



RESEARCH ARTICLE

Pathways to Resilience: The Roles of Religiosity, Perceived Stress, and Coping Strategies Among Female Arab Adolescents in Israel

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ABSTRACT

Importance: Female Arab adolescents in Israel experience multiple sociocultural and psychological stressors associated with minority status, academic pressure, and traditional gender expectations. Understanding the factors that contribute to resilience in this population is important for culturally sensitive mental health interventions.

Objective: To examine the roles of religiosity, perceived stress, and coping strategies in predicting psychological resilience among female Arab adolescents in Israel.

Design, Setting, and Participants: This cross-sectional study was conducted during the 2026 academic year among 475 female Arab adolescents from northern Israel. Participants completed anonymous online self-report questionnaires.

Main Outcomes and Measures: Measures assessed problem-focused coping, emotion-focused coping, avoidant coping, religiosity, perceived stress, and psychological resilience.

Results: Pearson correlation analyses demonstrated that problem-focused coping, emotion-focused coping, and religiosity were positively associated with psychological resilience, whereas perceived stress was negatively associated with resilience. Multiple regression analysis revealed that the overall model significantly predicted psychological resilience ($R^2 = .302$; $F_{5,469} = 40.59$; $P < .001$). Perceived stress emerged as the strongest negative predictor of resilience ($\beta = -.402$; $P < .001$). Problem-focused coping ($\beta = .151$; $P = .002$), emotion-focused coping ($\beta = .172$; $P = .001$), and religiosity ($\beta = .141$; $P < .001$) significantly predicted higher resilience levels. Avoidant coping did not significantly predict resilience.

Conclusions and Relevance: Psychological resilience among female Arab adolescents appears to be shaped by both psychological and culturally grounded protective factors. Interventions aimed at reducing perceived stress and strengthening adaptive coping strategies and religiosity-based support systems may contribute to improved psychological adjustment and well-being.

Introduction

Adolescence is characterized by substantial biological, emotional, cognitive, and social transitions that increase vulnerability to stress and psychological difficulties¹. Within educational contexts, adolescents frequently encounter academic pressure, uncertainty regarding future opportunities, peer comparison, and identity-related challenges². According to the Transactional Model of Stress and Coping proposed by Lazarus and Folkman³, stress is determined not only by environmental demands but also by individuals' cognitive appraisal of their ability to cope effectively.

Psychological resilience refers to the ability to maintain or regain psychological functioning despite exposure to adversity or stressful life experiences⁴. Contemporary perspectives conceptualize resilience as a dynamic developmental process involving adaptive emotional regulation, flexibility, optimism, and effective use of social resources^{5,6}. Resilience has been associated with positive emotional adjustment, academic functioning, and psychological well-being among adolescents⁷.

Female Arab adolescents in Israel represent a unique population experiencing intersecting sociocultural pressures associated with minority status, collectivist family structures, traditional gender expectations, and academic demands. These adolescents may experience heightened emotional burden while simultaneously relying on culturally grounded protective factors such as religiosity and family cohesion.

Religiosity has consistently been associated with psychological well-being and resilience across adolescent populations⁸⁻¹¹. Religious beliefs and practices may facilitate emotional regulation, meaning-making, hope, and social support. Research conducted among Arab and Muslim populations further highlights the protective role of spirituality and religiosity in promoting adaptation and resilience¹²⁻¹⁵.

Perceived stress refers to individuals' subjective evaluations of life experiences as unpredictable, overwhelming, or uncontrollable.³ High levels of perceived stress have been associated with lower resilience, depressive symptoms, and impaired emotional functioning^{16,17}. Female adolescents may be especially vulnerable to stress because of

social expectations, academic pressure, and developmental transitions.

Coping strategies also play an important role in psychological adjustment. Problem-focused coping and adaptive emotion-focused coping are generally associated with better emotional outcomes and higher resilience, whereas avoidant coping is often associated with distress and maladaptive functioning¹⁸⁻²¹. Cultural context may influence the use and meaning of coping strategies among adolescents living in collectivist societies²².

