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War Anxiety Scale and Its Relationship to Emotional Empathy from the Point of View of Adolescents in Jordanian Society

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Abstract

The study aims to verify the factorial structure of war anxiety in a sample of adolescent students in Jordanian society and to estimate the relationship between war anxiety and emotional empathy. The study adopted the symptoms of general anxiety stipulated in the Diagnostic and Statistical Manual and transformed them into statements using the GAD-7 list. Additionally, an emotional empathy scale was developed. A random sample was selected from Northeastern Badia schools (from the third grade to the ninth grade). The study tools were applied in a paper format for students to respond to. Confirmatory factor analysis was conducted, and the war anxiety scale achieved an acceptable fit in light of the sample data. The study also reached, using exploratory factor analysis, a three-member structure for the emotional empathy scale. The results of the Pearson correlation matrix were moderate and positive for the relationship between war anxiety and the dimensions of emotional empathy among adolescents, which means that cases of war anxiety are acceptable and moderate among adolescents and can be expressed in positive channels through behavioral manifestations of emotional empathy, such as rejecting foreign products and other common behaviors mentioned in the study.

Introduction

Recent escalations in wars and conflicts in the Middle East, the Balkans, and the NATO region have been primarily driven by disputes over the distribution of oil and natural gas wealth. The justifications for these wars have varied, including claims that Alaska belongs to Russia, allegations of Hamas incitement against Israel, Ukraine's accession to NATO, and other provocative reasons for inciting conflict. The war erupted in February 2022, with increased aggression against Ukrainian territories in objection to its NATO membership and the annexation of certain regions by Russia. Sanctions were imposed on Russia, leading it to retaliate by halting its natural gas exports to Europe. Given that Ukraine is the world's largest grain exporter, its trade disruptions led to price hikes, increased demand for the dollar, and its appreciation in global banks.

The repercussions and interventions, along with armed conflicts fueled by arming one of the factions with support from the NATO alliance, have multiplied. An energy crisis emerged due to the loss of natural gas supplies, resulting in factory shutdowns. The situation deteriorated further when North Korea announced a potential nuclear intervention in response to some countries exerting pressure on Russia using their rights. China's involvement in the conflict escalated tensions even more. The redefinition of Russian borders and the annexation of Ukrainian territories led to clashes with Poland and increased tensions in Malaysia and Japan. These developments have raised global concerns about the imminent outbreak of a third world war.

The dollar crisis in some countries led to price hikes and trade recession, resulting in inflation of goods and food prices, as well as shortages of medications and raw materials for industries. North Korea and Russia deployed nuclear weapons and threatened to bomb America and Britain to protect their national security, causing global panic, especially within the European

Union. As a prelude to the fear of nuclear wars breaking out, people rushed to pharmacies to stock up on medications, Lugol's solution, which prevents the absorption of iodine through the skin, gained popularity in East Asia following the Chernobyl explosion and other nuclear reactors incidents in Japan or Ukraine in the last century.

Israeli expansion in the Gaza Strip and the displacement of its residents stirred global sympathy for the Palestinian plight in both Arab and foreign countries. South Africa condemned Israel's actions before the International Court of Justice. Following these escalations were policies such as economic blockades imposed on some countries like Egypt, Jordan, and Lebanon. Other escalations came from Iraq and Yemen, with attacks on British naval ships and the closure of the Bab el-Mandeb strait to Israel and the United States as an expression of rejection of the conflict in Palestine.

As a result of the escalations, panic and anxiety spread among families in the Arab region, fearing the outbreak of a world war. There were discussions about fears of an impending doomsday, leading to familial depression and general anxiety. The anxiety worsened into post-traumatic stress disorder due to rising prices, stagnant wages, and shortages of medicines in the market. Individuals resorted to hoarding goods and grains due to the suffering caused by the pandemic in the previous period, because of media coverage of the disasters, crises, and displacement of people seeking refuge in other countries, which extended to school children. The current study aims to observe the situation in Jordanian society by studying the relationship between war anxiety and perceived behavioral aspects of emotional empathy among teenagers in Jordanian society.

