

# Suicidal Ideation in Female Students: Examining the Role of Perfectionism and Goal Adjustment

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## Abstract

**Background:** Over the last decades youth suicide has been recognized as a significant public health problem. Efforts have been intensified to understand suicidal continuum; from suicide ideation to committing suicide.

**Objectives:** This study sought to examine the predictive role of self-oriented/other-oriented perfectionism, goal reengagement, that increase psychological well-being and goal disengagement and reduce distressing psychological resources, on suicidal ideation among university students.

**Materials and Methods:** This study comprised 310 female university students with mean age of 21.37 years, selected via multi stage random sampling method. All subjects were asked to complete multidimensional perfectionism scale (MPS), goal adjustment scale (GAS) and Beck suicidal ideation (BSI). The data analysis was performed using correlation and stepwise regression methods.

**Results:** The results obtained showed significant correlations between self-oriented perfectionism and goal reengagement with suicidal ideation.

**Conclusions:** Considering the prediction of female students' suicide ideation by self-oriented perfectionism, other-oriented perfectionism and goal reengagement, further studies are needed in regard to design training and preventing programs in order to reduce the negative effects of perfectionism.

**Keywords:** Perfectionism, Goal Adjustment, Suicidal Ideation, Students

## 1. Background

Youth suicide is a major public health problem which is the third leading cause of death, accounting for 12% of all deaths in youth aged 15 to 24 (1). Suicide is a chain process that starts with suicidal ideation, followed by suicide attempt, and finally committing suicide (2). Suicidal ideation is thoughts of ending or harming one's own life. Furthermore, it is also well established that suicidal ideation not only increase the risk of committing suicide and death in youth (3), but also is an important sign for an array of significant mental health needs, risky sexual behavior, drug abuse and criminal conducts (1). Finally, suicidal behavior is an attempt to escape from painful self-awareness and negative effect (4). Theoretical approaches to study suicide have identified intolerable psychological pain as the common trigger of suicidal behavior (5). These highlight the role of perfectionism in increasing the psychological pain perception (6) and suggest a robust association between perfectionism and suicide commitment (7). Accordingly, perfectionism implies a high level of effort to achieve unrealistic goals and

focus on the shortcomings (8). Indeed, perfectionists are more likely to perceive themselves as a failure, thus increasing the likelihood of tending to escape from painful self-awareness and contemplating suicide (9).

Flett et al. (10) argue that perfectionism is a multidimensional construct including self-oriented perfectionism that focuses on the unrealistic standards people set for themselves, focus on failures and excessive self-monitoring. Other-oriented perfectionism is the degree to which individuals have the negative expectations and critical evaluations of other's behaviors. It also reflects that social-oriented perfectionism is the obligation to comply with the standards and meet the expectations induced by the important people in order to gain their approval. Some researchers posit that social-oriented perfectionism is the only dimension associated with suicide (11, 12), while others believe that there is significant correlation between suicide ideation and all dimensions of perfectionism and individuals high on perfectionism are more likely to contemplate suicide (13, 14).

Those personality constructs that help individuals cope with unattainable goals and achieve personal goals are the effective components in achieving the highest quality of life. Accordingly, one of the major variables is goal adjustment that underlies the positive effects on life (15). Indeed, there is a growing evidence to suggest that goal adjustment is based on two self-regulation strategies, including goal disengagement, which reduce distressing psychological resources, and goal reengagement, that increase psychological well-being (16). Researchers have noted that in goal disengagement individuals need to leave unattainable goals, while in goal reengagement; people need to strive towards other goals (15). Moreover, research literature demonstrates that goal reengagement incompetence is a predictor of suicidal ideation (4). In people with suicidal ideation goal reengagement deficiency is the predictor of suicidal behavior (17).