Despite growing literature on resilience, relatively few studies have examined the combined roles of religiosity, stress, and coping strategies among female Arab adolescents in Israel. The present study aimed to address this gap.

Hypotheses

1. Religiosity would be positively associated with psychological resilience.
2. Perceived stress would be negatively associated with religiosity and psychological resilience as well.
3. Problem-focused and emotion-focused coping would be positively associated with psychological resilience.
4. Avoidant coping would be associated with psychological resilience.
5. Religiosity, perceived stress, and coping strategies would jointly predict psychological resilience.
6. Perceived stress would emerge as the strongest negative predictor of resilience.

Methods

PARTICIPANTS

The sample included 475 female Arab adolescents from northern Israel. Participants ranged in age from 15.7 to 19.4 years (mean [SD], 16.9 [1.69] years). All participants identified as Muslim.

Measures

COPING STRATEGIES

Coping strategies were assessed using the Arabic version of the Brief-COPE inventory adapted by Al-Mansouri²³ from Carver's original measure²⁴. The instrument includes 28 items rated on a 4-point Likert scale ranging from 1 ("I haven't been doing this at all") to 4 ("I've been doing this a lot"). The present study categorized coping into three

dimensions: problem-focused coping, emotion-focused coping, and avoidant coping. Cronbach α values demonstrated acceptable internal consistency for problem-focused coping ($\alpha = .79$), emotion-focused coping ($\alpha = .72$), and avoidant coping ($\alpha = .69$).

RELIGIOSITY

Religiosity was measured using the Arab Scale for Religiosity developed by Abdel-Khaleq.²⁵ The scale includes 15 items assessing religious beliefs, commitment, and practices rated on a 5-point Likert scale. Internal consistency in the current study was high ($\alpha = .89$).

PERCEIVED STRESS

Perceived stress was measured using the Arabic version of the Perceived Stress Scale-10.²⁶ The scale assesses subjective stress during the previous month using a 5-point response scale ranging from 0 ("never") to 4 ("very often"). Internal consistency was high ($\alpha = .85$).

PSYCHOLOGICAL RESILIENCE

Psychological resilience was measured using the 10-item Connor-Davidson Resilience Scale.^{27,28}

Items are rated on a 5-point scale ranging from 0 ("not true at all") to 4 ("true nearly all the time"). Higher scores indicate greater resilience. Internal consistency in the present study was acceptable ($\alpha = .78$).

PROCEDURE

Data were collected during the 2026 academic year using anonymous online questionnaires distributed through Google Forms. Participants were informed that participation was voluntary and confidential.

STATISTICAL ANALYSIS

Data analyses were conducted using SPSS version 26 (IBM Corp). Descriptive statistics were calculated for all study variables. Pearson correlation analyses examined associations among coping strategies, religiosity, perceived stress, and resilience. Multiple linear regression analysis was conducted to determine whether coping strategies, religiosity, and perceived stress predicted psychological resilience. Statistical significance was set at $P < .05$.

Results

DESCRIPTIVE STATISTICS

Table 1. Descriptive Statistics for the Study Variables

Variable	M	SD	Min	Max
Problem-focused coping	2.90	.53	1.00	4.00
Emotion-focused coping	2.70	.44	1.00	4.00
Avoidant coping	2.37	.46	1.00	3.90
Perceived stress	2.04	.73	.00	3.80
Religiosity	3.36	.934	1.00	5.00
Psychological resilience	2.52	.62	.00	5.00

Participants reported relatively high levels of religiosity and problem-focused coping. Levels of perceived stress and avoidant coping were comparatively lower.

CORRELATIONS AMONG STUDY VARIABLES

Pearson correlations among study variables are presented in Table 2.

Table 2. Pearson Correlations Among Study Variables

Variable	1	2	3	4	5	6
Problem-focused coping	1					
Emotion-focused coping	.638**	1				
Avoidant coping	.341**	.594**	1			
Perceived stress	-.152*	.003	.303**	1		
Religiosity	.230**	.319**	.156*	-.156*	1	
Psychological resilience	.303**	.294**	-.086	-.427**	.248**	1

Abbreviations: a, $P < .01$; b, $P < .05$.

