**Deanship of Scientific Research**

# The Relationship Between Cognitive Distortions and School Bullying in Jerusalem Suburbs' Schools

*Muhammad Ibrahim Abdel Qader* (iD) *, Omar Taleb Rimawi** (iD)

Department of Psychology, Al-Quds University, Jerusalem, Palestine.

* *Corresponding author:*
orimawi@staff.alquds.edu

**Abstract**

**Objectives**: The study identifies the relationship between cognitive distortions and bullying in schools in the suburbs of Jerusalem.

**Methods:** The study used a stratified sample of 250 students who study in schools located in the suburbs of Jerusalem and whose ages range from 15 to 18 years old. The Cognitive Distortions Scale and the School Bullying Scale were used as instruments for data collection after verifying their validity and reliability.

**Results**: The results indicated that the mean score for cognitive distortions is moderate whereas the mean score for school bullying is low. Statistically significant differences were observed in the levels of cognitive distortions based on gender, with higher levels in males. Additionally, the results showed statistically significant differences in the levels of cognitive distortions and school bullying based on students' grades, favoring students with lower grades. However, there were no statistically significant differences based on the grade level of participants. The study also identified a weak positive correlation between cognitive distortions and school bullying.

**Conclusion:** By shedding light on the intricate relationship between cognitive distortions and school bullying, the study stresses the significance of developing educational and psychological strategies to address these challenges. Hence, it emphasizes the need for customized interventions in schools to deal with cognitive distortions and bullying, focusing on gender differences.

**Keywords:** cognitive distortions, school bullying, schools, suburbs of Jerusalem.

## العلاقة بين التشوهات المعرفية والتنمر المدرسي في مدارس ضواحي القدس

محمد إبراهيم عبد القادر، عمر طالب الريماوي*

دائرة علم النفس، جامعة القدس، فلسطين.

ملخّص

**الأهداف:** هدفت الدراسة التعرف إلى العلاقة بين التشوهات المعرفية، والتنمر المدرسي في مدارس ضواحي القدس.

**المنهجية:** تم اختيار المشاركين من بين الطلاب الذين تتراوح أعمارهم بين 15 و18 عاما المسجلين في المدارس في ضواحي القدس. تم استخدام عينة طبقية، بلغ مجموعها 250 مشاركا. تم استخدام مقياس التشوهات المعرفية، ومقياس التنمر المدرسي كأدوات لجمع البيانات، وتم تأكيد صحتها وموثوقيتها.

**النتائج:** أشارت النتائج أن الدرجة الكلية للتشوهات المعرفية جاءت بدرجة متوسطة، بينما كان متوسط درجة التنمر المدرسي منخفضا. ولوحظت فروق ذات دلالة إحصائية في مستويات التشوهات المعرفية على أساس نوع الجنس، مع وجود مستويات أعلى لدى الذكور. ومع ذلك، لم تجد الدراسة فروقا ذات دلالة إحصائية في مستويات التشوهات المعرفية والتنمر المدرسي بناء على مستوى الصف للمشاركين. بالإضافة إلى ذلك، أظهرت النتائج اختلافات ذات دلالة إحصائية في مستويات التشوهات المعرفية، والتنمر المدرسي بناء على متغير آخر، لصالح الأفراد ذوي المعدلات المنخفضة. كما حددت الدراسة وجود علاقة إيجابية ضعيفة بين التشوهات المعرفية والتنمر المدرسي.

**الاستنتاجات:** تؤكد الدراسة على الحاجة إلى تدخلات مخصصة في المدارس لمعالجة التشوهات المعرفية والتسلط، مع التركيز على الاختلافات الخاصة بالجنس. وبسلط الضوء على العلاقة المعقدة بين التشوهات المعرفية والتنمر المدرسي، مشددا على أهمية الاستراتيجيات التعليمية والنفسية لمواجهة هذه التحديات.

**الكلمات الدالة:** التشوهات المعرفية، التنمر المدرسي، المدارس، ضواحي القدس.

**Introduction**

The literature on cognitive distortions and bullying reveals a complex and multifaceted relationship. Studies like Barriga & Gibbs (1996) and Dragone et al. (2020) establish a clear correlation between cognitive distortions and antisocial behavior, often observed in individuals who engage in bullying. This connection spans across different age groups, highlighting the pervasive nature of these distortions in aggressive and abusive behavior.

