



RESEARCH ARTICLE / ARAŞTIRMA YAZISI

The Relationship Between Self-Esteem and Suicidal Ideation Among Individuals at Risk for Problem Gambling

Problemlü Kumar Davranışı Riski Taşıyan Bireylerde Benlik Saygısı ile İntihar Düşünceleri Arasındaki İlişki

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Abstract:

The current study explored the relationship between self-esteem and suicidal ideation among individuals at risk for problem gambling, with a particular focus on the moderating role of key sociodemographic characteristics. The sample consisted of 112 adults residing in the Turkish Republic of Northern Cyprus who were identified as being at risk using the South Oaks Gambling Screen. Data were collected through validated instruments, including the Rosenberg Self-Esteem Scale and the Suicide Cognitions Scale-Revised. Statistical analyses indicated that self-esteem significantly and negatively predicted suicidal ideation, accounting for 34% of the variance. Furthermore, moderation analyses revealed that this relationship varied significantly across gender, marital status, and educational level. Specifically, the predictive effect of low self-esteem on suicidal ideation was approximately three times stronger in males compared to females. Additionally, married individuals exhibited a stronger association between low self-esteem and suicidal ideation than single or divorced individuals, suggesting that marital status may lose its traditionally protective function in the context of gambling-related distress. Lower educational attainment was also found to amplify this risk. Overall, these findings underscore the critical role of self-esteem as both a risk and protective factor and highlight the importance of targeted, sociodemographically sensitive intervention strategies for individuals at risk for problem gambling.

Keywords: Gambling addiction, Problem gambling, Self-esteem, Suicidal ideation.

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Date of Received/Geliş Tarihi: 04.03.2026, **Date of Revision/Düzelme Tarihi:** 13.04.2026, **Date of Acceptance/Kabul Tarihi:** 24.04.2026, **Date of Online Publication/Çevrimiçi Yayın Tarihi:** 27.04.2026

Citing/Referans Gösterimi: Şakar, M. & Çelikay Söyler, H. (2026). The relationship between self-esteem and suicidal ideation among individuals at risk for problem gambling, *European Archives of Social Sciences*, 3, e262006, Doi: 10.35365/eass.26.1.06

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Öz:

Bu çalışmada, kumar oynama riski taşıyan bireyler arasında benlik saygısı ile intihar düşüncesi arasındaki ilişki ve sosyodemografik özelliklerin düzenleyici rolü incelenmiştir. Araştırmanın örneklemini, Güney Oaks Kumar Tarama Testi kullanılarak risk altında olduğu belirlenen, Kuzey Kıbrıs Türk Cumhuriyeti'nde yaşayan 112 yetişkin oluşturmaktadır. Veriler, Rosenberg Benlik Saygısı Ölçeği ve İntihar Biliş Ölçeği kullanılarak toplanmıştır. Elde edilen bulgular, benlik saygısının intihar düşüncesini negatif yönde ve anlamlı biçimde yordadığını ve toplam varyansın %34'ünü açıkladığını göstermiştir. Ayrıca bu ilişkinin cinsiyet, medeni durum ve eğitim düzeyi gibi sosyodemografik değişkenler tarafından anlamlı şekilde düzenlendiği belirlenmiştir. Düşük benlik saygısının intihar düşüncesi üzerindeki etkisinin erkeklerde kadınlara kıyasla yaklaşık üç kat daha güçlü olduğu saptanmıştır. Medeni duruma göre yapılan analizlerde, evli bireylerin düşük benlik saygısı ile intihar düşüncesi arasında daha güçlü bir ilişki sergilediği görülmüştür. Bu durum, evliliğin kumar riski bağlamında koruyucu işlevini yitirerek bir stres kaynağına dönüşebileceğine işaret etmektedir. Ayrıca düşük eğitim düzeyinin bu riski artırıcı bir rol oynadığı belirlenmiştir. Bununla birlikte, elde edilen sonuçlar benlik saygısının hem koruyucu hem de risk artırıcı bir psikolojik değişken olarak önemli bir işlev gördüğünü ortaya koymaktadır. Bu bulgular, benlik saygısını güçlendirmeye yönelik müdahalelerin önemini vurgulamakta ve özellikle erkek, evli ve düşük eğitim düzeyine sahip bireylere yönelik hedeflenmiş önleme stratejilerinin geliştirilmesi gerektiğini ortaya koymaktadır.

