The Impact of Environmental Factors on Hope for Life in Divorced Women with a Structural Equation Modeling Approach

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A r t i c l e   I n f o

A B S T R A C T

Objective: The objective of this study was to investigate the impact of environmental factors on hope for life in divorced women.

Methods and Materials: This research employed a quantitative, applied design. The population consisted of divorced women living in Zanjan, Iran, from which a sample of 250 participants was selected using convenience sampling. Data collection was conducted using a researcher-made questionnaire, designed to measure key environmental factors such as family support, governmental support, social support, and media education, in relation to hope for life. The reliability of the questionnaire was confirmed using Cronbach's alpha and composite reliability, while validity was established through convergent and discriminant validity. Data analysis was performed using SEM with Smart PLS4 software, and various fit indices, such as the Goodness of Fit (GOF) and Standardized Root Mean Square Residual (SRMR), were evaluated.

Findings: The results demonstrated that environmental factors significantly impacted hope for life in divorced women, with 93% of the variance in hope for life explained by the model. Specifically, family and social support were found to have strong positive effects on hope for life, while the role of governmental support was also significant but to a lesser extent. Media education, however, did not play a significant moderating role in the model. The SRMR value of 0.077 indicated an acceptable model fit, and the overall GOF of 0.539 confirmed the strength of the structural model.

Conclusion: This study highlights the importance of social and family support in enhancing hope for life among divorced women. Although media education did not show a significant effect, the findings underscore the need for policy interventions and community-based support systems to address the economic and psychological challenges faced by divorced women, improving their overall life satisfaction and well-being.

Keywords: *hope for life, divorced women, structural equation modeling*

1. Introduction

Marriage is one of the most complex human relationships, and it forms the foundation of the family. Marriage is generally recognized as a relatively stable relationship between a man and a woman, referred to as husband and wife, that is established through a religious, social, and legal bond, which creates mutual commitments between the couple (Navabinejad et al., 2024). For many individuals, marriage begins with satisfaction and happiness but gradually declines and even becomes a source of anxiety and distress. Most people marry at some point in their lives, but nearly two-thirds of first marriages end in separation or divorce (Yu et al., 2020).

The social changes of recent decades globally have exposed the family system to new changes, challenges, issues, and needs, threatening its stability. When the functions of the family—such as biological, social, cognitive, and emotional functions—are damaged one by one, the members gradually lose their sense of satisfaction. This gradual decline in satisfaction first leads to psychological disconnection, followed by social disconnection, and eventually results in a legal event—divorce. This is a complex event viewed from various psychological, social, and cultural perspectives, and its occurrence is especially difficult for women, who often find divorce to be a significant issue in their subsequent relationships (Motamedi Qalati et al., 2024).

The prevalence of this phenomenon increased rapidly in the 1960s and 1970s, with divorce rates in industrialized countries rising significantly (Butrica & Smith, 2012). Divorce, as one of the most stressful sources of life events, can disrupt individuals' cognitive structures, leaving them incapacitated in daily life (Poushchian et al., 2017). This phenomenon leads to individual, familial, and social collapse, with more negative effects on women than on men (Bringle et al., 2013). This breakdown is so powerful that it results in depression, anger, deep insecurity, helplessness, guilt, fear, hopelessness, pessimism, restlessness, and vulnerability (Musai et al., 2011). Generally, crises resulting from failure lead to imbalance and disharmony in thoughts, body, and soul, but the most common feeling during this period is despair and hopelessness (Gurman, 2009).

Hopelessness places the individual in a passive state where they are unable to evaluate and make decisions about different situations. Additionally, hopelessness leaves the person defenseless and trapped in the face of stressors (Youell, 2011). According to Snyder's theory, hopelessness is a shocking state characterized by feelings of impossibility, incapacity, and disinterest in life. A person in despair becomes severely inactive and unable to assess or decide on various situations. Hope is a capability that helps an individual maintain motivation despite obstacles in achieving their goals. Hope functions as a protective mechanism, while hopelessness threatens the body, mind, and quality of life (Sharifian, 2024).

Hope is an influential factor in achieving social success and can play a significant role as a multidimensional, dynamic, and powerful healing agent in helping individuals adapt to the issue of divorce. A lack of hope or having low levels of it leads to decreased feelings of efficiency and self-efficacy, reduced self-esteem, and as a result, the individual may find striving for life progress futile, ultimately achieving fewer successes (Senger, 2023). Given the circumstances of a divorced woman in society, it is not far-fetched to expect lower levels of hope for life in her (Gurman, 2009).

