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Psychological indicators in children's drawings: A study on social and emotional adjustment in Riyadh's elementary students

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Abstract

This study aims to analyze the psychological indicators manifested in children's drawings during late childhood and to examine their relationship with psychological and social adjustment. The study reported here was conducted with elementary school students in the Riyadh region. For collecting data and answering the study questions, three main tools were used: the Drawing Analysis Scale, the modified Ontario Child Health Study (OCHS), Teacher Version, and a Social Adjustment Scale developed by the researcher. The study sample consisted of 125 male and female elementary school students from the Riyadh region. The findings revealed that the most prominent psychological indicators in the children's drawings were introversion, followed by feelings of insecurity, anxiety, and withdrawal behaviors. These indicators reflect emotional tension and internal conflict, likely rooted in the child's family or school environment. The results also showed a statistically significant positive correlation between the psychological indicators in the drawings and signs of poor psychological adjustment, with anxiety and introversion being the most strongly associated with reduced emotional balance. Furthermore, a statistically significant negative correlation was found between the psychological indicators and social adjustment. Children whose drawings contained symbols of isolation, threat, repeated erasure, or distortion demonstrated lower levels of social adjustment and appeared to struggle in forming healthy relationships and actively engaging in their school.

Keywords: Children's drawings, Late childhood, Psychological adjustment, Psychological indicators, Social adjustment.

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1. Introduction

Drawing is an ancient human expression, used to depict emotions and dreams. It transcends language and linguistic barriers, allowing individuals to express their inner world. Drawing has gained attention in psychology, particularly in children's drawings, due to their spontaneity and transparency. Researchers like Stanley Hall have focused on tracing

cognitive and emotional development in children [1]. The study of children's drawings has evolved beyond merely examining developmental and artistic aspects to being recognized as a projective, non-verbal medium that reveals personality traits, emotional states, and psychological and social adjustment [2]. In this regard, Al-Hunaydi [3] argues that children's drawings serve as a symbolic language, allowing them to express their feelings and experiences from the moment they begin drawing, thereby translating their inner emotions into their social environment. Additionally, Al-Quraiti [4] emphasizes that these drawings function as a form of psychological communication, reflecting the child's personality and mental state, whether balanced or disturbed, through both explicit and subtle symbols and indicators.

According to Malika [5], the analysis of children's drawings is not focused on aesthetic evaluation but rather on interpreting lines and symbols to uncover psychological traits, identify aspects of personality, and detect potential issues. Al-Hunaydi [3] further underscores the diagnostic significance of these drawings, as they offer psychologists valuable insights into the child's psychological history and help reveal the underlying causes of behavioral and emotional disorders.

A study by Li et al. [6] demonstrated that using drawing as a parallel expressive tool to speech enhances the child's ability to recall and articulate emotional experiences. This makes drawing a safe space for emotional release and a step toward achieving psychological and social adjustment. In this regard, Kelley [7] defines adjustment as a person's sense of self-satisfaction and ability to adapt to changing life demands without internal conflict or external dysfunction.

Mohammed [8] adds that psychological and social adjustment is an ongoing process aimed at achieving harmony between the individual and their environment through flexibility, learning, and experience, ultimately leading to happiness and personal balance. A study by Ann and Betts [9] confirmed that children's drawings can serve as clear indicators of their adjustment level or psychological distress. Similarly, Al-Hijjan and Murad [10] found that children's drawings may reflect emotions such as anxiety, withdrawal, insecurity, and introversion, indicating potential issues with psychological and social adjustment.

Based on this theoretical and empirical framework, the researcher views children's drawings as valuable projective diagnostic tools that enable parents and professionals to gain a deeper understanding of the emotional and psychological challenges children may face. These tools also contribute to the development of psychological and educational interventions that are grounded in a genuine understanding of children's needs and experiences.

Drawing is considered one of the earliest expressive tools that children use to communicate with their surroundings. It often precedes verbal expression and serves as a medium through which children reflect their inner world and emotional and social experiences [11]. With the advancement of research methodologies in psychology, children's drawings have come to be viewed as projective tools carrying psychological indicators that express emotions such as anxiety, fear, aggression, or feelings of inferiority and introversion. This makes drawing an effective means for understanding personality and assessing psychological and social adjustment [12].

Findings from studies on drawing analysis indicate a significant relationship between the characteristics of children's drawings and parental treatment styles or the child's psychological conditions. For instance, the study by Ali [13] found that children who receive positive parental treatment tend to produce drawings that are coherent, clear, and marked by strong lines. On the other hand, the study by Al-Hijjan and Murad [10] concluded that children's drawings often reveal signs of anxiety, withdrawal, and introversion.