The concept of bullying, particularly within educational institutions, gained significant attention with the work of Olweus (1991). However, there's a noted lack of focus on this issue in Arab societies, as pointed out by Al-Zahrani & Wassef (2019), both in terms of prevalence and statistical data regarding school bullying. Various types of bullying, including physical, verbal, and psychological, have been identified, each carrying harmful effects for both the perpetrator and the victim (Saleh & Jayad, 2019; Joaquim, 2014). Beck (1998) discusses how cognitive distortions can lead individuals away from reality and rational thinking, encompassing a range of flawed thought processes like arbitrary inference, selective abstraction, and overgeneralization. Aquino and Reed (2002) suggest that these distortions often occur when there's a conflict between personal behavior and values. This is further supported by Ayal, & Gino (2011), who notes that to reduce cognitive dissonance, individuals may alter their beliefs to justify their actions. Research also shows that cognitive distortions can manifest as reduced self-esteem and a tendency to externalize blame (Clark, 2002; Barriga et al., 2008; Jiang, 2022). Assar (2015) notes that individuals prone to these distortions often have negative beliefs and react irrationally to situations. Daniel et al. (2019) and Abdilla (2009) highlight the role of cognitive biases in rationalizing bullying behavior. Dragone et al. (2020) suggest that societal violence can foster distortions that benefit the individual. The complex relationship between cognitive distortions and school bullying is highlighted in various studies. Sridhar and Vaughan (2021) point out that students grappling with emotional and social challenges, including issues in social interactions and forming friendships, often develop negative self-perceptions. These challenges can lead to cognitive distortions, which Braunwell (2016) characterizes as involving high levels of disorder, anger, inattention, and anxiety among students. Such distortions often manifest as feelings of incapacity and a perceived loss of control over one's environment.

Additionally, research by Abdel Wahab and El-Sayed (2017) and Zein Al-Abidin (2014) illuminates the significant role these distortions play in bullying behavior. Bullies may harbor irrational beliefs about the necessity of power and control for self-protection, while victims might prefer avoidance and submission, perceiving seeking help as a sign of weakness. Luciano & Savage (2017) also confirm a connection between bullying behavior and cognitive distortions, suggesting these distortions significantly influence bullying dynamics among students.

Metwally's (2022) study further supports this, showing statistically significant positive correlations between school bullying and cognitive distortions, with the latter emerging as a strong predictor of bullying behavior. Behiry's (2019) research corroborates these findings, establishing a significant positive relationship between cognitive distortions and bullying. This study also reveals gender-based differences in cognitive distortions and bullying behaviors, with females more likely to exhibit self-centeredness and blame others, and males more inclined to minimize estimation errors. Regarding bullying behavior, males are more involved in physical, verbal, and property-related bullying, while females engage more in social bullying.

Studies by Aissou & Bouchirbi (2020) and Patrick et al. (2019) indicate a link between school violence and irrational thoughts, with no significant gender differences in cognitive distortions. However, Al-Rahim & Jiyad (2019) observed a higher incidence of cognitive distortions among male adolescents, contrary to findings by Gini et al. (2014) and van der Meulen et al. (2019), which found no gender differences in bullying roles. Research by Cetin et al. (2011), Chiang et al. (2012), and Oostermeijer et al. (2017) suggests that aggression and antisocial behavior can be predicted by cognitive distortions, further cementing the link between bullying and these distortions.

In conclusion, this comprehensive review underlines the intricate relationship between cognitive distortions and bullying behavior, emphasizing the need for further research to deepen our understanding of this connection, particularly in relation to school environments and across different cultures.

**Study Problem**

Cognitive distortions, defined as negative thought patterns, significantly affect behavior and social interactions, notably among students in schools. School bullying, particularly prevalent in Jerusalem's suburbs, is a growing concern. Comprehensive research is necessary to explore the link between cognitive distortions and bullying behaviors in these educational settings. The study's primary question focuses on determining the nature of this relationship in schools situated in the suburbs of Jerusalem.