Anahtar Kelimeler: Kumar bağımlılığı, Problemliliği, Kumar, Benlik saygısı, İntihar düşüncesi.

Introduction

Gambling addiction is a chronic and relapsing condition in which individuals continue to gamble despite losing control over their behavior, causing serious disruptions in personal, financial, and family life (Wardle et al., 2024). Classified as gambling disorder in DSM-5, it shares neurobiological and behavioral features with other addiction spectrum disorders, rooted in dopaminergic pathway anomalies that regulate the reward system (Di Carlo et al., 2024). Over time, tolerance develops, leading individuals to gamble more frequently or at higher stakes to achieve the same psychological effect (Horvath et al., 2023), resulting in financial ruin, debt, family breakdown, job loss, and legal consequences (Langham et al., 2016).

A key psychological consequence of problem gambling is diminished self-esteem (Chen et al., 2022). The financial hardship, social deterioration, and guilt associated with disordered gambling gradually erode self-worth (Penfold et al., 2024). Research consistently shows that individuals with gambling problems report significantly lower self-esteem than those without (Choi & Kim, 2021), and low self-esteem has been identified as central to diagnosing addiction in adult gamblers (Çavuş, Çivgin & Yorulmaz, 2023).

Equally alarming is the elevated suicide risk among those with gambling disorders (Armoon et al., 2023). A meta-analysis by Kristensen et al. (2024) reported a lifetime prevalence of suicide attempts at 13.2%. Karlsson and Håkansson (2023) found that individuals diagnosed with gambling disorder were 15 times more likely to die by suicide, with debt, hopelessness, social isolation, depression, and substance abuse identified as independent risk factors.

The relationship between low self-esteem and suicidal ideation is well-established (Lippo et al., 2022; Seo et al., 2022), with Beck's cognitive model identifying negative self-schemas as central to hopelessness and suicidality (Burke et al., 2016). However, this relationship may vary across sociodemographic variables such as gender, marital status and educational level, (Franklin et al., 2017; Teismann et al., 2024). Despite this, research directly examining how self-esteem influences suicidal ideation specifically within gambling-addicted populations

remains strikingly limited. This study therefore aims to investigate this relationship and explore whether sociodemographic factors moderate it. Accordingly, the following research questions were addressed:

Does self-esteem significantly predict suicidal ideation among individuals at risk for problem gambling?

Does the relationship between self-esteem and suicidal ideation differ significantly according to gender, marital status and education level?

Material and Methods

This study employed a correlational survey model to examine the effect of self-esteem on suicidal ideation in individuals with gambling addiction and to determine whether this relationship differs according to gender, marital status, and education level (Fraenkel, Wallen & Hyun, 2019).

The study group consisted of 112 adults residing in the Turkish Republic of Northern Cyprus identified as at-risk for problem gambling. Sample size was determined through statistical power analysis following Cohen's (1992) parameters, requiring minimum 100 participants for medium effect size ($f^2 = 0.15$) at 95% confidence level with 80% power. Participants were recruited through social media and online gambling support communities using non-probability purposive sampling. The sample comprised 59.82% males (n=67) and 40.18% females (n=45), with 52.68% aged 30-39 years. Regarding marital status, 44.64% were single, 33.04% married, and 22.32% divorced. Educational distribution showed 41.96% with primary education or below, 31.25% high school, and 26.79% university degrees.

Four instruments were used: Personal Information Form for demographics, South Oaks Gambling Screen (SOGS; Lesieur & Blume, 1987; Turkish: Duvarcı & Varan, 2001) for problem gambling ($\alpha = .82$), Rosenberg Self-Esteem Scale (RSE; Rosenberg, 1965; Turkish: Çuhadaroğlu, 1986) for self-esteem ($\alpha = .85$), and Suicide Cognitions Scale-Revised (SCS-R; Rudd et al., 2008; Turkish: Bekaroğlu et al., 2024) for suicidal ideation ($\alpha = .88$).

