Exploring Emotional Intelligence Skills in Restoring Quality Outcomes in Education

Hafsat O. ABDUSEMIHI, Ph.D
Lead City University Ibadan, Nigeria.
hafsatakanni@gmail.com, abdulsemihi.hafsat@lcu.edu.ng
07066845677

Abstract

This study therefore investigated the intricate relationship between teachers' emotional intelligence, academic self-concept of students and achievement in economics. A sample of 1080 students and 36 economics teachers were drawn from the population of senior secondary schools in Ibadan metropolis. The instruments for data collection were Teachers emotional intelligence scale TEIS for college teachers (r =.611), Academic Self-concept scale ASCS (r =.824) and Economics achievement test point (r=.772.) Data were analysed and using the Pearson's product moments correlation and multiple aggression analysis. The result shows the joint contributions of teachers' emotional intelligence and students' academic self-concept in the model was found to be statistically significant ($F_{(2, 1077)} = 27.048$, $p < 0.05$) while the independent contributions of teachers' emotional intelligence ($\beta = 0.075$, $t_{(1077)} = 2.531$, $p = 0.012$) and students' academic self-concept ($\beta = -.200$, $t_{(1077)} = -6.702$, $p = .000$) were also found to be statistically significant at 0.05 alpha levels. Based on the findings of this study, it is safe to conclude that teachers' emotional intelligence is an integral part of the teaching-learning process that must be incorporated, developed and established meaningfully.

Keywords: Academic Self-concept, Teachers' Emotional Intelligence, Economics Achievement, Quality Outcomes

Introduction

Despite that the pursuit of quality outcomes in education is insatiable, there is an unrelenting effort to accomplish quality outcomes in

education due to the eminent value attached to it as the world's acclaimed remedy for human socio-economic advancement and development. The enhancement of educational outcomes and the continual pursuit of high-quality education bear significant consequences and implications for a nation's prospect. The pivotal players in this scenario encompass governmental bodies, educational institutions, parents, teachers, and students. However, the focus narrows down to the key figures directly engaged in the teaching-learning dynamic. Consequently, teachers and students emerge as superlative indicators reflecting the quality of education obtainable within a nation.

According to Akanni (2014; 2021), teachers remain a key variable in the teaching-learning process, as they inherently bear the responsibility of motivating students, facilitating learning, and managing the immediate learning environment. Additionally, teachers are accountable for the methods and effectiveness of instruction, as well as cultivating understanding among students. This underscores the significance of teachers in shaping students' development, where the quality of education received is heavily influenced by teachers' behaviour they obtain in desired directions (Adegbile, 2001).

Research has delved into examining teacher-related variables that exert the most significant influence on students' achievements, considering that achievement encapsulates the overall outcomes of the teaching-learning process. The indices of achievement serve as metrics to monitor teaching quality and assess teacher performance. While there is ample evidence supporting the assertion that teacher quality profoundly affects student learning, the specific observable characteristics of teachers contributing to this impact remain unascertained.

Over the two past decades, there has been a growing emphasis on emotional intelligence as a comprehensive concept, elucidating the necessity and advantages of integrating it into teacher preparation. This integration aims to enhance the teaching-learning process, fostering a conducive environment for healthy and challenging academic growth or

performance. Emotional Intelligence (EI) is characterised as a cognitive capacity involving the perception, comprehension, application, and management of both one's own emotions and those of others. Existing research literature indicates that individuals with higher levels of emotional intelligence tend to report enhanced psychological well-being and adjustment (Chamizo-Nieto, Arrivillaga, Rey and Extremera 2021).

It is widely accepted that if students are to reach their full potential, they will need the motivation from teachers. The cultivation of emotional intelligence skills transforms the learning process into an active, engaging, and student-centred experience (Nelson, Low and Nelson 2009; Chamizo-Nieto et al. 2021). This transformation is evident as teachers become more effective in delivering and managing instructions, treating all students equitably and with respect, gaining a better understanding of classroom dynamics, demonstrating a commitment to teaching, and, most importantly, finding enjoyment in the process. An emotionally skilled teacher serves as a motivational factor for students by adapting to changing circumstances and effectively relating subjects to real-life events. Such teachers exhibit fairness, respect, enthusiasm, a penchant for social interaction, and a caring attitude, influencing students' confidence and achievement in their academic pursuits.

