



The Relationship Between Rigid Cognitive Style and Social Anxiety Among Secondary School Students In Jerusalem

BY
Ola Hussein
Al-Quds University, Palestine

Doi: 10.21608/jasep.2024.391164

استلام البحث: ٢٠٢٤/ ٩ / ١٩

قبول النشر: ٢٠٢٤/ ١٠ / ٢٢

Hussein, Ola (2024). The Relationship Between Rigid Cognitive Style and Social Anxiety Among Secondary School Students In Jerusalem, *Arab Journal of Educational and Psychological Sciences*, AIESA, Egypt, 8 (42), 757 – 790.

<http://jasep.journals.ekb.eg>

The Relationship Between Rigid Cognitive Style and Social Anxiety Among Secondary School Students In Jerusalem

المستخلص :

هدفت هذه الدراسة إلى فحص العلاقة بين الأسلوب المعرفي التصليبي والقلق الاجتماعي لدى طلبة المرحلة الثانوية في القدس، وكذلك فحص الفروق في الأسلوب المعرفي التصليبي والقلق الاجتماعي حسب متغيرات الدراسة (الجنس، الصف الحالي، معدل الصف السابق، والقلق الاجتماعي). يأتي ذلك في ضوء الأهمية المتزايدة لفهم العوامل النفسية والمعرفية التي تؤثر على الصحة النفسية للطلبة في القدس. استخدمت الدراسة المنهج الوصفي الارتباطي؛ حيث شملت الدراسة عينة تكونت من (١٧٦) طالبًا وطالبة تم اختيارهم بالطريقة المتيسرة، وقاموا بتعبئة مقياس الشريف (٢٠١٩) لقياس الأسلوب المعرفي التصليبي المكون من (٢٢) فقرة، ومقياس عبد الفتاح (٢٠١٤) لقياس القلق الاجتماعي المكون من (٢١) فقرة. كشفت النتائج عن وجود علاقة طردية إيجابية دالة إحصائياً بين درجة الأسلوب المعرفي التصليبي والقلق الاجتماعي. بالإضافة إلى وجود فروق في درجة الأسلوب المعرفي التصليبي تعزى فقط لمتغيري الجنس ومعدل الصف الدراسي السابق، حيث كانت الفروق لصالح الذكور ولهم معدلهم أقل من ٦٠. بينما لم يتم العثور على فروق دالة إحصائية في درجة القلق الاجتماعي تعزى لمتغيري الجنس و الصف الدراسي الحالي، فقط لمتغير معدل الصف الدراسي السابق حيث كانت الفروق لصالح من معدلهم أقل من ٦٠. تؤكد هذه النتائج على الحاجة إلى استراتيجيات تربوية ونفسية لتعزيز المرونة الفكرية والحد من القلق الاجتماعي لدى الطلاب. تعتبر هذه النتائج خطوة مهمة نحو فهم أفضل للتحديات النفسية التي يواجهها الطلاب في القدس وكيفية معالجتها بفعالية.

الكلمات المفتاحية: التصلب ، النمط المعرفي ، القلق الاجتماعي ، المدرسة الثانوية.

Abstract:

This study aimed to assess the relationship between rigid cognitive style and social anxiety among secondary school students in Jerusalem, as well as to examine



differences in rigid cognitive style and social anxiety by study variables (gender, current grade, previous grade average). This comes in light of the increasing importance of understanding the psychological and cognitive factors that affect students' mental health in Jerusalem. Employing a descriptive correlational research design, the study involved 176 students selected by the accessible method, who completed the Al-Sharif's scale (2019) to measure rigid cognitive style, consisting of (22) paragraphs, and Abdel-Fattah's scale (2014) to measure social anxiety consisting of (21) paragraphs. the results revealed significant relationships between rigid cognitive style and social anxiety. Additionally, the existence of differences in the degree of cognitive style (rigidity) only due to the gender and previous grade average variables, where the differences were in favor of males and an average of less than 60. However, no significant differences was found in the degree of social anxiety due to the gender and current grade variables, only due to previous grade average in favor of an average of less than 60. These findings emphasize the need for educational and psychological strategies to promote intellectual resilience and reduce social anxiety in students. These findings are an important step towards a better understanding of the psychological challenges students face in Jerusalem and how to effectively address them.

Keyword: Rigid, Cognitive Style, Social Anxiety, Secondary School.

Introduction:

The high school stage is one of the important and future-oriented transitional stages, as there are many psychological and social changes and challenges that students can face, which may affect various aspects of personality such as cognitive and social aspects. Students use different ways to face and address these challenges and find solutions to problems; this is called the cognitive style. Cognitive styles are varied, although the rigid style is among the main cognitive styles associated with high school, which can affect all aspects of students' academic and psychosocial lives. Consequently, it becomes necessary to study and understand these cognitive styles in order to identify ways that help promote mental health and psychosocial adjustment or issues experienced by secondary learners. This study focuses specifically on understanding the relationship between rigid cognitive style and social anxiety in secondary school students in Jerusalem.

