

## The impact of a child's performance on their manifestations of anxiety

**Souad GUEDOUCHE**

University of Algiers2-abou elkacemsaadallah, Algeria  
laboratory of health psychology, prevention and quality of life  
Email: Souad.guedouche@univ-alger2.dz

**Received: 11/03/2024; Accepted: 06/07/2024; Published: 02/09/2024**

### **Abstract:**

The current study aimed to measure the manifestations of anxiety in school-aged children and assess their impact on performance related to cognition and recall in terms of accuracy, capacity, time, and pattern. An anxiety scale and a performance test were administered to a sample of 34 schoolchildren aged 8 to 13 years with social problems. Through factorial statistical analysis, significant statistical correlations were identified between these variables.

**Keywords:** child, anxiety manifestations, performance.

### **Introduction:**

Middle childhood holds great significance in a child's life as it coincides with the start of schooling, leading to the acquisition of knowledge and adaptation to a new life context represented by the school, classroom, and peer group, among others. Under normal circumstances, children navigate this phase smoothly. However, in some cases, a child may face exceptional circumstances that cause tension to the point of confusion. This confusion manifests in both emotional and cognitive forms, potentially impacting the child's academic performance.

#### **1. Study Subject:**

Anxiety is considered a somewhat effective adaptive mechanism, beneficial in confronting fear or challenges, as it makes individuals more alert, enhances learning, and leads to improved mental and physical performance when anxiety is present. Anxiety seems to accompany mental activity like a shadow, and the more we understand anxiety, the more we understand mental processes (Sauteraud, 1995).

The social environment may include challenges such as divorce, separation, the death or illness of a parent, or, more broadly, social problems. These challenges represent significant obstacles for individuals as they "lead to radical changes in life that not everyone can adapt to" (Bouardène, 2005, pp. 12-13).

The ability to adapt varies based on an individual's age and maturity level. What might be manageable for an adult may not be for a child. Whether it involves a fragmented environment (divorce), which is a traumatic event for a child (Bee & Boyd, 2003), parental separation, or ongoing conflicts, all these issues can result in negative consequences for the child, some of which may have serious implications.

According to Pegani & al. (1997), these negative impacts on children include behavioral disorders such as aggressive responses, emotional disturbances such as depression and anger, and reduced academic performance. Moreover, according to Mac Lanahan & Sandefur (1994), as cited by Bee & Boyd (2003), children who live with one parent due to divorce are twice as likely to drop out of school (Bee & Boyd, 2003).

#### **2. Research Problem:**

Do the manifestations of anxiety in children affect their performance?

#### **3. Research Hypothesis:**

The manifestations of anxiety in children affect their performance.

#### **4. Research Methodology:**

The descriptive-analytical method (using statistical tools for data analysis).

#### **5. Research Location:**

The study was conducted in schools affiliated with the administrative district of Bouzareah and the Bashir Ben Khnchir health sector in Battraia, Algiers. The study took place during the transition of the school system from the basic education model to the primary education model.

#### **6. Study Sample:**

The study included 34 schoolchildren aged 8 to 13 years (non-adolescents) who did not suffer from any chronic physical illnesses but experienced social problems.

**7. Study Tools:**

**7.1- Children’s Manifest Anxiety Scale (CMAS):**

The anxiety scale developed by Alfred Castaneda, Boyd R. MacCandless, and David S. Palermo (1953–1956) measures overt or manifest anxiety in children (CMAS: Children’s Manifest Anxiety Scale). The scale consists of a form containing numbered items presented in objective statements. It includes 53 items, 42 of which measure anxiety in children, while 11 items assess validity (lie scale). Each item requires a binary "Yes" or "No" response (Biblawi F., 1987).

The scale’s items are distributed across six factors: physiological manifestations of anxiety, emotional manifestations, mental manifestations, social manifestations, behavioral manifestations, and negative expectations. A score of one is assigned for each "Yes" response, and the total scores are summed to reflect the child’s anxiety level. The possible scores range from 0 to 42. Anxiety levels are categorized into three levels based on the total score: low, moderate, and high (Biblawi F., 1987).