The development of emotional intelligence is an ongoing process characterized by continuous objective self-assessment, prompt self-awareness, and the ability to understand oneself. This enables individuals to consciously learn from experiences and apply newfound knowledge to offer practical solutions that positively impact future occurrences. Thus, becoming an emotionally intelligent teacher is a journey and a process rather than a static state or outcome. Emotional intelligence comprises cultivated abilities to understand and appreciate oneself, foster and sustain diverse and beneficial relationships, collaborate effectively with others to achieve positive outcomes, and adeptly handle the pressures of daily life and work. According to Nelson

et al. (2009) and Anuradha (2013), emotionally intelligent teachers learn and apply emotional intelligence skills to improve various aspects of their professional and personal lives, including:

- Enhancing physical and mental health through knowledge and techniques to break the habit of emotional reactivity (Stress Management).
- Boosting productivity and personal satisfaction by harmonizing thinking and feeling minds (Self-Esteem and Confidence).
- Developing self-esteem and confidence through specific emotional intelligence skills (Positive Personal Change).
- Improving communication in personal and work relationships (Assertion).
- Managing anxiety and enhancing performance under pressure (Anxiety Management).
- Quickly establishing and maintaining effective interpersonal relationships (Comfort).
- Understanding and accepting differences in others and addressing diversity issues (Empathy).
- Planning, formulating, and implementing effective problem-solving procedures in stressful situations (Decision Making).
- Positively impacting, persuading, and influencing others (Leadership).
- Directing energy and motivation towards accomplishing personally meaningful goals (Drive Strength).
- Managing time to meet goals and assignments (Time Management).
- Completing tasks and responsibilities in a timely and dependable manner (Commitment Ethic).
- Controlling and managing anger to improve performance under stressful conditions and situations (Anger Management).

The effectiveness of teachers has been linked to their emotional intelligence, impacting overall performance, instructional

communication, job satisfaction, and stress management (Okigbo and Onoshakpokaiye 2023; Njoku and Okigbo 2021; Ajuwon 2018; Soleiman and Fatemeh, 2012; Luisa and Letizia, 2011). Furthermore, connections have been established between teachers' emotional intelligence and students' achievements (Njoku and Okigbo 2021; Ogundokun and Adeyemo, 2010; Guarang and Asha, 2012). This supports Singh's (2003) assertion that a heightened level of emotional intelligence is indispensable in the teaching profession, contributing to personal and professional development and fostering academically challenging and healthy learning environments (Nelson, Low, and Nelson, 2009).

In their study, Nelson et al. (2009) emphasises that teachers demonstrating emotional intelligence exhibit intentional reflective behaviour (rather than reactive), flexibility (instead of resistance to change), assertive communication (as opposed to being aggressive or passive), optimism, and hopefulness (avoiding pessimism and negativity). Sungoh (2007) suggests that emotional intelligence serves as a yardstick for selecting suitable teachers, while Nelson and Low (2005) provide evidence that learning and developing key emotional intelligence skills can enhance student achievement. The study of Chamizo-Nieto et al. (2021), presents empirical findings that endorse the significance of cultivating personal and social assets, such as emotional intelligence and positive teacher-student relationships, in promoting the well-being of adolescents and enhancing their academic achievements.

To enhance the success of the learning process, emotionally intelligent teachers must actively orient themselves towards students, work, and life. They exhibit resilience in the face of negative stress, avoiding overwhelming themselves with pessimism and strong, negative emotions (Nelson et al., 2009). Demonstrating emotionally healthy behaviour involves distinctive cognitive patterns, proficient

identification, management, expression of feelings, and the selection of effective behaviours.

