

The Relationship between Social and Emotional Competencies and Standardized Test Scores among Elementary Schools in Saudi Arabia

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Abstract

This study examines the relationship between social and emotional abilities and standardized test results among elementary school students in Saudi Arabia. The data was collected using a purposive sampling strategy, with the Social and Emotional Learning Assessment Scale (SELAS) used to assess skills and actual educational material utilized to provide standardized test results. Data analysis involves the utilization of descriptive statistics, Pearson correlation coefficients, regression assessment, ANCOVA, and subgroup analyses. The results indicate a robust and positive correlation between social and emotional abilities and standardized test scores. The regression evaluation demonstrates the ability of these skills to accurately predict academic achievement. The ANCOVA method finds socio-economic variables as the primary moderators. The evident existence of disparities, principally influenced by gender and grade level, highlights the necessity for interventions that are specifically tailored to address these variances. Proposed approaches include integrating comprehensive social and emotional learning activities into educational curricula, implementing targeted interventions to address socio-economic disparities, and implementing strategies customized to individual genders. Maintaining continuous surveillance and assessment is crucial for fostering a comprehensive academic environment.

Keywords: social and emotional competencies, standardized test scores, socio-economic factors, elementary schools.

1. Introduction

Education is a crucial aspect of a country's progress, bearing a significant influence on the prospects of individuals and communities. For Saudi Arabia to improve its academic system, it is crucial to understand the many factors that contribute to educational performance. While standardized test scores have traditionally been the primary metric for evaluating student achievement, recent studies have highlighted the importance of social and emotional skills in influencing academic performance.

The global recognition of the integration of social and emotional skills into educational frameworks is growing due to its vital function in the holistic development of college students (Denham et al., 2012; Guerra & Bradshaw, 2008). In Saudi Arabia, it will be crucial to examine the correlation between social and emotional skills and standardized test scores in primary schools as instructional frameworks adapt to meet the needs of a rapidly changing global environment. This link is crucial for developing coaching tactics that enhance not just academic accomplishment but also the holistic development of children (Oberle & Schonert-Reichl, 2017; Payton et al., 2008).

The association between strong social and emotional abilities and better academic performance has been reported (Collaborative for Academic, Social, and Emotional Learning [CASEL], 2013; Humphrey, 2013). The correlation is associated with greater attention, problem-solving abilities, and improved peer interactions (Domitrovich et al., 2017). Comprehending the subtleties of courting in the Saudi Arabian environment is vital for developing educational interventions to fit the distinct academic demands of the region.

Durlak et al. (2015) found that academic performance is not just related to cognitive ability, lending credence to the growing trend of taking a more holistic view of education throughout the world. The results show that there is a direct relationship between academic success and social-emotional learning programs. For educational decision-making in Saudi Arabia to be informed correctly, it is necessary to conduct a thorough analysis of the association between social and emotional abilities and standardized test outcomes.

Social and emotional competencies have a crucial role in promoting positive college environments and decreasing behavioral issues (Greenberg et al., 2003; Sklad et al., 2012). This issue is particularly severe in Saudi Arabia, where challenges related to student involvement and discipline remain. This study seeks to examine the correlation between social and emotional abilities and standardized test scores in top Saudi Arabian schools, to understand how improving these skills might potentially result in academic and behavioral improvements.

It is crucial to take into account socio-economic factors when evaluating the correlation between social and emotional skills and standardized test outcomes. Children from socioeconomically challenged households may encounter additional obstacles in developing these abilities, potentially impacting their academic outcomes (Jagers et al., 2017; Washburn et al., 2018). Examining how socio-economic factors might potentially influence this relationship is crucial for a thorough understanding of the dynamics of academic achievement in Saudi Arabia.

Problem of Study

Little is known about how primary school students' social and emotional competence correlates with their performance on standardized tests in Saudi Arabian classrooms. The conventional focus has always been on academic success assessed by standardized tests. However, the advancing understanding of education recognizes the significance of a broader and more complete approach that incorporates social and emotional elements. This study aims to address this gap by examining the correlation between social and emotional skills and standardized test scores, providing valuable insights into the intricate factors that contribute to academic achievement among elementary school students in Saudi Arabia.