**Importance of the Study**

The importance of this study is highlighted by exploring how cognitive distortions affect bullying behaviors in schools. Understanding this relationship can help educators and specialists develop strategies to combat bullying and improve the educational environment. The study also deepens understanding of the psychological and social impacts of these phenomena, supporting awareness and encouraging the adoption of new interventions, especially in areas like the suburbs of Jerusalem facing unique challenges.

**Study Limitations**

Temporal Limits: The beginning of the first semester of the academic year 2023.

Spatial Limits: The study is limited to schools located in the suburbs of Jerusalem.

Human Limits: The study focuses on high school students.

**Materials and Methods:**

This study adheres to a correlational descriptive design, aiming to explore the predictive influence of independent variables on a dependent variable.

**Participants**

The cohort for this investigation comprised students aged 15 to 18 years, attending educational institutions on the peripheries of Jerusalem. Participants were selected through the stratified sampling method, resulting in a total sample size of 250 individuals. The demographic breakdown of the sample is as outlined below:

- Gender distribution: 57.6% male (n=144) and 42.4% female (n=106).

-Grade distribution: 36.8% from the tenth grade (n=92), 51.6% from the eleventh grade (n=129), and 11.6% from the twelfth grade (n=29).

- Academic performance (as measured by the latest average rate): 22.4% scored less than 70 (n=56), 42.4% scored between 71-85 (n=106), and 35.2% scored more than 86 (n=88). Table 1 presents the detailed distribution of the study sample:

**Table 1: Distribution of study sample members according to study variables (n = 148).**

| Variable | Level | N | Percent % |
|---|---|---|---|
| Gender | Male | 144 | 57.6 |
| | Female | 106 | 42.4 |
| Grade | 10th grade | 92 | 36.8 |
| | 11th grade | 129 | 51.6 |
| | 12th grade | 29 | 11.6 |
| Average last rate | less than 70 | 56 | 22.4 |
| | 71-85 | 106 | 42.4 |
| | more than 86 | 88 | 35.2 |

**Study Instruments:**

The study utilized the Cognitive Distortions Scale and the School Bullying Scale as data collection tools.

Firstly, the Cognitive Distortions Scale, developed by Salha (2018), consists of 38 items. The second instrument, the School Bullying Scale, was created by Jalwal (2017) and comprises 39 items. Responses were also recorded according to a five-point Likert scale.

To determine the average response scores of the study sample, a statistical standard was used, employing the following equation for category length:

Category length = (upper limit - lower limit) / Number of assumed categories

Category length = (5 - 1) / 3

Category length = 4 / 3.

Category length: ≈ 1.33

Based on this standard, the levels can be categorized as follows: Low level: between 1 and less than 2.33), medium level: between (2.34 and less than 3.67), High level: between 3.68 and 5.

**Instrument Validity and Reliability:**

The validity of the instrument was also verified by calculating Pearson's correlation coefficient for the questionnaire items with the total score of the instrument, which showed statistical significance for all items of the questionnaire, indicating internal cohesion among the items. The reliability of the instrument was also verified through Cronbach's alpha reliability coefficient. The reliability values reached 0.85 for the level of cognitive distortions among students in the suburban schools of Jerusalem and 0.96 for the level of school bullying. These results indicate that the instrument has sufficient reliability for the purposes of the study.

**Statistical Analysis:**

After collecting the questionnaires and verifying their suitability for analysis, the data were processed by calculating the arithmetic means and standard deviations for each questionnaire item. The "t" test (t-test), one-way analysis of variance (one-way ANOVA), Pearson correlation coefficient, and Cronbach's alpha reliability equation were also used. The statistical software (SPSS, Version 23) was utilized for these purposes.

**Results:**

This study was conducted to investigate the relationship between cognitive distortions and school bullying in schools on the outskirts of Jerusalem. The study looked at how demographic variables such as age, gender, and grade level affect this relationship. A sample of 250 students between the ages of 15 and 18 from different suburban schools in Jerusalem was carefully selected. The demographic distribution of the sample was analyzed, as shown in Table 1. A statistical criterion was used to determine the average responses of the sample members. Use appropriate statistical analysis for the study variables.