Given that learning is an interactive process involving both teachers and students, understanding the roles of teachers' emotional intelligence skills in the teaching-learning process prompts an exploration of students' contributions to their own learning. Louise (2011), suggests that there is limited knowledge regarding students' perceptions of their academic experiences and the self-concepts they form. When it comes to educational advancement and academic achievement, a favourable self-concept is often considered a highly desirable outcome, as noted by Marsh and Martin in 2011. A positive self-concept is crucial for success, as it serves as both a personal and motivational variable. Studies have shown that the overall contribution of self-concept to the variance in academic achievement is significant (Ajunwo 2018, James et. al. 2021, & Peteroes et. al. 2019), as individuals are motivated to perform in a manner consistent with their self-concept. Therefore, students require a positive academic self-concept to achieve success in their learning goals. Ajunwo (2018) confirms that, self-concept plays a crucial role in the educational process and has far-reaching implications for a child's development. This is because of its association with students' holistic development; influencing their academic achievement, social interactions, and overall well-being.

Academic self-concept is the comprehensive self-perception within an academic context, encompassing the description and evaluation of perceived academic abilities. It involves global beliefs of self-worth associated with perceived academic competence (McCoach & Siegel, 2003). The assessment of academic self-concept involves students' perceptions shaped by their experiences and interpretations of events in the school environment. This process leads to specific attitudes, emotions, and perceptions regarding their intellectual and academic abilities, which can vary based on the academic domain, as outlined by Peteros, Gamboa, Etcuban, Dinauanao, Sitoy, & Arcadio (2019). The

interplay between the self-system and external environmental influences results in the evaluation of performance attainments, subsequently informing and altering subsequent performances. Achieving both positive and high levels of academic performance, as well as the opposite scenario of poor performance, can significantly influence the development of a high degree of academic self-concept (Izuchi & Onyekuru 2017).

Self-concept assumes a crucial role in the educational journey, particularly when a child experiences acceptance, approval, respect, and affection for their inherent qualities. In such an environment, the opportunity arises for the cultivation of a mindset characterized by self-acceptance and self-respect. This mindset allows individuals to confidently navigate the school environment, utilizing their intelligence to its fullest extent.

A heightened understanding and awareness of oneself among students correlate with increased academic achievements (Kamoru & Rahman 2017; James, Tawanda, Ndileleni, Hasina & Shonisani, 2021) and the development of qualities associated with good citizenship. The stability and positive dispositions of students are paramount, as they are the architects of the nation's destiny and progress. Therefore, fostering a positive self-concept among students becomes a collective responsibility, with everyone playing a significant role in this essential endeavour.

An examination of teachers' emotional intelligence skills and students' academic self-concepts suggests that both constructs play typical performance roles or models capable of influencing interactions, relationships, and activities within a school environment, particularly in the classroom. To illustrate the impact of these constructs on one another, the study considers Economics, a subject with less commendable achievement indices. In the past, economics was a popular secondary school subject, often ranked next to English and Mathematics due to its perceived societal importance. The subject

imparts knowledge, skills, values, and attitudes necessary for navigating a complex economic society, including quantitative ability, logical reasoning, decision-making, and forecasting. Akanni (2014) argues that a subject like Economics requires credible and emotionally intelligent teachers to deliver classroom instruction effectively, as it involves analysing societal core values for student understanding and divulging the consequences of decisions people make daily in their micro and macro constituencies. Also, not relinquishing the fact that the present-day economy demands the citizenry deep understanding of economics to provide insights and offer succour to the population.

With these considerations, it became expedient to explore possible links between achievement in Economics, teachers' emotional intelligence, and students' academic self-concept. Consequently, a study was conducted to thoroughly investigate the relationship among these variables, leading to the formulation of the following research questions;

1. What relationship exists between Students' Achievement in Economics, Teachers' Emotional Intelligence, and Students' Academic Self-Concept?
2. Is there any joint contribution of Teachers' Emotional Intelligence and Students' Academic Self-Concept to Students' Achievement in Economics?
3. What are the relative contributions of Teachers' Emotional Intelligence and Students' Academic Self-Concept to Students' Achievement in Economics?

The research was designed to explore the relationships and contributions among the variables of Students' Achievement in Economics, Teachers' Emotional Intelligence, and Students' Academic Self-concept. Thus these specific research questions were formulated to guide the study in investigating the intricate connections and influences between the key variables in the context of Economics education.