The study aims to determine the relationship between emotional empathy towards the residents of Gaza and war anxiety. The war anxiety may be caused by the fear of the war spreading

by proxy to the neighboring populations, especially since Jordan is a border country to Palestine, and the number of Palestinian refugees in the Hashemite Kingdom of Jordan is large. On the other hand, the study is considered a unique contribution to monitoring the relationship between the behavioral manifestations of emotional empathy, combining multiple psychological perspectives on empathy, and providing a new scale that is tailored to the Jordanian environment as an Arab society. The key points here are: The study examines the link between emotional empathy towards Gaza and war anxiety in Jordan, potentially due to the proximity and refugee situation, The study takes a multifaceted psychological approach to understanding emotional empathy, and The study develops a new empathy scale specific to the Jordanian/Arab cultural context.

War Anxiety

War anxiety has two dimensions: one affecting the populations suffering from the ravages of wars, and the other involving the transmission of anxiety about war spreading to the global environment. In the first dimension, individuals enduring war, oppression, displacement, and detention in conflict zones experience psychological disorders and post-traumatic stress disorder (PTSD), the effects of which can persist for years after the end of the war (Kashdan et al., 2009). Additionally, they may suffer from acute depression, social phobia, and separation anxiety (Karam et al., 2014). On the other hand, in the second dimension of war anxiety, feelings of anxiety and panic spread to neighboring countries, especially affecting children who receive more anxiety from their parents than their peers. They also exhibit greater psychological distress during tasks (Forrest et al., 2018).

The study proposes some definitions that focus on the entry of war anxiety among populations who have suffered from the ravages of war. Its studies depend on the definition by

Skwirczyńska et al. (2022) as a psychological disorder affecting individuals torn apart by wars, armed conflicts, and frontline soldiers. The study contributes a new perspective to the series of research on war anxiety and armed conflicts associated with the Russian-Ukrainian War, the conflict between Gaza and Israel, and the American and British conflicts in Yemen. However, the study diverges in another direction as it focuses on the war anxiety among populations neighboring conflict zones.

Psychological Disorders and War Anxiety

In the initial stage, psychological disorders are linked to the individual's age progression. Elderly individuals suffer from pre-war disorders due to financial stress, fear of destruction, and shock resulting from differences in expectations and the loss of loved ones. The second stage includes disorders related to war events such as exposure to detention, torture, or seeking refuge in refugee camps (Karam et al., 2014). Psychological literature (Karam et al., 2014; Kuterovac-Jagodic, 2003) has coined synonymous terms for war anxiety, such as pre-war disorder, which children under the age of 15 experience due to exposure to violent scenes and home destruction in media coverage of war events in Gaza, according to Thabet et al. (2016). Psychological disorders persist into adolescence according to Thabet et al. (2016).

Surzykiewicz et al. (2022) affirmed that war anxiety is linked to perceived parental fears resulting from media coverage of war in different countries, and due to the perceived inflation in the countries' economies. War anxiety leads to emotional imbalance, negative thinking, and loss of life meaning. This long-term feeling (war anxiety) occurs even without evidence affecting the child's anxious country. The scene of war anxiety may evolve into a mix of empathetic feelings, depression, post-traumatic stress disorder, nuclear anxiety, and emotional exhaustion.

In areas geographically distant from the war, constant exposure to tragic media reports has led to excessive emotional arousal and fears of poverty and destruction, as well as concerns that the person's own country might become involved in the conflict. A study (Rozanov et al., 2019; Surzykiewicz et al., 2022) observed nuclear anxiety among Poles, which led to hoarding of gasoline and food. This anxiety resulted in economic crises due to the depletion of Lugol's solution from pharmacies. In countries far from the war zone, studies (Celik et al., 2019; Qouta et al., 2012; Thabet et al., 2016; Yurtal & Artut, 2008) noted a decrease in interest, psychological and social fears related to the future, fear of loss, impaired time perception, self-blame, and disrupted social relationships among children.

Emotional Empathy

Anxiety about war generates a sense of emotional empathy for people who have suffered from devastation and destruction. It leads to deep tension about the future and feelings of sadness and sorrow for the loss of lives and the harm endured by civilians, including the destruction and killing of innocents during the war. Empathy is a fundamental element that plays a role in social interactions within any culture or society. For instance, people in Arab countries refrained from buying foreign products and boycotted products that supported the occupation. This feeling involves cognitive and emotional dimensions. It involves putting oneself in others' positions, imagining how they feel, and experiencing a sense of sorrow, pain, and suffering (Decety & Ickes, 2009).