Suicide cannot be treated after it happens (18) and individuals with suicidal ideation are unlikely to seek help. Their suicidal ideation, the outcome of which may continue into adulthood (19), is often not recognized (1). Given that studies are usually based on targets who have already committed suicide rather than studies on prevention or ideation (18), it is important to better understand and investigate the factors that increase the risk of suicide ideation in youth (1). In this context, relatively small number of studies have been conducted on understanding suicide ideation induced by perfectionism and goal adjustment and the findings are largely equivocal.

## 2. Objectives

Therefore, the present study, aimed to investigate the predictive role of self-oriented/other-oriented perfectionism, goal reengagement and goal disengagement. This would determine the relationships between the perfectionism-goal adjustment and suicidal ideation.

## 3. Materials and Methods

This cross sectional-descriptive study attempts to determine the relationship between perfectionism and goal adjustment with suicide ideation in female students of Shahid Chamran University of Ahvaz, Iran. Correlation and stepwise regression analysis were conducted using SPSS for windows, version 18. All participants completed multidimensional perfectionism scale (MPS), goal adjustment scale (GAS) and Beck suicidal ideation (BSI). Data collection took place within Shahid Chamran University of Ahvaz, Iran.

### 3.1. Participants

The sample included 366 female students in educational year 2014 - 2015 (Iranian year of 1393 - 1394) chosen by multistage random sampling. This sample size was selected from 8,000 female university students according to the placement of related numbers in Cochran formula.

Finally, analysis was done on data collected from 310 participants because of subject dropouts and elimination of incompletely filled questionnaires. Inclusion criteria consisted of those aged at least 18 years who had no history of chronic diseases and physical disabilities. First, six out of ten faculties were chosen, of which four classes were then selected and finally half of the female students in each class were chosen to answer the questionnaires. All selections were carried out randomly. The mean age of the participants was  $21.37 \pm 2.13$  years.

### 3.2. Instruments

#### 3.2.1. Scale for Suicide Ideation (SSI; Beck et al. 1979)

SSI is a 19-item self-report questionnaire designed to measure severity of attitude, behaviors and plans to complete suicide. It assesses death wish, active/inactive tendency to suicide, length and plentitude of suicidal thoughts, self-control, inhibitors and readiness to commit suicide (20). The items are scored on a 3-point scale from 0 to 2. The total score may vary from 0 to 38, with higher scores indicating more intense levels of suicidal ideation (21). The SSI has demonstrated good psychometric properties for psychiatric outpatients (22). Internal consistency of SSI with Cronbach  $\alpha$  of 0.89 is reported. In the current sample Cronbach  $\alpha$  was 0.9 (23).

#### 3.2.2. Multidimensional Perfectionism Scale (MPS; Hewitt & Flett, 1989; 1991b)

MPS is a 45-item scale that evaluates 3 dimensions including self-oriented perfectionism (unrealistic standards for the self), other-oriented perfectionism (unrealistic standards for others), and socially prescribed perfectionism indicative of the belief that others expect oneself to be perfect (24). The items are scored on a scale from 1 (strongly disagree) to 7 (strongly agree). Scale scores were computed by averaging responses across items (25), higher scores indicate greater perfectionism (26). Prior research has confirmed that the MPS subscale have an adequate degree of reliability and validity (24). Stoeber and Hotham (25) report strong psychometric properties for self-oriented perfectionism (Cronbach  $\alpha$  0.97), other-oriented perfectionism ( $\alpha = 0.82$ ), and socially prescribed perfectionism ( $\alpha = 0.71$ ). In the current study Cronbach  $\alpha$  was 0.74 for total scale, 0.81 for self-oriented perfectionism and 0.75 for social-oriented perfectionism.