Cognitive styles are one of the most important concepts in cognitive psychology, and are used to gain a greater understanding of how individuals process information and solve different problems. The term was first referred to by Alport (1937), explaining the typical way people process information and solve problems. These styles are the foundation of an individual's ability to interact socially and determine how they solve problems and acquire knowledge and experience (Zhang, 2023). Individuals use cognitive styles to perceive and process information, making them the primary determinant of their problem-solving style (Kayili

& Erbay, 2019). Martinsen, & Diseth (2011), Labelle et al. (1990) and Surur et al. (2020) argue that cognitive style plays a mediating role between an individual's cognitive abilities and problem solving, while Stoyanov & Kirschner (2007) argue that it directly influences problem solving.

Cognitive styles affect the processing of information and the perception of social situations, which can lead to errors in judgment (Dvorsky, 2013). Piattelli-Palmarini (1994) explained that cognitive biases are not negative conditions but are part of human nature that affect all aspects of life. Cognitive style relates to the way individuals process and prioritize certain types of information over others. Studies have shown that biases are errors in thinking because we can't always recognize them or know when we are processing or interpreting information incorrectly. These errors arise when we try to understand new information based on what we already know. These errors often hinder effective social interactions because they result from attempts to simplify information processing based on existing experiences or knowledge (Hilbert, 2012).

Research has demonstrated the relationship between academic resilience and cognitive biases, suggesting that students with higher levels of resilience exhibit fewer cognitive biases (Peng, Cao, Yu & Li, 2017). Research by Cortina, Stein, Kahn, Hilengwani, Holmes and Fazil (Cortina, et al., 2016) shows that cognitive style plays an important role in students' resilience, social and academic competencies, and interactions. Beadel et al. (2016) found that resilience training leads to a decrease in cognitive

biases and revealed a statistically significant inverse relationship between resilience and cognitive bias.

With the development of psychological research and the emergence of cognitive psychology, the importance of individual differences in how we handle and process information has emerged. Cognitive styles are related not only to cognitive aspects but also to emotional and social aspects, which are important for understanding how an individual deals with daily tasks and perceptions of situations and events (Al-Zaghoul & Al-Zaghoul, 2003). Kagan also notes that cognitive styles are responsible for individual differences in cognition and thinking processes, understanding the perception of objects detected in the external environment. These styles guide an individual's behavior, reflect temperamental aspects of personality, and help predict reactions in different situations, especially in social situations (Fakhry, 2010).

Rigid cognitive style refers to a style of thinking that is characterized by rigidity, inflexibility, and difficulty adapting to new ideas, situations, or environmental conditions. Rigid thinkers are characterized by their strong adherence to their opinions and beliefs and have difficulty adapting to new events or accepting criticism or even disagreement (Mason, 2011). This cognitive style can have a negative impact on social interactions, social relationships, and social adjustment, leading to an inability to resolve issues and increased levels of social anxiety (Dağ and Gülüm, 2013). This style negatively affects ways of thinking, problem solving, and decision-making, which

directly affects their ability to deal with different social situations (Bubić & Erceg, 2015).

Social anxiety is a psychological disorder that many high school students suffer from, which significantly affects an individual's academic and social life. Fear of situations that are likely to lead to negative evaluation from others is the hallmark of this disorder, and reflects the psychological arousal that results in such situations, which can lead to significant challenges that disrupt an individual's life (Detweiler et al., 2010). It is important to view anxiety as a pervasive social phenomenon in modern life, where it can have positive effects, such as self-improvement and increased achievement, or negative effects such as promoting unhappiness and constant worry. Understanding this balance will help develop effective anxiety management strategies in the context of education and personal development (Abdel-Magied et al., 2020).

Exploring how cognitive styles affect social anxiety offers an opportunity for teachers and educators to develop teaching and support techniques that take into account individual differences among students. By focusing on cognitive styles and their impact on social anxiety, educational institutions can provide a supportive environment that helps students achieve their full potential without fear or anxiety (El-Farmawy, 1986).

This study aims to explore the relationship between sclerotic cognitive style and social anxiety in high school students in Jerusalem. By understanding this relationship, educational and psychological mechanisms can be

developed to help students overcome social anxiety and improve their social and academic interaction. Cognitive styles represent an essential entry point for understanding many mental activities and play an important role in how individuals receive, process, and organize surrounding perceptions. These styles reflect individual differentiation in the cognitive process, from the reception of stimuli to the production of responses. Cognitive styles, including rigidity, have a very important influence on an individual's behavior and social interaction, so they occupy an important place in psychological research (Mayson, 2011).