Empathy is characterized by positive feelings such as warmth, care, compassion, and sensitivity towards others. A study by Saarinen et al. (2020) indicates that levels of empathy

develop as a person ages, starting from adulthood, and that empathy depends on personal judgment, emotional maturity, childhood experiences, and parenting skills.

Empathy consists of two elements: cognitive and emotional. Cognitive empathy refers to the ability to perceive, understand, or imagine the mindset of others, while emotional empathy refers to the ability to respond in a way that aligns with one's own emotional experience and adapt emotionally to others. Empathy involves generating emotional responses that go beyond just feeling empathy; they include reactions appropriate to the context, such as the desire to help and provide emotional support. Emotional empathy involves feelings arising from witnessing others' suffering and expressing empathetic responses that reflect our negative emotions when focusing on our own experiences rather than others' emotions (Roksana & Dominika, 2015). Emotional empathy is evident in effective social communication and achieving social and emotional harmony at different life stages. According to Koole (2010), controlling emotions and managing one's feelings when facing daily painful events is reflected in actions like boycotting products or rejecting certain items due to deep feelings of self-blame and self-criticism for not being able to react to the violence and aggression occurring.

Individuals need to experience cognitive empathy, which involves showing emotional responses that align with and adapt to the balance between cognitive beliefs and personal emotional experiences. Blair (2005) suggests that cognitive empathy often surpasses its emotional counterpart. High levels of cognitive empathy in both genders are associated with emotional and behavioral abilities to handle problems in a balanced manner and exhibit more refined social behavior. Cognitive empathy increases with age (Dadds et al., 2008). According to Hoffman (2000), there are two aspects of emotional empathy: 1) Emotional empathy enhances emotional

sensitivity to others' feelings by understanding their suffering and showing adaptive responses that balance emotions and cognitive beliefs related to cognitive empathy, and 2) Emotional empathy is linked to the need to take actions to mitigate intense emotions, such as drawing or wearing clothes with specific symbols.

Emotional empathy comprises three components (Hasso, 2023): 1) The cognitive component involves the cognitive beliefs that one perceives and thinks about (i.e., the mental state of others), 2) The dynamic component relates to the social connections and interactions that adapt to neurobiological processes, and 3) The emotional component is associated with how one behaves in a way that allows them to coexist with the situation in a relatively safe manner.

Hoffman (2000) identifies several key characteristics of individuals with emotional empathy, including understanding others' feelings and conflicts, assessing psychological needs and motivations, easily expressing their own emotions, and sharing affection and appreciation in healthy social relationships. Researchers conclude that when individuals receive news about the destruction caused by wars, the feelings of sorrow for the suffering associated with tragic events and human losses reflect levels of empathy and compassion towards others. Moreover, war-related anxiety intersects with emotional empathy by enhancing the desire to make a positive impact and the willingness to engage in efforts that promote peace and provide available assistance.

Studies of War-Related Variables

Rosner et al. (2003) conducted a study on samples from Bosnia and Herzegovina three years before the end of the war, involving 311 individuals who survived the siege of Sarajevo. According to the Diagnostic and Statistical Manual of Mental Disorders, Fourth Edition (DSM-

IV), it was found that 18.6% of residents, 32.7% of those receiving medical treatment, and 38.6% of those receiving psychological treatment were diagnosed with post-traumatic stress disorder (PTSD). Qouta et al. (2003) evaluated the prevalence and determinants of PTSD in the Gaza Strip on a sample of 121 children aged 6 to 16 years, with a nearly equal gender distribution, whose homes were in the bombing area. The results showed that slightly more than half of the children suffered from relatively high levels of PTSD, about one-third experienced moderate levels, and the remaining tenth of the sample exhibited mild to severe levels of PTSD. Pagano and Huo (2007) conducted an online survey study with 393 university students in the United States to assess the relationship between moral emotions and support for political actions to help Iraqi citizens after the Second Gulf War (2003/2004). The study focused on the role of emotions, empathy, and positive social tendencies in the post-war context in Iraq.

Punamäki et al. (2011) analyzed the prevalence of psychological resilience in facing military violence and the role of the child and family in enhancing resilience levels in a sample of 640 Palestinian children and adolescents, along with their parents and teachers, all residing in the Gaza Strip. Medical examinations were conducted to assess the physical, cognitive, and emotional health of the children and adolescents. The study found similar proportions of children who were able to endure high levels of trauma and were affected by psychological trauma (high levels of shocks and disorders). The resilient group was characterized by good parental mental health, supportive parenting practices, good academic performance, superior cognitive performance, and good physical health.