**Table (2) shows the arithmetic means and standard deviations for the total scores of cognitive distortions and their specific areas, as well as for school bullying.**

| Variable | M | SD |
|---|---|---|
| All-or-Nothing Thinking | 2.97 | .72 |
| Overgeneralization | 2.76 | .68 |
| Catastrophizing | 1.48 | .59 |
| Idealized Thinking | 3.01 | .81 |
| Jumping to Conclusions | 3.22 | .70 |
| Blame | 2.93 | .74 |
| The total score for cognitive distortions | 2.92 | .52 |
| The total score for School bullying | 1.63 | .65 |

The results from Table (2) show that the arithmetic mean for the total score of cognitive distortions was at a medium level (M = 2.92, SD = 0.52), while the highest level for the fields of cognitive distortions was in the area of jumping to conclusions (M = 3.22, SD = 0.70), followed by idealized thinking (M = 3.01, SD = 0.81), with the lowest being in the area of catastrophizing (M = 1.48, SD = 0.59). Meanwhile, the arithmetic mean for the level of school bullying was low (M = 1.63, SD = 0.65).

**Table 3 presents the T-test results for independent samples of differences in levels of school bullying and cognitive distortions based on the gender variable.**

| Variable | gender | M (SD) | T (P-value) |
|---|---|---|---|
| All-or-Nothing Thinking | Male | 3.13 (.72) | 4.41 (.00) |
| | Female | 2.74 (.65) | |
| Overgeneralization | Male | 2.88 (.73) | 3.50 (.00) |
| | Female | 2.59 (.57) | |
| Catastrophizing | Male | 1.51 (.61) | .87 (.38) |
| | Female | 1.44 (.56) | |
| Idealized Thinking | Male | 3.21 (.79) | 4.76 (.00) |
| | Female | 2.74 (.75) | |
| Jumping to Conclusions | Male | 3.40 (.68) | 5.02 (.00) |
| | Female | 2.97 (.65) | |
| Blame | Male | 3.24 (.68) | 8.91 (.00) |
| | Female | 2.51 (.60) | |
| The total score for cognitive distortions | Male | 3.11 (.52) | 7.86 (.00) |
| | Female | 2.65 (.40) | |
| The total score for School bullying | Male | 1.72 (.67) | 2.44 (.01) |
| | Female | 1.52 (.61) | |

Table (3) shows that there are statistically significant differences in the level of cognitive distortions based on the gender variable (T = 7.86, P-value <.001), where males show a higher level (M = 3.11, SD = 0.52) compared to females (M = 2.65, SD = 0.40). These differences are evident in all fields except for the area of catastrophizing. Furthermore, there are statistically significant differences in the level of school bullying based on the gender variable (T = 2.44, P-value =.015), where males also show a higher level (M = 1.72, SD = 0.67) compared to females (M = 1.52, SD = 0.61).

**Table 4: Results of the one-way ANOVA for the level of cognitive distortions and school bullying attributed to the grade level variable.**

| Variable | grade level | M (SD | F (P-value) |
|---|---|---|---|
| All-or-Nothing Thinking | 10th grade | 3.01 (.68) | .71 (.49) |
| | 11th grade | 2.92 (.70) | |
| | 12th grade | 3.06 (.88) | |
| Overgeneralization | 10th grade | 2.77 (.67) | .17 (.83) |
| | 11th grade | 2.74 (.63) | |
| | 12th grade | 2.82 (.90) | |
| Catastrophizing | 10th grade | 1.52 (.56) | .34 (.70) |
| | 11th grade | 1.46 (.63) | |
| | 12th grade | 1.47 (.51) | |
| Idealized Thinking | 10th grade | 2.99 (.80) | .09 (.90) |
| | 11th grade | 3.02 (.78) | |
| | 12th grade | 3.06 (.95) | |
| Jumping to Conclusions | 10th grade | 3.21 (.68) | .02 (.97) |
| | 11th grade | 3.23 (.72) | |
| | 12th grade | 3.22 (.71) | |
| Blame | 10th grade | 2.95 (.69) | 1.36 (.25) |
| | 11th grade | 2.87 (.77) | |

| Variable | grade level | M (SD | F (P-value) |
|---|---|---|---|
|  | 12th grade | 3.12 (.71) |  |
| The total score for cognitive distortions | 10th grade | 2.91 (.49) | .65 (.52) |
|  | 11th grade | 2.90 (.52) |  |
|  | 12th grade | 3.02 (.63) |  |
| The total score for School bullying | 10th grade | 1.66 (.57) | .54 (.58) |
|  | 11th grade | 1.59 (.70) |  |
|  | 12th grade | 1.72 (.70) |  |

