Humanities and Social Sciences Communications

Article in Press

https://doi.org/10.1057/s41599-026-07874-w

Unveiling of shifts in life meanings for Palestinians in the context of the Gaza war 2023: a quantitative study

Received: 25 June 2025

Accepted: 29 May 2026

Cite this article as: Jabali, O., Khalili, F., Saeedi, M. Unveiling of shifts in life meanings for Palestinians in the context of the Gaza war 2023: a quantitative study. *Humanit Soc Sci Commun* (2026). https://doi.org/10.1057/s41599-026-07874-w

Oqab Jabali, Fakher Khalili & Munther Saeedi

Unveiling of shifts in life meanings for Palestinians in the context of the Gaza war 2023: A quantitative study

Abstract

The study investigates the impact of the Gaza War on Palestinian university students' sense of meaning in life, highlighting both psychosocial and existential effects of prolonged conflict. Using a mixed-methods approach, the study combined quantitative survey data with qualitative interviews to capture not only patterns in mental and physical health but also **s**tudents' lived experiences and narratives. Quantitative results revealed heightened anxiety, trauma, and exhaustion, alongside disruptions to daily routines, declining academic performance, reduced happiness, and weakened social connections. Qualitative interviews enriched these findings, revealing the emotional burden of continuous exposure to destruction, shifts in values toward family and safety, uncertainty about the future, and reflections on life, justice, and identity. Students coped by strengthening family bonds, engaging in volunteer work, and deepening spiritual practices, while also expressing disillusionment with Western indifference and reinforcing their commitment to Palestinian identity and advocacy. Gender emerged as a key factor influencing both the intensity of challenges and the strategies students employed to find meaning amidst ongoing conflict.

Keywords: coping mechanisms, Gaza War 2023, identity, optimism, meaning of life, resilience, shifts

Introduction

In the face of constant conflict and hardship, the ongoing Gaza War has profoundly changed the meaning of life for Palestinians, impacting both individual goals and group identity (Matar, 2024). Experiences of resistance, loss, and displacement are at the heart of this change and have become essential to the Palestinian story (Gheytasi, 2024). Particularly in a setting where survival is a daily struggle, the ongoing cycle of violence and instability has forced a redefinition of purpose (Esu, 2015; Hlasny et al., 2016).

The development of Palestinian identity as a transnational anti-colonial movement is essential to this change. This identity, which unites people throughout the diaspora in the shared quest for justice and self-determination, is based on a common history of displacement and occupation and cuts across national and political borders (Alayan & Riley, 2023; Bartal, 2022; Halabi, 2023). Using historical accounts, cultural heritage, and a common future vision, this evolution shows both a proactive assertion of agency and solidarity as well as a response to outside forces (Matar, 2024).

A key component of this redefined identity is resilience, which can be used as a strategy for resistance as well as for survival (Kayali, 2024). According to Palestinians, resilience transcends the individual and is embodied in Sumud, or acts of steadfastness, which highlight the value of close family bonds, group support, and cultural preservation (Abualkibash & Rodríguez, 2017; Faraj, 2022; Hamming, 2023; Harazneh et al., 2021; Veronese et al., 2023). Rebuilding homes, continuing education in the face of conflict, and steadfastly supporting the Palestinian cause internationally are all examples of this resilience (Kayali, 2024).

This resilience is further strengthened by communal solidarity, which promotes a feeling of community and support among members despite hardship. This solidarity, which is demonstrated through communal grieving, group efforts, and the maintenance of cultural customs, strengthens identity and offers hope (Alshurafa & Kamla, 2024). These components act as crucial pillars in the face of continuous conflict, helping Palestinians to endure trauma and uncertainty while maintaining their dedication to freedom and self-determination (Badarin, 2021; Lavi & Solomon, 2005; Whiteford & Haddad, 2020).

A complex interaction between aspirations, identity, and resilience characterizes the transformation in Palestinians' meaning of life (Kayali, 2024). This path of resistance and adjustment demonstrates how the hardships of war have altered their reality while strengthening their resolve to protect their political and cultural heritage. Accordingly, the Gaza War is not only a place of loss but also a testing ground for redefining Palestinian identity in a world that still

challenges their existence (Abuelaish & Yousufzai, 2023; Devin & Atallah, 2021; Hammad & Tribe, 2021, 2024; Marei et al., 2018; Mokadi & Yousef, 2024).

In this context, the interplay between resilience and identity significantly influences how Palestinians make sense of their lives and navigate their existence amid ongoing conflict (Ahmead et al., Kayali, 2024; Lucas et al., 2022; 2024; Nazzal et al., 2017). The Gaza War has not only tested their ability to endure but has also reshaped their understanding of what it means to live with purpose and meaning. For many, the process of finding meaning in life involves a delicate balance between holding onto traditions and adapting to new realities, between personal agency and collective solidarity.

This study aims to explore these transformations in the meaning of life for Palestinians, focusing on the intersection of resilience and identity within the unique context of the Gaza War. By examining the lived experiences of individuals and communities, this research seeks to uncover how Palestinians reconstruct their sense of purpose and navigate their realities in the aftermath of war. It also aims to highlight the broader implications of these transformations for understanding the psychosocial impacts of prolonged conflict and for developing culturally sensitive interventions to support mental health and well-being. The authors seek to answer the following questions:

Q1. What is the factorial structure of the meaning of life scale among Palestinian university students following the events of October 7th, 2023?
Q2. What is the meaning of life level among Palestinian university students following the events of October 7th, 2023?
Q3. Do demographic variables affect the meaning of life among Palestinian university students following the events of October 7th, 2023?

Method

In this mixed-methods study, cross-sectional survey data were collected to assess the meaning of life among Palestinian university students following the events of October 7th, 2023. A newly developed survey instrument was administered to a larger sample of students at a local university in Palestine. The survey comprised two main sections: demographic information and items evaluating the meaning of life.

The quantitative data were analyzed using descriptive statistics, exploratory factor analysis (EFA) and confirmatory factor analysis (CFA), and inferential statistics. Descriptive statistics, including means, standard deviations, frequencies and percentages, were used to summarize participants' demographic characteristics, as well as their total scores, sub-scores, and individual item responses for the meaning of life measure. EFA was conducted to identify the factorial structure underlying the meaning of life construct, ensuring the themes derived from the qualitative data were valid and reliable in a quantitative form. Cronbach's alpha was used to assess the reliability of the resulting factors.

Following EFA, CFA was performed to test the proposed factor structure and assess the goodness-of-fit of the measurement model. This step was essential to confirm whether the data aligned with the hypothesized structure and whether the constructs related to the meaning of life were appropriately measured. Inferential statistics, including a one-sample t-test, were conducted to assess the participants' sense of meaning in life. A multivariate analysis of variance (MANOVA) was used to examine the significance of differences in the total meaning of life score and sub-scores means in light of some demographic variables.

The integration of quantitative psychometric analysis with qualitative inquiry aligns with recommendations in trauma and post-conflict research, where complex psychological constructs such as meaning in life require both structural measurement and contextual interpretation (Creswell & Plano Clark, 2018; Tedeschi & Calhoun, 2004). While quantitative methods enable the examination of factorial validity and reliability, qualitative interviews provide depth and contextual sensitivity, capturing lived experiences that may not be fully represented through scale items alone. In war-affected populations, meaning-making processes are often embedded in identity, faith, collective memory, and resilience narratives. Therefore, combining quantitative and qualitative approaches enhances construct validity, allows triangulation of findings, and ensures that the developed scale reflects culturally situated experiences of Palestinian students following October 7, 2023.

To capture the lived experiences and personal meanings behind their responses, a qualitative dimension was added to complement the quantitative survey. A purposive sample of 21 participants was selected for in-depth interviews. All participants were bachelor’s degree students at An-Najah National University (ANNU), representing diverse academic disciplines, including

Medicine, Nursing, Engineering, Computer Science, Media, Law, and Fine Arts. ANNU is a leading public university located in Nablus, the West Bank. Established in 1977 (with roots dating back to 1918), it is one of the largest and most prominent higher education institutions in Palestine, attracting students from across the West Bank, including the Green Line areas, Jerusalem, and other regions.

Efforts were made to ensure diversity in gender and geographic representation. To meet the inclusion criteria, participants had to be at least in their second year of university, reside in student housing in Nablus, be unmarried, and have no work obligations, allowing them to focus fully on their studies. The qualitative data were analyzed using thematic analysis following the six-phase framework of Braun and Clarke (2022), chosen for its flexibility and ability to reveal both explicit and implicit patterns in participants' narratives. Data were collected through a short semi-structured interview consisting of the following core questions:

1. How has the Gaza War affected your sense of meaning and purpose in life?
2. What changes, if any, have you experienced in your mental or emotional well-being?
3. How have your academic life and daily routines been impacted?
4. How has the war influenced your sense of identity, resilience, or future aspirations?
5. What coping strategies have you relied on since the events of October 2023?