Spasenoska et al. (2017) identified the level of empathy among a sample of 193 first and second-year medical students at a Malaysian university. The results indicated a high level of

empathy among medical students at the university. Forrest et al. (2018) examined in a review study the levels of mental and social care for families of Vietnam War veterans from multiple generational stages who served in the army between 1962 and 1975. The results showed that children of Vietnam War participants were more prone to depression, while children of those who did not participate in the war were more prone to suicide.

Petrulytė and Guogienė (2018) examined the level of empathy among 600 teenagers in a Lithuanian city. The results showed that levels of empathy were higher among teenagers aged 12-15 years compared to those aged 16-18 years. Additionally, females surpassed males in empathy levels. Riad et al. (2022) conducted a survey study on 591 university students in the Czech Republic to assess anxiety and depression experiences in 2022 due to the Russian-Ukrainian war. The study found that 34% to 40.7% of students experienced moderate levels of anxiety and depression. The study highlighted the mental health burden, with a positive relationship found between anxiety and depression. Higher levels of anxiety and depression were associated with following news through television and social media platforms. In an assessment by Skwirczyńska et al. (2022) on 510 Polish students, the study found elevated levels among females and increased anxiety among first-year students. The results confirmed a strong relationship between gender, anxiety, and fear of armed conflicts affecting Poland. In a separate study conducted by Xu et al. (2023) on Ukrainian residents in March 2022 during the Russian-Ukrainian war, approximately 52.7% reported experiencing psychological distress, 54.1% experienced moderate anxiety, and 46.8% exhibited symptoms of depression. Coping strategies identified included effective support utilization, behavioral disengagement, self-distraction, and planning. Lee and colleagues (Li et al., 2023) discussed the significant role of moral emotions such as pride, guilt, and shame in the social

and emotional development of 182 preschool children aged 2 to 6 years. The results indicated an adaptive role for pride and guilt and a maladaptive role for shame in the social and emotional growth of preschool children.

What distinguishes the current study from others is that it is the first Arab study, to the researchers' knowledge, aimed at examining the structure of the war anxiety scale and its relationship with emotional empathy from the perspective of teenagers in Jordanian society.

Problem Identification

The study attempts to present a different set of measures to avoid response bias or distractions from the aspects being measured emotionally. It provides a context in the items that relate to some behavioral manifestations of empathy, away from political issues or personal opinions, to avoid the social desirability effect that has been demonstrated in previous studies (Alenezi et al., 2024a, b; Moussa & Alenezi, 2022, Alenezi et al., 2024; Moussa, 2020a, b, 2021; Moussa & Abdelrehim, 2024).

Additionally, the emotional aspects related to the Palestinian people are inherent between the Jordanian and Palestinian populations, especially since they are citizens within the Jordan Kingdom. There have been global waves of panic triggered by war fears, war-related anxiety, and nuclear apprehensions, with some nations issuing threats of their potential use. These anxieties are intensified by distressing media coverage of events unfolding in conflict zones such as Russia, Ukraine, and Gaza, resulting in the displacement of residents to refugee camps or other regions outside their homeland. Societal behavioral shifts have ensued, including price hikes and stockpiling of essential items like food and medicine, causing shortages of certain medications,

notably in Europe where products like Lugol's solution and antidepressants have become scarce in pharmacies. The global surge in the value of the dollar and the thriving gold market have prompted individuals to turn to gold as a hedge against the volatile currency in neighboring countries affected by these conflicts. Notably, the anxiety surrounding future uncertainties and wars has transcended from adults to children. Children have demonstrated their empathy towards the Palestinian crisis through symbolic gestures like donning keffiyehs or Palestinian flags and boycotting foreign goods, signifying emotional involvement and empathy. However, existing studies have primarily focused on crises such as the Ukrainian-Russian conflict and the Palestinian crisis, particularly preceding October 7, 2023. This study addresses the concurrent occurrence of both conflicts, investigating the influence of war-induced anxiety on children's emotional empathy. Specifically, the study aims to address the following inquiries: *Is there a correlation between war anxiety and emotional empathy among a sample of adolescents in Jordanian society?*

Method and Procedures

Design

The study employed a descriptive correlational methodology to examine the relationship between war anxiety and emotional empathy from the perspective of adolescents in Jordanian society.