Hope significantly influences many areas of life, as hopeful individuals are better able to set effective goals and make appropriate decisions about those goals. Research findings show that higher levels of hope in individuals are positively related to self-esteem and perceived competence, and negatively related to depressive symptoms. Hope is a positive trait introduced by Snyder (1999) and is considered a concept closely related to positive psychology. Numerous studies have highlighted hope as a positive component that influences individuals' cognitive and emotional outcomes. According to Snyder (1994), hope is a combination of willpower and pathways, the mental energy an individual possesses to achieve their goals. In another definition, hope is "a desire accompanied by the expectation of positive outcomes, or in other words, a positive evaluation of what the individual wishes and expects to happen" (Shariati et al., 2023). High levels of hope are associated with psychological well-being, stress management, emotional distress regulation, self-esteem, social competence, self-efficacy, and academic achievement (Mozhgan Gholami et al., 2019; Preston et al., 2023; Yalnizca-Yildirim & Cenkseven-Önder, 2023).

Studies on hope for life and its contributing factors are limited, and a comprehensive model on this topic, especially regarding divorced women, is not available. Among the few studies conducted, Pourabdell (2015) introduced quality of life as one of the components of the hope for life model (PourAbdel et al., 2015). Griffin, Lo, and Hesketh (2013) used a regression model to report that physical health,

psychological health, high self-esteem, positive thinking, and good social relationships significantly predicted hope for life (Griffin et al., 2013). Despite the numerous studies on hope for life and its positive effects in reducing social harm among various groups, a comprehensive perspective on the factors influencing hope for life in divorced women is still lacking, and efforts have not been significant despite the importance of this concept, leaving a notable research gap. Therefore, given that studying the effects of divorce on individuals, particularly divorced women, is of special importance, and that the research on hope for life in divorced women is scattered and incomplete, it is necessary to examine these outcomes more scientifically across different cultures. Based on the previous review, it can be concluded that hope for life in divorced women is a fundamental challenge in the lives of this group of women, who also represent a significant demographic. Therefore, in order to increase hope for life among this vulnerable group of women, the researcher was motivated to explore this subject to present a suitable model for hope for life in divorced women. Providing this model will enable the relevant authorities and the target population to take effective actions toward increasing hope for life in divorced women based on the variables present in this context. Accordingly, the main research question is: What is the hope for life model for divorced women?

2.   Methods and Materials

2.1.   Study design and Participant

The present study employed an applied research design with a quantitative approach, aimed at examining the impact of environmental factors on hope for life in divorced women. The study was conducted in Zanjan, Iran, and the target population consisted of divorced women residing in this city. To obtain a representative sample, a convenience sampling method was utilized, and 250 participants were selected for the study. The choice of sampling method allowed the researcher to access a sufficient number of respondents within a reasonable timeframe and ensured the inclusion of women who were readily available and willing to participate. All participants were informed of the study's purpose and gave their consent prior to participating.

2.2.   Measures

2.2.1.   Researcher-Made Questionnaire

The primary tool for data collection was a researcher-made questionnaire, specifically designed to assess the environmental factors affecting hope for life in divorced women. The development of the questionnaire involved reviewing existing literature on the subject, as well as adapting validated scales related to hope for life and environmental factors to fit the context of divorced women. The questionnaire was divided into several sections, each covering different aspects such as family support, governmental support, social support, media education, and personal perceptions of hope for life. The items were rated on a Likert scale, ranging from strongly disagree to strongly agree. To ensure the reliability of the instrument, Cronbach's alpha and composite reliability were calculated during the pilot testing phase, with all values exceeding the acceptable threshold of 0.7, indicating a high level of internal consistency. In terms of validity, both convergent and discriminant validity were assessed through factor loadings and the Fornell-Larcker criterion, confirming that the instrument effectively measured the constructs it was intended to.