Following ethical approval from the Scientific Research Ethics Committee of Near East University (Approval No: YDÜ/SB/2025/2081, date: August 14, 2025), data were collected via Google Forms between August 25 and October 25, 2025. Analysis was conducted using IBM SPSS Statistics 27.00. Normality was confirmed through skewness and kurtosis coefficients (± 1 range). Simple linear regression tested the primary hypothesis, while moderator analyses used Hayes' (2018) PROCESS macro

Model 1 with 5,000 bootstrap resamples at 95% confidence interval. Statistical significance was set at $p < .05$.

Results

The findings of the simple linear regression analysis applied to determine the effect of self-esteem on suicidal ideation are presented in Table 1.

Table 1. The Effect of Self-Esteem on Suicidal Ideation

Dependent Variable		B	β	t	p	R ²
Self-Esteem	Constant	18,183		18,82	,000	,34
	Suicidal Ideation	-,22	-,58	-7,49	,000	

Model; $F(1,110) = 56,20, p < .05$

According to Table 1, the simple linear regression analysis shows that self-esteem negatively and significantly predicts suicidal ideation ($B = -0.22, \beta = -0.58, t = -7.49, p < .05$). The model is statistically significant [$F(1, 110) = 56.20, p < .05$], with self-esteem explaining approximately 34% of the variance in suicidal ideation ($R^2 = .34$).

Consequently, an increase in self-esteem appears to be associated with a decrease in suicidal ideation.

The moderating effect of gender on the relationship between self-esteem and suicidal ideation is presented in Table 2.

Table 1. Regression Analysis Results Regarding the Moderating Effect of Gender on the Relationship Between Self-Esteem and Suicidal Ideation

	B	SE	t	p	LLCU	ULCI
Constant	36,20	7,68	4,71	,000	20,97	51,42
Self-Esteem (X)	,50	,67	,75	,451	-,82	1,84
Gender (W)	6,29	4,45	1,41	,166	-2,53	15,13
X.W	-1,15	,38	-3,00	,003	-1,91	-,39
$\Delta R^2 = 0.042$						
Conditional Effect						
Female	-,64	,31	-2,03	,044	-1,27	-,02
Male	-1,80	,21	-8,36	,000	-2,23	-1,37

According to the analysis results presented in Table 2, the interaction term between self-esteem and gender (X.W) was found to be statistically significant ($B = -1.15, t = -3.00, p = .003$). This result shows that the role of self-esteem on suicidal ideation varies greatly among male and

female. The interaction term added an extra variance $\Delta R^2 = 0.042$ to the model. The slope graph of whether the relationship between self-esteem and suicidal ideation is moderated by gender is displayed in Figure 1.