Previous studies on cognitive style (rigidity) revealed a variety of findings: Muhtaseb (2020) found that flexible style is the most common among tenth grade students. Al-Kaabi (2019) did not find a relationship between social alienation and cognitive style. Al-Sharif (2019) found that there were no interactions between cognitive style (rigid-flexible) and the similarities strategy in developing reflective thinking skills among second grade middle school students. Abani and Al-Shaieb (2018) indicated that the most commonly used cognitive style is flexible, and found no significant differences according to gender, seniority in teaching, or educational qualification. Shuaib (2022) showed that there were no statistically significant differences between the mean scores of students in the self-efficacy scale between the cooperative and competitive groups, but the group with a flexible cognitive style was better in the cognitive control strength scale. Also, Hussein and Salhoub's (2021) study confirmed the superiority of

individuals with a flexible or autonomous cognitive style. Sharaf, (2023), found that the experimental group that included students with an analytical thinking style and learning in a stimulating environment with games based on the immediate appearance of leaderboards excelled in the achievement test and the final product assessment of programming skills and their motivation towards learning was high. Abdel-Ati, (2022), found that there was a statistically significant difference between the average scores of the experimental groups' students in the cognitive achievement test and the skill performance observation card related to digital image production skills in the blended learning environment, and the differences came in favor of students with a flexible cognitive style and those who use the interactive infographic style. Muhtasib's (2021) study concluded that the flexible cognitive style is predominant among psychological counseling students using Facebook, and the results also showed a strong correlation between flexible cognitive style and psychological alienation.

Previous studies related to social anxiety have indicated varied results: Al-Ajami (2020) found a significant negative relationship between social anxiety and achievement motivation, with differences between students with learning disabilities and normal students in favor of students with learning disabilities in the social phobia and achievement motivation scales. Abdelmageed et al. (2020) did not find significant correlations between perfectionistic self-presentation and social anxiety. Al-Hassan's (2020) study revealed that the prevalence of social anxiety is higher

among third graders compared to second graders, and higher among students of the literary department compared to the scientific department, but did not find differences depending on family income. Rifai et al (2020) found a negative correlation between social anxiety and quality of life. Joseph, et al. (2018) and Ratnani, et al. (2017) reported a negative correlation between emotional intelligence, psychological stress and social anxiety, and a positive correlation between social anxiety and depression. Al-Sharida (2022), Al-Dhihan (2022), and Al-Jabri (2023) provided evidence of differences in social anxiety levels between different groups of students and the impact of intervention programs in improving social skills and reducing social anxiety symptoms.

Problem of study:

As a result of the evolutions witnessed by the world in general, and the Jerusalem region in particular, at all levels, in addition to psychological and social challenges, it has been observed that students are the most common group to enter the circle of social disorders and social anxiety, represented by excessive fear of social situations and a sense of anxiety about the evaluation of others. This feeling may extend and affect the student's effectiveness and ability, and this can be reflected in academic performance, various daily life activities, and social relationships. Rigid cognitive style plays an important role in how students respond to these developments and challenges, characterized by rigid thinking and difficulty adapting to new developments. This is one of the reasons why students are unable to deal with

different social situations flexibly. Knowing the characteristics of individuals with different cognitive styles is a reliable basis for predicting with a reasonable degree of accuracy the type of behavior that individuals with different cognitive styles may exhibit while dealing with different stressful situations. The current study aims to understand the relationship between rigid cognitive style and social anxiety, which may help alleviate the issue and promote psychosocial adjustment in students.

Hypotheses of the study:

- The first hypothesis: “There is a statistically significant relationship at the significance level ($\alpha \leq 0.05$) between the degree of cognitive style (rigidity) and social anxiety among secondary school students in Jerusalem.”
- The second hypothesis: “There are no statistically significant differences at the level of significance ($\alpha \leq 0.05$) in the degree of cognitive style (rigidity) among secondary school students in Jerusalem due to the gender variable.”
- The third hypothesis: “There are no statistically significant differences at the level of significance ($\alpha \leq 0.05$) in the degree of cognitive style (rigidity) among secondary school students in Jerusalem due to the current grade variable.”
- Fourth hypothesis: “There are no statistically significant differences at the level of significance ($\alpha \leq 0.05$) in the degree of cognitive style (rigidity) among secondary school students in Jerusalem due to the previous grade level variable.”
- Fifth hypothesis: “There are no statistically significant differences at the level of significance ($\alpha \leq 0.05$) in the level of social anxiety among secondary school students in Jerusalem attributed to the gender variable.”

- Sixth hypothesis: “There are no statistically significant differences at the level of significance ($\alpha \leq 0.05$) in the level of social anxiety among secondary school students in Jerusalem due to the current grade variable.”
- Seventh hypothesis: “There are no statistically significant differences at the level of significance ($\alpha \leq 0.05$) in the level of social anxiety among secondary school students in Jerusalem due to the previous grade average variable.”

Importance of the study:

The importance of the current study lies in its subject matter, which deals with students in society, as they are one of the most important sectors of society and the main pillar of any society. In particular, it deals with a geographical area characterized by special social, economic and political conditions, namely Jerusalem, where Arab psychological studies on this group are scarce, in order to try to understand the psychological and social aspects of students. This study focuses on the extent to which young people are able to possess one of the important cognitive styles represented in the rigidity/flexibility style and its relationship with social anxiety, which enhances the scientific understanding of this relationship and adds to the psychological literature. It also derives its importance from the importance of its two variables, as cognitive styles are one of the recent topics that began to be addressed after the increasing growth of studies in the field of cognitive psychology. Finally, this study seeks to provide recommendations based on its findings to help specialists in building support mechanisms to improve the general psychosocial level of secondary school students

in the Jerusalem area to overcome and confront various psychosocial challenges.