The analysis aimed to identify key themes reflecting how students perceive and experience shifts in identity and resilience in the context of the 2023 Gaza War.

The analysis aimed to identify key themes reflecting how students perceive and experience shifts in identity and resilience in the context of the 2023 Gaza War.

Participants

The study was conducted at An-Najah National University, located in Nablus, West Bank. It is the largest university in Palestine and is situated near the center of the West Bank, allowing students from across the region—including the Green Line areas, Jerusalem, and other parts of Palestine—to attend. Founded as the first university in the area, it remains the most popular, with more than 25,000 students enrolled.

Stratified sampling was employed to ensure gender and specializations balance in the survey construction process. The survey involved two distinct samples of undergraduate students from a local Palestinian university. The first sample, used for exploratory factor analysis (EFA), consisted of 221 students (male = 97, female = 124), while the second sample, used for confirmatory factor analysis (CFA), included 459 students (male = 202, female = 257). All participants were bachelor's degree students with a mean age of 20 years (±1.5). Table 1 shows the frequencies and percentages for the demographic variables of the participants due to phase 1 (EFA) and phase 2 (CFA)**.**

Table 1.

Descriptive statistics of the participants in the two phases.

	Phase 1	Phase 2	χ^2	P-value
Gender	*n_1 = 221*	*n_2 = 459*		
Male	97 (44%)	207 (45%)	0.046	.830
Female	124 (56%)	252 (55%)		
Faculty				
Natural sciences	119 (54%)	262 (57%)	0.509	.476
Humanities	102 (46%)	197 (43%)		
Academic year				
Second year	82 (37%)	193 (42%)		
Third year	62 (28%)	129 (28%)	2.084	.353
≥ Fourth year	77 (35%)	137 (30%)		
Monthly income (USD)				
Less than 1000	105 (48%)	239 (52%)		
1000-2000	85 (39%)	165 (36%)	1.362	.506
More than 2000	31 (13%)	55 (12%)		
Region				
Northern West Bank	127 (57%)	252 (55%)		
Central West Bank	26 (12%)	46 (10%)		
Southern West Bank	24 (11%)	46 (10%)	3.937	.415
Jerusalem	19 (9%)	37 (8%)		
1948 territories	25 (11%)	78 (17%)		

Location				
Village	107 (49%)	252 (55%)		
City	87 (39%)	165 (36%)	3.042	.219
Camp	27 (12%)	42 (9%)		
Living in a dormitory				
Yes	71 (32%)	161 (35%)	0.454	.501
No	150 (68%)	298 (65%)		

The Chi-square test was used to examine differences in proportions between Phase 1 and Phase 2 for various demographic variables. The results showed no significant differences across all variables analyzed. For gender, the proportions of males and females were highly similar between the two phases, with 44% male and 56% female in Phase 1, compared to 45% male and 55% female in Phase 2 ($\chi^2 = 0.046$, $p = .83$). Similarly, the distribution of students by faculty (natural sciences vs. humanities) showed no significant difference, with 54% in natural sciences during Phase 1 and 57% in Phase 2 ($\chi^2 = 0.509$, $p = .48$).

The academic year distribution (second, third, and fourth year or higher) remained consistent, with 37%, 28%, and 35% in Phase 1 compared to 42%, 28%, and 30% in Phase 2 ($\chi^2 = 2.084$, $p = .353$). Likewise, monthly income categories (less than $1000, $1000–$2000, and more than $2000) showed no significant differences between the two phases ($\chi^2 = 1.362$, $p = .506$).

Regarding the regions where students lived, slight differences were observed, but they were not statistically significant ($\chi^2 = 3.937$, $p = .415$). The living location (village, city, or camp) also showed no significant variation, with 49%, 39%, and 12% in Phase 1 compared to 55%, 36%, and 9% in Phase 2 ($\chi^2 = 3.042$, $p = .219$). Finally, the percentage of students living in dormitories remained stable, with 32% in Phase 1 and 35% in Phase 2 ($\chi^2 = 0.454$, $p = .501$).

In conclusion, the Chi-square test results indicate no significant differences in the proportions of the analyzed demographic variables between Phase 1 and Phase 2. This consistency supports the conclusion that the distributions remained stable across the two phases of the study.

Instrument

The conceptualization of meaning in life in the present study is grounded in existential and meaning-centered theoretical frameworks, which conceptualize meaning as a multidimensional construct encompassing personal, relational, and transcendent domains (Frankl, 1963; Schnell,

2020; George & Park, 2017). Contemporary models of meaning emphasize that individuals derive purpose not only from internal self-actualization and well-being but also from social relationships, collective identity, and spiritual or religious commitments, particularly in contexts of adversity and trauma (George & Park, 2017; Schnell, 2020). These theoretical perspectives support the assumption that meaning in life is structured across identifiable yet interrelated domains, justifying the use of exploratory and confirmatory factor analyses to empirically examine its factorial structure. In post-conflict settings, meaning-making is often shaped by identity, resilience, and collective narratives, further reinforcing the need for a culturally grounded and multidimensional assessment framework.

The Post-October 7th Meaning of Life Scale (POMLS) is a 5-point Likert scale questionnaire (ranging from 1 = strongly disagree to 5 = strongly agree) designed to assess the level of meaning in life among Palestinian university students following the events of October 7, 2023. The development of this scale was informed by a thorough review of the literature (Mahamid et al., 2023; Schnell, 2020;), qualitative research findings, and existing meaning-of-life scales (George & Park, 2017; Negri et al., 2020; Thabet et al., 2008).

Based on the literature review and existing scales, the concept of meaning in life was categorized into four primary components, each with specific subcomponents:

A. Personal Meaning Component: This dimension focuses on an individual's relationship with themselves, their goals, and overall well-being. It encompasses both internal and external factors that contribute to fulfillment, happiness, and self-actualization (Schnell, 2020). Subcomponents include:

1. **Self-Wellbeing:** This involves maintaining physical and mental health, meeting material and psychological needs, experiencing pleasure, seeking happiness, enjoying life, accepting oneself, and appreciating life's value (Negri et al., 2020).
2. **Self-Actualization:** This pertains to achieving goals, taking responsibility, pursuing personal growth, realizing potential, fostering creativity, and actively engaging in society (Diab, 2024; George & Park, 2017; Negri et al., 2020; Schnell, 2020).

B. Relational Meaning Component: This dimension highlights the importance of personal relationships, including maintaining positive relationships with family and friends, gaining respect and appreciation, developing romantic relationships, and serving others (Schnell, 2020;).

C. Social/Global Meaning Component: This component relates to societal and global values, emphasizing justice, ethics, truth, societal contribution, cultural preservation, connection with nature, and ensuring the continuity and progress of humanity.

D. Religious or Spiritual Meaning Component: This dimension focuses on self-transcendence, including faith in God and a connection to spirituality (George & Park, 2017; Mahamid et al., 2023;).

The components were adapted to reflect the specific experiences of Palestinians after October 7, 2023. As a result, 76 questionnaire items were developed based on these components.

These items reflect nine initial components:

(a) F1: Psychological and Health Impacts: This component encompasses the emotional, cognitive, and physical effects of life experiences, particularly those that are traumatic or life-altering, on an individual's mental and physical health. It includes how trauma influences overall well-being. (b) F2: Value of Life: This refers to the perceived worth of one's existence, including an individual's sense of purpose, contributions to others, and overall satisfaction with life. The value of life is often deeply connected to existential questions and the search for meaning. (c) F3: Religious and Spiritual Practices: This dimension highlights the role of religious beliefs and spiritual practices in shaping an individual's understanding of life's meaning. It often involves faith, transcendence, and a connection to something greater than oneself. (d) F4: Pride in identity: it refers to a strong sense of self-respect and appreciation for one's personal, cultural, national, or social identity. It involves feeling a deep connection to and pride in the qualities, heritage, or characteristics that define who one is, whether it is related to nationality, ethnicity, religion, or other aspects of individual or collective identity. This sense of pride often contributes to self-esteem, belonging, and a desire to protect or celebrate one's identity in the face of external challenges or pressures.

(e) F5: Changes in Interests and Priorities: This reflects shifts in what individuals consider important or meaningful, often due to life-changing events, age, or evolving circumstances. These changes may involve redefined values, desires, and perceptions of success or fulfillment. (f) F6: Family and Social Relationships: This component addresses the significance of close interpersonal relationships, including those with family, friends, and community, in providing support, meaning, and emotional fulfillment. Social connections foster a sense of belonging and contribute to an individual's understanding of life's purpose.