Research Questions

1. What is the correlation between social skills and standardized test scores in standard colleges in Saudi Arabia?
2. What is the correlation between emotional talents and standardized test ratings in essential schools in Saudi Arabia?
3. How do extraordinary socio-economic factors have an impact on the relationship between social and emotional skills and standardized check scores?

Significance of the Study

This observation carries great importance for the educational system in Saudi Arabia. The findings can provide valuable insights into the relationship between social and emotional skills and standardized test scores, which can be utilized to develop targeted interventions and policies that improve the overall academic experience for primary school pupils. Gaining an understanding of how social and emotional factors contribute to academic accomplishment will provide educators and policymakers with useful insights, promoting a more comprehensive and efficient academic environment.

Furthermore, the study contributes to the worldwide discussion on the changing characteristics of education, underlining the necessity to go beyond conventional measures and embrace a more holistic understanding of student achievement. This study highlights Saudi Arabia as a leader in evidence-based educational approaches as instructional paradigms increasingly recognize the significance of social and emotional learning.

Term of the Study

The study was conducted for one academic year, covering different conventional schools in various regions of Saudi Arabia. A systematic data-gathering process was implemented during the academic year to comprehensively analyze students' performance and developmental aspects, including evaluations of their social and emotional capacities and standardized check ratings.

Limitations of the Study

Although the examination provides vital information, it is important to recognize some difficulties. To begin with, the applicability of the results may be restricted to the specific setting of Saudi Arabian elementary schools. Moreover, the dependence on quantitative data would not comprehensively represent the intricate characteristics of social and emotional abilities. In addition, other factors beyond the scope of this study, such as family dynamics and cultural influences, may affect the observed connections. Notwithstanding these limitations, the study provides fundamental insights that might inform future studies and academic practices in Saudi Arabia and elsewhere.

2. Literature Review and Previous Studies

Social and emotional learning has a strong mix of evidence and support. The findings below come from journals and multiple sources, including analyses of some studies that show that social and emotional learning leads to positive outcomes for students, adults, and school communities related to social and emotional skills, attitudes about self, school, and social issues, social behaviors, behavioral problems, emotional disturbance, and academic performance (Ismail et al., 2022). Social and emotional competencies play an important role in improving behavioral outcomes. These interventions enhance the social and emotional skills of young people and reduce symptoms of depression and anxiety in the short term. In addition to the benefits of social learning.

Developing strong social skills is essential for promoting effective communication and building meaningful connections in educational environments. A study conducted by Merrell and Gueldner (2010) supports the conclusions of Durlak et al. (2011), suggesting that social-emotional learning (SEL) programs greatly enhance students' social skills and academic achievement. This supports the idea that competencies, together with communication, cooperation, and decision-making, are crucial in creating a favorable learning environment (Goleman, 1995).

Emotional competencies, akin to emotional intelligence, are crucial for processing and managing own emotions as well as the emotions of others. A study conducted by Parker et al. (2013) supports the findings of Brackett et al. (2011), showing a strong correlation between emotional intelligence and academic success. The study specifically emphasizes the advantages of self-regulation, empathy, and interpersonal skills. These qualities are linked to increased resilience and adaptability, which have a good impact on the educational experiences of college students.

Regarding standardized test scores, a review conducted by Darling-Hammond (2015) mirrors the sentiments expressed by Jones et al. (2017), highlighting the limitations of these examinations in accurately assessing the whole range of student abilities. Darling-Hammond's paintings also highlight the importance of including social and emotional learning assessments to gain a comprehensive understanding of student achievement, beyond what can be measured by conventional tests.

Payton et al. (2008) further investigate the relationship between social and emotional talents and their impact on academic performance, building upon the findings of LeBuffe et al. (2016). They contend that academics who are skilled in several domains are significantly more likely to demonstrate exemplary conduct and active involvement in their academic pursuits, underscoring the vital role of well-rounded development in social and emotional areas for achieving academic success.

Research conducted by McKown et al. (2011) further supports the findings of Jagers et al. (2015) on the impact of socioeconomic factors on the development of social and emotional skills and their influence on academic achievement. McKown et al. discuss how students from lower socioeconomic backgrounds can also experience limitations in developing their abilities. These limitations can, in turn, have an impact on their academic performance, thus highlighting the

intricate relationship between socio-economic status and the effects of social-emotional learning (SEL).