2.3.   Data Analysis

For the analysis of the data, structural equation modeling (SEM) was used, which allowed for the evaluation of complex relationships between the measured variables. Smart PLS4 software was employed for this purpose. SEM was chosen due to its ability to simultaneously analyze multiple dependent relationships, as well as its capacity to account for measurement errors in latent variables. The analysis included testing the model's fit, examining path coefficients, and evaluating the significance of direct and indirect effects among variables. Various fit indices such as the Goodness of Fit (GOF) and the Standardized Root Mean Square Residual (SRMR) were calculated to ensure that the model was appropriately specified and fit the data well. Additionally, the adjusted coefficient of determination (R^2) was reported to indicate the percentage of variance in hope for life explained by the environmental factors studied.

3.   Findings and Results

In confirmatory factor analysis, the basic assumption is that each factor is associated with a specific subset of variables. The minimum condition for confirmatory factor

analysis is that the researcher has a predetermined assumption about the number of factors in the model before conducting the analysis. However, the researcher can also incorporate expectations regarding the relationships between variables and factors into the analysis.

Table 1

Conditions for Reliability and Convergent Validity

Indicator	Permissible Limit
Reliability	• Composite reliability (CR) and Cronbach's alpha should be above 0.7.
Convergent Validity	• Factor loadings must be significant (t>1.96).
	• Standardized factor loadings must be greater than 0.4.
	• CR > AVE.
	• AVE > 0.5.
	• Rho_A > 0.7.
Discriminant Validity	• AVE > MSV.
Model Fit Indices	• GOF > 0.36.
	• SRMR < 0.1.

AVE: Average Variance Extracted, CR: Construct Reliability, MSV: Maximum Shared Squared Variance, GOF: Goodness of Fit.

To assess the validity of the measurement models, the following values were calculated. If the conditions listed in Table 1 are met, we can claim that the measurement model has satisfactory and desirable conditions.

Table 2

Fornell-Larcker Test, Cronbach's Alpha, Composite Reliability, and Average Variance Extracted

Variable	Media Education	Hope for Life	Family Support	Government Support	Social Support	Cronbach's Alpha	Homogeneous Reliability	Composite Reliability	AVE
Media Education	0.803	-	-	-	-	0.728	0.809	0.842	0.645
Hope for Life	0.764	0.805	-	-	-	0.909	0.915	0.928	0.649
Family Support	0.688	0.714	0.873	-	-	0.844	0.850	0.906	0.762
Government Support	0.578	0.804	0.707	0.847	-	0.801	0.825	0.883	0.717
Social Support	0.641	0.702	0.793	0.805	0.841	0.791	0.817	0.878	0.706

As observed in Table 2, the results of the variance extracted for the latent variables indicate that all variables achieved values greater than 0.5. Based on this, it can be concluded that the convergent validity of the measurement instruments, using the Average Variance Extracted (AVE) index, has been confirmed.

The results of Cronbach's alpha and composite reliability coefficients, as presented in Table 2, show that these values for all latent variables are greater than 0.7. Thus, the reliability of the measurement instruments has also been confirmed using these two indices.

Based on the results in Table 2, the square root of the AVE for each latent variable is greater than the highest correlation of that latent variable with other latent variables. Therefore, discriminant validity of the measurement model has been confirmed using the Fornell-Larcker test.