This scale possesses strong psychometric properties, making it, as it appears, suitable for use.

**7.2- Rey’s Figure A Test (Figure A de Rey):**

This is a neuropsychological performance test designed by André Rey to measure spatial-temporal organizational ability. It is sensitive to the following factors: attention, perception, mental representation of spatial elements, quality of drawn lines, laterality, and memory recall ability. Essentially, it assesses the neurological maturity of visual perception processes and the organization of perceptual elements. The test is applicable to individuals aged eight and older.

The test includes a card featuring a geometric figure composed of lines forming a set of rectangles and triangles. This geometric figure has no specific meaning, although some individuals attempt to associate it with recognizable objects, such as a rural house or a ship with a flag. The card is presented horizontally, with the small triangle at the top.

Administering the test requires only a blank, unlined sheet of paper and a set of colored pencils. The test involves two stages: the **copying phase** and the **memory recall phase**. In the copying phase, the time is recorded from the moment the card is presented and the instruction is given orally. A third phase may be introduced in cases where the copying task is not performed well, as a corrective measure.

Two factors are considered when evaluating an individual's performance on this test:

1. Perceptual type (Type perceptif).
2. Accuracy and richness (Exactitude et richesse) in both the copying and recall phases.

A third factor, time taken to complete the copying task, is also assessed.

The test identifies seven (7) performance patterns that reflect different visual perception types. These patterns are ranked from the most to the least rational based on cognitive habits, copying speed, and accuracy of results.

**8. Study Results:**

After administering the scales, we obtained anxiety levels on one hand and performance levels, both in the task of copying the model and recalling it from memory, on the other. Through factorial analysis, it was observed that many correlations were weak, except for the relationships illustrated in Table 1.

**Table 1: The Relationship Between Anxiety Levels and Performance**

<b>Anxiety Levels Sub-Performance</b>	<b>High Anxiety</b>	<b>Moderate Anxiety</b>	<b>Low Anxiety</b>
Copying Accuracy / Recall Accuracy	R=0.54	R=0.64	R=0.98
Attention / Recall	R=0.06	R=0.08	R=0.93
Copying Time / Recall Time	R=0.51	R=0.83	R=0.86
Perceptual Pattern / Recall Pattern	MD =0.25	MD =0.75	MD=0.1

**Source:** guedouche, Souad, 2016, p. 483

The study examining the relationship between cognitive-perceptual activity and cognitive-recall activity in terms of performance accuracy, attention capacity, performance time, and pattern across three anxiety levels (high, moderate, and low) revealed the following findings:

- **Accuracy in copying is correlated with accuracy in recall across all anxiety levels**, but the strength of this correlation increases as anxiety decreases.

- **No correlation was found between attention capacity and recall ability in individuals with high anxiety levels.** However, this correlation is very strong in individuals with low anxiety levels. This indicates that low-anxiety individuals cannot recall if they fail to pay attention, and their ability diminishes when attention is reduced. Conversely, their ability strengthens with increased attention. It appears that anxiety disrupts the connection between perceptual and recall tasks, acting as a barrier. Anxiety also seems to play the role of a motivator or driver (a stressor) for activity when subsequent activity or performance is linked to primary ability levels.
- **A correlation was also found between performance time in copying (perception) and performance time in recall.** This correlation becomes stronger as anxiety decreases. High-anxiety individuals often show discrepancies in the time taken for both tasks, either increasing or decreasing it inconsistently. In contrast, individuals with moderate or low anxiety tend to have more consistent times for both tasks.

These tendencies can be interpreted as follows:

- **High anxiety levels** deprive individuals of patience, perseverance, and determination, instead promoting haste and impulsiveness (accelerated performance).
- **Moderate and low anxiety levels** enable individuals to benefit from a longer duration of recall. Moderate-anxiety individuals, in particular, demonstrate better recall, while low-anxiety individuals rely heavily on their attention levels for effective recall.
- **No correlation was found between perceptual pattern and recall pattern among individuals with high or moderate anxiety (weak significance).** However, a significant correlation was observed in low-anxiety individuals. If they fail to maintain consistency in their patterns, their recall patterns deteriorate. In contrast, individuals with high or moderate anxiety tend to maintain good patterns or even improve their recall performance.