(g) F7: Future Thinking: Future thinking encompasses the ability to anticipate and plan for the future, as well as the hope and optimism individuals have about what lies ahead. It often relates to setting goals, pursuing aspirations, and finding direction in life. (h) F8: Community and National Responsibility: This dimension reflects a sense of duty, involvement, and contribution to society or one's nation. It pertains to collective identities and responsibilities, influencing how individuals perceive their role within society and their connection to broader societal goals. (i) F9: Adaptation and Coping with Challenges: This refers to the capacity to adjust and manage adversity, change, and stress, both emotionally and cognitively. Effective coping strategies and resilience play a critical role in maintaining a sense of meaning and purpose during difficult times.

The initial pool of 76 items was reduced to 49 items after validating the instrument (see Instrument validity and reliability section).

Data analyses

To validate the POMLS, an EFA was conducted using principal component analysis with promax rotation in SPSS (version 27). The Kaiser-Meyer-Olkin (KMO) Measure of Sampling Adequacy and the Bartlett's test of sphericity were also performed. To specify the estimation method for the Confirmatory Factor Analysis CFA, multivariate normality and outliers were examined. Univariate normality was assessed as part of the multivariate normality check (Kline, 2023). Skewness and kurtosis were used to assess univariate normality (Kline, 2023). To determine whether the variable of interest exhibited significant skewness or kurtosis, Kline (2023) recommended dividing the skewness or kurtosis value by its corresponding standard error. This ratio is interpreted as a z-test of skewness or kurtosis. Ratios greater than 1.96 indicate a p-value less than .05, and ratios greater than 2.58 correspond to a p-value less than .01, suggesting significant skewness or kurtosis.

Outliers, which are extreme or unusual cases that may bias results, were also addressed. Outliers can be univariate or multivariate. Univariate outliers are characterized by extreme scores on a single variable, detectable through z-scores. Cases with z-scores exceeding 3.0 in absolute value are considered unusual and may be outliers (Kline, 2023). Multivariate outliers were identified using Mahalanobis distance, with a p-value of less than .001 ($p < .001$) considered statistically significant for this test (Kline, 2023). AMOS 22 was used to detect multivariate outliers in the data. For further validation of the measurement scale, Structural Equation Modeling (SEM) using CFA was conducted in AMOS 22, utilizing the maximum likelihood estimation method (ML).

Results

Instrument validity and reliability

For the EFA, the KMO Measure of Sampling Adequacy was .90, indicating excellent suitability for factor analysis. Additionally, Bartlett's Test of Sphericity ($\chi^2_{1176} = 7369.59$, $p < .001$) confirmed the adequacy of the sample for performing EFA. The analysis revealed a ten-factor solution (see Table 2). Factors with eigenvalues below 1 and items with factor loadings less than .40 were excluded. Items with cross-loadings of .30 or higher on multiple factors were also eliminated. The final ten factors, comprising 49 items out of the original 76, explained 68.78% of the total variance, demonstrating good construct validity for the scale. Specifically, the first factor accounted for 29.59% of the variance, the second for 19.90%, the third for 4.63%, the fourth for 4.21%, the fifth for 3.44%, the sixth for 3.11%, the seventh for 2.87%, the eighth for 2.52%, the ninth for 2.31%, and the tenth for 2.20%. Communalities ranged from .47 to .87.

The factors and their corresponding reliability measures (Cronbach's alpha) were as follows:

Factor 1: Islamic-National Identity Pride (INIP), consisting of seven items (α = .90).

Factor 2: Future Thinking (FT), consisting of five items (α = .90).

Factor 3: Adaptation and Coping with Challenges (ACC), consisting of five items (α = .89).

Factor 4: National-International Responsibility (NIR), consisting of seven items (α = .87).

Factor 5: Psychological and Health Impacts (PHI), consisting of six items (α = .84).

Factor 6: Changes in Interests and Priorities (CIP), consisting of five items (α = .80).

Factor 7: Dysfunction (DSF), consisting of three items (α = .82).

Factor 8: Physical and Psychological Strain (PPS), consisting of four items (α = .76).

Factor 9: Value of Life (VL), consisting of four items (α = .76).

Factor 10: Resilience and Optimism (RO), consisting of three items (α = .79).

For the overall scale, which included all 49 items, Cronbach's alpha was .94, indicating high internal consistency.

Table 2.

Factor loadings of each item of the POMLS *(n_1* = 221)

Items	Component									
	1	2	3	4	5	6	7	8	9	10
38	.986									
37	.900									
36	.861									

Items	Component									
	1	2	3	4	5	6	7	8	9	10
34	.800									
33	.681									
32	.501									
14	.426									
54		.851								
52		.846								
51		.816								
50		.802								
53		.692								
72			.853							
75			.839							
74			.805							
73			.803							
59			.503							
65				.862						
64				.807						
61				.671						
66				.588						
63				.565						
68				.533						
69				.501						
2					.849					
3					.827					
5					.735					
1					.728					
6					.590					
4					.561					
41						.858				
40						.824				
39						.585				
42						.566				
30						.496				
10							.929			
9							.774			
8							.659			
12								.841		
7								.672		
13								.531		

Items	Component									
	1	2	3	4	5	6	7	8	9	10
11								.508		
17									.787	
18									.773	
15									.497	
19									.425	
56										.671
57										.637
71										.526
Component	1	2	3	4	5	6	7	8	9	10
Eigenvalue	14.5	6.8	2.3	2.0	1.7	1.5	1.4	1.2	1.1	1.1
Percent variance	29.6	19.9	4.6	4.2	3.4	3.1	2.9	2.5	2.3	2.2

Given the numerous factors identified in the POMLS, the researchers conducted a second-order exploratory factor analysis to reduce them into a smaller number of latent factors. The KMO Measure of Sampling Adequacy was 0.81, indicating the data's suitability for factor analysis. Furthermore, Bartlett's Test of Sphericity ($\chi^2(45) = 663.56$, $p < .001$) confirmed that the sample was appropriate for performing the analysis. The results revealed a two-factor solution (see Table 3), which accounted for 54.45% of the total variance, demonstrating strong construct validity for the scale. Specifically, the first factor explained 35.68% of the variance, while the second accounted for 18.77%. Communalities for the factors ranged from 0.36 to 0.65.

The factors and their corresponding reliability measures (Cronbach's alpha) were as follows:

Factor 1: Positive Meaning of Life [PML], consisting of five factors (α = .86).

Factor 2: Negative Meaning of Life [NML], consisting of five factors (α = .88).

Table 3.

The Second-order EFA of the POMLS *(n_1* = 221)

	Component	
Factors	PML	NML
INIP	.823	
ACC	.800	
NIR	.722	
CIP	.701	

	Component	
Factors	PML	NML
RO	.613	
VL		.773
FT		.745
DSF		.731
PHI		.567
PSS		.548
Component	PML	NML
Eigenvalue	3.57	1.88
Percent variance	35.68%	18.77%

In Phase 2, normality and outliers were assessed. The results indicated that all skewness and kurtosis values were below 1.96, providing strong evidence of univariate and multivariate normality. Based on the cut-off value of three, no univariate outliers were detected. However, the Mahalanobis distance test identified 11 multivariate outliers in the sample (n_2 = 459, p < .001; Kline, 2023). These outliers represented less than 0.03% of the sample (11/459), which is considered negligible. Consequently, the researchers decided to retain all cases, including outliers, to ensure realistic results. In conclusion, none of the factors in the proposed scale violated univariate or multivariate normality assumptions. Therefore, the maximum likelihood estimation (ML) method was deemed appropriate (Kline, 2023) as the data satisfied the assumptions of structural equation modeling (SEM). Accordingly, the ML method was applied to estimate the parameters of the study variables.

CFA was conducted to validate the POMLS structure derived from the exploratory factor analysis (EFA). CFA assesses the relationship between observed variables and latent factors through factor loading estimates. In this study, CFA was used to confirm the first-order and second-order factor structure of the POMLS, which consisted of two dimensions: PML (comprising INIP, ACC, NIR, CIP, and RO) and NML (comprising VL, FT, DSF, PHI, and PSS). Thus, the data collected in Phase 2 were analyzed using CFA with the ML method.

Additionally, the Parceling technique was employed to reduce the number of observed variables in the model. Parceling involves grouping related items or indicators for the same factor and treating these groups as single variables. This approach is commonly used in CFA to simplify models with a large number of items (Rhemtulla, 2016), such as the POMLS, which includes 49

items. In this study, each domain was represented by two parcels, with each parcel created by computing the mean of the items within its respective construct. Figure 1 shows the measurement model using the parceling technique.

Figure 1 here

The initial CFA results for the original model revealed that some fit indices did not fall within acceptable limits. To address this, Modification Indices were applied to enhance the model's fit. These indices recommended specific adjustments to improve the measurement model, including adding covariances between the error terms of certain items. The following table (4) summarizes the model fit indices for the measurement model and their corresponding decisions based on recommended threshold values.