Figure 1

Path Coefficient Diagram and Significance of Path Coefficients
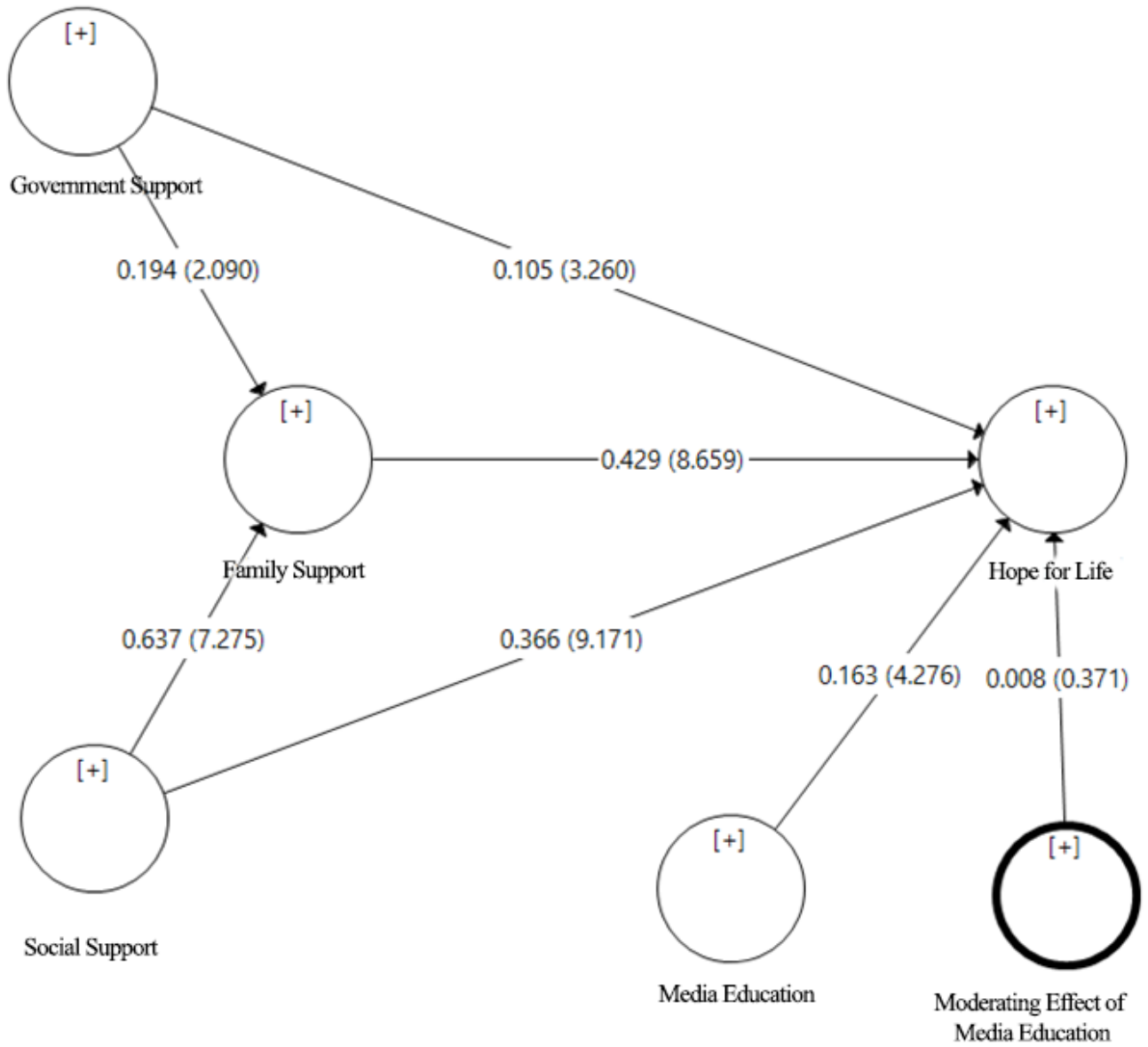
If the obtained value exceeds the minimum threshold of the statistic at the considered confidence level, the relationship or hypothesis is confirmed. At confidence levels of 90%, 95%, and 99%, this value is compared with minimum t-statistics of 1.64, 1.96, and 2.58, respectively.

Table 3

Model Fit Results

Variables	R^2	√Coefficient of Determination	Communalities	√Communalities	GOF (Goodness of Fit)
Media Education	-	0.777	0.645	0.694	0.539
Hope for Life	0.940	-	0.649	-	-
Family Support	0.642	-	0.762	-	-
Government Support	-	-	0.717	-	-
Social Support	-	-	0.706	-	-
SRMR	0.077				

The obtained value for GOF was 0.539, which exceeds the recommended value of 0.36 suggested by Wetzels et al. (2009), indicating the strength of the model. Therefore, the overall model fit is confirmed.

The desirable threshold for the SRMR index is a maximum of 0.1. The results for this index showed a value of 0.077, which is a favorable value, and thus, the overall model fit is confirmed.

The adjusted coefficient of determination for hope for life is 0.939, indicating that 93% of the variation in hope for life is influenced by the variables in the study, with the remaining factors not considered in the model. Another criterion for evaluating the structural model is effect size. Cohen (1988) assessed values of 0.02, 0.15, and greater than 0.35 as small, medium, and large effects, respectively. The results of effect size in Table 4 show values ranging from small to large effects.