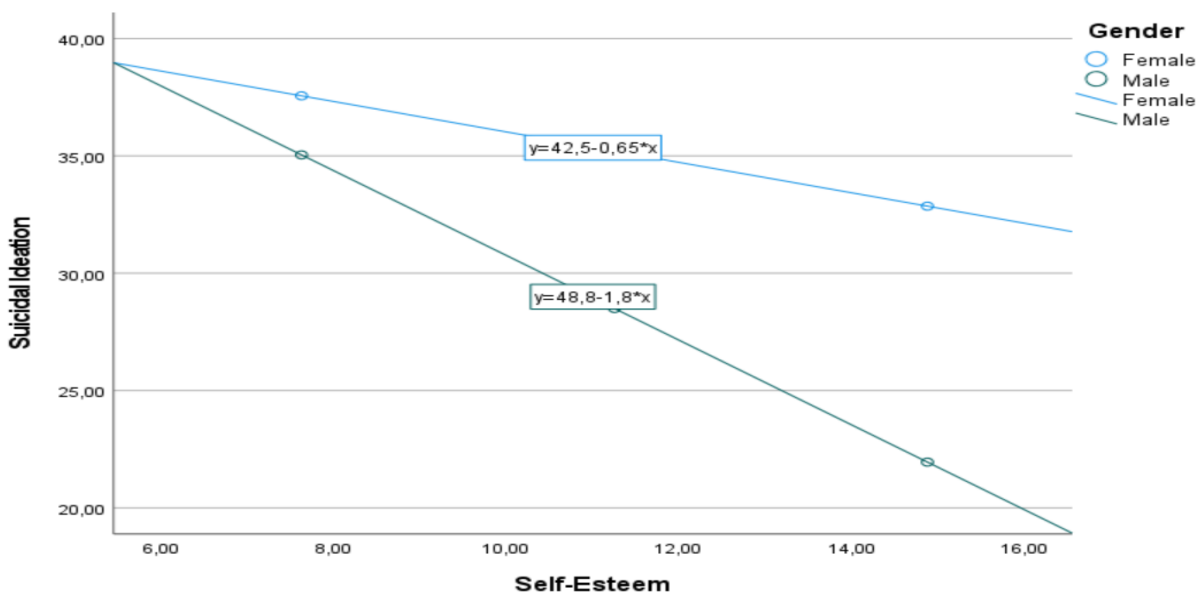


Figure 1. The Moderating Role of Gender in the Relationship Between Self-Esteem and Suicidal Ideation

When examining the slope analysis presented in Figure 1 and the conditional effect analysis in Table 2, the negative effect of self-esteem on suicidal ideation was statistically significant for both females ($B = -0.64, t = -2.03, p = .044$) and males ($B = -1.80, t = -8.36, p < .001$). However, this effect was approximately 2.8 times stronger in males compared to females. While increased self-esteem reduces suicidal ideation for both genders, this protective effect is more pronounced in males, indicating that high self-esteem serves as an important protective factor against suicidal ideation. The significant interaction term ($X.W$) in Table 2 ($B = -1.15, t = -3.00, p = .003$) demonstrates that

the relationship between self-esteem and suicidal ideation varies by gender. When self-esteem is low, suicide risk increases more rapidly and severely in males than in females. These results reveal that self-esteem functions as both a risk and protective factor that differs according to gender, with its effects being particularly critical for males.

Findings from the moderator variable analysis examining whether the negative effect of self-esteem on suicidal ideation showed a significant difference according to marital status are presented in Table 3.

Table 3. Regression Analysis Results Regarding the Moderating Effect of Marital Status on the Relationship Between Self-Esteem and Suicidal Ideation

	B	SH	t	p	LLCU	ULCI
Constant	52,15	6,26	8,32	,000	39,72	64,57
Self-Esteem (X)	-2,53	,50	-5,03	,000	-3,53	-1,53
Marital Status (W)	-3,35	3,10	-1,07	,282	-9,51	2,80
X.W	,66	,26	2,54	,012	,14	1,17
$\Delta R^2=0.032$						
Conditional Effect						
Married	-1,77	,25	-7,07	,000	-2,26	-1,27
Single	-1,28	,18	-6,86	,000	-1,65	-,91
Divorced	-,79	,28	-2,78	,006	-1,35	-,22

Table 3 shows that the interaction term between self-esteem and marital status ($X.W$) was statistically significant ($B = .66, t = 2.54, p = .012$), indicating that the effect of self-esteem on suicidal ideation differs

significantly by marital status. The interaction term contributed $\Delta R^2 = 0.032$ additional variance to the model. Figure 2 presents the slope analysis of this moderating effect.