Methodology

A correlational survey research design was employed for this study. This design was chosen to explore the relationships between variables, specifically examining the direction and magnitude of the relationship between Students' Achievement in Economics, Teachers' Emotional Intelligence, and Students' Academic Self-Concept. The population for the study comprised all senior secondary school Economics students in Class II across five Local Government Areas within Ibadan Metropolis. The SSII class was purposively chosen due to stability, maturity, and prior exposure to Economics. Three out of the five local governments were randomly selected, and 12 schools were randomly chosen from each. Thirty students per school, along with their corresponding Economics teachers, were included in the study, resulting in a total sample size of 1116 (1080 students and 36 teachers).

Instrumentation

Emotional Intelligence Scale for College Teachers: Adapted from Sungoh (2007), this instrument covered four dimensions: emotional awareness, emotional acceptance, emotional attitude, and emotional action. It underwent re-validation using Cronbach's alpha, with four items eliminated. The final 16-item scale employed a four-point Likert scale, measuring reliability with a coefficient of .611.

Academic Self-Concept Scale ASCS: Adapted from H.W. Marsh (2010), this self-descriptive questionnaire measured students' academic self-concept in Economics. It consisted of fifteen items using a four-response Likert format, achieving a reliability coefficient of .824.

Achievement Test: A 20-item test measured students' achievement in Economics, with a reliability coefficient of .772, determined, using Guttmann split-half.

Data Analysis

Inferential statistics, specifically Pearson Product Moment Correlation and Multiple Regression analysis, were employed to assess

relationships among independent variables (Teachers' Emotional Intelligence and Students' Academic Self-Concept) and the dependent variable (Students' Achievement in Economics). All statistical tests were conducted at a significance level of $\alpha = .05$. This comprehensive research design and methodology provided a robust framework for investigating the relationships and contributions of emotional intelligence and academic self-concept to students' achievement in Economics.

Results

Research Question One: What relationship exists between the variables (students' achievement in economics, teachers' emotional intelligence, and students' academic self-concept)?

Table: Pearson Correlations of Teachers' Emotional Intelligence and Students' Academic Self-concept and Students' Achievement in Economics.

		TEIS	ASCS	ECOACHIEVEMENT
TEIS	Pearson Correlation	1		
	Sig. (2-tailed)			
	N	1080		
ASCS	Pearson Correlation	**-.073***	1	
	Sig. (2-tailed)	.016		
	N	1080	1080	
ECOACHIEVEMENT	Pearson Correlation	**.090****	***-.205****	1
	Sig. (2-tailed)	.003	.000	
	N	1080	1080	1080
MEAN		35.50	36.07	10.46
SD		12.101	5.752	4.009

* Significant at P<.05

The Pearson Correlation analysis in Table 1 reveals the magnitude and direction of relationships between the variables.

Teachers' Emotional Intelligence (TEIS) and Students' Academic Self-Concept (ASCS): A negative relationship exists between teachers' emotional intelligence and students' academic self-concept ($r = -0.073$), indicating that a decrease in one corresponds to a simultaneous decrease in the other. This relationship is statistically significant ($p = 0.016$), suggesting an association between the variables. This finding aligns with Akanni (2014), who emphasized that teachers' caring attitudes, influenced by emotional intelligence, impact students' confidence and achievement in school subjects.

Teachers' Emotional Intelligence (TEIS) and Students' Achievement in Economics (ECOACHIEVEMENT): A positive and significant relationship is found between teachers' emotional intelligence and students' academic self-concept and economics achievement ($r = 0.09$, $p < 0.05$), indicating that an increase in one variable corresponds to a corresponding increase/decrease in the other. This is consistent with the assertion by Freedman and Jensen (2007) that teachers' emotional intelligence is crucial for addressing students' social and emotional needs, leading to improved academic achievement. Similar findings were reported by Fernandez (2011) and Ericka & Loujessa (2007), highlighting the positive correlation between teachers' emotional intelligence and academic achievement.

Students' Academic Self-concept (ASCS) and Students' Achievement in Economics (ECOACHIEVEMENT): A strongly negative and significant relationship is observed between students' academic self-concept and students' achievement in economics ($r = -0.205$, $p < 0.05$), indicating that an increase/decrease in one variable corresponds to a proportionate increase/decrease in the other. This finding aligns with previous research by Dambudzo (2009), Coetzee

(2011), and Marsh & Martin (2011), emphasizing that academic achievement is influenced by an individual's self-concept. The more positive a student feels about their abilities, the higher their achievement is likely to be, and vice versa.