Table 4

Summary of Hypothesis Results

Hypothesis	Path Coefficient	t-Statistic	P-Value	VAF	Sobel
Government Support -> Family Support -> Hope for Life	-	-	-	0.495	3.218
Direct Effect	0.105	3.260	0.001		
Indirect Effect	0.103	2.137	0.033		
Total Effect	0.208	4.317	0.000		
Social Support -> Family Support -> Hope for Life	-	-	-		
Direct Effect	0.366	9.171	0.000		
Indirect Effect	0.273	5.983	0.000		
Total Effect	0.639	12.312	0.000		
Government Support -> Hope for Life	0.105	3.260	0.001		
Social Support -> Hope for Life	0.366	9.171	0.000		
Media Education Moderating Effect -> Hope for Life	0.008	0.371	0.711		

4. Discussion and Conclusion

The present study aimed to examine the impact of environmental factors on hope for life in divorced women using a structural equation modeling approach. In this study, the impact of environmental factors on hope for life in divorced women was confirmed with 95% confidence. However, the moderating role of media education in the model was not confirmed. This finding aligns, to some extent, with the results of previous studies (Mohammadi & Khanjani-Vashki, 2020; Rahimi Sadegh et al., 2020; Zakiul, 2021). Undoubtedly, governmental support in the form of some benefits and living subsidies, as well as social support for divorced women, are factors that can influence their hope for life. Bourassa et al. (2015) showed in their research that the quality of life for women declines more than for men after divorce due to the lack of social and financial support {Gähler, 2006 #67550}. The results of Zakiul's (2021) research also support this finding. Family support and media education were other variables in the model {Seungmi, 2012 #67543}. Although family support for divorced women is influenced by other factors, such as cultural development, it is undoubtedly one of the most significant factors contributing to hope for life. The role of media and education, which act as awareness tools, should also be considered among the factors influencing hope for life.

Media, by facilitating public and free access to education, can be seen as a useful tool. In some cases, personality can influence all other factors and may explain a significant part of the changes in hope for life, even in the absence or scarcity of other factors.

The economic challenges faced by women after divorce are greater than those faced by men. Economic needs demand that divorced women form new families to restore their emotional well-being and fulfill their needs. However, in our society, such opportunities are not available to many, which increases their sense of insecurity and the likelihood of engaging in criminal activities due to financial and sexual needs. Economic problems, including securing housing, employment, providing for living expenses, and bearing the economic burdens of children, are among the economic consequences of divorce.

In conclusion, despite numerous studies on hope for life and its positive effects in reducing social harm among various groups, a comprehensive perspective on the factors influencing hope for life in divorced women is still lacking. Efforts, despite the significant importance of this concept, have not been substantial, and a research gap remains. Therefore, considering the special importance of studying the effects of divorce on individuals, particularly divorced women, and given that the research related to hope for life

in divorced women is scattered and incomplete, these outcomes need to be studied more scientifically across different cultures.

5. Limitations and Suggestions

One of the primary limitations of this study is the use of convenience sampling, which may limit the generalizability of the findings to the broader population of divorced women. Additionally, the study was conducted exclusively in Zanjan, Iran, and therefore, the results may not fully capture the experiences of divorced women in other cultural or geographical contexts. Another limitation lies in the reliance on self-reported data, which may introduce bias such as social desirability or inaccurate recollections. Furthermore, the cross-sectional design of the study prevents the examination of changes in hope for life over time, limiting the ability to infer causal relationships.

Future research should aim to replicate this study in different regions and among diverse cultural groups to enhance the generalizability of the findings. Employing longitudinal designs would also provide more insight into how environmental factors influence hope for life over time, helping to establish clearer causal relationships. Additionally, future studies could consider using more robust sampling methods, such as random sampling, to reduce potential biases. Expanding the range of variables, such as incorporating personality traits or economic conditions, may also provide a more comprehensive understanding of the factors influencing hope for life in divorced women.

The findings of this study suggest that government and social support systems play a critical role in enhancing hope for life among divorced women. Policymakers and practitioners should consider strengthening financial and emotional support programs tailored to this vulnerable group. Media and educational initiatives should also be developed to provide divorced women with greater access to resources that promote resilience and life satisfaction. Family counseling services could focus on empowering families to offer stronger emotional support, which, according to the study, is a significant factor in improving hope for life. These interventions could help mitigate the negative psychological and economic impacts of divorce, ultimately fostering a better quality of life for divorced women.

Authors' Contributions

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