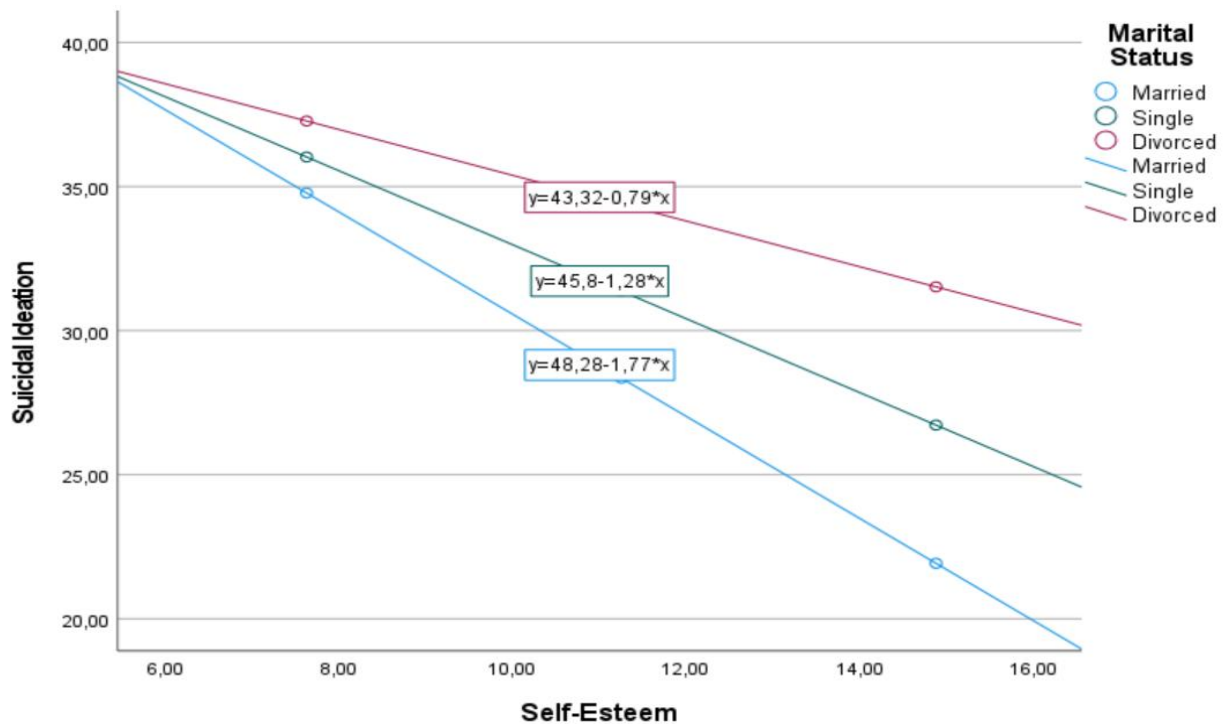


Figure 2. The Moderating Role of Marital Status in the Relationship Between Self-Esteem and Suicidal Ideation

The slope analysis in Figure 2 and conditional effects in Table 3 reveal that the negative effect of self-esteem on suicidal ideation was statistically significant across all marital status categories: married ($B = -1.77, t = -7.07, p < .001$), single ($B = -1.28, t = -6.86, p < .001$), and divorced ($B = -0.79, t = -2.78, p = .006$). However, the strength of this effect varied systematically, being strongest among married individuals, followed by single individuals, and weakest among divorced individuals. While high self-esteem reduces suicidal ideation in all groups, the destructive effect of low self-esteem is most pronounced in married individuals and most limited in divorced

individuals. These findings suggest that self-esteem's protective and risk-enhancing effects are stronger in stable relationships but weaken following relationship loss such as divorce. This indicates that while self-esteem is a critical factor for married individuals, other factors may be more prominent in determining suicidal ideation among divorced individuals.

The findings of the moderator variable analysis regarding whether the negative effect of self-esteem on suicidal ideation shows a significant difference according to educational level are presented in Table 4.

Table 4. Regression Analysis Results Regarding the Moderating Effect of Educational Level on the Relationship Between Self-Esteem and Suicidal Ideation

	B	SH	t	p	LLCU	ULCI
Constant	56,98	5,79	9,82	,000	45,49	68,47
Self-Esteem (X)	-2,65	,52	-5,00	,000	-3,69	-1,60
Educational Level (W)	-3,86	2,82	-1,36	,17	-9,47	1,73
X.W	,50	,24	2,10	,037	,02	,98
$\Delta R^2=0.025$						
Conditional Effect						
Primary education or below	-2,12	,31	-6,76	,000	-2,74	-1,50
High School	-1,70	,20	-8,20	,000	-2,12	-1,29
University	-1,29	,25	-5,00	,000	-1,80	-,78

Table 4 shows that the interaction term between self-esteem and educational level was statistically significant ($B = .50, SE = .24, t = 2.10, p = .037, 95\% CI [.02, .98]$), indicating that the effect of self-esteem on suicidal ideation

differs significantly by educational level. The interaction term contributed $\Delta R^2 = 0.025$ additional variance to the model.