Objectives of the study:

- Identify the relationship between the degree of cognitive style (rigidity) and social anxiety among secondary school students in Jerusalem.
- Identify the differences in cognitive style (rigidity) among secondary school students in Jerusalem according to the study variables (gender, current grade, previous grade average).
- Identify the differences in the level of social anxiety among secondary school students in Jerusalem according to the study variables (gender, current grade, previous grade average).

Limitations of the study:

The limitations of the current study are as follows:

- Human Limits: The study was applied to secondary school students in Jerusalem.
- Spatial Boundaries: This study was applied in Al-Quds Al-Sharif.
- Temporal Limits: This study was applied in the academic year 2023/2024.
- Conceptual boundaries: The study will be limited to the conceptual boundaries and terms included in the study.
- Procedural limits: The study will be limited to the instruments used to collect data, their reliability and stability on the study sample and its characteristics, and the appropriate statistical treatments.

Methodology of study:

In order to achieve the objectives of the study, the researcher used the descriptive-correlational method. It is defined as a method that studies an existing phenomenon, event, or issue from which information can be obtained that answers the research questions without the researcher's intervention in it. Through it, the researcher tries to describe the phenomenon under study, analyze its data, and indicate the relationship between the components and opinions put forward about it, the processes it involves and the effects it produces, which is one of the forms of scientific analysis and interpretation organized to describe a phenomenon or issue, classify it, analyze it, and subject it to careful studies by examination and analysis.

Study population

The study population consisted of all secondary school students in Jerusalem, whose number, according to the official records for the academic year 2320/2024, is (2314) male and female students, distributed among (17) schools.

Study sample

The study sample consisted of (176) male and female students, and they were selected by the available method, and Table (1) shows the distribution of the study sample members:

Table (1): Description of the variables of the sample subjects:

Variable	Values	Frequency	Percentage
Sex	Male	45	25.6
	Female	131	74.4
Current grade	Eleventh	73	41.5
	Twelfth	103	58.5
Previous grade average	Less than 60	19	10.8
	61-74	60	34.1
	75-84	51	29.0
	85 and above	46	26.1

Tools of the study

A set of scales related to cognitive styles was reviewed, and Al-Sharif (2019) was adopted, consisting of (22) items, and the second scale, Abdel-Fattah (2014), consisting of (21) items.

Validity

The researcher designed the questionnaire in its initial form, and then the validity of the study tool was verified by presenting it to a group of arbitrators with specialization and experience. They were asked to give their opinion on the questionnaire's paragraphs in terms of: The clarity and linguistic soundness of the language of the paragraphs, the extent to which the paragraphs cover the studied aspect, and the addition of any information, amendments or paragraphs they deem appropriate, and according to these observations, the questionnaire was output in its final form.

On the other hand, the validity of the instrument was also verified by calculating the Pearson correlation coefficient of the questionnaire paragraphs with the total score of the instrument, and it turned out that there is statistical significance in all paragraphs of the questionnaire, which

indicates that there is internal consistency between the paragraphs.

Reliability

The researcher verified the reliability of the tool, by calculating the stability of the total score of the stability coefficient, for the fields of study according to the Cronbach's alpha stability equation, and the total score for the degree of cognitive style (rigidity) among secondary school students in Jerusalem (0.87), and (0.89) for the level of social anxiety among secondary school students in Jerusalem, and this result indicates that this tool has a reliability that meets the purposes of the study.

Procedure of study

The researcher applied the tool to the subjects of the study after taking their consent to participate in the study, and after the process of collecting the questionnaires from the sample members was completed after they answered them correctly, the researcher found that the number of valid returned questionnaires that were subjected to statistical analysis: (176) questionnaires.

Statistical processing

After collecting the questionnaires and ensuring their suitability for analysis, they were coded (giving them certain numbers), in preparation for entering their data into the computer to perform the appropriate statistical manipulations, and analyzing the data according to the study questions and study data, the statistical processing of the data was done by extracting the arithmetic means and standard deviations for each paragraph of the questionnaire,

t-test, one-way ANOVA test, Pearson's correlation coefficient, Cronbach's alpha, Cronbach's alpha test, one-way ANOVA, Pearson's correlation coefficient, Cronbach Alpha, and simple regression line slope analysis, using the Statistical Package for Social Sciences (SPSS).

Results of the study

The responses given by the respondents were analyzed using a specific tool, and based on this analysis, the responses were classified into three different categories based on their arithmetic means. The “low” category includes responses with an arithmetic mean of 2.33 or less, which expresses a weak degree of the measured attribute. The “Medium” category covers responses with a mean between 2.34 and 3.67, expressing an intermediate level. The “High” category includes responses with a mean of 3.68 or higher, indicating a high degree of the measured attribute.

Results of the first hypothesis:

The hypothesis was tested by calculating the Pearson correlation coefficient and statistical significance between the degree of cognitive style (rigidity) and social anxiety among secondary school students in Jerusalem.

Table (2): Pearson correlation coefficient and statistical significance of the relationship between the degree of cognitive style (rigidity) and social anxiety among secondary school students in Jerusalem.

