Original Article

Investigating the relationship between lifestyle, emotion regulation, and negative perfectionism with suicidal ideation

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Abstract

Introduction: Suicide is known as one of the main causes of death. Identifying its antecedents is important. Therefore, this study aimed to investigate the relationship between lifestyle, emotion regulation, and negative perfectionism with suicidal ideation.

Materials and Methods: The statistical population of the present study consisted of all the housewives of Bushehr, Iran. A total of 100 participants were selected through the convenient sampling method. The research instruments included the Miller-Smith Lifestyle Assessment Inventory (LSI), the Cognitive Emotion Regulation Questionnaire (CERQ), the Positive and Negative Perfectionism Scale, and the Beck Scale for Suicide Ideation (BSI). Data analyzed by the descriptive statistics, Pearson correlation coefficient, and SPSS software.

Results: Based on the findings, the independent variables could predict 41% of the variance of suicidal ideation ($P< 0.05$). Also, negative perfectionism, lifestyle, and emotion regulation can predict suicidal ideation ($P< 0.05$). Among the independent variables, the adaptive emotion regulation has the most impact. Negative perfectionism is also in the next order, and for every unit added to its standard deviation, suicide tendency is increased by 0.267 standard deviations ($P< 0.05$).

Conclusion: According to the findings, lifestyle, emotion regulation, and negative perfectionism can predict suicide ideation in women. So, healthy lifestyles trainings, adaptive emotion regulation strategies, and reducing negative perfectionism can reduce suicide attempts among women.

Keywords: Emotion regulation, Lifestyle, Perfectionism, Suicide ideation

Introduction

Suicidal attempts are conscious attempts to end one's life, which may manifest as actions or remain purely emotional feelings. Suicide is one of the most common medical and social problems in the world, and according to the World Health Organization, suicide is the 13th leading cause of death (1) and the third leading cause of death in the age group of 14-36 (2). Worldwide, a suicide takes place every three seconds, and a suicide-related death occurs every 40 seconds (3). Studies have shown that 9.4 out of 100,000 Iranians commit suicide. The average age of suicide in Iran is 29 years, which is much lower than in Western countries (4). Approximately 27 to 37% of suicides are caused by self-immolation, according to world statistics (5). Among Iranian women, poisoning and self-immolation are the most common means of suicide (6). Female suicide rates are

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four times higher than male suicide rates (7). It appears that suicide tendency does not originate from a specific period of life, but that women exhibit greater fragility in times of personal hardship, and this is when they believe there is no way to recover. One of the personality factors associated with suicide is perfectionism, which is an important predictor of negative psychological outcomes such as suicidal ideation. There are cognitive and behavioral components to perfectionism, which include an excessive requirement for self-evaluation, self-imposition, and the setting of extremely high standards (8-10).

Perfectionism may lead to some risky behaviors, such as suicide, because of a cycle of irrational thoughts and behaviors that are recurring and ongoing (11). Therefore, perfectionism generally refers to a person's tendency to set high-level standards, strive to be flawless, and express dissatisfaction as a result of a slight deviation from perfection (10). In contrast to adaptive perfectionism, which entails realistic efforts to achieve high standards without inconsistency or psychological discomfort (12), maladaptive perfectionism is characterized by negative evaluation concerns, frequent doubts about tasks, and mental preoccupation with avoiding errors (11). It appears that maladaptive perfectionism may contribute to a portion of the tendency to commit suicide (13). In contrast, emotion regulation plays an important role to adapt to life's events and challenges. To achieve goals, emotions are regulated through internal and external processes, which include responding to control, monitoring, evaluating, and adjusting emotional interactions, particularly those that are fleeting and rapid in nature. It has been found that disruptions in emotional regulation can result in incompatibility, aggression, anger, hatred, anxiety, and other adverse consequences, which seriously threaten individuals' mental and emotional health (14,15). Emotion regulation skills play an essential role in the etiology of women's suicide ideation (16). It seems that depression can be considered a form of maladaptive emotion regulation that has serious consequences for the individual (17).

Lifestyle, as a social science term, is directly related to concepts such as content, behavior, and meaning (attitudes, values, and norms), ethics and ideology, and personality and identity (individual and collective). As a result,

lifestyle includes the interests, opinions, behaviors, and behavioral orientation of a person, group, or culture (18,19). Thus, lifestyle is defined as the specific way of life of a person, group, or society that includes perceptions, values, ways of acting, moods, and tastes. It has been demonstrated that changes in lifestyle can contribute to suicide attempts (20,21). Consequently, this study aims to assess the relationship between negative perfectionism, emotion regulation, and lifestyle with suicide tendency among women.

Materials and Methods

In the present study, the research method was correlational, and the population consisted of housewives from Bushehr city-Iran.