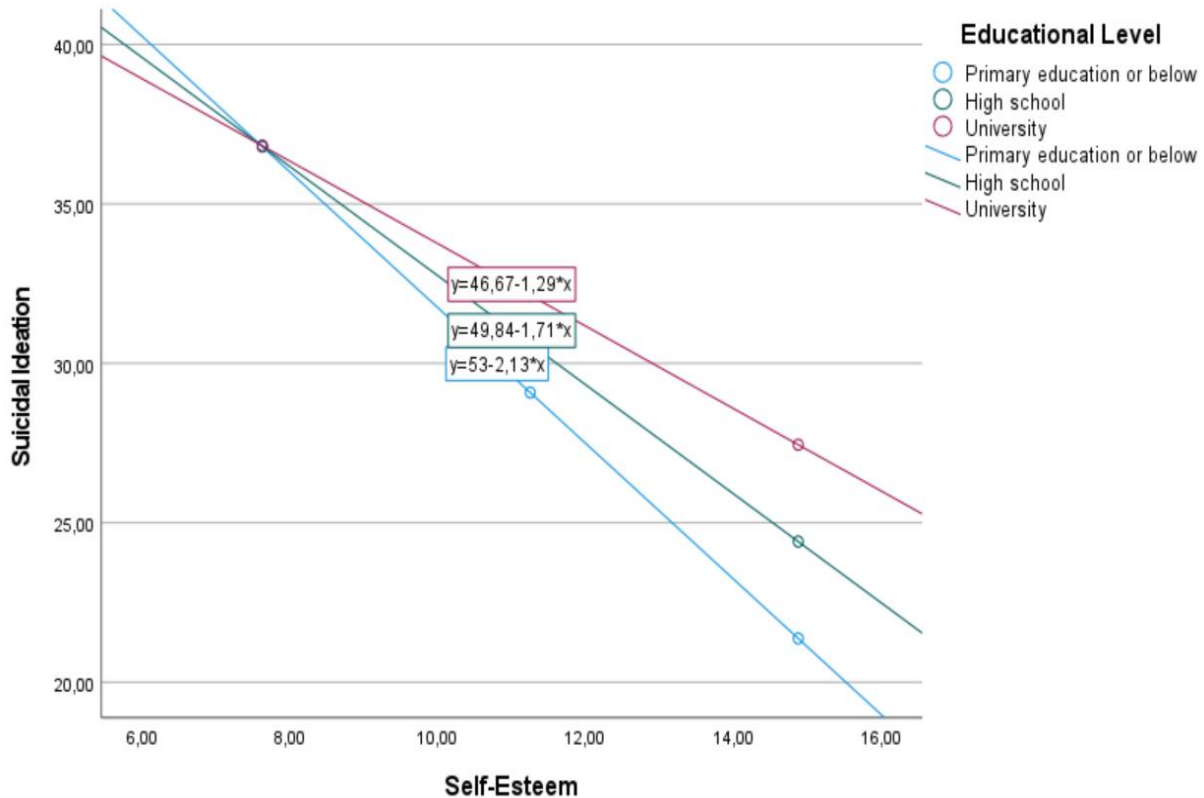


Figure 3. The Moderating Role of Educational Level in the Relationship Between Self-Esteem and Suicidal Ideation

The slope analysis in Figure 3 and conditional effects in Table 4 demonstrate that the negative effect of self-esteem on suicidal ideation was statistically significant across all education levels: primary education and below ($B = -2.12$, $SE = .31$, $t = -6.76$, $p < .001$, 95% CI [-2.74, -1.50]), high school ($B = -1.70$, $SE = .20$, $t = -8.20$, $p < .001$, 95% CI [-2.12, -1.29]), and university ($B = -1.29$, $SE = .25$, $t = -5.00$, $p < .001$, 95% CI [-1.80, -.78]). The protective effect of self-esteem decreased as educational level increased, being strongest among those with primary education and below and weakest among university-educated individuals. This suggests that high self-esteem functions as a stronger protective factor against suicidal ideation in individuals with lower educational levels, likely because higher education provides additional protective factors such as social support, problem-solving skills, and cognitive resources that reduce the relative importance of self-esteem. Conversely, low self-esteem has a particularly dramatic destructive effect among individuals with lower educational levels, where it leads to faster and more severe increases in suicide risk.