Based on this theoretical and empirical background, the current study seeks to address the following research problem: analyzing the psychological indicators embedded in children's drawings during late childhood and exploring their relationship with psychological and social adjustment among a sample of elementary school students.

2. Review of Literature

Children's drawings are expressive tools that carry psychological, cognitive, and social dimensions. They reflect the child's inner world and perceptions of the external environment, as well as desires, fears, and aspirations. Psychologists have offered various interpretations of these drawings, shaped by their respective theoretical frameworks. While some view drawings as emotional projections, others interpret them as cognitive outputs or responses shaped by environmental interaction [14]. Below is a summary of the most prominent theories explaining children's drawings:

One of the earliest theories addressing children's drawings, this view assumes that children's drawings are direct and mechanical representations of what they see in the real world. According to this perspective, children draw based on direct visual observation, and differences between children's and adults' drawings are attributed to variations in muscular and mental abilities, rather than psychological or emotional development or individual differences [4, 15].

Despite its simplicity, this theory has been criticized for neglecting the emotional and creative aspects of children's artwork, reducing artistic expression to rigid visual replication [4].

Rooted in the ideas of Freud and the psychoanalytic school, this theory posits that children's drawings reflect unconscious content, repressed desires, emotional conflicts, and unexpressed feelings. From this perspective, drawing is not merely a cognitive activity but also an emotional one, revealing mood, personality traits, and inner conflicts. Visual symbols are interpreted as deeply meaningful psychological indicators tied to the child's inner world [16].

According to this theory, children's drawings are learned responses shaped by interaction with their environment and subject to reinforcement and rewards. Drawing is viewed as a behavior that develops through experience and training, and it reflects the child's competence in performing specific tasks, such as achieving form consistency, color perception, or spatial awareness [17].

This theory does not treat drawing as a purely mechanical act; rather, it adopts an interactive approach between the organism and environmental stimuli, acknowledging the role of artistic activity in developing thinking, motor, and social skills [18, 19].

This theory emphasizes that children's drawings arise not merely from visual perception but from mental and conceptual understanding developed through prior experience. It assumes that children draw what they know about objects, not just what they see, making their art fundamentally conceptual. Drawings are considered mental symbols that represent accumulated cognitive knowledge, evolving alongside the child's conceptual and experiential development [15, 18].

This theory aligns with developments in cognitive psychology, linking drawing with abstract cognitive growth and highlighting the role of higher-order mental processes such as perception, abstraction, and generalization.

In light of the above, the researcher considers the behavioral theory to be the most appropriate framework for interpreting the drawings analyzed in the present study. This theory offers a direct link between children's artistic behavior and their environmental experiences. It assumes that children express in their drawings what they have actually experienced, whether through media exposure, personal events, or socially shaped interactions, particularly within the family context.

Psychological and social adjustment represent central pillars of mental health. It is commonly understood as an individual's ability to adapt both to oneself and to the surrounding environment [20]. Psychological adjustment refers to a state of inner satisfaction and emotional balance that enables a person to accept themselves and interact positively with their reality. Social adjustment, on the other hand, reflects an individual's ability to establish healthy relationships with others and to adopt behaviors that align with societal values and norms [21, 22].

Numerous studies have confirmed that poor adjustment is often associated with internal emotional conflicts, which may arise from unmet basic needs or from cumulative environmental stressors [23, 24]. The researcher views adjustment as the child's ability to reduce tension, fulfill needs in socially acceptable ways, and develop effective behaviors that facilitate communication with both the self and others.

According to Freud, adjustment is achieved when the "ego" successfully mediates between the demands of the "id" and the "superego." A weak ego fails in this mediation, leading to repression, internal conflict, and the emergence of neurotic symptoms [25, 26].

3. Methodology

This study employed a dual-method approach, combining both qualitative and quantitative methodologies. On the qualitative level, a projective drawing analysis technique was utilized. This involved examining the visual elements present in children's drawings and assigning scores to each element based on a standardized correction system, with the aim of identifying psychological indicators related to their emotional and social states.

On the quantitative level, the study adopted a descriptive correlational method to explore the nature of the relationship between the outcomes of the drawing analysis and the level of psychological and social adjustment among children in late childhood. This was achieved through the use of standardized measurement tools designed to assess the strength and direction of the correlation between the two variables.