This again highlights that **anxiety, at moderate or high levels, activates cognitive activity**, while low anxiety tends to confine individuals to their initial performance level.

From the above, the following conclusions can be drawn:

- **High and moderate anxiety levels** are associated with accuracy in copying and recall, as well as performance time. However, at these levels, there is no significant correlation between attention and recall or between perceptual and recall patterns, allowing individuals opportunities to increase activity and improve performance.
- **Low anxiety levels** are associated with accuracy, attention, time, and patterns in both the copying and recall phases. This indicates that recall performance largely depends on perceptual performance, which tends to remain stable. Consequently, low-anxiety individuals may not exert additional effort or show significant improvement. These individuals may require stimuli to increase their anxiety levels, creating a state of additional activation that could enhance their performance.

### **Conclusion:**

In response to the question of whether a child's performance is affected by their anxiety level, the study results demonstrated that performance is indeed correlated with anxiety levels. The correlation was particularly strong for the low-anxiety group, where perceptual performance was closely linked to recall performance if one was good, the other was also good, and vice versa.

For the high- and moderate-anxiety groups, there was no relationship between perceptual and recall performance; one could be good while the other was poor, and vice versa. This indicates that for these groups, one aspect may be affected without necessarily impacting the other.

Thus, the study hypothesis—that a child's performance is influenced by their anxiety level—was confirmed. This underscores the importance of psychological support for children with social problems, or for children in general, at the first sign of changes in their performance or the emergence of unusual levels of anxiety or indifference.

### **References:**

1. Abu Fakhr, Ghassan (2007). *Difficulties in Learning and Their Treatment*. Damascus: University of Damascus Publications.
2. Ahmed, Al-Sayed Ali Said & Badr, Faeqa Mohamed (1999). *Attention Disorders in Children: Causes, Diagnosis, and Treatment*, 1st ed. Cairo: Nahda Library of Egypt.
3. Shakshak, Anas (2008). *General Psychology: Cognitive Psychological Forces and Psychological Forces Driving Behavior*. Al-Nahj Publishing, Aleppo.

4. Souad, Guedouche (2016). Assessing Response Patterns to Chronic Stressful Conditions in Children in the Concrete Operational Stage and Evaluating the Effectiveness of a Therapeutic Intervention Method to Correct Faulty Responses. Unpublished Doctoral Dissertation in Clinical Psychology, University of Algiers 2, Algeria.
5. Souad, Guedouche (2017). "The Interactive Effect of Stressful Life Events and Personal Traits on Children's Physical and Mental Health: A Case Presentation." *Journal of Health Psychology Studies*, Vol. 2, No. 3, pp. 67–77.
6. Souad, Guedouche (2018). A Project for Designing a New Diagnostic-Therapeutic Model for Cognitive Process Confusion: A New Positive Perspective on Cognitive Problems and Their Treatment. *International Conference on Positive Psychology: Reality and Prospects*, University of Algiers 2.
7. Castaneda, MacCandless, & Palermo, Adapted by Viola Biblawy (1987). *Children's Manifest Anxiety Scale*. Cairo: Anglo-Egyptian Library.
8. Bear, M.F. et al. (2005). *Neuroscience: Discovering the Brain* (2nd ed.), translated by Nieoullow. Pradel, France.
9. Bee, H., & Boyd, D. (2003). *Developmental Psychology: The Ages of Life*, translated by Gosselin F. Brussels: De Boeck University (DBU).
10. Boudarène, M. (2005). *Stress between well-being and suffering*. Algiers: Berti Editions.
11. Coudron, L. (1992). *Decide without stress*. Paris: Masson.
12. Graziani, P. & Swendsen, J. (2004). *Stress: emotions and coping strategies*. Nathan/SEJER.
13. Sauteraud, A. (1995). "Normal and pathological worry: its links with generalized anxiety disorder." *Confrontation Psychiatrique*, 36, pp. 15–26.