Variables	Pearson coefficient	Significance level
Cognitive style Social anxiety (rigidity)	*.٤٨	٠.٠٠

The value of the Pearson correlation coefficient for the total score is (0.48), and the significance level is (0.00), meaning that there is a positive and statistically significant direct relationship at the significance level ($\alpha \leq 0.05$) between the degree of cognitive style (rigidity) and social anxiety among secondary school students in Jerusalem, that is, the more rigid the cognitive style tends to be, the greater the level of social anxiety, and vice versa.

Results of the second hypothesis:

The hypothesis was examined by calculating the results of the t-test and the arithmetic means of the responses of the study sample in the degree of cognitive style (rigidity) among secondary school students in Jerusalem according to the gender variable.

Table (3): Results of the independent samples t-test on the degree of cognitive style (rigidity) among secondary school students in Jerusalem, according to the gender variable.

Sex	Frequency	Mean	Standard deviation	"t" value	Significance level
Male	45	3.60	0.56	5.92	0.00
Female	131	3.05	0.52		

The t-value for the total score is (5.92), and the significance level is (0.00), meaning that there are differences in the degree of cognitive style (rigidity) among secondary school students in Jerusalem due to the gender variable, where the differences were in favor of males.

Results of the third hypothesis:

The hypothesis was examined by calculating the results of the t-test and the arithmetic means of the responses of the

study sample in the degree of cognitive style (rigidity) among secondary school students in Jerusalem according to the current grade variable.

Table (4): The results of the independent samples t-test for the response of the sample subjects in the degree of cognitive style (rigidity) among secondary school students in Jerusalem according to the current grade variable.

Current grade	Frequency	Mean	Standard deviation	"t" value	Significance level
Eleventh	73	3.17	0.65	.42	.67
Twelfth	103	3.21	0.53		

The t-value for the total score is (0.42) and the significance level is (0.67), meaning that there are no differences in the degree of cognitive style (rigidity) among secondary school students in Jerusalem due to the current grade variable.

Results of the fourth hypothesis:

The hypothesis was tested by calculating the arithmetic averages of the responses of the study sample on the degree of cognitive style (rigidity) among secondary school students in Jerusalem according to the variable of the previous grade average.

Table (5): The results of the univariate analysis of variance test for the response of the sample subjects in the degree of cognitive style (rigidity) among secondary school students in Jerusalem according to the previous grade level variable.

Previous grade level	Frequency	Mean	Standard deviation	"t" value	Significance level
Less than 60	19	3.65	0.76	5.11	0.002
61-74	60	3.19	0.47		

75-84	51	3.12	0.63
85 and above	46	3.07	0.49

It is noted that the F value for the total score (5.11) and the significance level (0.002) is less than the significance level ($\alpha \leq 0.05$), meaning that there are statistically significant differences in the degree of cognitive style (rigidity) among secondary school students in Jerusalem due to the previous grade average variable in favor of an average of less than 60.

Results of the fifth hypothesis:

The hypothesis was examined by calculating the results of the “t” test and the arithmetic means of the responses of the study sample in the level of social anxiety among secondary school students in Jerusalem according to the gender variable.

Table (6): The results of the independent samples t-test for the response of the sample subjects in the level of social anxiety among secondary school students in Jerusalem according to the gender variable.

Sex	Frequency	Mean	Standard deviation	“t” value	Significance level
Male	45	2.88	0.85	٠.٨٧	٠.٣٨
Female	131	2.77	0.64		

It can be seen from the previous table that the t-value for the total score is (0.87), and the significance level is (0.38), meaning that there are no differences in the level of social anxiety among secondary school students in Jerusalem due to the gender variable.

Results of the sixth hypothesis:

The hypothesis was examined by calculating the results of the “t” test and the arithmetic means of the responses of the study sample in the level of social anxiety among secondary school students in Jerusalem according to the current grade variable.

Table (7): The results of the independent samples t-test for the response of the sample subjects in the level of social anxiety among secondary school students in Jerusalem according to the current grade variable.

Current grade	Frequency	Mean	Standard deviation	“t” value	Significance level
Eleventh	73	2.89	0.66	١.٤٧	٠.١٤
Twelfth	103	2.7	0.72		

It can be seen from the previous table that the value of “t” for the total score (1.47), and the level of significance (0.14), meaning that there are no differences in the level of social anxiety among secondary school students in Jerusalem due to the current grade variable.

Results of the seventh hypothesis:

The hypothesis was tested by calculating the arithmetic means of the responses of the study sample on the level of social anxiety among secondary school students in Jerusalem according to the variable of grade point average.

Table (8): The arithmetic means and standard deviations of the respondents' response to the level of social anxiety among secondary school students in Jerusalem according to the previous grade level variable.

Previous grade level	Frequency	Mean	Standard deviation	"t" value	Significance level
Less than 60	19	3.47	0.88	7.56	0.00
61-74	60	2.77	0.57		
75-84	51	2.65	0.72		
85 and above	46	2.71	0.60		

The F value for the total score (7.56) and the significance level (0.00) is less than the significance level ($\alpha \geq 0.05$), meaning that there are statistically significant differences in the level of social anxiety among secondary school students in Jerusalem attributed to the variable of the previous grade average in favor of an average of less than 60.