Participants

The study sample was randomly selected from schools under the Directorate of Education for the Northeastern Badia region, including students from grades three to nine. The sample consisted of 200 students, with 74 (37%) males and 126 (63%) females. In terms of nationality,

180 (90%) were Jordanian, and 20 (10%) were non-Jordanian. The ages of the sample ranged from 9 to 15 years, with a mean age of 11.7 years and a standard deviation of 2.23 years.

Instruments

- a) **War Anxiety Scale:** The researchers based the War Anxiety Scale on the concept of general anxiety as defined in the Diagnostic and Statistical Manual of Mental Disorders, Fourth Edition (DSM-IV), modifying the General Anxiety Disorder-7 (GAD-7) scale to include seven items that identify potential cases of general anxiety. The items were based on the DSM-IV criteria and included aspects such as 1) Nervousness, 2) Inability to stop worrying, 3) Excessive worry, 4) Restlessness, 5) Difficulty relaxing, 6) Irritability, and 7) Fear of terrible events. These seven items reflect the most common symptoms experienced over the past week. Responses were rated on a four-point scale: Generally, Several Days, more than Half the Day, daily. The researchers modified the Likert scale to a five-point scale: Always, Often, Sometimes, Rarely, Never, with "Never" given a score of 1, acknowledging that anxiety as an emotional response is rarely absent at the measured level. The modified items were as follows:

To what extent do you experience the following symptoms:

1. I feel upset whenever I hear about wars and destruction in a country.
2. I cannot stop or control the panic of losing due to the outbreak of a world war.
3. I worry a lot about the possibility of a global famine due to rising prices of goods and oil.

-
4. I have trouble relaxing and sleeping.
 5. Severe anxiety makes me tense and unable to think calmly.
 6. I get very angry when I hear people talking about the destruction in Ukraine or Gaza.
 7. I feel scared as if something terrible might happen to our country because of the destruction and wars.

The Cronbach's alpha reliability coefficient was 0.89, confirming the first-order general factor structure of the general anxiety scale as supported by Zhong et al. (2015).

Validity and reliability: The study used confirmatory factor analysis (CFA) with the Maximum Likelihood (ML) method. The fit indices are shown in Table 1. The fit indices indicated that the model was a good fit for the Jordanian sample data.

Table 1

Goodness-of-fit indicators for the War Anxiety Scale among a sample of adolescents in the Jordanian environment.

SRMR	RMSEA	TLI	CFI	χ^2	df	P
.040	.056	.937	.967	17.8	11	.087

The war anxiety structure has a good fit according to sample data. The item loadings on the first-order general factor model are presented in Table 2.

Table 2

Factor loadings of the general factor model for the War Anxiety Scale among a sample of adolescents in the Jordanian environment.

Indicator	Loadings	Std error	Z	p-value
1	.387	.105	3.67	.000
2	.650	.091	7.15	.000
3	.530	.081	5.92	.000
4	.852	.090	9.93	.000
5	.477	.089	5.29	.000
6	.531	.085	6.26	.000
7	.354	.095	3.72	.000

The results showed statistically significant loadings at the 0.05 significance level, with factor loadings ranging from 0.354 to 0.852. The resulting structure confirms the complex nature of the war anxiety model, encompassing symptoms of depression, social phobia, and separation anxiety disorder. This mix of emotions causing psychological distress is supported by visual media and reported in studies by Forrest et al. (2018), Kashdan et al. (2009), and Karam et al. (2014). This study is a cross-sectional or action research study examining a societal phenomenon. Anxiety is often transmitted to children through parents' concerns or the perception of the family's economic status, peer complaints about living conditions, or recurring issues such as the shortage of medicines due to public fear of epidemics or economic downturns, aligning with studies by Rozanov et al. (2019) and Surzykiewicz et al. (2022).