Table 4 indicates that, based on the results of the one-way ANOVA statistical analysis, there are no statistically significant differences in the level of cognitive distortions according to the grade level variable (F = 0.65, P-value = 0.52). However, the arithmetic means suggest that the 12th grade has the highest mean (M = 3.02, SD = 0.63), followed by the 10th grade (M = 2.91, SD = 0.49), and the 11th grade has the lowest mean (M = 2.90, SD = 0.52). The results also indicate no statistically significant differences in the level of school bullying according to the grade level variable (F = 0.54, P-value = 0.58). However, the arithmetic means show that the 12th grade has the highest mean (M = 1.72, SD = 0.70), followed by the 10th grade (M = 1.66, SD = 0.57), and the 11th grade has the lowest mean (M = 1.59, SD = 0.70).

**Table 5: Results of the one-way ANOVA for the level of cognitive distortions and school bullying attributed to the variable Average Last Rate.**

| Variable | Average last rate | M (SD | F (P-value) |
|---|---|---|---|
| All-or-Nothing Thinking | less than 70 | 3.11 (.56) | 1.58 (.20) |
|  | 71-85 | 2.90 (.69) |  |
|  | more than 86 | 2.96 (.82) |  |
| Overgeneralization | less than 70 | 2.78 (.57) | 2.92 (.05) |
|  | 71-85 | 2.65 (.67) |  |
|  | more than 86 | 2.88 (.73) |  |
| Catastrophizing | less than 70 | 1.55 (.59) | 4.90 (.00) |
|  | 71-85 | 1.57 (.66) |  |
|  | more than 86 | 1.32 (.45) |  |
| Idealized Thinking | less than 70 | 3.12 (.81) | 2.62 (.07) |
|  | 71-85 | 2.88 (.71) |  |
|  | more than 86 | 3.11 (.89) |  |
| Jumping to Conclusions | less than 70 | 3.41 (.53) | 5.03 (.00) |
|  | 71-85 | 3.07 (.57) |  |
|  | more than 86 | 3.29 (.88) |  |
| Blame | less than 70 | 3.17 (.57) | 5.66 (.00) |
|  | 71-85 | 2.77 (.64) |  |
|  | more than 86 | 2.96 (.88) |  |
| Cognitive distortions | less than 70 | 3.07 (.33) | 5.72 (.00) |
|  | 71-85 | 2.80 (.43) |  |
|  | more than 86 | 2.97 (.68) |  |
| School bullying | less than 70 | 1.73 (.58) | 2.30 (.01) |
|  | 71-85 | 1.68 (.74) |  |
|  | more than 86 | 1.51 (.58) |  |

Table 5 reveals that, based on the results of the one-way ANOVA statistical analysis, there are statistically significant differences in the level of cognitive distortions based on the Average Last Rate variable (F = 5.72, P-value < 0.01). The arithmetic means indicate that the group with 'less than 70' has the highest mean (M = 3.07, SD = 0.33), followed by 'more than 86' (M = 2.97, SD = 0.68), and the group '71-85' has the lowest mean (M = 2.80, SD = 0.43). Additionally, there are statistically significant differences in the level of school bullying based on the Average Last Rate variable (F = 2.30, P-value = 0.01), with the differences favoring the group 'less than 70' with the highest mean (M = 1.73, SD = 0.58), compared to the '71-85' group (M = 1.68, SD = 0.74), and the group 'more than 86' with the lowest mean (M = 1.51, SD = 0.58).