These results highlight the intricate relationships among teachers' emotional intelligence, students' academic self-concept, and students' achievement in economics. The findings are consistent with existing literature, emphasising the role of emotional intelligence and self-concept in shaping academic outcomes.

Research Question Two: Is there any joint contribution of teachers' emotional intelligence and students' academic self-concept to students' achievement in economics?

Table 2: Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.219	.048	.046	3.916

The linear relationship between teachers' emotional intelligence and students' academic self-concept, collectively, explains 4.8% (R Square) of the variance observed in students' achievement in economics. The adjusted R Square, considering the number of predictors, accounts for 4.6%. This modest contribution suggests that both teachers' emotional intelligence and students' academic self-concept jointly influence students' achievement in economics. This is in line with the submission of Akanni (2014) who noted that teachers and students continue to play alternating and interactive roles in the product of learning.

Research Question Three: What are the relative contributions of teachers' emotional intelligence and students' academic self-concept to students' achievement in economics?

Table 3: ANOVA

Model		Sum of Squares	Df	Mean Square	F	Sig.
	Regression	829.506	2	414.753	27.048	.000
	Residual	16514.448	1077	15.334		
	Total	17343.955	1079			

a. Dependent Variable: ECOACHIEVEMENT

b. Predictors: (Constant), TEIS, ASCS

* Significant at P<.05

Table 3: ANOVA: The ANOVA results further confirm the statistical significance of the joint contributions ($F(2, 1077) = 27.048$, $p < 0.05$), reinforcing that teachers' emotional intelligence and students' academic self-concept collectively play a significant role in predicting students' achievement in economics.

Table 4: Relative contributions of Teachers' Emotional Intelligence and Students' Academic Self-concept to Students' Achievement in Economics.

Model		Sum of Squares	Df	Mean Square	F	Sig.
	Regression	829.506	2	414.753	27.048	*.000*
	Residual	16514.448	1077	15.334		
	Total	17343.955	1079			

a. Dependent Variable: ECOACHIEVEMENT

b. Predictors: (Constant), TEIS, ASCS

* Significant at P<.05

Table 4: Relative contributions of Teachers' Emotional Intelligence and Students' Academic Self-concept: The coefficients in Table 4 provide insights into the individual contributions of teachers' emotional intelligence and students' academic self-concept.

Teachers' Emotional Intelligence (TEIS): The unstandardised coefficient (B) for teachers' emotional intelligence is 0.025 (t = 2.531, p = 0.012), indicating a positive contribution. This suggests that a one-unit increase in teachers' emotional intelligence is associated with an increase in students' achievement in economics.

Students' Academic Self-concept (ASCS): The unstandardized coefficient (B) for students' academic self-concept is -0.139 (t = -6.702, p = 0.000), indicating a negative contribution. This implies that a one-unit increase in students' academic self-concept is associated with a decrease in students' achievement in economics.

These findings underscore the importance of both teachers' emotional intelligence and students' academic self-concept in influencing students' achievement in economics. While teachers' emotional intelligence contributes positively, students' academic self-concept has

a negative association, suggesting a complex interplay of factors affecting academic outcomes.

The study reiterates the pivotal roles teachers and students play in the teaching-learning process. Teachers' emotional intelligence emerges as a significant factor in students' overall achievement, influencing their emotional, social, mental, and physical development. Similarly, students' academic self-concept is crucial for academic success. Both variables make substantial and independent contributions to the observed variance in students' achievement in economics. These findings align with existing literature, emphasising the significance of emotional intelligence and self-concept in education.

Conclusion

In conclusion, this study underscores the significance of teachers' emotional intelligence and students' academic self-concept in the teaching-learning process. These factors are essential components that contribute to effective interactions within the classroom, leading to positive educational outcomes. Teachers, being at the forefront of classroom dynamics, play a crucial role not only in delivering academic content, but also in fostering students' social and emotional development, influencing their academic self-concept.