The sample size was calculated based on Klein's theory (22), and 100 individuals were selected after receiving permits from the Islamic Azad University, Bushehr branch. Women referring to all Bushehr health centers fulfilled the Beck Scale for Suicide Ideation (23) in coordination with the health center managers, and those with a suicidal tendency were selected as sample participants. Inclusion criteria included having suicidal ideation, willingness to participate, and not having other coexisting mental disorders. The incomplete questionnaires or cases who did not cooperate were excluded. To ensure high accuracy, the researcher distributed and collected the questionnaires. Participants received the questionnaire in groups or individually. The researcher explained necessary information about the questionnaires and confidentiality. In addition, the researcher answered the questions during the fulfillment of the questionnaires.

Research instruments

A) Cognitive Emotion Regulation Questionnaire: This questionnaire was developed by Garnefski et al. in 2002. As a multi-dimensional questionnaire and self-report tool, this questionnaire consists of 36 items and nine cognitive strategies, including self-blame, acceptance, ruminating, positive refocusing, refocusing on planning, positive reappraisal, perspective-taking, catastrophizing, and other-blame, which are classified into two main groups of emotion regulation strategies that are adaptive and maladaptive. The Cronbach's alpha for the subscales was reported by Garnefski et al. in the range of 0.71 to 0.81 (24). In the present study,

the reliability coefficient of the questionnaire using Cronbach's alpha method was 0.89.

B) The Miller Smith Lifestyle Assessment - Inventory: Miller and Smith developed this inventory in 1988. It contains 20 items and consists of five components. Miller and Smith investigated the validity of the questionnaire by factor analysis and found its results to be acceptable. They reported a reliability coefficient of 0.89 (25). Using Cronbach's alpha method, Fazel et al. obtained a reliability coefficient of 0.89 for the questionnaire (26). The reliability coefficient of the questionnaire in the present study was 0.85.

C) The Positive and Negative Perfectionism Scale: This questionnaire was developed by Terry-Short et al. in 1995. It consists of 40 questions (20 questions assess positive perfectionism and 20 questions assess negative perfectionism), which are graded on a five-point Likert scale. For the positive subscale, the internal consistency coefficient is 0.88, while for the negative subscale, it is 0.87 (27). In Iran, the re-test validity of this scale has been reported to be 0.68 for the positive subscale and 0.71 for the negative subscale (28). In the present study, the reliability coefficient of the questionnaire using Cronbach's alpha method was 0.86 for the total scale.

D) The Beck Scale for Suicide Ideation: In 1991, Beck et al. developed the Beck Scale for Suicide Ideation, which includes 19 items.

It consists of five screening items. The respondent answers positively to item number 5, i.e. 1 or 2, then the remaining 14 items must also be answered otherwise there is no need to continue. In a study involving hospitalized patients and outpatients, Beck and Steer (23), concluded that standardized depression tests are highly correlated with suicidal ideation. The correlation coefficients varied from 0.90 for hospitalized patients to 0.94 for outpatients. Additionally, this scale has a correlation of 0.58 to 0.69 with the suicide question on the Beck depression inventory, and it had a high level of validity based on Cronbach's alpha of 0.87 to 0.97 and the test-retest method of 0.54 (23). According to Anisi et al.'s study, the concurrent validity of Beck suicidal ideation scale and general health questionnaire is 0.76 and using Cronbach's alpha method, its validity is 0.95 (29).

Results

The results of the descriptive analysis showed that the mean age of the participants was 36.97 years (range: 23-49 years). Most respondents were in the bachelor's education group (35%), and the least frequent group was the doctoral education group (15%). Table 1 shows the descriptive variables and Table 2 presents the Pearson correlation coefficient between the variables.

Table 1. The descriptive variables

Variables	Mean	SD	Min	Max
Suicidal tendency	16.10	4.79	12	38
Negative perfectionism	38.59	5.98	20	99
Emotion regulation				
Adaptive	5.36	2.51	3	9
Acceptance	4.37	2.89	3	10
Positive refocusing	5.03	2.47	3	9
Refocusing on planning	6.03	2.96	2	9
Positive re-evaluation	4.02	1.65	4	8
Coping with the view				
Maladaptive	6.31	2.07	4	9
Self-blame	5.64	2.51	3	9
Other-blame	5.63	2.89	2	9
Rumination	5.30	3.42	2	10
Catastrophizing				
Lifestyle (Total)	26.51	7.25	15	39
Body management	5.31	2.50	3	8
Leisure activity	5.37	2.83	3	7
Choice of residence	6.09	2.47	3	9
Purchase pattern	4.07	2.96	2	8
Nutrition	4.05	1.65	4	7

Table 2. Pearson correlation coefficient between the research variables

Variables	1	2	3	4	
Lifestyle	1				
Adaptive emotion regulation	**0.41	1			
Maladaptive emotion regulation	**-0.39	**-0.43	1		
Negative perfectionism	**-0.75	**-0.37	**0.54	1	
Suicidal tendency	**-0.28	**-0.43	**0.47	**0.28	1

A negative and significant relationship was found between lifestyle and adaptive emotion regulation with suicidal ideation, as well as a positive and significant relationship between maladaptive emotion regulation and negative perfectionism with suicidal ideation. Table 3 shows regression of predictor variables.