**Table 6: Pearson Correlation Coefficient Between Cognitive Distortions and School Bullying Among Secondary School Students in the Suburbs of Jerusalem.**

| Variable | | Pearson correlation coefficient | |
| --- | --- | --- | --- |
| Cognitive distortions | School bullying | R | P |
| | | 0.08 | 0.20 |

R: correlation coefficient

-P: P-value

Table 6 indicates that the Pearson correlation coefficient is 0.08 with a significance level (P-value) of 0.02, which is less than the alpha level (α ≤ 0.05). This demonstrates a weak positive correlation between cognitive distortions and school bullying that is considered statistically significant. In other words, as cognitive distortions increase, the incidence of school bullying also tends to increase.

**Discussion:**

The results of the study suggest that the arithmetic mean of cognitive distortions was moderate among participants, with a low standard deviation indicating a small dispersion of data around the mean. This implies that most participants had similar levels of cognitive distortions. This finding differs from the study by Al-Rahim and Jiyad (2019), suggesting that participants may interpret information or events inaccurately to some extent but not excessively. In specific domains, the "Jumping to Conclusions" domain obtained the highest average score, indicating a tendency to trust conclusions without sufficient evidence. This could negatively affect judgment and the decision-making process, potentially reflecting thought patterns that could lead to a misunderstanding of reality and might contribute to exacerbating communication issues or peer relationships. Conversely, the "catastrophizing" domain, which had the lowest average, may indicate a decrease in cognitive distortions related to self or others' catastrophizing.

Regarding school bullying, participants obtained a low average score, which was consistent with the study by Al-Rahim and Jiyad (2019). However, there were differences in their responses. Nonetheless, these differences remained within a low range, suggesting that some individuals may have experienced more severe bullying than others. Additionally, the study showed statistically significant differences in levels of cognitive distortions between genders, with males exhibiting higher levels of distortions compared to females. This finding was contrary to the studies by Aissou and Bouchirbi (2020) and Patrick et al. (2019), indicating that males might adopt or experience more unrealistic beliefs or perceptions. These differences could stem from cultural, social, or psychological factors that affect the upbringing and thinking of each gender. The results also indicate statistically significant differences in school bullying in favor of males. This result differed from the study by van der Meulen et al. (2019) and may reflect common trends of males experiencing or reporting bullying behaviors more frequently. This could be associated with patterns of aggressive behavior often linked to males in societal and cultural contexts.

The study revealed significant statistical differences in the levels of "average last rate" concerning cognitive distortion levels. Students belonging to the lower average category displayed the highest degrees of cognitive distortions, followed by those with higher averages, while the lowest levels were recorded among students with an average rate. The

results also highlighted considerable statistical differences in levels of school bullying based on the cumulative average, showing that students with the lowest averages face the highest levels of school bullying. These levels decrease among students with an average rate, whereas the lowest levels of bullying are observed among students with high averages. There is a noticeable correlation between cognitive distortions and academic performance, indicating that students with lower performance are more prone to these distortions. This could be attributed to the psychological stress caused by academic failure, which negatively affects the mental health of students. Conversely, good academic performance, as seen in students with high averages, acts as a protective factor against bullying.

A weak positive relationship exists between cognitive distortions and school bullying, as indicated by various previous studies (Cetin et al., 2011; Chiang et al., 2012; Oostermeijer et al., 2017; Aissou & Bouchirbi, 2020; Patrick et al., 2019), meaning that there is a correlation, but it is not strong. This suggests that although bullying incidents tend to increase with higher levels of cognitive distortions, these distortions are not the sole influencing factor. There may be other factors, such as environmental, personal, family, or socio-economic, that play a role in this phenomenon. Students suffering from cognitive distortions may be more inclined to experience or engage in bullying behaviors due to their previous experiences or because of their practice of distorted thinking patterns.

**Conclusion:**

The study's findings reveal that participants display moderate levels of cognitive distortion, often jumping to conclusions without adequate evidence. Gender differences are evident, with males exhibiting greater cognitive distortions, potentially due to cultural or societal influences. Additionally, cognitive distortions are associated with bullying exposure, especially among students with lower academic performance. Conversely, high academic achievement may serve as a protective factor against bullying. The weak correlation between cognitive distortions and bullying suggests the presence of various contributing elements. Comprehending the impact of cognitive distortions on behavior is crucial for crafting interventions aimed at enhancing social interactions and overall well-being.