#### 3.2.3. Goal Adjustment Scale (GAS; Wrosch, Scheier, Miller et al. 2003)

This is a 10-item scale designed for assessing goal disengagement (GAS-D) and goal reengagement (GAS-R). Items are scored based on 5-items Likert scale from (1 = almost never true to 5 = almost always true), with higher scores indicating better ability to disengage from or reengage

in goals against failure (26). GAS has been demonstrated to have good psychometric properties, with Cronbach  $\alpha$  0.84 and 0.86 for GAS-D and GAS-R, respectively (27). In the present study Cronbach  $\alpha$  was 0.92 for total scale, with respective values of 0.85 and 0.89 for GAS-D and GAS-R.

#### 4. Results

Main descriptive characteristics of participants and correlation matrix of the study population ( $n = 310$ ) are given in Table 1.

As shown in Table 1, descriptive statistics indicate that participants experience a high burden of suicide ideation with mean of 3.32 (SD = 5.45). The rate of self-oriented perfectionism (mean = 56.99, SD = 8.02) in female students was higher than other-oriented perfectionism (mean = 47.22, SD = 5.99). Goal reengagement (mean = 21.16, SD = 5.03) experience was higher than goal disengagement (mean = 10.67, SD = 2.92). Table 1 also presents linear correlation between perfectionism (2 subscales), goal adjustment (2 subscales) and suicide ideation. Suicide ideation was significantly correlated with other-oriented perfectionism, self-oriented perfectionism and goal reengagement, although in all cases the effects were small. However, no correlation was found between suicide ideation and goal disengagement.

Before performing multiple regression analysis to investigate the relationship between perfectionism and goal adjustment with suicidal ideation, the following statistical steps should be taken to investigate the re-

gression assumption: first, Kolmogorov-Smirnov test is performed to examine the assumption of distribution normality. The non-significant results of Kolmogorov-Smirnov test proves that the distribution of variables is normal. The second step was to examine the linearity of the variables, which is indicated by less than 0.05 for linearity and more than 0.05 for linearity deviation. The third step was regression analysis which was carried out after removing the outlier data.

Another basic assumption of multiple regression analysis is independence of predictive variables or in other words, the lack of correlation between errors of independent variables, which is investigated by Durbin-Watson test, where the values between 1.5 and 2.5 indicate independence of the observations which is acceptable and can be justified to perform the analysis (28). In this context, according to the results of Durbin-Watson test the predictor variables were independent with corresponding value of 1.82. Finally, stepwise regression was used to examine the predictive role of suicidal ideation regarding perfectionism and goal adjustment (Table 2).

As seen in Table 2, goal reengagement and self-oriented perfectionism as well as other-oriented perfectionism are the best predictors of suicide ideation but goal disengagement was not entered into the analysis and was removed from the regression equation. Adjusted R square was 0.18. Thus, 18% of suicide ideation variance was explained by goal reengagement, self-oriented perfectionism and other-oriented perfectionism.

**Table 1.** Descriptive Statistics and Linear Correlation Between Research Variables (N = 310)

Variables	Suicide Ideation		Other-Oriented Perfectionism		Self-Oriented Perfectionism		Goal Disengagement		Goal Reengagement		Values <sup>a</sup>
	R	P Value	R	P Value	R	P Value	R	P Value	R	P Value	
<b>Suicide ideation</b>	-										3.32 ± 5.45
<b>Other-oriented perfectionism</b>	0.137 <sup>b</sup>	< .05	-								47.22 ± 5.99
<b>Self-oriented perfectionism</b>	0.112 <sup>b</sup>	< .05	0.068		-						56.99 ± 8.02
<b>Goal disengagement</b>	0.071		0.059		0.194 <sup>c</sup>	< .01	-				10.67 ± 2.92
<b>Goal reengagement</b>	-0.164 <sup>c</sup>	< .01	0.102 <sup>b</sup>	< .05	-0.032		-0.191 <sup>c</sup>	< .01	-	-	21.16 ± 5.03

<sup>a</sup>Data are presented as mean ± SD.

<sup>b</sup>P < 0.05.

<sup>c</sup>P < 0.01.