In summary, manifestations of war anxiety encompass psychological shifts, like experiencing shame stemming from intense empathy towards the Palestinian plight and the Arab solidarity in supporting Palestinian brethren or feeling guilt induced by the international

community's limitations on aid to Gaza. Certain nations like Egypt, Jordan, Oman, and Saudi Arabia have initiated humanitarian aid missions as a moral stance. As a result, children across different age groups have exhibited solidarity by adorning Palestinian scarves or flags and abstaining from purchasing products from foreign nations perceived to endorse aggression, opting instead for locally made alternatives. These actions resonate with the discoveries outlined by Li et al. (2023).

The current study also agrees with Riad et al. (2022) that war anxiety levels among children are moderate, with a weighted average of 3.55 and a standard deviation of 0.68. The overall reliability of the scale was 0.69 using Cronbach's alpha and 0.70 using the Omega coefficient.

- b) **Emotional Empathy Scale:** The study developed an Emotional Empathy Scale after reviewing the relevant literature on this phenomenon. The study aimed to create an effective set of statements suitable for children, incorporating behavioral and emotional criteria similar to the study by Caruso and Mayer (1998), tailored to the context of the Palestinian-Israeli conflict of October 7, 2023. To avoid conflating emotional empathy with emotional intelligence, the scale focused on observable behaviors and expressions of empathy towards the Palestinian cause, such as avoiding certain products and wearing specific clothing or keffiyehs.

The scale was designed to be quickly comprehensible by children, including cognitive, emotional, and behavioral aspects, following the study by Carré et al. (2013). It consisted of 12 declarative statements describing observed behaviors in school or the Jordanian environment. Responses were rated on a five-point scale from Always = 5 to Never = 1.

Validity and reliability: The study utilized exploratory factor analysis, as it did not adopt a specific established scale, nor did it adopt a particular theory that specifies the number of factors that explain the phenomenon. The study designed items that are appropriate for the nature of Jordanian society and compatible with the nature of emotional empathy.

Exploratory factor analysis (EFA) was employed using Principal Axis Factoring (PAF) and oblique rotation with Oblimin, without pre-specifying the number of factors to extract. A loading cut-off point of 0.3 was set for acceptance. The results identified three factors with eigenvalues of 2.36, 1.89, and 1.18, explaining 19.64%, 15.75%, and 9.82% of the variance respectively, totaling 45.2% explained variance. The Kaiser-Meyer-Olkin (KMO) measure of sampling adequacy was 0.83.

The item loadings on the factors are shown in Table 3:

Table 3

The item loadings of emotional empathy items on factors.

Indicator	Items	Factors		
		One	Two	Three
1	I feel emotionally affected when I see Palestinian citizens suffering.			.504
2	I strive to understand the perspectives and feelings of others			.732
3	Seeing the scenes of destruction in Gaza fills me with sadness.			.383
4	I feel deep empathy for the challenges of living in difficult conditions in Gaza.	.630		
5	I make efforts to provide emotional support for the Palestinian cause	.816		
6	I am sensitive to the feelings and emotions during the siege and destruction of Gaza	.654		
7	I show my sympathy with Gaza by boycotting foreign products	.532		
8	I feel the urge to help and alleviate the suffering of Gaza through prayers		.423	
9	I wear a Palestinian scarf to express support for the people of Gaza		.550	
10	I own a T-shirt with the Gaza flag as a sign of solidarity with Gaza		.635	
11	I use art to reinforce the Palestinian cause through drawing		.771	
12	I participate in the school radio by presenting Palestinian paragraphs, songs, and chants		.435	

The results revealed acceptable loadings exceeding 0.3. The model derived from EFA was simple, with each item loading on one and only one factor. The item loadings on the three dimensions were as follows:

- a) *Emotional Empathy*: This dimension covers the emotional responses triggered by witnessing others' suffering in the context of destruction and includes items 1, 2, and 3. Loadings ranged from 0.383 to 0.732.
- b) *Emotional Sensitivity*: This dimension includes emotional sensitivity to feelings and emotions arising from extremism and wars, such as making appeals, boycotting products, and coping with the phenomenon. It included items 4, 5, 6, and 7. Loadings ranged from 0.532 to 0.816.
- c) *Emotional Support*: This dimension covers emotional participation and endorsement through activities like participating in school broadcasts, wearing clothes with pro-Palestinian slogans, or denouncing violence and extremism. It included items 8, 9, 10, 11, and 12. Loadings ranged from 0.423 to 0.771.