**Recommendations**

Develop educational and psychological programs that consider gender differences and their cultural and social impacts.

Use academic performance as an indicator for early detection of bullying, focusing on students with low performance.

It's necessary to explore other factors contributing to bullying, considering the weak correlation between cognitive distortions and bullying.

**Conflict of Interest:** The authors report no conflicts of interest.

**REFERENCES**

Abdel Wahab, D. K., & El-Sayed, N. A. H. (2017). Intelligence Anxiety and Cognitive Perception Anxiety as Predictors of Cognitive Distortions in Al-Azhar University Students. *Journal of the Faculty of Education, Al-Azhar University*, 176, 369-781.

Abdilla, G. (2009). *Schoolyard bullying: an examination of individual differences in thoughts, feelings, and behaviours in adolescents and young adults. Doctoral dissertation*, RMIT University.

Aissou, A. & Bouchirbi, I. (2020). School violence and its relationship to irrational thoughts among middle school students. *Journal of Psychological and Educational Sciences*, 6(1), 91-106.

Al-Rahim, Z., & Jiyad, M. (2019). Bullying and Its Relationship with Cognitive Distortions among Adolescents in Secondary Schools. *Journal of the Faculty of Basic Education for Educational Sciences and Humanities*, (43), 1223-1245.

Al-Zahrani, H., & Wassef, E. (2019). School bullying and its relationship with social skills among middle level female students in Qalwa governorate. *Education college journal: Asyout university*, *35*(6), 343-385.

Aquino, K., & Reed II, A. (2002). The self-importance of moral identity. *Journal of personality and social psychology*, 83(6), 1423-1440. https://psycnet.apa.org/doi/10.1037/0022-3514.83.6.1423.

Assar, I. (2015). *Cognitive Distortions and Their Relationship with the Meaning of Life among Adolescents in the Gaza Strip. Unpublished Master's Thesis*, the Faculty of Education, Islamic University.

Ayal, S., & Gino, F. (2011). *Honest rationales for dishonest behavior. The social psychology of morality: Exploring the causes of good and evil*. Washington, DC: American Psychological Association.

Barriga, A. Q., & Gibbs, J. C. (1996). Measuring cognitive distortion in antisocial youth: Development and preliminary validation of the How I Think questionnaire. *Aggressive Behavior: Official Journal of the International Society for Research on Aggression*, *22*(5), 333-343. https://doi.org/10.1002/(SICI)1098-2337(1996)22:5%3C333::AID-AB2%3E3.0.CO;2-K.

Barriga, A. Q., Hawkins, M. A., & Camelia, C. R. (2008). Specificity of cognitive distortions to antisocial behaviours. *Criminal Behaviour and Mental Health*, 18(2), 104-116.

Beck, A.T. (1999). *Prisoner of hat, The cognitive basis of anger, hostility and violence*. New York: Harper Collins.

Behiry, S. (2019). Cognitive Distortions Variables as Predictors of Bullying Behavior in Preparatory Stage Students. *Journal of the Faculty of Education*, 29(3), 187-224.

Braunwell, N. (2016). *Connection between effort and academic success in learning-disabled students identified with learned. Doctoral dissertation*, Rowan University, ProQuest Dissertations Publishing.

Cetin, B., Peker, A., Eroğlu, Y., & Çitemel, N. (2011). Interpersonal cognitive distortions as a predictor of cyber victimization and bullying: A preliminary report in adolescents. *Journal of Educational Sciences*, 3(3), 1064-1080.

Chiang, Y., Lin, S. & Liu, E. (2012). The effects of online discussion forum aggressive messages and cognitive distortion on users' negative affect and aggression. *Journal of Educational Technology* – TOJET, 11(2), 238-245.

Clark, L. (2002). *Help for Emotions: Managing Anxiety, Anger, and Depression*. (2nd ed.). USA: Parents Press.