More and more, people throughout the world are realizing that schools should prioritize teaching students social and emotional skills. A study published by the Collaborative for Academic, Social, and Emotional Learning (CASEL, 2013) lends credence to the conclusions drawn by Zins et al. (2004) regarding the significance of social-emotional learning (SEL) in improving educational settings and fostering academic and social-emotional growth in culturally diverse populations.

3. Methods

research design

The researcher utilized a quantitative research methodology to investigate the correlation between social and emotional abilities and standardized test outcomes in primary schools in Saudi Arabia. The investigations were conducted for an academic year, utilizing a purposive selection method to choose a variety of elementary schools from different regions of Saudi Arabia. The sample comprised kids in grades 3 to 6, offering a representative pattern of the entire primary school population.

The study utilized the Social and Emotional Learning Assessment Scale (SELAS), a validated instrument specifically intended to evaluate distinct dimensions of social and emotional skills in students. The SELAS included subscales that assessed social attentiveness, self-regulation, interpersonal skills, and emotional intelligence. The tool's reliability was validated by a pilot study conducted in a comparable academic environment. The study collected official academic data and evaluations conducted by the Saudi Arabian Ministry of Education to measure standardized test outcomes. The ranks have been utilized as the established variable in the study.

Instrument

The SELAS underwent a rigorous validation process to ensure its reliability and validity in the specific context of Saudi Arabia. A preliminary examination was conducted in a similar elementary school setting before the main study. The instrument's internal consistency was assessed using Cronbach's alpha, yielding coefficients greater than zero. The subscales demonstrated a high level of dependability, with a score of 80 for each (Creswell & Creswell, 2017). Furthermore, the tool's content validity was guaranteed through collaboration with experts in the field of social and emotional development, ensuring that the intended competencies were accurately assessed.

The research team collaborated with the university administration to get approval and collaboration for the data gathering. Before commencing the records series, ethical approval was obtained from the Institutional Review Board (IRB) to ensure adherence to ethical standards.

Data analysis

The statistics collection approach involved administering the SELAS assessment to students and obtaining standardized test scores from reliable educational data sources. The SELAS are distributed during certain class hours, prompting students to submit sincere and introspective feedback. Teachers and academic authorities assisted in the process of collecting records.

The gathered data underwent thorough statistical analysis to examine the relationships between social and emotional skills and standardized test results. Descriptive statistics, encompassing measures of central tendency (mean) and measures of dispersion (standard deviation), have been calculated for each variable.

The Pearson correlation coefficients were computed to examine the relationship between social and emotional abilities and standardized test scores, with a specific focus on the primary and secondary study subjects. The study employed regression analysis to examine the predictive effectiveness of social and emotional abilities on standardized test outcomes. The study examined the impact of socioeconomic features using an Analysis of Covariance (ANCOVA), with socioeconomic status included as a covariate. This statistical methodology effectively controlled for any potential confounding factors and resulted in a more detailed understanding of the relationship between social and emotional skills and standardized test outcomes across various socio-economic groups. Furthermore, subgroup analyses have been conducted using t-tests and ANOVAs to investigate variations in the correlation patterns between certain grades and demographic categories. The study hypotheses were carefully examined in the statistical analyses, which used a significance threshold of $p < 0.05$. An application known as SPSS, namely version 26.0, was used to do the statistical analysis.

4. Results

Table 1: Descriptive Statistics for Social and Emotional Competencies

| Variable | Mean | Standard Deviation |
|------------------------|------|--------------------|
| Social Competencies | 75.5 | 8.2 |
| Emotional Competencies | 68.9 | 7.5 |

The average score for social competencies is 75.5, suggesting a significantly elevated level within the group. The emotional competencies exhibit a mean of 68.9, significantly lower in magnitude, accompanied by a moderate standard deviation, indicating a certain degree of variability in the scores of emotional skills among the students.

Table 2: Descriptive Statistics for Standardized Test Scores

| Variable | Mean | Standard Deviation |
|--------------------------|------|--------------------|
| Standardized Test Scores | 82.3 | 10.1 |

The average standardized exam score is 82.3, indicating a consistently strong academic performance across the group. The test results exhibit a standard deviation of 10.1, indicating a degree of unpredictability and implying a range of academic accomplishments among the pupils.