Discussion of study results:

The results of the study indicate that there is a positive and statistically significant relationship between rigid cognitive style and social anxiety among secondary school students in Jerusalem, where the Pearson correlation coefficient reached 0.48, indicating a moderate relationship between cognitive rigidity and social anxiety. This result can be explained by the psychological understanding of cognitive style and its impact on behavior, experiences, and psychological experiences, as sclerotic cognitive style is characterized by resistance to change and adherence to fixed ideas, which makes it difficult to adapt to diverse social

situations, the inability to solve social issues, and, as a result, leads to increased social anxiety due to feelings of incompetence, fear of failure, negative evaluation from others, and negative self-evaluation. Other factors that may influence this relationship should be considered, such as cultural, educational, and social factors in Jerusalem, in addition to exploring other styles of thinking and personal variables such as social support and previous experiences, as studies such as Joseph et al. (2018) and Ratnani et al. (2017) suggest that the relationships between cognitive style and social anxiety may be influenced by multiple mediating variables.

Moreover, the results showed that there were differences in the rigid cognitive style attributed to the gender variable, where these differences emerged in favor of males. These differences can be explained by the Jerusalem society and its conservative socialization mechanisms, which are based on the difference in parenting methods between males and females, where males are exposed to stereotypical and traditional social pressures and expectations that encourage the adoption of a more rigid cognitive style, which affects the way they deal with social situations and increases their social anxiety, taking into account the influence of other factors, such as biological and political factors. This effect reflects social expectations of gender roles and is in line with other studies such as Al-Sharif's (2019) which did not find direct interactions between cognitive style and thinking skills, but focuses on the indirect effects of cognitive style. On the other hand, Al Kaabi's (2019) study that did not find

a relationship between social alienation and cognitive style disagrees with the aforementioned findings, suggesting complexities in how cognitive styles affect social behavior and the resulting anxiety. The results also showed that there are no statistically significant differences in cognitive rigidity between different grades, with a t-value of 0.42 and a significance level of 0.67. This reflects the stability of cognitive rigidity across school years, indicating that the factors influencing cognitive rigidity may be stable and transcend differences between grades, and may include family upbringing or psychological, social, and cultural pressures. Previous studies such as Abdelmageed et al. (2020) support this view, as they found no gender differences in social anxiety, while other studies such as Alhassan (2020) indicate that there are other factors influencing social anxiety and cognitive styles that were not the focus of this study.

In addition, the study revealed statistically significant differences in cognitive rigidity among students, attributing these differences to the previous grade point average variable. Students with a GPA below 60 showed higher levels of cognitive rigidity. This can be explained by the fact that academic stress and psychological insecurity resulting from low academic performance may lead these students to hold on to more rigid thinking styles as a defense mechanism. These findings emphasize the importance of providing psychological and educational support in schools to promote greater cognitive resilience in students, which

may help improve their academic performance and psychological well-being.

Furthermore, the results confirmed that there were no statistically significant differences in cognitive style between low- and high-achieving students, indicating that academic pressures and psychological insecurity associated with low achievement may lead students to adopt more rigid thinking styles. This finding is consistent with the results of studies such as Abdelmageed et al. (2020) which did not find significant gender differences in social anxiety, suggesting that academic factors may play a greater role in shaping cognitive styles than factors such as gender. On the other hand, Al Kaabi's (2019) study that did not find a relationship between social alienation and cognitive style disagrees with these findings, reinforcing the need for a deeper understanding of how academic and psychological factors influence cognitive stiffness. This comparison highlights the importance of exploring diverse influencing factors and providing appropriate support to students to promote cognitive resilience that may help improve academic performance and psychological well-being.

The study showed that there are no statistically significant differences in the level of social anxiety attributed to the gender variable. These results indicate that gender is not an influential factor in determining the levels of social anxiety among students, reflecting perhaps the similarity of social pressures or ways of dealing with them between males and females in this cultural and social context regarding their social interactions or social relationships. These findings

differ from other studies such as Al-Hassan (2020) who found differences in social anxiety based on academic and occupational factors, while Rifai et al. (2020) found gender differences in quality of life related to social anxiety. These findings urge the exploration of other factors that may influence social anxiety in different contexts.

The study also found that there are no statistically significant differences in the level of social anxiety between different grades, which indicates that the grade is not an influential factor in determining levels of social anxiety compared to social education, social context, students' desire to belong to a group, and social acceptance, as educational institutions and teaching curricula are an extension of social culture with regard to social attitudes and social interactions. This contrasts with other studies such as Al-Hassan (2020) who found differences between grades in social anxiety, indicating that differences in anxiety may be influenced by multiple factors that differ according to the cultural and social context, while this result supports Al-Kaabi (2019) who did not find relationships between social alienation and cognitive style, the idea that some psychological characteristics may be independent of traditional factors such as grade.