Table 3. Regression of predictor variables of suicide tendency

Variable	Regression coefficients		T		Collinearity test	
	B	Beta	T	Sig	Tolerance	VIF
Constant	17.14	-	4.23	0.000	-	-
Negative perfectionism	0.106	0.311	3.33	0.001	0.622	1.03
Life style						
Body management	0.171	-0.236	2.32	0.001	0.654	1.01
Leisure activity	0.332	-0.246	3.63	0.000	0.312	1.09
Nutrition	0.125	0.121	3.63	0.000	0.455	1.12
Purchase pattern	0.011	0.025	0.432	0.625	0.922	1.63
Choice of residence	0.002	-0.032	0.511	0.456	0.456	1.43
Emotion regulation						
Adaptive	-0.192	-0.323	-3.53	0.001	0.652	1.45
Maladaptive	0.306	0.301	3.23	0.001	0.154	1.012
Summary of the model	**R**	**R²**	**Adjusted R²**			
	0.654	0.473	0.452			
ANOVA	**F**	**P**	**Durbin–Watson**			
	15.62	0.000	1.96			

Discussion

This study assessed the relationship between lifestyle, emotion regulation, and negative perfectionism with suicide ideation among women. The results showed that lifestyle can significantly predict suicide ideation in women. This finding is consistent with studies by Wyrwa et al. (21), who clinically examined the effects of lifestyle on suicide ideation in American veterans. This finding is also consistent with a study by Song and Lee (19). This study examined social, economic, and lifestyle factors associated with suicide risk among Korean adults. It found that being female, prior marital status, low education, and lower income all contribute to suicidal ideation. Furthermore, suicidal ideation were associated with drinking alcohol, smoking, higher levels of physical activity, and fewer meals in women. Accordingly, lifestyle can be explained by a unique pattern of characteristics, behaviors, and habits. If a person's lifestyle is defective, he/she is vulnerable to disease or injury. As a result, individuals with more unpleasant feelings are more likely to commit suicide (19). In fact, by choosing a lifestyle to maintain and improve their health and prevent diseases, people perform actions and activities such as proper diet, sleep, exercise, body weight control, etc. So, these people have a purposeful lifestyle and are much less likely to suffer from mental illnesses or engage in high-risk behaviors such as suicide (21). Another finding of the current study indicates that the type of strategy people use to regulate their emotions is related to their suicide tendency. People who use adaptive strategies are less likely to commit suicide, while those who use maladaptive strategies are more likely to do so. This finding is consistent with the results of a study by Grattan et al. that

concluded emotion regulation is related to the suicide tendency between the ages of 12 and 32 (16). Additionally, the findings of this study are in agreement with those of Chang et al. who state that chronic negative mood is a risk factor for suicidal behavior based on a study on 456 adult Americans (17). The negative relationship between positive emotion regulation strategies and suicide is due to the fact that when a person evaluates a negative event in his/her mind using these positive strategies, he/she views this event with a more positive perspective, and considers its possible long- and short-term positive aspects. Consequently, he/she experiences less depression and despair, which makes him less susceptible to suicidal thoughts. In this regard, people who use maladaptive cognitive emotion regulation strategies are more likely to commit suicide (17). Finally, the present study showed that negative perfectionism is related to suicidal ideation. This finding is in line with the study by Jones et al. They found that perfectionism is associated with self-suffering and suicidal ideation in 240 Australian participants (13). Also, this finding is in line with the study by Ying et al. on 5619 young Chinese individuals. They concluded that perfectionism has a positive and significant correlation with suicidal ideation (11). This finding may be explained by the fact that negative perfectionism can cause physiological changes in the brain that can make a person more susceptible to suicidal thoughts and their progressive manifestation (11).

Using self-reported scales to measure suicidal tendency and women samples are limitations of this study. In future studies, removing these limitations could improve the accuracy and generalization of the findings. It may also be useful to investigate the interpersonal relationships of women who commit suicide in the future. Hence, teaching healthy lifestyles, facilitating adaptive approaches to emotion regulation, and eliminating negative perfectionism are suggested as means of reducing suicide attempts among women.

Conclusion

In general, traumatic lifestyle along with maladaptive emotion regulation strategies plus negative perfectionism have a significant contribution in predicting suicide ideation in women.

Acknowledgments

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