Table 4.

Model fit indices for the measurement model (n_2 = 459)

Fit indices	Recommended value	Measurement model	Decision
CMIN/df	□ 3	2.78	Accepted
P-value	≥.05	.000	Rejected
SRMR	□ 10	.065	Accepted
RMSEA	≤.08	.072	Accepted
TLI	≥.90	.921	Accepted
IFI	≥.90	.935	Accepted
GFI	≥.90	.944	Accepted
AGFI	≥.80	.908	Accepted
CFI	≥.90	.934	Accepted
PCFI	≥.5	.772	Accepted
PNFI	≥.5	.752	Accepted

As shown in Table 4, the measurement model demonstrated an excellent fit to the data ($\chi^2(157)$ = 190.19, $p < .001$, CMIN/df = 2.78, SRMR = .065, RMSEA = .072, TLI = .921, IFI = .935, GFI = .944, AGFI = .908, CFI = .934, PCFI = .772, and PNFI = .752), meeting the recommended thresholds outlined in the literature (Kline, 2023). Figure 2 illustrates the CFA diagram. Reliability analysis revealed high internal consistency, with Cronbach's alpha coefficients of .94 for POMLS, .91 for PML, and .90 for NML. Additionally, Cronbach's alpha values for the individual constructs;

INIP, ACC, NIR, CIP, RO, VL, FT, DSF, PHI, and PSS were .88, .84, .81, .89, .77, .75, .87, .86, .81, and .79, respectively.

Figure 2 here

Meaning of life level among Palestinian university students following the events of October 7th, 2023

To address Research Question 1, which examined the overall level of meaning in life among Palestinian university students following October 7, 2023, responses on POMLS and its domains were evaluated by comparing the scores for each domain and the total POMLS score against an appropriate cutoff value, determined as the midpoint between the minimum and maximum possible values. Since POMLS and its domains are measured using a five-point Likert scale, the scores ranged from 1 to 5, with a midpoint of 3 serving as the hypothetical mean. A one-sample t-test was performed to determine whether the sample means for POMLS and its domains were significantly above or below this midpoint. The results of the one-sample t-test are presented in Table 5.

Table 5.

Results of one-sample t-test for the differences between POMLS and its domains means and the hypothetical mean of 3 (n_2 = 459).

Domains	Means	Standard Deviations	t-value	P-value
PML	4.06	0.57	39.91	< .001**
INIP	4.30	0.67	41.87	< .001**
ACC	3.90	0.72	26.86	< .001**
NIR	4.13	0.66	36.72	< .001**
CIP	3.81	0.67	25.92	< .001**
RO	4.13	0.80	30.38	< .001**
NML	3.58	0.67	18.55	< .001**
VL	3.60	0.86	14.83	< .001**
FT	3.29	0.99	6.24	< .001**
DSF	3.61	0.88	14.84	< .001**
PHI	4.05	0.65	34.84	< .001**
PSS	3.36	0.86	8.88	< .001**
POMLS	3.87	0.51	36.55	< .001**

*** p <.001*

As shown in Table 5, the results reveal a significant positive difference ($p < .001$) between the means scores of POMLS and its domains and their respective cutoff values, favoring the sample scores. In other words, Palestinian university students exhibit a high level of meaning in life, both in positive and negative dimensions. These findings provide empirical evidence that students maintained a statistically elevated sense of meaning despite the ongoing conflict.

On the positive side, the findings highlight strong pride in Islamic-national identity, adaptability and coping with challenges, a sense of national and international responsibility, a desire to shift interests and priorities, as well as resilience and optimism, where all of these dimensions represent a positive sense of meaning in life. Conversely, high scores were also observed for dimensions such as future thinking (uncertainty), negative psychological and health impacts, physical and psychological strain, dysfunction, and a diminished sense of life's value, where all of these dimensions reflect a negative sense of meaning in life. Taken together, these results suggest that meaning in life in this context is characterized by a complex coexistence of strength and vulnerability, directly addressing the study's aim of examining both positive and negative dimensions of meaning.

Effects of the Demographic Variables

To address Research Question 2, which explored whether demographic variables significantly shape meaning in life, descriptive statistics, including means and standard deviations, were calculated for the POMLS scores. To examine whether significant differences in POMLS means exist across gender, faculty, academic year, monthly income (USD), region, location, and living in a dormitory, a seven-way MANOVA was conducted with the POMLS scores as the dependent variables and the demographic factors as independent variables. Prior to conducting the MANOVA, preliminary tests were performed to assess the assumptions of multicollinearity and homogeneity of variance for all dependent variables. Pearson correlation coefficients were calculated to evaluate the relationships among the dependent variables and ensure the absence of multicollinearity, as MANOVA requires moderate correlations among the dependent variables. The correlation coefficients between the dependent variables were examined, and the results are presented in Table 6.

Table 6.

Correlations among all variables (n_2 = 459)

Study Variables	INIP	ACC	NIR	CIP	RO	VL	FT	DSF	PHI	PPS
INIP	1									
ACC	.525**	1								
NIR	.627**	.553**	1							
CIP	.547**	.514**	.532**	1						
RO	.630**	.610**	.596**	.481**	1					
VL	.337**	.128**	.410**	.343**	.179**	1				
FT	.106*	-.054	.250**	.214**	-.001	.536**	1			
DSF	.293**	.141**	.350**	.369**	.149**	.500**	.482**	1		
PHI	.459**	.279**	.557**	.439**	.303**	.558**	.367**	.580**	1	
PPS	.251**	.108*	.347**	.384**	.169**	.566**	.480**	.673**	.587**	1

** *p* <.01.

As shown in Table 6, most correlation coefficients fell within moderate ranges, indicating the absence of multicollinearity among the study variables. The assumption of homogeneity of variances was also assessed using Levene's test, which confirmed that the variances of all dependent variables were equal ($p > .05$).

The results indicated that all assumptions for conducting MANOVA were satisfied. Wilks's lambda was used to evaluate multivariate effects, and effect sizes for the *F*-statistics were reported as partial eta-squared (ηp^2). Based on the guidelines provided by Tabachnick and Fidell (2014), an effect size of $\eta p^2 = .01$ indicates a small effect, $\eta p^2 = .09$ represents a medium effect, and $\eta p^2 = .25$ reflects a large effect (see Table 7).

Table 7.

Results of Wilks' Lambda of the effect of study variables on POMLS (n_2 = 459).

Independent Variables	Wilks' Lambda	F-value	P-value	Partial Eta Squared

Gender	.929	3.23	.001**	.071
Faculty	.959	1.87	.047*	.041
Academic year	.888	1.76	.007**	.039
Monthly income	.924	1.76	.021*	.039
Region	.884	1.37	.063	.030
Location	.948	1.19	.259	.027
Living in a dormitory	.954	1.09	.074	.022

**p <. 05; ** p <.01.*

The seven-way MANOVA revealed a significant multivariate effect for Gender, Wilks' lambda = .929, $F_{10,435} = 3.23$, $p < .001$, $\eta_p^2 = .071$, significant multivariate effect for faculty, Wilks' lambda = .959, $F_{10, 435} = 1.87$, $p < .05$, $\eta_p^2 = .041$, significant multivariate effect for academic year, Wilks' lambda = .888, $F_{30,1277} = 1.76$, $p < .01$, $\eta_p^2 = .039$, and significant multivariate effect for monthly income, Wilks' lambda = .924, $F_{20,870} = 1.76$, $p < .05$, $\eta_p^2 = .039$. One the other hand, region, location, and living in a dormitory had no significant multivariate effects (table 8). These findings indicate that certain structural and socioeconomic factors influence how students experience meaning in life during conflict, whereas geographic location and housing status do not appear to play a significant role.

Table 8

Results of MANOVA of the effect of study variables on POMLS ($n_2 = 459$).