The study also found that there are statistically significant differences in the level of social anxiety attributable to the previous grade average variable, where students with grades below 60 showed higher social anxiety compared to their peers with higher grades, with an F value and less than the level of significance, these results support the hypothesis

that academic pressures associated with low achievement negatively affect students' mental health, as well as family expectations and pressures on students to obtain high grades and the negative perception of low-achieving students, which reinforces the need to provide psychological and academic support for them. These findings are consistent with other studies such as Al-Hassan (2020) who found that social anxiety is related to grade and major, while differing from other studies such as Al-Kaabi (2019) who did not find relationships between cognitive style and levels of social alienation, highlighting the complexities in the factors influencing social anxiety.

In conclusion, this study highlights the significant relationship between a rigid cognitive style and social anxiety, indicating the need for educational and psychological strategies to promote intellectual resilience and reduce social anxiety in students. These findings are an important step towards a better understanding of the psychological challenges students face and how to effectively address them.

Recommendations:

- Educational programs that encourage critical and flexible thinking should be developed.
- Provide psychological support programs for students to help them deal with social anxiety.
- Awareness and training to educate students and teachers about the impact of a rigid cognitive style and how to develop more flexible ways of thinking.

References:

- Abani, Malika, Elshayeb, Mohamed (2018). "Rigidity" cognitive style among primary school teachers: A field study in Ouargla. Journal of the Researcher in Humanities and Social Sciences, No. (35), 401-412.
- Abdel-Ati, Ghada (2022). Designing a blended learning environment based on the interaction between the two modes of presenting infographic content "animated - interactive" and the cognitive style "flexibility and rigidity" to develop digital image production skills among postgraduate students. Journal of the Faculty of Education, Vol. 33, No. 129, 195-290.
- Abdel Fattah Fathi Farrag (2004). The effectiveness of a program based on structured desensitization therapy in reducing the severity of social anxiety in middle school students. Master's thesis (unpublished), Institute of Graduate Studies for Childhood, Ain Shams University.
- Abdel Majeed, El Sayed Mohamed, Mansour, El Sayed Kamel El-Sherbini, El-Negiri, Moataz El-Morsi (2020). Social anxiety, Machiavellianism and narcissism as predictors of perfectionistic self-presentation in a sample of students of the Faculty of Education in Al-Arish. Faculty of Education Journal, 30 (2), 55-77.
- Al-Ajmi, Thiab (2020). Social anxiety and its relationship to achievement motivation among students with learning disabilities at the intermediate level in Kuwait. Journal of Reading and Knowledge, 19 (2), 149-187.
- Al-Daihan, Turki Mashari. (2022). The effectiveness of assertive behavioral counseling in reducing the

- symptoms of social anxiety in secondary school students. *Journal of Educational Sciences and Humanities*, v25, 301-338.
- Al-Farmawi, Hamdi (2009). *Cognitive methods between theory and practice*. Dar Al-Safaa for Publishing and Distribution, Amman, Jordan.
- Al-Hassan, Jalal (2020). Social fear in light of some demographic variables among secondary school students. *Journal of Educational Sciences*, 5 (1), 207-238.
- Al-Jabri, Hassan Mohsen Saadoun. (2023). The effectiveness of cognitive-behavioral counseling in reducing social anxiety symptoms and improving social skills among female middle school students in Dhi Qar Governorate. *Journal of Educational and Psychological Research*, v79, 422-453.
- Al Kaabi, Hisham Mahdi Karim. (2019). Social alienation and its relationship with the cognitive style of the integrative synthesis “macroscopic-abstract” among university students. *Al-Qadisiyah Journal of Humanities*, Vol. 22, No. 3, 681-710.
- Al-Muhtaseb, Isa (2020). Cognitive style flexibility-rigidity and academic procrastination as predictors of tenth grade students' attitudes towards graffiti. *Journal of Educational and Psychological Studies*, 14 (1), 165-185.
- Al-Muhtaseb, Isa Muhammad Hassan. (2021). Cognitive style “rigidity - flexibility” and its relationship with psychological alienation among psychological

- counseling students using Facebook. *Journal of Educational Sciences and Humanities*, v14, 230-261.
- Alport, C. J. M. (1937). *Kingdoms in partnership: a study of political change in the British commonwealth*.
- Al-Sharif, Al-Shaima (2019). The effect of the interaction between the rigid-flexible cognitive style and the similarities strategy on the development of reflective thinking skills among a sample of second grade preparatory students, *Faculty of Education Journal*, 19 (1), 631-668.
- Al-Shuraidda, Amal bint Saleh Suleiman. (2022). Learned helplessness and its relationship with social anxiety and self-esteem among secondary school students in the Qassim region. *Journal of Education*, p196, c5, 1-28.
- Al-Zaghoul, Rafi, and Al-Zaghoul, Emad (2003). *Cognitive Psychology*. Dar Al-Shorouk for Publishing and Distribution, Amman, Jordan.
- Beadel, J. R., Mathews, A., & Teachman, B. A. (2016). Cognitive bias modification to enhance resilience to a panic challenge. *Cognitive Therapy and Research*, 40, 799-812.
- Bubić, A., & Erceg, N. (2015). The relevance of cognitive styles for understanding individuals' cognitive functioning. *Suvremena psihologija*, 18(2), 159-173.
- Cortina, M. A., Stein, A., Kahn, K., Hlungwani, T. M., Holmes, E. A., & Fazel, M. (2016). Cognitive styles and psychological functioning in rural South African school students: Understanding influences for risk and

