetes*. [CrossRef]
- Arora, M. (2016). *Effect of Cognitive Abilities Emotional Intelligence and Self Esteem On Investment Decision Making A Prospect Theory Approach* [Doctoral dissertation, Thapar Institute of Engineering and Technology] Shodhganga: a reservoir of Indian theses @INFLIBNET <http://hdl.handle.net/10603/260020>.
- Asamoah, G., Baah-Adade, A. K., Ayikpah, Y. A., & Ayikpah, Y. A. A. (2021). Effects of emotional intelligence variables on investor behaviour in Ghana. *Journal of Technology, Engineering, Management & Computational Sciences*, 1(1), 130-240.
- Aydemir, S. D., & Aren, S. (2017). Do the effects of individual factors on financial risk-taking behavior diversify with financial literacy? *Kybernetes*.
- Buccioli, A., Guerrero, F., & Papadovasilaki, D. (2020). Financial risk-taking and trait emotional intelligence. *Review of Behavioral Finance*. [CrossRef]
- Dhiman, B., & Raheja, S. (2018). Do personality traits and emotional intelligence of investors determine their risk tolerance? *Management and Labour Studies*, 43(1-2), 88-99. [CrossRef]
- El-Chaarani, H. (2016). Exploring the impact of emotional intelligence on portfolio performance: An international exploratory study. *Humanomics*. [CrossRef]
- Goleman, D., Boyatzis, R. E., & McKee, A. (2013). *Primal leadership: Unleashing the power of emotional intelligence*. Harvard Business Press.
- Goyal, K., Kumar, S., & Xiao, J. J. (2021). Antecedents and consequences of Personal Financial Management Behavior: a systematic literature review and future research agenda. *International Journal of Bank Marketing*. [CrossRef]
- Gupta, M. A., & Kumar, S. (2019) Do Emotional Intelligence Influence Investment Decision Making Among Generation Y?
- Hadi, F. (2017). Effect of emotional intelligence on investment decision making with a moderating role of financial literacy. *China-USA Business Review*, 16(2), 53-62. [CrossRef]
- Jamil, N., & Bashir, T. (2021). Impact of Cognitive Dissonance Bias on Investors' Decisions: Moderating Role of Emotional Intelligence. [CrossRef]



# Analyzing the Influence of Emotional Intelligence on Investor Behavior in Developing Regions: A PRISMA Systematic Review

14. Johnsi, S., & Sunitha, K. A. (2019). Impact of personality and emotional intelligence on investor behaviour. *sdmimd Journal of Management*, 10(1), 21-29. [CrossRef]
15. Lubis, H., Kumar, M. D., Ikbar, P., & Muneer, S. (2015). Role of psychological factors in individuals investment decisions. *International Journal of Economics and Financial Issues*, 5(1S), 397-405.
16. Munir, I.U., Hussain, S., Ijaz, M.S., ur Rehman, Z. and Zulfiqar, B., 2020. DO GENDER AND FINANCIAL LITERACY RELEVANT ON THE RELATIONSHIP BETWEEN EMOTIONAL INTELLIGENCE AND INVESTMENT BEHAVIOR? *International Journal of Management (IJM)*, 11(8).
17. Munir, I. U., Yue, S., Ijaz, M. S., Zaidi, S. Y., & Hussain, S. (2018). Effect of emotional intelligence on behavior of investment: Possible role of financial literacy and gender. *Asia Proceedings of Social Sciences*, 2(2), 79-83. [CrossRef]
18. Page, M. J., McKenzie, J. E., Bossuyt, P. M., Boutron, I., & Hoffmann, T. C. (2021). The PRISMA 2020 statement: an updated guideline for reporting systematic reviews. *Systematic Reviews*, 10, 1-11. [CrossRef]
19. Pirayesh, R. (2014). A study on the effect of emotional intelligence on retail investors' behavior. *Management Science Letters*, 4(1), 43-48. [CrossRef]
20. Raheja, S., & Dhiman, B. (2020). How do emotional intelligence and behavioral biases of investors determine their investment decisions? *Rajagiri Management Journal*. [CrossRef]
21. Salehi, M., & Mohammadi, N. (2017). The relationship between emotional intelligence, thinking style, and the quality of investors' decisions using the log-linear method. *Qualitative Research in Financial Markets*. [CrossRef]
22. Salovey, P. (2001). Applied emotional intelligence: Regulating emotions to become healthy, wealthy, and wise. *Emotional intelligence and everyday life*, 168-184.
23. Sashikala, V. (2017). *Impact of Equity Investors Personality Emotional Intelligence and Risk Aversion on Behavioural Factors and Investment Intention* [Doctoral dissertation, Avinashilingam Deemed University For Women] Shodhganga: a reservoir of Indian theses @INFLIBNET <http://hdl.handle.net/10603/257524>.
24. Saweris, S., Sapuric, S., El Gazzar, S., & Georgiou (2022). The Impact of Neurotransmitters, Emotional Intelligence and Personality on Individual Investors' Investment Decisions: An Empirical Comparative Study. *Emotional Intelligence and Personality on Individual Investors' Investment Decisions: An Empirical Comparative Study*.
25. Sharma, R. (2020). The Impact of Behavioral Dispositions on Risk Endurance of Individual Investors: Application of Multiple Discriminant Analysis. *IUP Journal of Financial Risk Management*, 17(1), 16-42.
26. United Nations Development Programme (2021). Developing regions. Retrieved April 14, 2022, from <https://hdr.undp.org/en/content/developing-regions>.
27. Varzaneh, N. S., & Aliahmadi, S. (2015). An Investigation of the Relationship between EQ and Decision-making Style of Investors in Stock Exchange Market (Case Study: Esfahan). *Mediterranean Journal of Social Sciences*, 6(3), 423-423. [CrossRef]
28. Ziyae-Pour A., & Miladiyan H. (2014). The effect of emotional intelligence on the financial behavior of investors in the Tehran Stock Exchange, *Uct Journal of Management and Accounting Studies* 2 (1-6). [CrossRef]



**Dr. Deshea Simon**, holds a master's degree in Information Systems from Strayer University and a Ph.D. in Information Technology from Capella University. Dr. Simon is passionate about introducing technology to students and finding ways to provide seamless integration of technology into the classroom for teachers. Her research interests are Information Systems in Organizations, Social Inclusion, Project Management, Database, and System Analysis and Design.

## AUTHORS PROFILE



**Denise Chambers**, holds a bachelor's degree in Mechanical Engineering from Clarkson University, a Master of Science degree from Rensselaer Polytechnic Institute, and a Master of Business Administration from St. John Fisher University. Denise is an experienced Financial Analyst currently pursuing a Ph.D. in Business Administration from Hampton University, School of Business in Hampton Virginia. In *Analyzing the Influence of Emotional Intelligence on Investor Behavior in Developing Regions: A PRISMA Systematic Review*, Denise systematically explores studies analyzing the influence of emotional intelligence on investor behaviors in developing countries. Her research interests include Behavior Finance, Emotion Intelligence, Psychology, Neuroscience, and Human Development.