3.1. Study Sample

The study sample consisted of 125 students (both boys and girls) in late childhood, enrolled in elementary schools in the Riyadh region. Their ages ranged from 9 to 12 years, with a mean age of 10.6 years and a standard deviation of 0.65. The study instruments were administered to this sample to analyze their drawings and assess their levels of psychological and social adjustment.

3.2. Instruments

The primary instrument used in this study was the Children's Drawing Analysis Scale for Detecting Psychological Indicators, developed by Al-Hijjan and Abdel-Ghani [14]. This scale is specifically designed to identify psychological indicators embedded in children's expressive drawings, based on a comprehensive theoretical and applied framework within the field of projective analysis.

The scale consists of 20 items distributed across four main dimensions: indicators of anxiety, indicators of withdrawal, indicators of insecurity, and indicators of introversion.

The scale was applied to the drawings produced by the students in the study sample, and the results were documented and statistically analyzed to identify underlying psychological indicators and assess their relationship with levels of psychological and social adjustment.

The validity of the Children's Drawing Analysis Scale for detecting psychological indicators was verified using the following method: Expert Judgment (Content Validity). The preliminary version of the scale was reviewed by nine experts specializing in the fields of education and psychology, as well as educational supervisors from Umm Al-Qura University, King Saud University, Abha University, and the Ministry of Education. The reviewers were asked to evaluate the appropriateness of the items for measuring psychological indicators, their linguistic clarity, and their accuracy in reflecting the intended dimensions. No items were excluded from the scale; however, five items were reworded based on the reviewers' feedback to enhance their clarity and precision.

3.3. Exploratory Factor Analysis

The scale was administered to a sample of 150 female elementary school students in the Riyadh region to examine its factorial structure. Exploratory factor analysis was conducted on the 20 items of the scale using the Principal Components Method with Varimax orthogonal rotation. The Kaiser Criterion was adopted, retaining factors with an eigenvalue equal to or greater than 1.0. Items with factor loadings below 0.30 were excluded from the final structure. The results of the exploratory factor analysis revealed the presence of four main factors, each with an eigenvalue of 2.06 or higher. Together, these four factors accounted for 53.98% of the total variance of the scale. The items of the scale were distributed across the four factors as follows:

Table 1.

Results of Exploratory Factor Analysis of the Children's Drawing Analysis Scale

Factor	Number of Items	Loading Range	Eigenvalue	Explained Variance (%)	Factor Label
Factor 1	7	0.61 - 0.73	3.33	16.63%	Indicators of Anxiety
Factor 2	6	0.50 - 0.80	2.73	13.66%	Indicators of Withdrawal
Factor 3	4	0.58 - 0.87	2.68	13.40%	Indicators of Insecurity
Factor 4	3	0.45 - 0.83	2.06	10.28%	Indicators of Introversion
Total Explained Variance				%53.98	

3.4. Internal Consistency Validity

To assess the internal consistency validity of the scale items, Pearson's correlation coefficients were calculated between each item and the total score of the subscale to which it belongs. This analysis was conducted on a sample of 125 elementary school students.

Table 2 presents the correlation coefficients between each item and its corresponding subscale within the Children's Drawing Analysis Scale for Identifying Psychological Indicators.

Table 2. Pearson's Correlation Coefficients Between Items and Their Subscales in the Drawing Analysis Scale (N = 125).

Indicators of Anxiety	r	Indicators of Withdrawal	R	Indicators of Insecurity	r	Indicators of Introversion	r
Item 1	0.71**	Item 8	0.62**	Item 14	0.78**	Item 18	0.77**
Item 2	0.68**	Item 9	0.67**	Item 15	0.89**	Item 19	0.63**
Item 3	0.65**	Item 10	0.66**	Item 16	0.71**	Item 20	0.78**
Item 4	0.67**	Item 11	0.61**	Item 17	0.65**		
Item 5	0.71**	Item 12	0.73**				
Item 6	0.65**	Item 13	0.71**				
Item 7	0.70**						

Note: * p < .05. ** p < .01.

Interpretation: The table shows that all correlation coefficients between the items and their respective subscales range from .61 to .89 and are statistically significant at the $\alpha \le .01$ level. This indicates a high degree of internal consistency within the scale, reflecting the strong alignment between each item and its theoretical construct. These results support the validity of the scale in measuring the targeted psychological indicators.

Table 3. Reliability Coefficients (Cronbach's Alpha) for the Drawing Analysis Scale.