The findings emphasise that teachers' emotional intelligence is a critical element for fulfilling their duties, and contributing to national growth and development. The study suggests that deliberate efforts should be made to incorporate and develop these aspects as integral parts of the teaching-learning process, thereby ensuring a conducive environment for quality education to thrive.

Recommendations

Incorporating Emotional Intelligence in Teacher Training: Teacher training institutions should integrate the teaching of emotional intelligence skills into their programs. This ensures that future educators are equipped with the necessary emotional competencies.

Assessment of Teachers' Emotional Intelligence: Teachers should undergo assessments of their emotional intelligence skills as part of the hiring process. Regular checks on teachers' emotional intelligence skills should also be conducted, with support and motivation for self-improvement in areas of weakness.

Professionalisation of Teaching: The teaching profession should be professionalized, akin to other professional bodies like Nigeria Medical Association where licences can be revoked on basis of failure or misconduct. This ensures that teachers enter the profession with adequate academic and professional qualifications and engage constantly on their professional development needs.

Certification for In-Service Teachers: All in-service teachers should undergo professional certification to continue in the teaching profession. This ensures that educators maintain a certain level of competence and commitment to their roles.

Teaching Non-Cognitive Skills: Teachers should actively incorporate the teaching of non-cognitive skills, such as academic self-concept, social and emotional intelligence as part of life skills which is crucial for students' academic success and preparation for future endeavours.

Communication of Research Findings: Researchers, practitioners, and stakeholders should establish avenues for effectively communicating research findings. This will facilitate the dissemination of valuable insights that can be beneficial to schools and teachers, fostering continuous improvement in the education sector.

References

Adegbile, J.A. (2001). Teacher Preparation and Teacher Morale as Factors in English Language Achievement in secondary Schools. *Nigerian Journal of Educational Research and Evaluation.* Vol. 3, No. 1: Pp 12-15.

Ajunwo, F. O. (2018). Self-concept and academic achievement of undergraduate business education students in Rivers State. *International Journal of Innovative Psychology & Social Development, 6(3), 6-17.* https://seahipaj.org/journals-ci/sept2018/IJIPSD/full/IJIPSD-S-2-2018.pdf

1. Akanni, H.O. (2014). *Selected Teacher Variables and Students' Non-Cognitive Factors as Correlates of Students' Achievement in Senior Secondary School Economics.* Unpublished M. Ed Dissertation, University of Ibadan, Nigeria.
2. Akanni, H.O. (2021). *School Organisational Variables and Education Quality performance Indicators at Senoir Secondary Level in South-Western Nigeria*. Unpublished Ph.D Thesis, University of Ibadan, Nigeria.

Anuradha, M. (2013). A study of how emotional intelligence reduces occupational stress among teachers. *International monthly refereed journal of research in management and technology*. Vol 2.

Chamizo-Nieto, M.T., Arrivillaga, C., Rey, L. & Extremera, N. (2021). The Role of Emotional Intelligence, the Teacher-Student Relationship, and Flourishing on Academic Performance in Adolescents: A Moderated Mediation Study. *Front. Psychol.* 12:695067. doi: 10.3389/fpsyg.2021.695067

Coetzee, L.R. (2011). *The relationship between students' academic self-concept, motivation and academic achievement at the university of the free state.* Unpublished M.Ed dissertation, University of South Africa.

Dambudzo, I.I. (2009). *The relationship between learner self-concept and achievement in secondary schools in Zimbabwe.* Unpublished M.Ed-thesis. Pretoria University. Available from: http://hdl.handle.net/10500/2393

Ericka, C. R., Pasinos, L. & Ebit, D. (2007). *The Emotional Intelligence and Personal Variables of Elementary Teachers Of Olivarez College In Relation To The Academic Performance Of Pupils*.