The reliability of the Emotional Empathy factor was 0.69 using Cronbach's alpha and 0.70 using the Omega coefficient. The reliability for the Emotional Sensitivity factor was 0.79 using both Cronbach's alpha and Omega. The Emotional Support factor had a reliability of 0.74 using both Cronbach's alpha and Omega. The Emotional Empathy factor was the least reliable, indicating that the sample was relatively homogeneous in terms of their emotional response to the distress caused by the war, including feelings of Arab pride, guilt, and shame regarding the situation of the Palestinian people. The highest reliability was found in the Emotional Sensitivity factor, reflecting individual differences in emotional sensitivity, which serves as an indicator of emotional empathy,

as noted by Hoffman (2000). The overall scale reliability was 0.81 using Cronbach's alpha and 0.82 using the Omega coefficient, with an average emotional empathy score of 3.61, indicating a moderate level of empathy with a standard deviation of 0.64.

Children's emotional empathy encompassed three motivating factors: pride, guilt, and shame, as highlighted by Li et al. (2023). The current study's nature differed from the studies conducted by Xu et al. (2023), which examined the impact of war and crises on the people under attack, differing in the measurement of anxiety. The current study aligns with Skwirczyńska et al. (2022) in assessing war-related anxiety among neighboring populations, though their study used the Generalized Anxiety Disorder scale (GAD-7) to measure anxiety in the Polish population affected by the Ukrainian-Russian war. In contrast, the current study used the GAD-7 scale but focused on a different sample.

Procedures: The researchers followed these procedures to achieve the study's objectives:

1. Preparation of Study Instruments: the initial datasheet XLSX format informed into OMV format to be analyzed in Jamovi 2.3.26 software.
2. Defining the Study Population: Based on statistics from the Directorate of Education for the Northeastern Badia District, the study population was defined, and a representative sample was selected.
3. Distribution of Instruments: The two instruments (War anxiety and emotional empathy) were distributed in paper form to the targeted sample.
4. Handling Missing Data: After ensuring there were no data entry errors, missing data were addressed using a mathematical imputation method (Full information maximum likelihood method). The same method was applied consistently across the study measures.

5. Confirmatory factor analysis was used to verify the construct of war anxiety. The goodness of fit accepted as SRMR which implied to zero, $.05 \leq RMSEA \leq .08$, The ideal values which implied to zero, and the saturated value of this index can equal to zero. TLI, and $CFI \geq .90$. Chi-Square must be insignificant.
6. Exploratory factor analysis is performed to test the emotional empathy structure. The principal axis factoring and oblimin rotation are used with 0.3 cut-of-point of loadings.
7. The Pearson correlation coefficient has been conducted for age and war anxiety and emotional anxiety subscales.

Ethical Considerations: The researchers translated and adapted the General Anxiety Scale to fit the context of war anxiety, in line with the DSM-IV diagnostic criteria. Approval for the study was obtained from the Directorate of Education for the Northeastern Badia region under the reference number BShSh7/382 dated January 25, 2024.

Results

Relationships Between War Anxiety and Emotional Empathy Among Adolescents in the Jordanian Environment:

Pearson correlation matrices were calculated to estimate the relationship between the dimensions of emotional empathy and war anxiety among a sample of adolescents in the Jordanian environment. The results are presented in Table 4.

Table 4*Pearson correlation matrix between the study variables*

	Factors	1	2	3	4
1	Emotional Empathy	--			
2	Emotional Sensitivity	.433***	--		
3	Emotional Support	.341***	.407***	--	
4	War Anxiety	.372***	.481***	.641***	--
5	Age	.126	.091	.140*	.085

Notes. * $P \leq .050$, ** $P \leq .010$, *** $P \leq .001$

The researchers suggest a strong relationship between war anxiety and emotional empathy in adolescents. During adolescence, individuals' social and emotional understanding develops, enabling them to experience a broader range of emotions more deeply. War anxiety can significantly impact adolescents, causing them to feel worried and stressed about the violence and destruction occurring in affected areas. They may also have concerns about their safety and the safety of their family and friends, which can affect their mental and emotional health.