Source	Dependent Variable	F	P-value	Partial Eta Squared
Gender	PML	4.404	.036*	.010
	INIP	3.996	.046*	.009
	ACC	1.470	.226	.003
	NIR	3.455	.064	.008
	CIP	.001	.981	.000
	RO	10.132	.002**	.022
	NML	6.767	.010*	.015
	VL	3.248	.072	.007
	FT	5.134	.024*	.011
	DSF	1.124	.290	.003
	PHI	2.437	.119	.005
	PPS	12.036	<.001**	.026
	POMLS	7.392	.007**	.016
Faculty	PML	4.097	.044*	.009

Source	Dependent Variable	F	P-value	Partial Eta Squared
	INIP	3.012	.083	.007
	ACC	1.063	.303	.002
	NIR	3.656	.057	.008
	CIP	1.139	.286	.003
	RO	5.548	.019*	.012
	NML	1.359	.244	.003
	VL	.467	.495	.001
	FT	2.007	.157	.004
	DSF	2.887	.090	.006
	PHI	.555	.457	.001
	PPS	.010	.920	.000
	POMLS	.297	.586	.001
Academic year	PML	1.386	.246	.009
	INIP	1.859	.211	.010
	ACC	.392	.758	.003
	NIR	.902	.440	.006
	CIP	.642	.589	.004
	RO	3.386	.018*	.022
	NML	2.028	.109	.014
	VL	1.578	.194	.011
	FT	1.692	.168	.011
	DSF	.540	.655	.004
	PHI	1.434	.232	.010
	PPS	3.655	.013*	.024
	POMLS	.633	.594	.004
Monthly income	PML	.513	.599	.002
	INIP	.622	.537	.003
	ACC	2.406	.091	.011
	NIR	.345	.708	.002
	CIP	1.024	.360	.005
	RO	1.957	.142	.009
	NML	3.891	.021*	.017
	VL	1.151	.317	.005
	FT	8.404	<.001**	.036
	DSF	2.782	.063	.012
	PHI	.129	.879	.001
	PPS	2.358	.096	.011
	POMLS	1.037	.355	.005

**p <. 05; ** p <.01.*

The overall MANOVA, descriptive statistics, and LSD post hoc test revealed a statistically significant small effect of gender on POMLS and its subdomains. Specifically, significant effects were observed for POMLS ($F_{(1, 444)} = 7.39$, $p < .01$, $\eta p^2 = .016$), PML ($F_{(1, 444)} = 4.40$, $p > .05$, $\eta p^2 = .010$), INIP ($F_{(1, 444)} = 3.99$, $p > .05$, $\eta p^2 = .009$), RO ($F_{(1, 444)} = 10.13$, $p < .01$, $\eta p^2 = .022$), NML ($F_{(1, 444)} = 6.77$, $p > .05$, $\eta p^2 = .015$), FT ($F_{(1, 444)} = 5.13$, $p > .05$, $\eta p^2 = .011$), and PPS ($F_{(1, 444)} = 12.04$, $p < .01$, $\eta p^2 = .026$), with females scoring higher across these dimensions. These findings suggest that females tend to experience a greater sense of meaning in life, both positively and negatively, compared to males. This is particularly evident in areas such as pride in Islamic-national identity, resilience and optimism, future thinking, and physical and psychological strain.

The MANOVA results also revealed a statistically significant small effect of faculty on PML ($F_{(1, 444)} = 4.09$, $p > .05$, $\eta p^2 = .009$) and RO ($F_{(1, 444)} = 5.55$, $p > .05$, $\eta p^2 = .012$), with humanities students scoring higher than natural science students. This indicates that humanities students tend to exhibit greater resilience, optimism, and a more positive sense of meaning in life compared to their counterparts in the natural sciences.

The MANOVA results further revealed a statistically significant small effect of academic year on RO ($F_{(3, 441)} = 3.39$, $p > .05$, $\eta p^2 = .022$), with second-year students scoring higher compared to other academic years. Additionally, a statistically significant small effect of academic year on PPS ($F_{(3, 441)} = 3.66$, $p > .05$, $\eta p^2 = .024$) was observed, favoring fourth-year and above students compared to those in earlier years.

Finally, the MANOVA results revealed a statistically significant small effect of monthly income on NML ($F_{(2, 442)} = 3.89$, $p > .05$, $\eta p^2 = .017$) and FT ($F_{(2, 442)} = 8.40$, $p < .001$, $\eta p^2 = .036$), particularly for students with a monthly income of 2000 USD or less. This indicates that students with low to moderate monthly incomes tend to have a more negative sense of meaning in life and more pessimistic views about future thinking. Meanwhile, the remaining dependent variables were not significantly affected by the independent variables.

Taken together, the quantitative findings provide a broad statistical picture of how Palestinian university students experienced meaning in life following the events of October 7th, 2023. The high overall POMLS scores, alongside significant positive differences across nearly all domains, indicate that students held simultaneously strong positive and negative senses of meaning—combining pride, responsibility, and resilience with uncertainty, psychological strain, and diminished life value. The demographic effects further reveal that females, humanities students,

individuals in certain academic years, and those from lower-income households experience these meanings more intensely. While these results illuminate general patterns in the sample, they cannot fully capture the depth, complexity, and contextual nuance underlying how students make sense of these experiences in their daily lives. Therefore, to complement and contextualize the statistical trends, the qualitative findings delve into students' personal narratives, offering a richer understanding of the emotional, social, and existential dimensions that shape their sense of meaning during the war.

Qualitative Results

To complement the quantitative findings and address the study's qualitative research question, thematic analysis was conducted based on interviews with 21 students. The qualitative findings illuminate how students interpret and emotionally process the statistical patterns observed in the survey data. The qualitative findings, based on interviews with 21 students, reveal how the 2023 Gaza War profoundly disrupted students' emotional wellbeing, daily functioning, social relationships, and sense of meaning in life. Students consistently described a pervasive emotional burden shaped by continuous exposure to scenes of destruction and loss. Many reported heightened anxiety, sadness, and psychological exhaustion, noting that their thoughts were repeatedly drawn back to Gaza. One student explained, *"How can you live your life knowing they are suffering?"* Others reported physical consequences such as fatigue, tension, and stress-related symptoms, including stomach discomfort, reflecting the embodied nature of their distress. Daily functioning was also affected, with several students describing constant monitoring of the news, diminished concentration, and difficulty maintaining normal routines. As one put it, *"Our minds are constantly occupied by the war."*

Students also expressed a noticeable decline in their capacity for happiness and enjoyment. For many, activities that previously brought pleasure now felt empty or inappropriate given the scale of suffering in Gaza. One student stated, *"It's hard to be happy; I can't feel joy."* This emotional withdrawal was intensified by financial constraints, mobility restrictions, and a general atmosphere of fear, all of which reduced opportunities for recreation or social engagement. Several students described a shift in their values, explaining that basic safety and family unity became more central than personal leisure or entertainment. The absence of joy was also linked to disruptions in

academic life, with students noting low motivation, disengagement from coursework, and a sense that "university life has lost its meaning." These narratives correspond closely with the elevated quantitative scores on psychological strain and diminished life value, offering contextual depth to the statistical findings.

Regarding their future outlook, most students reported a deep sense of uncertainty. Many felt that their educational and career aspirations had become fragile or irrelevant in the face of widespread destruction. *"The future feels dark and hopeless,"* one student explained, capturing a sentiment shared by many. These feelings led some to consider emigration as the only viable path toward stability, while others interpreted the crisis as a call to remain steadfast and contribute to Palestinian resilience. For these students, staying in Palestine, completing their education, and supporting their communities became acts of purpose and national commitment. As one student expressed, *"We must do our best… even just by staying and learning."* This theme aligns with the quantitative results showing significantly elevated scores on the Future Thinking domain, particularly among lower-income students.

Students also experienced significant changes in their relationships with family, friends, and the broader community. For many, family bonds strengthened as they sought emotional support and reassurance. Increased communication with parents and siblings provided comfort amid instability. Friendships also deepened, with students noting that previous conflicts seemed trivial in comparison to the current reality. Meanwhile, community engagement and volunteering gained new significance, as students felt a moral responsibility to assist others or participate in humanitarian and relief efforts. However, these efforts were sometimes constrained by mobility restrictions and fears associated with the political situation. These accounts provide qualitative support for the high scores observed in the domains of national responsibility and pride in identity.

Finally, the war prompted profound reflections on the meaning of life, justice, and identity. Several students reported a heightened awareness of life's fragility and a renewed appreciation for small daily blessings. This was often accompanied by a deepening of spirituality, as religious practices and beliefs provided comfort and resilience. At the same time, some described feelings of existential emptiness, stating that the scale of loss rendered their personal goals insignificant. *"The meaning of my life has become zero,"* one student said. Students also reflected critically on global

human values, expressing disillusionment with what they viewed as international indifference to Palestinian suffering. In contrast, their Palestinian identity and sense of collective struggle became stronger, with many describing the war as a moment that reinforced their cultural pride and commitment to national belonging.

These reflections help explain the simultaneous presence of high resilience and heightened psychological strain observed in the quantitative results, illustrating the coexistence of strength and vulnerability identified in the POMLS structure.

Discussion

This study explored Palestinian university students' perceived meaning in life following the events of October 7, 2023, investigated the factorial structure of the POMLS, and examined how demographic factors shape life meaning. The quantitative findings indicate that, despite the acute psychological stressors associated with the Gaza War—including trauma, disrupted routines, and ongoing uncertainty—many students demonstrated a strong sense of meaning in life, rooted in cultural identity, spirituality, resilience, and community values (Abuelaish & Yousufzai, 2023; Hamming, 2023).