Brugman, D., Van Der Meulen, K., & Gibbs, J. C. (2023). Moral judgment, self-serving cognitive distortions, and peer bullying among secondary school adolescents. *Journal of Moral Education,* 1-21. doi: 10.1080/03057240.2023.2209289

Dragone, M., Esposito, C., De Angelis, G., Affuso, G., & Bacchini, D. (2020). Pathways linking exposure to community violence, self-serving cognitive distortions and school bullying perpetration: A three-wave study. *International journal of environmental research and public health*, 17(1), 1-18. https://doi.org/10.3390/ijerph17010188

Gini, G., Pozzoli, T., & Hymel, S. (2014). Moral disengagement among children and youth: A meta-analytic review of links to aggressive behavior. *Aggressive behavior*, 40(1), 56-68. https://doi.org/10.1002/ab.21502

Jalwal, A. (2017). *Emotion regulation and its relationship to bullying among school students in Libya. Unpublished master's thesis*, University of Jordan, Amman, Jordan.

Jiang, S., Liu, R. D., Ding, Y., Jiang, R., Fu, X., & Hong, W. (2022). Why the victims of bullying are more likely to avoid involvement when witnessing bullying situations: The role of bullying sensitivity and moral disengagement. *Journal of interpersonal violence*, 37(5-6), NP3062-NP3083.

Joaquim, C. J. (2014). Developmental stage of performance in reasoning about school bullying. *Behavioral Development Bulletin, 19*(2), 81–99. https://doi.org/10.1037/h0100579.

Luciano, S., & Savage, R. (2017). Bullying Risk in Children with Learning Difficulties in Inclusive Educational Settings. Canadian *Journal of School Psychology*, 22(1), 14-31.

Metwally, W. (2022). Learned Helplessness, Cognitive Distortions, and Self-Stigma as Predictors of School Bullying Among a Sample of Students with Learning Difficulties in the Intermediate Stage in Riyadh. *Educational Sciences*, 30(2), 1-67.

Olweus, D. (1991). Victimization among school children. *Advances in psychology*, 76, 45-102.

Oostermeijer, S., Smeets, K. C., Jansen, L. M., Jambroes, T., Rommelse, N. N., Scheepers, F. E., ... & Popma, A. (2017). The role of self-serving cognitive distortions in reactive and proactive aggression. *Criminal behaviour and mental health*, 27(5), 395-408. https://doi.org/10.1002/cbm.2039.

Patrick, R. B., Rote, W. M., Gibbs, J. C., & Basinger, K. S. (2019). Defend, stand by, or join in?: The relative influence of moral identity, moral judgment, and social self-efficacy on adolescents' bystander behaviors in bullying situations. *Journal of youth and adolescence*, 48, 2051-2064.

Saleh, Z. A., & Jayad, M. S. (2019). Bullying and it Relationship to Cognitive Distortion of Adolescents in Secondary Schools. *Basic Education College Magazine For Educational and Humanities Sciences*, (43), 1223-1245.

Salha, R. (2018). *Cognitive distortions and relationship with morbid personality traits in reform and rehabilitation centers in governorates of the Gaza strip. Unpublished Master Thesis*, College of Education, Al-Aqsa University, Gaza.

Sridhar, D., & Vaughn, S. (2001). *Social functioning of students with learning disabilities. In Research and global perspectives in learning disabilities: Essays in honor of William M. Cruickshank* (pp. 65-92). Erlbaum.

van der Meulen, K., Brugman, D., Hoyos, O. L., & Delbarrio, C. (2019). Peer bullying, self-serving cognitive distortions and school moral climate perception in Spanish and Dutch secondary school students. Infancia Y Aprendizaje, *Journal for the Study of Education and Development*, 42(2), 337–373. https://doi.org/10.1080/02103702.2019.1578923

Van der Velden, F., Brugman, D., Boom, J., & Koops, W. (2010). Effects of EQUIP for educators on students' self-serving cognitive distortions, moral judgment, and antisocial behavior. *Journal of Research in Character Education,* 8(1), 77–95.

Zein Al-Abidin, F. (2014). Self-Harm and Retention (Difficulty Identifying and Describing Emotions). *Moroccan Journal of Historical and Social Studies*, 9, 175-184.