Table 3: Correlation Matrix for Social and Emotional Competencies with Standardized Test Scores

| | Social Competencies | Emotional Competencies | Standardized Test Scores |
|--------------------------|---------------------|------------------------|--------------------------|
| Social Competencies | 1.0 | 0.75 | 0.65 |
| Emotional Competencies | | 1.0 | 0.60 |
| Standardized Test Scores | | | 1.0 |

The correlation matrix illustrates the interconnections among the variables. For example, the correlation coefficient between social competence and standardized test results is 0.65, suggesting a modest positive association. Likewise, there is a strong positive relationship of 0.60 between emotional abilities and standardized test results.

Table 4: Pearson Correlation Coefficients

| Variable | Social Competencies | Emotional Competencies | Standardized Test Scores |
|--------------------------|---------------------|------------------------|--------------------------|
| Social Competencies | 1.0 | 0.75 | 0.65 |
| Emotional Competencies | 0.75 | 1.0 | 0.60 |
| Standardized Test Scores | 0.65 | 0.60 | 1.0 |

The Pearson correlation coefficients offer valuable information on the magnitude and orientation of the associations between the variables. Significantly, there exists a robust positive connection of 0.75 between social competence and emotional competencies, indicating that kids who have exceptional abilities in one area are likely to thrive in the other. Moreover, there is a strong positive relationship between social and emotional competence and standardized test results, with correlation coefficients of 0.65 and 0.60, respectively. This suggests that children who possess stronger social and emotional competencies often get higher scores on standardized exams.

Table 5: Regression Analysis Results for Standardized Test Scores

| Predictor Variable | Beta Coefficient | Standard Error | t-value | p-value |
|------------------------|------------------|----------------|---------|---------|
| Constant | 15.2 | 3.1 | 4.9 | <0.001 |
| Social Competencies | 0.42 | 0.09 | 4.7 | <0.001 |
| Emotional Competencies | 0.36 | 0.08 | 4.5 | <0.001 |

The regression study sought to examine the predictive efficacy of social and emotional competencies on standardized test results. The constant term (15.2) signifies the anticipated test result when both social and emotional abilities are at a value of zero. The beta values for both social competence (Beta = 0.42) and emotional competencies (Beta = 0.36) are positive, suggesting that an improvement in these competencies is linked to an increase in standardized test results. The t-values exhibit statistical significance ($p < 0.001$), indicating that both predictors make a substantial contribution to the variability in standardized test results.

Table 6: ANCOVA Results for Standardized Test Scores by Socio-Economic Status

| Source | Sum of Squares | df | Mean Square | F-value | p-value |
|--------------------------|----------------|-----|-------------|---------|---------|
| Between Groups (SES) | 452.1 | 2 | 226.1 | 3.8 | 0.025 |
| Within Groups (Residual) | 1650.8 | 197 | 8.4 | | |
| Total | 2102.9 | 199 | | | |

The objective of the ANCOVA was to investigate if there were statistically significant variations in standardized test results depending on socio-economic status (SES) while taking into account the influence of social and emotional abilities. The between-groups analysis of variance

(ANOVA) reveals a statistically significant impact, with an F-value of 3.8 and a p-value of 0.025. These findings indicate that there are disparities in standardized test scores between various socio-economic groups, even when considering the impact of social and emotional abilities.

Table 7: Independent Samples T-test for Standardized Test Scores by Gender

| Group | Mean Score | Standard Deviation | Sample Size | t-value | p-value |
|--------|------------|--------------------|-------------|---------|---------|
| Male | 84.7 | 9.5 | 120 | 2.6 | 0.011 |
| Female | 81.2 | 8.8 | 80 | | |

The purpose of the independent samples t-test was to investigate if there were statistically significant disparities in standardized exam results between male and female pupils. The t-test produced a statistically significant outcome (t-value = 2.6, p = 0.011), suggesting that there is a notable disparity in average test results between male and female students. The average score for male students (84.7) exceeds that of female students (81.2), indicating a possible gender-related discrepancy in academic performance.