The most salient dimensions included pride in Islamic-national identity, resilience and optimism, and a sense of national and international responsibility. These results underscore how collective identity and social support can serve as protective psychological resources during times of crisis. However, the data also point to disparities in life meaning based on gender, academic discipline, income level, and year of study—suggesting that while resilience is present, it is not evenly distributed (Harazneh et al., 2021; Hlasny et al., 2016).

Importantly, the quantitative and qualitative findings demonstrate strong convergence. The elevated scores on pride in identity and national responsibility were reflected in interview narratives in which students described remaining in Palestine and continuing their education as acts of resistance, moral duty, and collective commitment. Similarly, higher scores on resilience and future thinking align with participants' accounts of perseverance despite uncertainty, reinforcing the interpretation that meaning is sustained through collective belonging and shared struggle (Devin & Atallah, 2021; Whiteford & Haddad, 2020). At the same time, qualitative

descriptions of emotional exhaustion and existential doubt nuance the statistical findings, suggesting that resilience coexists with psychological strain rather than replacing it (Ahmead et al., 2024; Nazzal et al., 2017). This integration highlights the dual structure of meaning in conflict settings: simultaneously vulnerable and fortified.

The qualitative findings reveal that the 2023 Gaza War profoundly disrupted Palestinian university students' emotional well-being, daily functioning, social relationships, and sense of meaning in life. Students consistently described pervasive emotional burdens, including anxiety, sadness, and psychological exhaustion, often accompanied by physical symptoms such as fatigue and tension. Daily routines were disrupted, with students reporting difficulty concentrating, constant news monitoring, and diminished engagement in previously enjoyable activities. As one student noted, "It's hard to be happy; I can't feel joy," highlighting the deep impact of the conflict on both personal and academic life. These experiences underscore how prolonged exposure to violence and loss can affect mental health and everyday functioning, consistent with evidence of elevated PTSD, anxiety, and depression in Gaza (Javanbakht, 2024; Nisa et al., 2024).

The war also reshaped students' values, priorities, and future aspirations. Many reported heightened uncertainty and a sense that educational or career goals were fragile or irrelevant. Some viewed emigration as a potential path to stability, while others interpreted remaining in Palestine and continuing their education as acts of resilience and national commitment: "We must do our best… even just by staying and learning." These findings align with previous research on Palestinian youth, which notes that crises often prompt shifts from long-term ambitions toward immediate survival and communal responsibility (Jabali et al., 2024; Mokadi & Yousef, 2024; Roy, 2000).

Social relationships and community engagement emerged as crucial sources of support. Family bonds strengthened, friendships deepened, and students felt a moral imperative to contribute to humanitarian and community efforts, despite mobility restrictions and safety concerns. This mirrors prior studies highlighting the protective role of strong familial and community networks in buffering the psychological impact of political violence (Abualkibash & Rodríguiz, 2017; Attard, 2019; Veronese et al., 2012).

Finally, the war prompted profound reflections on meaning, justice, and identity. Many students reported a heightened awareness of life's fragility, renewed spirituality, and increased attachment to Palestinian identity and collective struggle. Simultaneously, some experienced existential emptiness, feeling their personal goals diminished in the face of widespread suffering. These findings resonate with the concept of Sumud (steadfastness), which emphasizes resilience, cultural pride, and collective perseverance during adversity (Alexei et al., 2019; Bartal, 2022; Halabi; 2023; Matar, 2024). Taken together, the mixed-methods findings suggest that meaning in life in this context is not merely an individual psychological construct but a socially embedded and culturally mediated process shaped by collective narratives, identity affirmation, and shared endurance.

Study Limitations

Several limitations must be acknowledged. The study was conducted at a single university, limiting the generalizability of the findings across Palestine. The cross-sectional design restricts the ability to infer causality or examine changes over time. Additionally, self-reported data may be influenced by social desirability or recall bias. The study also focused on a limited set of demographic variables and did not include other potentially influential factors, such as family support, institutional support, direct exposure to conflict, religious practices, prior mental health status, and the quality of social networks, which may significantly shape students' sense of meaning in life.

Future Research Implications

Future research should expand to include multiple institutions across different regions of Palestine, adopt longitudinal designs to track psychological and existential changes over time, and further integrate qualitative approaches to deepen understanding of evolving coping strategies and identity reconstruction processes. Investigating the role of institutional support, peer networks, and educational interventions in fostering meaning and well-being may provide actionable insights for educators, policymakers, and mental health practitioners working in conflict-affected contexts. Future research could also examine other highly affected populations, such as bereaved parents and children, to develop a more comprehensive understanding of the war's psychological and social consequences across Palestinian society.

Practical Implications

The findings of this study highlight the significant emotional, social, and cognitive impacts of the 2023 Gaza War on Palestinian university students, emphasizing the need for targeted intervention strategies. Educational institutions can play a pivotal role in supporting students' mental health and fostering a renewed sense of purpose. Universities could establish comprehensive psychosocial support programs, including individual and group counseling, peer mentorship schemes, and stress management workshops tailored to conflict-related trauma. Trauma-informed teaching approaches—such as flexible deadlines, adaptive assessment methods, and supportive classroom environments—could help mitigate the academic and emotional disruptions students experience during and after crises.

In addition, mental health services should adopt culturally responsive interventions that integrate students' familial, social, and community networks, recognizing the centrality of social relationships in promoting resilience. Programs could include community-based initiatives, volunteer opportunities, and workshops on coping strategies that encourage students to reconnect with their sense of meaning and collective identity. Furthermore, educational campaigns and awareness sessions for faculty and administrative staff could equip them to identify signs of distress and provide early support.

Given the central role of identity, spirituality, and collective responsibility identified in both the statistical and narrative findings, universities may also consider implementing meaning-centered counseling approaches grounded in existential and resilience-based frameworks. Such interventions can help students reframe suffering, reconnect personal aspirations with collective narratives, and strengthen adaptive coping strategies. Group-based resilience programs that incorporate discussions of cultural identity, Sumud, and community solidarity may further reinforce the protective psychological resources identified in the POMLS. Additionally, trauma-informed educational practices should extend beyond flexibility in deadlines to include structured reflection spaces, facilitated peer dialogue forums, and faculty training on conflict-sensitive pedagogy. These targeted strategies directly translate the study's empirical findings into actionable institutional responses.

Implementing these strategies may not only improve students' psychological well-being but also enhance academic engagement and overall life satisfaction. Future research should evaluate the

effectiveness of such interventions, exploring which approaches most effectively strengthen students' resilience, sense of purpose, and ability to cope with ongoing conflict. By translating the study's findings into practical applications, universities and mental health practitioners can better address the complex needs of students living under conditions of prolonged political violence.

Declarations

Ethical Standards

This study received ethical approval from the Institutional Review Board (IRB) of An-Najah National University, Nablus, Palestine (Approval No. Hum. Nov. 2024/23), granted on November 15, 2024. The IRB reviewed and approved all procedures related to participant recruitment, informed consent, data collection, and data analysis. The study involved minimal-risk activities, specifically structured interviews with adult participants. All research procedures were conducted in accordance with the ethical principles outlined in the Declaration of Helsinki and relevant institutional and national guidelines governing research involving human participants.

Informed consent:

Written informed consent was obtained from all adult participants prior to beginning the online survey, which was administered via a secure university platform on 20 November 2024. Participants were recruited through social media posts and zoom platform during classes. Before accessing the survey, participants reviewed a detailed information sheet outlining the study's purpose, procedures, confidentiality assurances, and voluntary nature. Consent was recorded through a mandatory checkbox confirming agreement to participate, the use of anonymized data for academic research and publication, and acknowledgment of no associated risks. Participants were also informed of their right to withdraw at any time without penalty. No minors or vulnerable individuals were included in the study.

Data Availability Statement

The datasets generated and analyzed during the current study are available as supplementary materials for peer review. These include the dataset of the first sample (n = 221) used for Exploratory Factor Analysis (EFA), the dataset of the second sample (n = 459) used for Confirmatory Factor Analysis (CFA), the full questionnaire in both English and Arabic versions, and the AMOS model file containing the measurement model and factorial structure of the scale. All datasets have been anonymized to ensure participant confidentiality. The materials are provided for editorial and peer-review purposes to support transparency, methodological verification, and reproducibility of the findings.

Acknowledgements

We sincerely thank everyone who participated in this research. Their eagerness to participate, exchange ideas, and provide important data has greatly enhanced the breadth and caliber of my study.

Funding

This research did not receive any specific grant from funding agencies in the public, commercial, or not-for-profit sectors.

Conflict of interests: The author declares no competing interests.