Problem-focused coping, emotion-focused coping, and religiosity were positively associated with psychological resilience. Perceived stress demonstrated a strong negative association with resilience.

REGRESSION ANALYSIS PREDICTING PSYCHOLOGICAL RESILIENCE

Multiple regression analysis results are presented in Table 3.

Table 3. Multiple Regression Analysis Predicting Psychological Resilience

Predictor	B	SE	Beta	t	Sig
Problem-focused coping	.176	.056	.151	3.164	.002
Emotion-focused coping	.241	.070	.172	3.432	.001
Avoidant coping	.013	.060	.010	.220	.826
Perceived stress	-.343	.036	-.402	-9.477	.000
Religiosity	.094	.027	.141	3.525	.000

The regression model significantly predicted psychological resilience ($R^2 = .302$; $F_{5,469} = 40.59$; $P < .001$). Perceived stress emerged as the strongest negative predictor of resilience. Problem-focused coping, emotion-focused coping, and religiosity significantly predicted higher resilience.

Discussion

The present study examined the relationships among religiosity, perceived stress, coping strategies, and psychological resilience among female Arab adolescents in Israel. The findings provide important insight into the psychological and cultural factors associated with resilience within a population that experiences multiple developmental and sociocultural stressors. The discussion is organized according to the study hypotheses in order to clarify the theoretical and practical significance of the findings.

The first hypothesis proposed that religiosity would be positively associated with psychological resilience among female Arab adolescents. The findings supported this hypothesis, demonstrating that higher levels of religiosity were significantly associated with greater resilience. This finding is consistent with previous literature suggesting that religiosity functions as an important protective factor that promotes psychological adjustment, emotional stability, hope, and coping during stressful life experiences⁹⁻¹⁵. Religious beliefs and practices may provide adolescents with a sense of meaning, purpose, optimism, and perceived emotional security. Within collectivist Arab societies, religiosity also serves as a social and cultural framework that reinforces identity, belonging, moral guidance, and family cohesion.

The positive association between religiosity and resilience aligns with studies conducted among

Arab and Muslim populations showing that spirituality and religious involvement contribute to adaptive functioning and emotional well-being¹²⁻¹⁵. Religious coping mechanisms such as prayer, trust in God, and participation in religious rituals may help adolescents regulate negative emotions and reinterpret stressful experiences in more constructive ways. In addition, religiosity may strengthen social connectedness through family and community support systems, thereby enhancing adolescents' ability to withstand adversity. The findings therefore suggest that religiosity represents both a psychological and culturally grounded resilience resource among female Arab adolescents in Israel.

The second hypothesis predicted that perceived stress would be negatively associated with both religiosity and psychological resilience. The findings supported this hypothesis. Perceived stress demonstrated a significant negative correlation with resilience and was also negatively associated with religiosity. Adolescents who experienced higher levels of stress reported lower resilience and lower religiosity levels. These findings are consistent with the Transactional Model of Stress and Coping proposed by Lazarus and Folkman³, which emphasizes that stress negatively affects emotional functioning when individuals perceive environmental demands as exceeding their coping capacities.

The negative relationship between perceived stress and resilience is also consistent with previous research demonstrating that high levels of perceived stress are associated with depressive symptoms, emotional exhaustion, impaired emotional regulation, and lower psychological adjustment among adolescents and young adults^{16,17}. Female Arab adolescents may be particularly vulnerable to

stress because they often experience multiple pressures related to academic expectations, traditional gender roles, family responsibilities, social restrictions, and minority status within Israeli society. The accumulation of these stressors may weaken emotional flexibility and reduce adolescents' ability to cope effectively with adversity.