Dimension	Cronbach's Alpha (α)		
Anxiety Indicators	0.82		
Withdrawal Indicators	0.75		
Insecurity Indicators	0.80		
Introversion Indicators	0.71		
Total	0.83		

Scale Reliability: To ensure the reliability of the Drawing Analysis Scale, Cronbach's alpha coefficient was calculated. The reliability coefficients were computed for each subscale as well as for the overall scale. The table below presents the obtained reliability values:

The values indicate that most subscales exhibit a high level of internal consistency, suggesting that the scale demonstrates acceptable to strong reliability.

The Revised Ontario Child Health Study (OCHS) Scale for Child and Adolescent Mental Health. Relevant items were selected and adapted to suit the objectives and context of the current study. The scale items were distributed across the following dimensions: conduct disorder, anxiety, and depression.

Scale Validity: The validity of the scale was verified through expert judgment. The instrument was reviewed by nine specialists in education and psychology from various Saudi universities to assess its content validity. The reviewers evaluated the appropriateness of the items in measuring students' mental health, as well as their clarity and linguistic accuracy. Based on their feedback, no items were excluded from the scale.

Reliability: To assess the reliability of the scale, Cronbach's alpha coefficient was calculated. The results are presented in Table 4 below:

Table 4.Cronbach's Alpha Reliability Coefficients for the Revised Ontario Child and Adolescent Mental Health Scale.

Dimension	Cronbach's Alpha
Conduct Disorder	0.78
Anxiety	0.86
Depression	0.90
Total Score	0.91

These values indicate that the scale has a high level of internal consistency across all dimensions.

The Social Adjustment Scale was developed by the researcher after reviewing relevant theoretical literature, particularly the study conducted by Shibli et al. [27]. Appropriate items were selected and rephrased to align with the objectives of the present study. The scale comprises 15 items designed to measure the level of social adjustment among students in late childhood.

The scale was administered to the target group, with the total possible score ranging from 15 to 45. Scoring was as follows:

- "Always applies" = 3 points
- "Sometimes applies" = 2 points
- "Never applies" = 1 point

For negatively worded items that indicate low social adjustment, reverse scoring was applied.

Scale Validity: Content validity was established through review by nine expert judges specializing in education and psychology from various Saudi universities. They assessed the appropriateness, linguistic clarity, and accuracy of the items measuring social adjustment. Based on their feedback, no items were excluded from the scale.

Reliability of the Scale: The reliability of the scale was calculated using Cronbach's alpha coefficient, which yielded a value of .88. This result indicates that the Social Adjustment Scale demonstrates a high level of internal consistency and reliability.

Statistical Analysis: The researcher employed the following statistical methods to analyze the study data: frequencies, means, standard deviations, percentage weights, and Pearson's correlation coefficient.

4. Results and Discussion

The results will be presented and discussed according to the order of the study questions as follows:

The first question states, what are the psychological indicators present in the drawings of children in late childhood in the schools of the Riyadh educational region? To answer this question, children's drawings were analyzed, and Table 5 shows this.

Table 5.Means, Standard Deviations, Percent Weight, and Rank of the Dimensions and Items of the Drawing Analysis Scale for Detecting Psychological Indicators (N = 125).

Dimension / Item	Mean	SD	
First Dimension: Anxiety Indicators	8.03	0.98	
Distortion of the human figure	1.33	0.47	
Scribbling on the page	1.32	0.46	
Excessive shading and erasing	1.33	0.47	
Obscuring shapes	1.35	0.47	
Contradictory shading	1.31	0.46	
Drawing figures with heavy broken lines	1.24	0.42	
Drawing grotesque figures	1.26	0.44	
Second Dimension: Withdrawal Indicators	6.83	0.88	
Lack of organization	1.28	0.45	
Unstable figures	1.26	0.44	
People with missing arms	1.21	0.40	
Use of a single color	1.22	0.42	
Pressure on lines	1.13	0.34	
Concealed hands	1.11	0.31	
Third Dimension: Insecurity Indicators	4.69	0.95	
Drawing in small areas of the page	1.26	0.44	
Minimization of drawing elements	1.22	0.42	
Small figures at the edge of the page	1.23	0.42	
Miniature (detailed) drawing	1.22	0.41	
Fourth Dimension: Introversion Indicators	3.58	0.74	
Isolation and lack of connection or interaction among drawn units	1.27	0.45	
Separation between family members	1.23	0.42	
Drawing of large hands for one of the parents	1.30	0.46	