Author contribution: OJ: conceptualized the study, developed the research design, contributed to the literature review, and provided critical revisions during the manuscript drafting process. FK: conducted the data analysis and was primarily responsible for interpreting the results within the broader theoretical framework. MS: led the data collection process, assisted with data interpretation. All authors reviewed and approved the final manuscript.

References

Abualkibash, S. K., & Rodríguez, M. J. L. (2017). Resilience and basic psychological needs among Palestinian school students. *Biochemical and Biophysical Research Communications, 10*(3), 346-353. https://doi.org/10.21786/BBRC/10.3/2

Abuelaish, I., & Yousufzai, S. (2023). Resilience under protracted conflict and siege: A new paradigm shift. *Medicine, Conflict and Survival*, 1-20. https://doi.org/10.1080/13623699.2023.2258325

Ahmead, M., El Sharif, N., Abuiram, I., Alshawish, E., & Dweib, M. (2024). Depression, anxiety and coping strategies among Palestinian university students during political violence: A cross-sectional study. *Frontiers in Public Health, 12*. https://doi.org/10.3389/fpubh.2024.1436672

Alayan, S., & Riley, C. (2023). The new Palestinian textbooks: A strategy for national identity and self-determination. *Nations and Nationalism, 30*(2), 235–261. https://doi.org/10.1111/nana.12976

Alshurafa, M., & Kamla, R. (2024). Accountability and the postcolonial identity of Palestinian human rights NGO activists. *Accounting, Organizations and Society, 112*, 101546. https://doi.org/10.1016/j.aos.2024.101546

Amro, N. (2024). Post-traumatic stress disorder among nursing students at Palestine Polytechnique University during the Gaza war and the attack on the health care system. *Middle East Current Psychiatry, 31*(1). https://doi.org/10.1186/s43045-024-00458-x

Badarin, E. (2021). Politics and economy of resilience: EU resilience-building in Palestine and Jordan and its disciplinary governance. *European Security, 30*(1), 65-84.

Bartal, S. (2022). Palestinian Islamic Jihad: Between nationalism and religion. *The Journal of the Middle East and Africa, 14*(2), 117–137. https://doi.org/10.1080/21520844.2022.2146400

Devin, G., & Atallah, D. G. (2021). Decolonial enactments of human resilience: Stories of Palestinian families from beyond the wall. In *Beyond the wall: Stories of resistance and*

resilience in Palestine (pp. 565–583). Oxford University Press. https://doi.org/10.1093/oso/9780190095888.003.0030

Esu, A. (2015). Violence and statebuilding in a borders conflict context: A study of the Israeli–Palestinian conflict. *Journal of Intervention and Statebuilding, 10*(2), 1–20. https://doi.org/10.1080/17502977.2015.1054658

Faraj, Z. (2022). Community social work in Palestine: From resilience to national resistance. *Critical and Radical Social Work, 10*(3), 377–397. https://doi.org/10.1332/204986021x16611651375583

George, L. S., & Park, C. L. (2017). The multidimensional existential meaning scale: A tripartite approach to measuring meaning in life. *The Journal of Positive Psychology*, *12*(6), 613-627.

Gheytasi, S. (2024). Echoes of Exile. *Arab Studies Quarterly*. 2024. Vol. 46(1):9-27. DOI: 10.13169/arabstudquar.46.1.0009

Halabi, A. (2023). *Palestinian rituals of identity: The Prophet Moses Festival in Jerusalem, 1850–1948*. Austin, TX: University of Texas Press. https://doi.org/10.7560/326312

Diab, A.-K. (2024). Pursuing dreams, confronting paradoxes: Palestinian students in Israeli institutions. *Social Sciences, 13*(6), 1-23. https://doi.org/10.3390/socsci13060000

Hammad, J., & Tribe, R. (2021). Culturally informed resilience in conflict settings: A literature review of Sumud in the occupied Palestinian territories. *International Review of Psychiatry, 33*(2), 132–139. https://doi.org/10.1080/09540261.2020.1741259

Hamming, T. (2023). Factors associated with perceived resilience among undergraduate nursing students: Findings of the first cross-sectional study in Palestine. *BMC Nursing, 22*(1), 1-10. https://doi.org/10.1186/s12912-023-01325-6

Harazneh, L., Hamdan-Mansour, A. M., & Ayed, A. (2021). Resiliency process and socialization among Palestinian children exposed to traumatic experience: Grounded theory approach. *Journal of Child and Adolescent Psychiatric Nursing, 34*(2), 88–95. https://doi.org/10.1111/jcap.12298

Hart, J. (2023). Empowerment or frustration? Participatory programming with young Palestinians. *Children, Youth and Environments, 17*, 1–23. https://doi.org/10.1353/cye.2007.0043

Hlasny, V., Battal, L., & El-Ahmadieh, L. (2016). Perceptions of socio-economic conditions in Palestine: Evidence from Gallup and World Values Surveys. *Social Science Research Network*. https://doi.org/10.2139/SSRN.2844608

Jabali, O., Sleem, H., Ayyoub, A. A., Saeedi, M., Alawneh, Y., & Ishtaiyeh, M. (2024). Exploring perceived challenges, adoption, and assessment of Western values of democracy and

human rights in Palestine in the 2023 War on Gaza. *Dental Science Reports, 14*(1). https://doi.org/10.1038/s41598-024-60147-x

Kayali, L. (2024). Transformative incrementalism: Palestinian women's strategies of resistance and resilience amid gendered insecurity and neoliberal co-optation. Security Dialogue, 0(0). https://doi.org/10.1177/09670106241226653

Kline, R. B. (2023). *Principles and practice of structural equation modeling*. Guilford publications.

Lavi, T., & Solomon, Z. (2005). Palestinian youth of the Intifada: PTSD and future orientation. *Journal of the American Academy of Child and Adolescent Psychiatry, 44*(11), 1176-1183. https://doi.org/10.1097/01.CHI.0000177325.47629.4C

Lucas, S., Thompson, K., & Ramsey, T. L. (2022). Relationships and reciprocity in learning: A Palestine field trip for social work and youth and community students. *Critical and Radical Social Work, 11*(1), 79–95. https://doi.org/10.1332/204986021x16623675816737

Mahamid, F., Veronese, G., & Bdier, D. (2023). The factorial structure and psychometric properties of the PERMA-Profiler Arabic version to measure well-being within a Palestinian adult population. *Middle East Current Psychiatry*, *30*(1), 10.

Marie, M., Hannigan, B., & Jones, A. (2018). Social ecology of resilience and Sumud of Palestinians. *Health, 22*(1), 20-35. https://doi.org/10.1177/1363459316677624

Matar, D. (2024). What It Means To Be Palestinian. Middle East Journal of Culture and Communication, doi: 10.5040/9780755610891

Mautner, O. (2023). At home in my enemy's house: Israeli activists negotiating ethical values through ritualized Palestinian hospitality. *American Anthropologist, 126*(1), 59–70. https://doi.org/10.1111/aman.13925

Mokadi, T., & Yousef, A. (2024). Beyond the occupation: Palestinian youth and the struggle for political change. *Mağallaẗ ğāmi'aẗ al-Nağāḥ li-l-abḥāṯ. Al-ʿulūm al-insāniyyaẗ, 38*(11). https://doi.org/10.35552/0247.38.11.2291

Nazzal, F., Cruz, O., & Neto, F. (2017). Psychological problems among the Palestinian university students on the West Bank. *Biochemical and Biophysical Research Communications, 10*(2), 76-81. https://doi.org/10.21786/BBRC/10.2/13

Rhemtulla, M. (2016). Population performance of SEM parceling strategies under measurement and structural model misspecification. *Psychological Methods, 21*(3), 348.

Schnell, T. (2020). *The psychology of meaning in life*. London: Routledge.

Shu, Y. (2024). Cultivation of college students' sentiment of serving the country through science and technology: Goal dimensions and implementation paths. *Educational Research and Reviews, 6*(7). https://doi.org/10.32629/rerr.v6i7.2343

Tabachnick, B. G., & Fidell, L. S. (2014). Using Multivariate Statistics: Pearson New International Edition, edn.

Thabet, A. A., Abu Tawahina, A., El Sarraj, E., & Vostanis, P. (2008). Siege and quality of life of Palestinians in the Gaza Strip. *Arabpsynet eJournal*, *20*, 157-164.

Veronese, G., Mahamid, F. A., & Bdier, D. (2023). Transgenerational trauma and collective resilience: A qualitative analysis of the experiences of settler-colonial violence among three generations of Palestinian refugees. *International Journal of Social Psychiatry*. https://doi.org/10.1177/00207640231175787

Whiteford, G., & Haddad, A. (2020). Ontological and epistemological considerations in understanding occupations in extreme and/or oppressive contexts: Doing non-violent resistance in Palestine. In *Occupational Justice and Social Inclusion* (pp. 48–54). https://doi.org/10.4324/9780429266256-6

Figure Legends:

Figure 1. Initial confirmatory factor analysis (CFA) measurement model of the Post-October 7th Meaning of Life Scale (POMLS) using the parceling technique.