However, the fear of war can also heighten emotional empathy among teenagers. Witnessing or hearing about the suffering caused by war may evoke feelings of sadness and compassion within them, prompting a desire to assist those impacted. This fosters a sense of emotional empathy in adolescents, inspiring them to contemplate humanitarian actions and contribute to easing the distress of others. Furthermore, war anxiety and adolescents' empathy can cultivate greater social and political awareness, sparking their interest in global issues and motivating them to delve into research about conflicts, wars, and their repercussions on individuals and societies. Consequently, war anxiety and emotional empathy can have a beneficial impact on

adolescents, encouraging them to engage in critical thinking, participate in humanitarian endeavors, and become politically active to strive for a more peaceful and equitable world.

Previous studies have shown that the anxiety levels of populations neighboring war zones tend to be moderate but can be extremely positive, while post-war populations exposed to violence and wars tend to have chronic anxiety levels and higher rates of depression. Political measures often aim to mitigate these feelings, as seen in studies following the Vietnam War, the Iraq War, and conflicts in Gaza (Forrest et al., 2018; Pagano & Huo, 2007; Punamäki et al., 2011).

However, this study takes a distinct approach to understanding emotional empathy. While most research focuses on assessing empathy levels among adults and adolescents, this study delves into emotional empathy among children within Jordanian society. Previous studies have primarily examined cognitive elements and the dynamic aspect related to neurological and emotional facets, as evidenced by the works of Hasso (2023) or (Dadds et al., 2008; Hoffman, 2000). In contrast, this study emphasizes the behavioral manifestations of these elements. The current assessment includes statements that encompass the behavioral aspects of both cognitive and emotional components. Emotional empathy and the corresponding behaviors arise from children's sincere belief in the legitimate rights of the Palestinian people to self-defense. This is demonstrated through their spiritual and emotional support, as well as their avoidance of Western products that support the conflict. Interestingly, this avoidance has led to noticeable price reductions in some Arab markets as a promotional tactic, despite buyers steering clear of these products. This finding contradicts Blair's (2005) study, which suggested that individuals during conflicts may adopt cognitive standards and beliefs without necessarily expressing them emotionally.

The results suggest that the actions taken by children serve as a constructive means to regulate emotions instead of resorting to harmful behaviors that may negatively impact society or contribute to feelings of anxiety and depression. These actions represent a form of emotional empathy aimed at alleviating negative emotions such as shame, self-blame, or self-criticism, corroborating findings from studies conducted by Koole (2010). Moreover, the current study highlights that emotional empathy encompasses three components: cognitive, emotional, and behavioral. The behaviors observed are responses stemming from emotional arousal triggered by conflicts between cognitive beliefs, the emotional distress experienced by families, and children's discontentment with the current circumstances, as evidenced in previous research (Petruilytė & Guogienė, 2018; Roksana & Dominika, 2015; Xu et al., 2023).

Recommendations

1. Based on the findings of the study, the researchers propose the following recommendations:
2. Validate the study tools through further research to ensure the reliability of the scale items' psychometric properties, enabling their confident utilization in future studies.
3. Create a supportive environment for adolescents affected by war anxiety by offering emotional assistance through educational institutions, families, and local communities. This support should include access to psychological counseling and psychosocial support services.
4. Encourage the advancement of research and studies concerning emotions and empathy within the context of wars and conflicts. Academic investigations can contribute to the

development of effective strategies aimed at enhancing empathy and fostering positive outcomes among adolescents.

5. Strengthen school curricula by incorporating arts and philanthropic activities that allow children to channel their emotional energies constructively. This may involve engaging students in creating supportive artworks for the Palestinian people and addressing any unacceptable stereotypical behaviors through educational interventions.

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The authors declare that they have no conflicts of interest regarding the publication of this article.

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Appendix 1.

Emotional empathy scale

1. I feel emotionally affected when I see Palestinian citizens suffering.
2. I strive to understand the perspectives and feelings of others.
3. Seeing the scenes of destruction in Gaza fills me with sadness.
4. I feel deep empathy for the challenges of living in difficult conditions in Gaza.
5. I make efforts to provide emotional support for the Palestinian cause.
6. I am sensitive to the feelings and emotions during the siege and destruction of Gaza.
7. I show my sympathy with Gaza by boycotting foreign products.
8. I feel the urge to help and alleviate the suffering of Gaza through prayers.
9. I wear a Palestinian scarf to express support for the people of Gaza.
10. I own a T-shirt with the Gaza flag as a sign of solidarity with Gaza.
11. I use art to reinforce the Palestinian cause through drawing.
12. I participate in the school radio by presenting Palestinian paragraphs, songs, and chants.