Based on the results of Table 5, which presents the mean scores of children on the Drawing Analysis Scale for Detecting Psychological Indicators, the most prominent artistic indicators reflecting psychological conditions in late childhood were identified. The findings were as follows:

4.1. Indicators of Introversion

The introversion dimension ranked first in terms of percentage weight (59.6%), indicating that feelings of social Isolation and withdrawal from family interaction were the most prominent features in the children's drawings. These indicators appeared in items such as drawing large hands for one of the parents (65%), isolated and disconnected units in the drawing (63.5%), and separation between family members (61.5%). These findings suggest an unconscious desire in some children to express emotional detachment or familial alienation, which aligns with the premise of the Kinetic Family Drawing (KFD) technique developed by Burns and Kaufman [28]. This technique assumes that children project family dynamics and conflicts through the placement and interaction of figures in the drawing. The results also support Shalaby et al. [29] study, which found a relationship between emotional and familial adjustment and signs of isolation in children's drawings.

4.2. Indicators of Insecurity

The insecurity dimension ranked second (58.6%). This was evident in items such as drawing in a small area of the page (63%), placing small figures at the edges (61.5%), and minimizing drawing elements (61%). These indicators are expressive artistic symbols of anxiety, fear of threat, and low self-confidence. This supports De Leo et al. [30] findings, which suggested that drawing small shapes in the corners of the page reflects feelings of inadequacy and insecurity. Similarly, the study by Al-Hijjan and Murad [10] confirmed that children with chronic health conditions, such as albinism, often depict themselves as small and isolated figures, signaling a sense of insecurity.

4.3. Indicators of Anxiety

The anxiety dimension ranked third at 57.3%. It was reflected in children's drawings through items such as obscuring shapes (67.5%), excessive shading and erasing (66.5%), and distortion of the human figure (66.5%). These elements indicate internal emotional conflict and tension. This aligns with what Shakshak [31] suggested about the symbolism of shading and erasing as indicators of general anxiety, particularly when focused on body parts Hamada [32] study also supported this interpretation, revealing that drawing is an effective tool for uncovering a child's inner world, social anxiety, and unconscious distress.

4.4. Indicators of Withdrawal

Although this dimension ranked last (56.9%), some of its items were noteworthy, such as lack of organization (64%), unstable figures (63%), and the use of a single color (61%). These features point to a desire to withdraw from the surrounding world or a limited ability to interact with social stimuli. Taulu et al. [33] study indicated that children with internal fears often use dark colors or draw faint, unorganized shapes that reflect anxiety and social retreat.

From the theoretical framework of the study, which is based on behavioral theory, these results can be interpreted by viewing drawings as learned artistic responses that reflect a child's interactions with their environment. Artistic behavior does not emerge in a vacuum; rather, it stems from previous experiences and environmental and social factors that shape how a child expresses their emotions. For example, a child who excessively erases or draws tiny elements in the corner of the page is projecting stored emotional states related to fear, insecurity, or social withdrawal. This interpretation is consistent with behavioral theory, which views behavior, including artistic expression, as a response shaped by the interaction between the individual and environmental stimuli. Studies such as those by Al-Mandlawy and Ali [18] and Al-Anani [17] support this view.

In conclusion, the findings reveal that children in late childhood express complex psychological states in their drawings, primarily introversion, insecurity, and anxiety, with elements of withdrawal. These findings align with the developmental characteristics of this stage, as noted by Rice [34] and Abu Allam [35], where children begin to exhibit more reflective thinking, heightened self-esteem and sensitivity, and increased awareness of others. This makes drawing an ideal tool for understanding psychological factors that may not manifest in observable behavior. These results open valuable opportunities for professionals in psychological and educational counseling to use drawing analysis as a projective tool to detect children's emotional and psychological needs in school settings and to guide appropriate interventions that support their mental and social well-being.

Table 6.Correlation Coefficients Between the Dimensions of the Drawing Analysis Scale and the Psychological Adjustment Scale (N = 125).

Dimensions	Conduct Disorder	Anxiety	Depression	Total Score of the Psychological Adjustment Scale
Anxiety Indicators	0.63**	0.33**	0.35**	0.72**
Withdrawal Indicators	0.54**	0.32**	0.35**	0.64**
Insecurity Indicators	0.50**	0.26**	0.43**	0.63**
Introversion Indicators	0.56**	0.23*	0.46**	0.68**
Total Score of Drawing Analysis	0.78**	0.40**	0.54**	0.92**

Note: ** p < .01.