**Table 2.** Stepwise Regression Analysis<sup>a</sup>

Predictive Variable	$\beta$	S.E	Adjusted R Square	P Value
<b>Goal reengagement</b>	-0.19	5.367	0.18	.001
<b>Self-oriented perfectionism</b>	-0.15	5.312		.007
<b>Other-oriented perfectionism</b>	-0.11	5.285		.04

<sup>a</sup>Criterion variable: Suicide ideation.

## 5. Discussion

The purpose of this study was to explore the role of fore-going predictors including self-oriented perfectionism, other-oriented perfectionism, social-oriented perfectionism, goal reengagement and goal disengagement on predicting suicidal ideation in a non-clinical population of university students. As previously mentioned, regression analysis showed that self-oriented, social-oriented and goal reengagement perfectionisms are the best predictors for suicidal ideation while goal disengagement was removed from the regression equation. In line with previous researches (7, 11-14) the results of this study revealed a significant correlation between self-oriented and social-oriented perfectionisms with suicidal ideation.

Meanwhile, in the light of existing evidence, self-oriented perfectionism is a motivational component which includes individual's efforts to achieve self-perfection. In other words these people have high and unrealistic personal standards and evaluate themselves based on their achievements. More broadly, perfectionist individuals have a strong motivation for perfection, unrealistically high standards, forced efforts, all or nothing thinking style, and are extremely astute and critical, so that they cannot accept their imperfections and deficits regarding various aspects of life. Finally, this aspect of inner perfectionism leads to self-criticism and high self-expectation and increase the risk of suicidal ideation (29).

Individuals with social-oriented perfectionism seek approval from others and have high and unrealistic standards in others. Since these standards are unattainable, they often fail and their sense of frustration leads to depression and even suicidal ideation. According to Blatt while perfectionists strive to attain others satisfaction, they strongly try to avoid any failure or error (30), such conditions lead to stressful interpersonal experiences, helplessness and the development of negativism (31, 32). Furthermore, high standards of others is perceived as imposed external standards, which are uncontrollable, and lead to feeling of failure, anxiety and frustration and ultimately cause suicidal ideation and depression (30).

The results of this study also revealed a significant negative relationship between suicidal ideation and goal reengagement that is consistent with previous researches (4, 17). It has been well established that individuals who have difficulty in reaching and engaging new goals are at increased risk for suicidal ideation. Meanwhile, it seems important that depressed people cannot reconcile themselves with unattainable objectives and engage new goals, thus face increasing sense and experience of failure, low self-confidence and finally suffer depression (33).

Overall, these findings add to a growing body of evidence demonstrating the impact of perfectionism and goal adjustment on the expression of suicidal ideation. More specifically, social-oriented perfectionism includes interpersonal relationships. Since the expectations that are imposed by others are unrealistic, excessive, and difficult to

achieve, they must be considered in the context of others' approval. Individuals with perfectionism become anxious to deal with others' standards. They are afraid of negative evaluations of others, avoid disapproval from others and give a great importance to attract the attention of others. Therefore these people consider high and unrealistic standards for themselves, and failure to achieve their standards leads to increasing risk of suicidal ideation and suicidal attempts.

Despite its large sample size and noteworthy findings, the results obtained must be considered in light of existing limitations. First, our non-clinical sample included female university students and cannot be extended to less clinical and male samples. There is a growing demand for research on serious clinical samples due to their great awareness of personal features in predicting suicide ideation in women. A second limitation is related to the self-report measures, which can be addressed by conducting studies using interview tools. The findings of the present study yield straightforward evidence for the treatment of suicidal ideation in perfectionist women by improving goal adjustments in their lifestyle.

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## Footnote

**Authors' Contribution:** Fakhri Tajikzadeh was responsible for the acquisition of data, analysis, and interpretation of data. Seyede Fatemeh Sajadi was responsible for drafting and writing the manuscript. Mahnaz Mehrabi-zade Honarmand and Iran Davudi supervised the study.

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