Figure 2. Final CFA measurement model of the Post-October 7th Meaning of Life Scale (POMLS) after model refinement and validation.

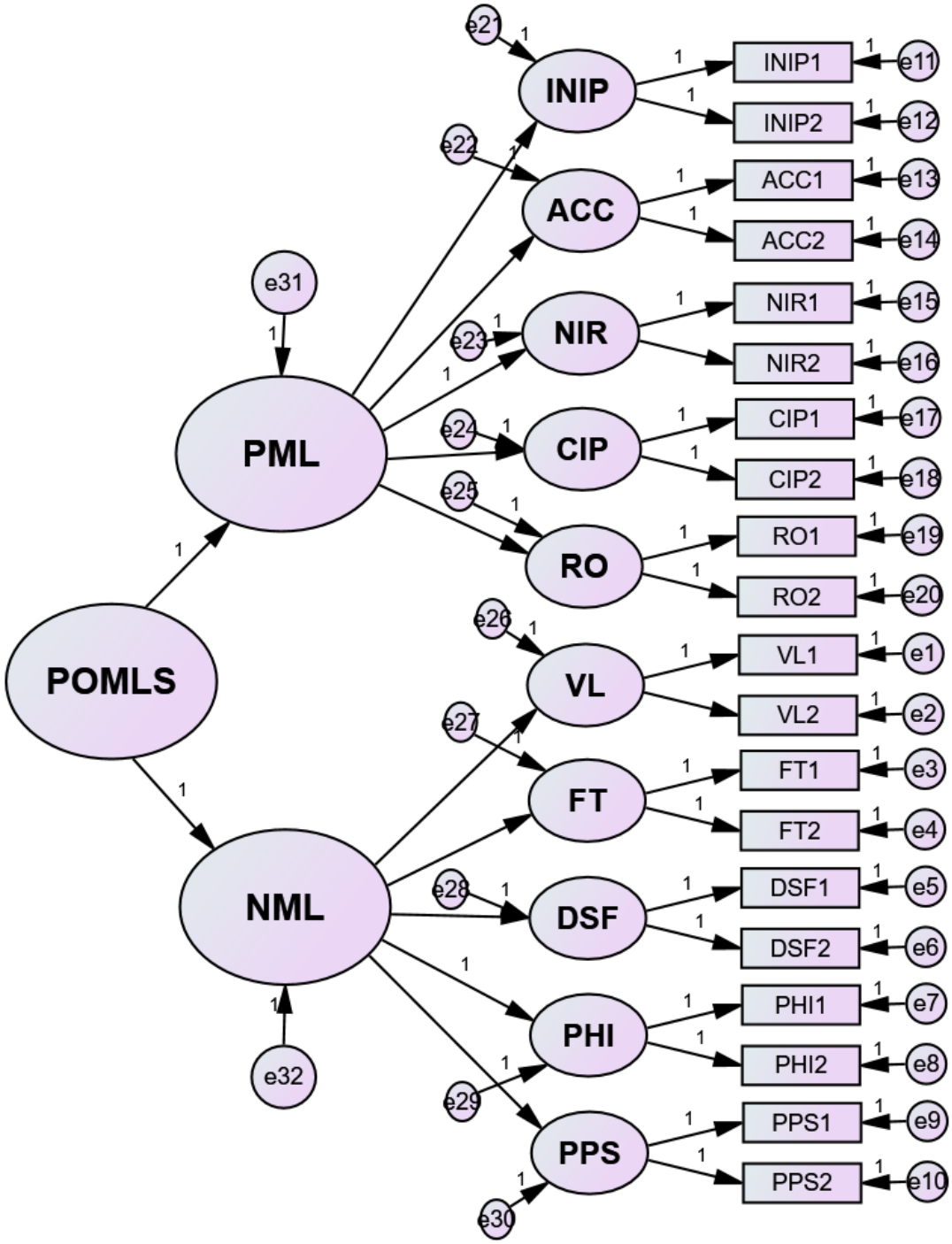
POMLS
PML
NML
e31
e32
INIP
ACC
NIR
CIP
RO
VL
FT
DSF
PHI
PPS
e21
e22
e23
e24
e25
e26
e27
e28
e29
e30
INIP1
INIP2
ACC1
ACC2
NIR1
NIR2
CIP1
CIP2
RO1
RO2
VL1
VL2
FT1
FT2
DSF1
DSF2
PHI1
PHI2
PPS1
PPS2
e11
e12
e13
e14
e15
e16
e17
e18
e19
e20
e1
e2
e3
e4
e5
e6
e7
e8
e9
e10

Figure 1. Initial confirmatory factor analysis (CFA) measurement model of the Post-October 7th Meaning of Life Scale (POMLS) using the parceling technique.

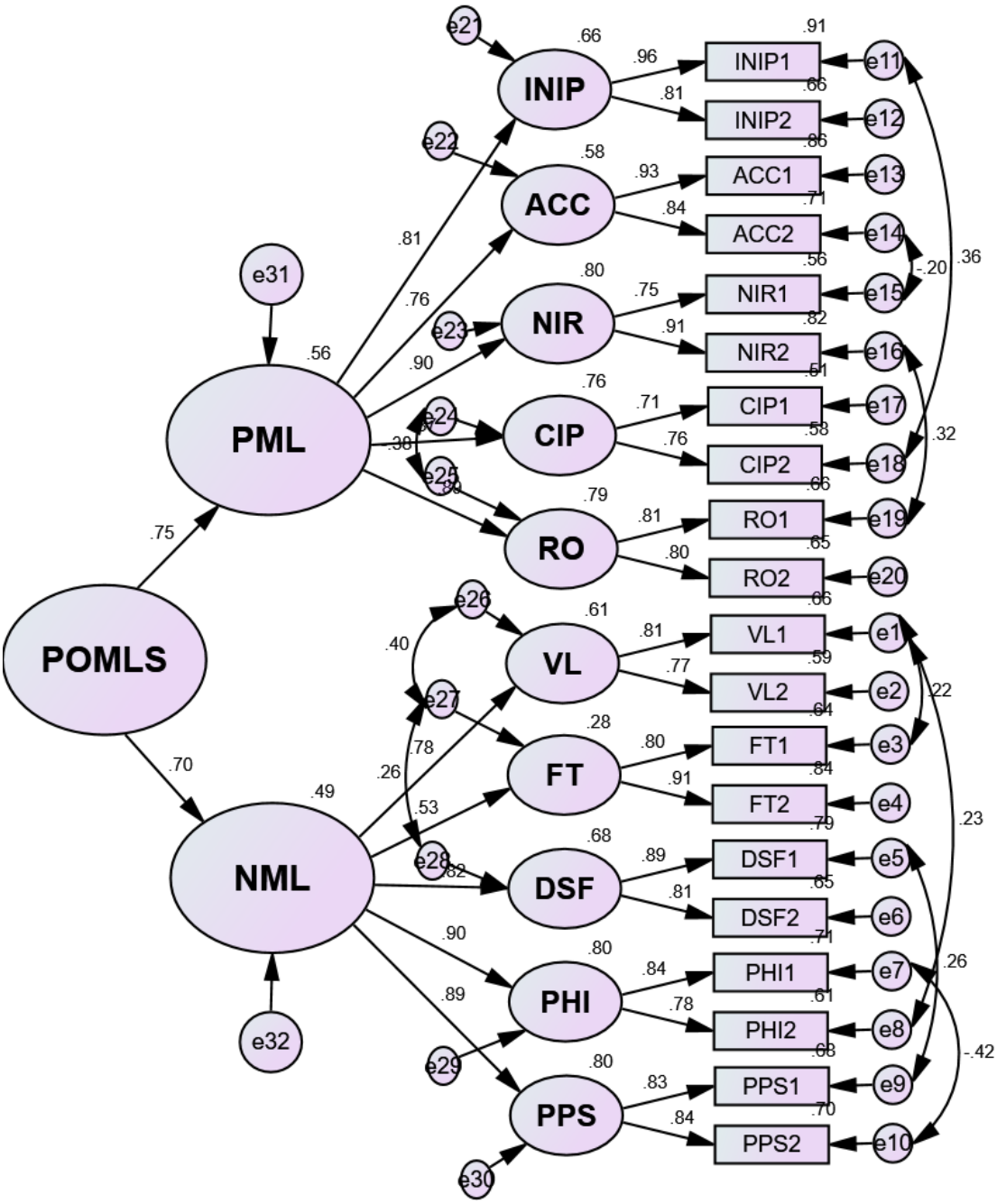

Figure 2.

Final POMLS' measurement model.