Table 6 presents the correlation coefficients between psychological indicators extracted from children's drawings and the dimensions of the Psychological Adjustment Scale (Conduct Disorder, Anxiety, Depression, and the Total Score). The results reveal statistically significant correlations, indicating a positive relationship between psychological disturbance indicators in the drawings and lower levels of psychological adjustment, as detailed below:

4.5. The Relationship Between Anxiety Indicators and Psychological Adjustment

Anxiety indicators in the drawings showed the strongest correlation with the total score of the Psychological Adjustment Scale and with conduct disorder. Significant correlations were also observed with anxiety and depression. This suggests that children whose drawings reflect anxiety indicators such as excessive erasing, shading, and distortion are more likely to experience lower levels of psychological adjustment across various domains. This finding supports Hamada [32] study, which confirms that drawing is an effective tool for revealing signs of social anxiety and behavioral disorders, particularly when involving elements like erasure, smudging, and distortion. From a psychoanalytic perspective, these artistic symbols are considered unconscious projections of internal conflict, reflecting a disturbance in the ego's ability to mediate between desires and inhibitions, as proposed by Freud.

4.6. Withdrawal Indicators and Their Relationship to Adjustment

Withdrawal indicators showed a strong correlation with conduct disorder and the total adjustment score, as well as significant associations with both anxiety and depression. This indicates that artistic signs of withdrawal such as disorganization, use of a single color, and concealment of hands are linked to decreased levels of social and emotional adaptation. Taulu et al. [33] pointed out that children experiencing internal fear often express it through visual withdrawal in their drawings, such as color stagnation and visual constriction. From a behavioral theory perspective, such drawings are viewed as learned responses formed through experiences of rejection or social withdrawal. The lack of interaction depicted in the artwork reflects a lack of environmental or familial support.

4.7. Insecurity Indicators

These indicators showed significant correlations with depression, conduct disorder, and the overall adjustment score, but a weaker association with anxiety.

These results confirm that a child's sense of insecurity manifests through the use of small figures, placement at the page's edges, or confinement to small spaces, indicating an internal sense of marginalization or psychological withdrawal.

This is consistent with De Leo et al. [30] view that small, marginal drawings symbolize a lack of security and self-confidence. Similarly, the study by Al-Hijjan and Murad [10] supports this finding, showing that children with albinism who often face social rejection frequently display such indicators in their artwork.

4.8. Introversion Indicators and Adjustment

This dimension showed a high correlation with the total adjustment score and strong associations with conduct disorder and depression, with a moderate but significant link to anxiety. This suggests that drawings featuring isolated figures, separation between parents and children, or exaggerated parental features are associated with poor social interaction and tendencies toward depressive or oppositional behavior. The study by Backos and Samuelson [36] affirmed that such symbols in the drawings of children exposed to domestic violence reflect internal family conflicts and a loss of emotional warmth.

4.9. Total Score of the Drawing Analysis Scale

The overall score demonstrated a very strong correlation with the total Psychological Adjustment Scale and significant correlations with all its dimensions: Conduct Disorder, Anxiety, and Depression. This indicates that children's projective drawings serve as a highly reliable overall indicator of psychological adjustment. The more frequently symbols related to anxiety, withdrawal, and introversion appear, the more likely it is that the child is experiencing significant psychological difficulties. This finding enhances the effectiveness of drawing analysis as an early diagnostic tool for psychological issues, aligning with Malchiodi [37]'s assertion regarding the value of projective drawing in indirect psychological assessment. The correlation results suggest that the drawings of children in late childhood are not merely random artistic expressions but rather precise emotional reflections of their psychological adjustment levels. These findings support the study's central hypothesis: that children's drawings can serve as projective tools for identifying anxiety, depression, and poor social adaptation. In light of these results, it is recommended that this tool be employed alongside other psychological assessment instruments within school counseling programs to enable early detection of children exposed to psychological stress and to guide interventions aimed at enhancing their psychological and social well-being.

The third question states, What is the relationship between psychological indicators in children's drawings during late childhood and their social adjustment? To answer this question, Table 7 is accompanied by a simplified scientific interpretation of the results related to this question.

Table 7. Correlation Coefficients Between the Dimensions of the Drawing Analysis Scale and the Social Adjustment Scale (N = 125).

Dimensions	Total Score of the Social Adjustment Scale
Anxiety Indicators	-0.67**
Withdrawal Indicators	-0.54**
Insecurity Indicators	-0.52**
Introversion Indicators	-0.59**
Total Score of Drawing Analysis	-0.81**

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