- resilience in the face of chronic adversity. *Journal of adolescence*, 49, 38-46.
- Dağ, İ., & Gülüm, V. (2013). The mediating role of cognitive traits in the relationship between adult attachment patterns and psychopathology symptoms: Cognitive flexibility. *Turkish Journal of Psychiatry*, 24(4).
- Detweiler, M., Comer, J., & Albano, A. (2010). Social Anxiety in Children and Adolescents: Biological, Developmental, and Social Consideration. In Hofmann, S., & Dibartolo, P (Eds.), *Social Anxiety: Clinical, Developmental, and Social Perspectives* (Second Edition), (223-270). New York: Academic Press.
- Dvorsky, G. (2013). The 12 cognitive biases that prevent you from being rational. *Accessed on June 20, 2015 from <http://io9.com/5974468/the-most-common-cognitivebiases-that-prevent-you-from-being-rational>*.
- Fakhry, Abdulhadi (2010). *Cognitive Psychology*. Dar Osama for Publishing and Distribution, Amman, Jordan.
- Hilbert, M. (2012). Toward a synthesis of cognitive biases: how noisy information processing can bias human decision making. *Psychological bulletin*, 138(2), 211.
- Hussein, Aida Farouk, and Salhoub, Manal Al-Saeed Mohamed. (2021). The interaction between blended learning modes “self/alternative” and cognitive style “independent/dependent” and its impact on the development of gamification skills and academic self-concept of student teachers. The refereed scientific

- journal of the Egyptian Association for Educational Computing, Vol. 9, No. 2, 1 - 121.
- Joseph, N., Rasheeka, V. P., Nayar, V., Gupta, P., Manjeswar, M. P., & Mohandas, A. (2018). Assessment of determinants and quality of life of university students with social phobias in a coastal city of south India. *Asian journal of psychiatry*, 33, 30-37.
- Kayili, G., & Erbay, F. (2019). A comparison of preschool children's communication and emotional skills on the basis of their cognitive tempos. *Early Child Development and Care*, 189(4), 625-634.
- Labelle, L., Laurence, J. R., Nadon, R., & Perry, C. (1990). Hypnotizability, preference for an imagic cognitive style, and memory creation in hypnosis. *Journal of Abnormal Psychology*, 99(3), 222.
- Martinsen, Ø. L., & Diseth, Å. (2011). The assimilator-explorer cognitive styles: Factor structure, personality correlates, and relationship to inventiveness. *Creativity Research Journal*, 23(3), 273-283.
- Mayson Samira (2011). Cognitive styles and their relationship with vocational inclinations among trainees of vocational training institutions. Unpublished doctoral dissertation, Montouri University, Constantine, Algeria.
- Peng, L., Cao, H. W., Yu, Y., & Li, M. (2017). Resilience and cognitive bias in Chinese male medical freshmen. *Frontiers in Psychiatry*, 8, 273494.
- Piattelli-Palmarini, M. (1996). Inevitable illusions: How mistakes of reason rule our minds.

- Ratnani, I. J., Vala, A. U., Panchal, B. N., Tiwari, D. S., Karambelkar, S. S., Sojitra, M. G., & Nagori, N. N. (2017). Association of social anxiety disorder with depression and quality of life among medical undergraduate students. *Journal of family medicine and primary care*, 6(2), 243.
- Rifai, Nariman, Al-Tantawi, Hazem Shawki Mohammed, Mazloun, Mustafa Ali Ramadan (2020). Social anxiety and its relationship with quality of life among university students. *Faculty of Education Journal*, 31 (12), 430-474.
- Sharaf, Huwaida (2023). The interaction between the timing of “immediate/delayed” leaderboard appearance in a game-based learning environment and “holistic/analytic” thinking style and its impact on the development of programming skills and learning motivation among educational technology students. *Educational Technology*, Vol. 33, No. 6, 155-273.
- Shuaib, Iman (2022). The interaction between the project learning strategy pattern “cooperative-competitive” and the cognitive style “rigidity-flexibility” in the blended learning environment and its impact on self-efficacy and cognitive control among educational technology students. *Journal of Research in Qualitative Education*, v41, 1563-1645.
- Stoyanov, S., & Kirschner, P. (2007). Effect of problem solving support and cognitive styles on idea generation: Implications for technology-enhanced learning. *Journal of Research on Technology in Education*, 40(1), 49-63.

- Surur, M., Degeng, I., Setyosari, P., & Kuswandi, D. (2020). The Effect of Problem-Based Learning Strategies and Cognitive Styles on Junior High School Students' Problem-Solving Abilities. *International Journal of Instruction*, 13(4), 35-48.
- Zhang, J. (2023). Links between cognitive styles and learning strategies in second language acquisition. *Journal of Education, Humanities and Social Sciences*, 8, 327-333.