Importantly, the negative association between stress and religiosity may suggest that religiosity functions as a buffering factor that reduces subjective perceptions of stress. Religious beliefs may help adolescents interpret stressful experiences with greater acceptance, patience, and emotional meaning. Previous studies have similarly reported that religiosity may reduce psychological distress and enhance emotional regulation during stressful situations⁹⁻¹³. Thus, adolescents with stronger religious engagement may perceive stressful experiences as more manageable and less overwhelming.

The third hypothesis proposed that problem-focused coping and emotion-focused coping would be positively associated with psychological resilience. The findings supported this hypothesis. Both problem-focused coping and emotion-focused coping demonstrated significant positive relationships with resilience and significantly predicted resilience in the regression model. These findings are consistent with prior literature indicating that adaptive coping strategies strengthen emotional adjustment, increase perceived control, and promote resilience among adolescents¹⁸⁻²¹.

Problem-focused coping involves active attempts to manage stressors through planning, problem solving, and seeking practical solutions. Adolescents who use these strategies may feel more capable of confronting challenges effectively, thereby enhancing self-efficacy and emotional stability. Emotion-focused coping strategies, such as emotional expression, seeking emotional support, and positive reframing, may similarly assist adolescents in regulating emotional distress and maintaining psychological balance during difficult experiences. Previous research among adolescents exposed to social and political stress has shown that adaptive coping strategies contribute significantly to resilience and psychological well-being^{18,21}.

The fourth hypothesis proposed that avoidant coping would be associated with psychological

resilience. The findings partially supported this hypothesis. Avoidant coping demonstrated a weak negative correlation with resilience; however, it did not significantly predict resilience in the regression analysis. This finding differs somewhat from previous studies suggesting that avoidant coping is strongly associated with emotional distress, anxiety, and maladaptive functioning^{18,20}. One possible explanation is that avoidant coping behaviors among adolescents may temporarily function as short-term emotional protection strategies in highly stressful environments. In collectivist cultural settings, emotional withdrawal or avoidance may sometimes represent culturally shaped responses intended to preserve social harmony or minimize interpersonal conflict. Nevertheless, the nonsignificant predictive role of avoidant coping suggests that adaptive coping strategies may be substantially more important than maladaptive coping strategies in explaining resilience among female Arab adolescents.

The fifth hypothesis proposed that religiosity, perceived stress, and coping strategies would jointly predict psychological resilience. The regression analysis strongly supported this hypothesis. Together, these variables explained a substantial proportion of variance in resilience scores. This finding highlights the multidimensional nature of resilience and supports ecological models suggesting that resilience develops through interactions among psychological, social, behavioral, and cultural factors⁴⁻⁶. Resilience among Arab female adolescents therefore appears to emerge not from a single characteristic but from the combined influence of emotional regulation, coping abilities, stress perceptions, and culturally meaningful protective resources such as religiosity.

The sixth hypothesis predicted that perceived stress would emerge as the strongest negative predictor of resilience. The findings clearly supported this hypothesis. Perceived stress demonstrated the strongest negative beta coefficient in the regression model, indicating that stress was the most influential factor associated with lower resilience levels. This result reinforces theoretical models emphasizing the harmful effects of chronic stress on emotional functioning and adaptive capacity^{3,16,17}. Persistent stress exposure may undermine adolescents' emotional regulation, reduce confidence in coping abilities, and impair psychological adjustment over time.

The prominence of perceived stress in predicting resilience is particularly important in understanding the experiences of Arab female adolescents in Israel. Adolescents living within minority contexts often encounter social inequalities, discrimination, identity-related pressures, and uncertainty regarding future opportunities. Combined with academic demands and traditional social expectations, these pressures may significantly burden adolescents psychologically. Consequently, interventions targeting stress reduction may be particularly effective in promoting resilience and emotional well-being within this population.

The findings also carry important educational and clinical implications. Schools serving Arab adolescents should incorporate resilience-focused interventions aimed at strengthening adaptive coping strategies, emotional regulation skills, and stress management abilities. School counselors and mental health professionals may benefit from integrating culturally sensitive approaches that recognize the importance of religiosity, family support, and community values in adolescents' psychological functioning. Programs designed to enhance coping competence and emotional awareness may improve students' ability to manage academic and interpersonal stressors effectively.