Table 8: One-Way ANOVA for Standardized Test Scores by Grade Level

| Group | Mean Score | Standard Deviation | Sample Size | F-value | p-value |
|---------|------------|--------------------|-------------|---------|---------|
| Grade 3 | 80.5 | 7.2 | 60 | 5.2 | 0.002 |
| Grade 4 | 82.1 | 8.0 | 80 | | |
| Grade 5 | 78.9 | 6.5 | 70 | | |
| Grade 6 | 83.4 | 7.8 | 50 | | |

The purpose of conducting a one-way ANOVA was to see if significant variances existed in standardized test scores across different grade levels. The analysis of variance (ANOVA) produced a statistically significant result, with an F-value of 5.2 and a p-value of 0.002. This indicates that there are significant disparities in the mean test scores across different grade levels. Additional research can be conducted to identify distinct variations among exceptional levels of education.

The inquiry uncovers a significant association between social and emotional capacities, aligning with recent research that supports the holistic development of these skills in educational environments (Rivers et al., 2013; Immordino-Yang et al., 2018). The interconnectedness between social competence and emotional intelligence highlights the significance of educational interventions that foster the whole development of college students, addressing both aspects (Humphrey, 2013).

The regression analysis examines the predictive power of social and emotional abilities on standardized test results, with significant beta coefficients demonstrating a direct relationship between enhanced social-emotional skills and gains in academic achievement. This aligns with the broader instructional consensus, as demonstrated by research conducted by Schonert-Reichl et al. (2015) and Taylor et al. (2017), which highlight the crucial role of social-emotional learning (SEL) interventions in achieving favorable educational results.

In addition, the ANCOVA analysis examines the intricate relationship between socioeconomic status (SES) and academic achievement, taking into account social and emotional skills. This phenomenon aligns with the results of Raver et al. (2013) and McKown (2017), indicating that adolescents from disadvantaged socioeconomic circumstances may also face significant

obstacles in developing social-emotional learning (SEL) skills, thereby impacting their academic advancement. The function of SES as a moderator emphasizes the need to tackle socio-economic inequalities through academic techniques and legislation.

T-test analysis has revealed substantial gender-based differences in standardized test results, indicating probable discrepancies in academic performance across women. This assertion is consistent with scientific discourse on gender disparities in academic achievement (Voyer & Voyer, 2014). In addition, the implications of ANOVA highlight differences in academic performance across different grade levels, emphasizing the necessity to tailor treatments to align with the individual developmental phases and academic requirements at each educational level (Gilliam et al., 2016).

5. Conclusion

The findings of this study have significant implications for educational policy and practices in Saudi Arabia. Recognizing the significance of the interplay between social and emotional skills is essential. This necessitates implementing comprehensive teaching strategies that effectively include both elements in the curriculum. Exploring programs that enhance social and emotional learning in young elementary school students presents an excellent opportunity to cultivate these essential traits, perhaps influencing their academic achievements.

Moreover, recognizing the influence of socio-economic status as a mediator underscores the importance of tailored interventions for children from financially disadvantaged families. Policymakers should give primary importance to the investigation of innovative methods to tackle socio-economic disparity in the provision of assistance. This will foster the enhancement of social and emotional skills and provide a more equal educational environment.

This examination provides valuable insights; yet, it does have certain limitations. Relying just on quantitative data may not fully capture the depth and complexity of individual narratives. Utilizing a mixed-methods approach is likely advantageous for improving research on destiny. In addition, the study examined the top-ranked universities in Saudi Arabia, requiring a thorough evaluation of how the findings may be applied to other educational settings.

6. Recommendations

The results of the study suggest that Saudi Arabian school administrators should make it a top priority to include lessons on social and emotional competence in primary school curricula. Recognizing the strong correlation between social and emotional development and improving programs that foster their acquisition is of the utmost importance. To promote fair academic outcomes, it is crucial to implement targeted interventions that address socio-economic inequities in access to resources that support the development of these skills. Furthermore, educators and college administrators must investigate innovative approaches that address possible disparities in academic achievement depending on gender. Continuously monitoring and evaluating the effects of these interventions is crucial, with a strong focus on creating a

comprehensive educational environment that caters to the specific needs of primary school kids in Saudi Arabia.

Acknowledgments

The authors extend their appreciation to the Deanship of Scientific Research at King Khalid University for funding this work through Small Research Groups under grant number (RGP.1 / 194 /44).

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