Fernandez, S. (2011). *The Relationship between Teachers' Emotional Intelligence and Sense of Humor, and Student Achievement* retrieved 06/04/2013 from http://udini.proquest.com/educational-psychology

Freedman, J. & Jensen, A. (2007). *A Case for Emotional Intelligence in Our Schools* 1(.7). Retrieved from www.6seconds.org

Gaurang, T. & Asha, P. (2012). Imperilled Childhood: Emotional Intelligence As Panacea For Streamlining Teaching-Learning Practices In Early Childhood Education. *International Journal Of Multidisciplinary Management Studies.* Vol.2 Issue 1. Pp 1-17

Izuchi, M-R. N. & Onyekuru, B.U. (2017). Relationships among academic selfconcept, academic motivation and academic achievement among college students. *European Journal of Research and Reflection in Educational Sciences, 5(2),* 93-102

James, B. O., Tawanda, R., Ndileleni, M., Hasina, C. & Shonisani, A. M. (2021). An examination of the correlation between South African grade12 students' mathematics selfconcept and their academic achievement. *International Journal of Learning, Teaching and Educational Research, 20(12), 127-138.* https://doi.org/10.26803/ijlter.20.12.8

Kamoru, U., & Ramon, O. G. (2017). Influence of self-concept, study habit, and gender on attitude and achievement of secondary school students in mathematics. *Journal for Leadership and Instruction, 16(1), 49-52*. https://www.scopeonline.us/wpcontent/uploads/2019/01/Spring-2017- Final.pdf

Louise, R. C. (2011). *The Relationship between Students' Academic Self-Concept, Motivation and Academic Achievement At The University Of The Free State.* University of South Africa Ed. Dissertation.

Luisa, B.C.B. & Letizia, P.A.D. (2011). Emotional Intelligence as a Protective Factor in Times of Educational Reforms: First Steps of an Investigation on Italian High-School Teachers. *Literacy*

Information and Computer Education Journal (LICEJ), Volume 2, Issue 1.

Marsh, H.W. & Martin, A.J. (2011). Academic self-concept and academic achievement: relations and causal ordering. *British Journal of EducationalPsychology.;81(Pt1):5977.doi:10.1348/000709910X503501*. Retrieved from //www.ncbi.nlm.nih.gov/favicon.ico

Marsh, H.W. (2010). *Self-description questionnaire-III Manual.* SELF Research Centre: University of Oxford. Available from: http://www.self.ox.ac.uk/SDQ3.htm

McCoach, D. B. & Siegle, D. (2003). The School Attitude Assessment Survey-Revised: A new instrument to identify academically able students who underachieve. *Educational and Psychological Measurement,* 63, 414-429

Nelson, D. B. & Low, G.R. (2005). Emotional intelligence: The role of transformative learning in academic excellence. *Texas Study of Secondary Education,* 13, 7-10.

Nelson, D. B., Low, G. R. & Nelson, K. (2009). *The Emotionally Intelligent Teacher: A Transformative Learning Model.*

Njoku, I. O. & Okigbo, E. C. (2021). Emotional intelligence and academic self- concept as predictors of secondary school students' achievement in Mathematics Imo. *African Journal of Science, Technology & Mathematics Education* (AJSTME), 6(1), 174-184. https://www.ajstme.com.ng/volume.ph p?id=14

Ogundokun, M.O & Adeyemo, D.A. (2010). Emotional Intelligence And Academic Achievement: The Moderating Influence Of Age, Intrinsic and Extrinsic Motivation. *The African Symposium.* Volume 10, No. 2.

Okigbo, E.C. & Onoshakpokaiye, O.E. (2023). Relationship between Academic Self-Concept and Academic Performance in Mathematics of Secondary School Students in Delta State, Nigeria. *Indonesian Journal of Mathematics Education Vol. 6, No.2, October 2023,* pp: 63~71 p-ISSN: 2654-3907, e-ISSN:

2654-346X e-mail: ijome@untidar.ac.id, website: journal.untidar.ac.id/ index.php/ijome

Peteros, E., Gamboa, A., Etcuban, J. O., Dinauanao, A., Sitoy, R., & Arcadio, R. (2019). Factors affecting mathematics performance of junior high school students. *International Electronic Journal of Mathematics Education, 15(1),* 1-13. https://doi.org/10.29333/iejme/5938

Singh, K. (2003). *Influence of Teacher on Student' Learning Motivation in Management Sciences Studies.* Retrieved from http://www.saching.com

Sungoh, S.M. (2007). Construction of Emotional Intelligence Scale for college teachers. *North East Journal of the North East India Education Society.* Vol.11.