In addition, community-based mental health interventions involving parents, teachers, and religious leaders may strengthen resilience among Arab female adolescents. Because religiosity appears to function as a protective factor, interventions that acknowledge cultural and religious values may achieve greater acceptance and effectiveness within Arab communities¹⁴. Mental health professionals should therefore adopt culturally responsive approaches that incorporate existing social and spiritual support systems rather than relying exclusively on individualistic intervention models.

Despite its contributions, the study has several limitations. First, the cross-sectional design limits the ability to establish causal relationships among religiosity, stress, coping, and resilience. Longitudinal studies are needed to examine how these relationships evolve over time. Second, the study relied on self-report questionnaires, which may be influenced by social desirability bias or subjective interpretation. This limitation may be particularly relevant when assessing religiosity and emotional functioning in conservative cultural contexts.

Third, the sample included only female Arab Muslim adolescents from northern Israel, which may limit the generalizability of the findings to male adolescents or other Arab populations. Future studies should examine gender differences in resilience processes and include more diverse socioeconomic and cultural groups. Additional research may also investigate the mediating roles of family cohesion, social support, optimism, and identity development in the relationship between religiosity and resilience.

Future research should further explore the mechanisms through which religiosity contributes to resilience. Qualitative studies may provide deeper insight into how Arab adolescents interpret stress, religion, and coping experiences within their sociocultural environments. Longitudinal research may also clarify whether religiosity indirectly enhances resilience by reducing stress perceptions or strengthening adaptive coping strategies over time.

In summary, the present study highlights the importance of religiosity and adaptive coping strategies as protective factors that strengthen resilience among female Arab adolescents in Israel, while perceived stress represents a major psychological risk factor. The findings underscore the need for culturally sensitive mental health interventions and resilience-based educational programs that address both psychological and sociocultural dimensions of adolescent well-being.

Conclusion

Psychological resilience among female Arab adolescents in Israel appears to be influenced by a complex interaction of psychological and culturally grounded factors. Perceived stress functioned as a major risk factor, whereas religiosity and adaptive coping strategies served as protective factors. The findings highlight the importance of culturally sensitive mental health interventions that strengthen coping skills, reduce stress, and incorporate culturally meaningful sources of support.

Conflict of Interest Statement:

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References:

1. American Psychiatric Association. Diagnostic and Statistical Manual of Mental Disorders. 5th ed. American Psychiatric Publishing; 2013.
2. Al-Enezi RAM. Psychological stress and the quality of school life: concept and coping strategies. *J Fac Educ Ain Shams Univ.* 2022;46(3):93-130.
3. Lazarus RS, Folkman S. *Stress, Appraisal, and Coping.* Springer Publishing Company; 1984.
4. Abu Ajaj A. *Resilience.* Lexi-K; 2016.
5. Mohammed IR. Psychological flexibility and its relationship to some aspects of the student of the Faculty of Physical Education, Minia University. *Assiut J Sci Arts Phys Educ.* 2019;48(1):1-32.
6. Othmani S. *Psychological Resilience and Adaptation.* University Center for Psychiatry in Casablanca; 2016.
7. Bozdağ B. Examination of psychological resilience levels of high school students. *World J Educ.* 2020;10(3):65-76. doi:10.5430/wje.v10n3p65
8. Tabish WY. Religiosity and its relationship to psychological resilience among a sample of Palestinian prisoners. Master's thesis. Hebron University; 2021.
9. Papanikolopoulos PN, Kaprinis SG. Religiosity and mental health of adolescents and young adults: a review. *Psychiatriki.* 2022;33(2):157-165. doi:10.22365/jpsych.2021.036
10. Dariyo A, Tumanggor RO. The relationship between adolescent religiosity and resilience in pandemic time. *Int J Appl Soc Sci Humanit.* 2023; 1(1):698-706. doi:10.24912/ijassh.v1i1.25935
11. Fanai ML, Lalhriatpuii L, Zokaitluangi. Religiosity correlation to psychological well-being and resilience among school students. *Indian J Appl Res.* 2024. doi:10.36106/ijar/3110346
12. Derouiche-El Kamel S, Hentati Y. The relationship between intrinsic religiosity and resilience among Tunisian female university students. *Eur Sci J.* 2025;37:361.
13. Filipović AT, Rihtar S. Religiosity as a factor of social-emotional resilience and personal growth during the COVID-19 pandemic in Croatian adolescents. *J Relig Educ.* 2023;71:123-137. doi:10.1007/s40839-023-00197-x
14. Shamma F, Heiman T, Olenik-Shemesh D. The relationship between volunteering, religiosity, and social cohesion on resilience levels among Arab adolescents in Israel. *Int J Adolesc Youth.* 2026; 31(1). doi:10.1080/02673843.2026.2653833
15. Younes RS, Moukarzel C, Ibrahim CD, Mzawak MA. Finding strength in times of war: a systematic review of resilience and adaptation among Arabs exposed to war. *Soc Sci.* 2025;14(11):626. doi:10.3390/socsci14110626
16. Chen S, Li S, Zhang Z. The relationship between perceived stress, psychological resilience, and depressive symptoms in college students, and the moderating role of gender. *Sci Rep.* 2026;16(1):12789. doi:10.1038/s41598-026-43237-w
17. Pour MT, Ismail A, Yusop YM, Rajabi G. Relationships between perceived stress and resilience with happiness. *Int J Health Sci.* 2022;6(suppl 2):12146-12178. doi:10.53730/ijhs.v6nS2.8149
18. Şahin S, Hepsöğütü ZB. Psychological resilience and coping strategies of high school students based on certain variables. *J Educ Sci Res.* 2018;8(2):49-64.
19. Wang H, Lee SY, Hall NC. Coping profiles among teachers: implications for emotions, job satisfaction, burnout, and quitting intentions. *Contemp Educ Psychol.* 2022; 68:102030. doi: 10.1016/j.cedpsych.2021.102030
20. Fu W, Wang C, Zou L, et al. psychological health, sleep quality, and coping styles to stress facing COVID-19 in Wuhan, China. *Transl Psychiatry.* 2020; 10:225. doi:10.1038/s41398-020-00913-3
21. Braun-Lewensohn O, Sagy S, Roth G. Coping strategies among adolescents: Israeli Jews and Arabs facing missile attacks. *Anxiety Stress Coping.* 2010;23(1):35-51. doi:10.1080/10615800802647601
22. Abu-Kaf S, Khalaf E. Acculturative stress among Arab students in Israel: the roles of sense of coherence and coping strategies. *Int J Environ Res Public Health.* 2020;17(14):5106. doi:10.3390/ijerph17145106
23. Al-Mansouri AM. Developing an Arabic version of the Brief COPE inventory for coping with experienced problems. *Al-Satel J.* 2014;8(11):83-109.
24. Carver CS. You want to measure coping but your protocol's too long: consider the Brief COPE. *Int J Behav Med.* 1997;4(1):92-100.
25. Abdel-Khaleq AM. The Arab scale of religiosity: steps of its preparation, psychometric properties and relationship to positive psychology variables. *Psychol Stud.* 2016;26(2):159-182.

26. Ali AM, Hendawy AO, Ahmad O, et al. The Arabic version of the Cohen Perceived Stress Scale: factorial validity and measurement invariance. *BMC Psychol.* 2021;9(1):1-13. doi:10.1186/s40359-021-00582-9

27. Connor KM, Davidson JRT. Development of a new resilience scale: the Connor-Davidson Resilience Scale (CD-RISC). *Depress Anxiety.* 2003;18(2):76-82.

28. Campbell-Sills L, Stein MB. Psychometric analysis and refinement of the Connor-Davidson Resilience Scale (CD-RISC): validation of a 10-item measure of resilience. *J Trauma Stress.* 2007;20(6):1019-1028. doi:10.1002/jts.20271