Discussion

The primary objective of this study was to examine the relationship between self-esteem and suicidal ideation in individuals at risk for problem gambling and to determine the moderating roles of key sociodemographic variables. The findings clearly demonstrated that self-esteem significantly and negatively predicts suicidal ideation, explaining a substantial proportion of the variance. This result is consistent with previous research indicating that diminished self-worth is a central psychological mechanism underlying suicidal cognition (Manani & Sharma, 2013; Lippo et al., 2022).

From a theoretical perspective, these findings can be interpreted within Baumeister's escape theory, which posits that individuals experiencing intense self-discrepancy and negative self-evaluation may develop a desire to escape aversive self-awareness, ultimately leading to suicidal ideation (Teismann et al., 2024). In the context of gambling addiction, repeated financial loss, social deterioration, and perceived personal failure contribute to a progressive erosion of self-esteem. This process reinforces maladaptive cognitive schemas such as hopelessness and worthlessness, which are well-established predictors of suicidal ideation (Burke et al., 2016). Therefore, self-esteem appears to function as both a vulnerability and a protective factor within this population.

The moderating effect of gender represents one of the most striking findings of this study. The results indicated that the negative impact of low self-esteem on suicidal ideation was significantly stronger in males than in females. This finding aligns with the well-documented gender paradox in suicide research, which suggests that although women report higher rates of suicidal ideation, men exhibit higher rates of completed suicide (Brezo, Paris & Turecki, 2006). One possible explanation lies in traditional masculine norms that emphasize emotional suppression, independence, and financial success. In the case of gambling addiction, failure to meet these expectations may lead to intensified feelings of inadequacy and shame. Additionally, men are less likely to seek psychological help, which may further exacerbate the psychological consequences of low self-esteem (Çiftçi et al., 2025).

Another important finding concerns the moderating role of marital status. Contrary to the traditional view that marriage serves as a protective factor against suicide (Borges et al., 2010), the present study found that married individuals exhibited the strongest relationship between low self-esteem and suicidal ideation. This paradoxical finding can be explained through the interpersonal-psychological theory of suicide, which highlights perceived burdensomeness as a key determinant of suicidal desire (Teismann et al., 2024). Individuals with gambling problems may perceive themselves as a burden due to financial losses, damaged relationships, and diminished family roles. As a result, marriage may transform from a protective structure into a source of pressure, guilt, and psychological distress.

Educational level also emerged as a significant moderating factor. The findings indicated that individuals with lower levels of education experienced a stronger association between low self-esteem and suicidal ideation. This is consistent with previous literature suggesting that lower educational attainment is associated with increased vulnerability to mental health problems and suicidal behavior (Borges et al., 2010). Higher education may provide individuals with enhanced problem-solving skills, cognitive flexibility, and access to social and economic resources, thereby buffering against the negative psychological effects of low self-esteem. Conversely, individuals with limited educational backgrounds may lack these protective mechanisms, making them more susceptible to the adverse effects of psychological distress.

Overall, the findings of this study highlight the complex and multifaceted nature of suicidal ideation among individuals at risk for problem gambling. Self-esteem emerges as a central psychological construct that interacts with sociodemographic factors to shape suicide risk. These results underscore the importance of adopting a multidimensional approach in both research and clinical practice.

Conclusion

In conclusion, the findings of this study indicate that self-esteem is a significant predictor of suicidal ideation among individuals at risk for problem gambling. Moreover, this relationship is meaningfully moderated by gender, marital status, and educational level, highlighting the complex and multidimensional nature of suicide risk within this population. The results suggest that low self-esteem constitutes a critical psychological vulnerability, particularly among males, married individuals, and those with lower educational attainment. These findings underscore the importance of developing targeted intervention and prevention strategies that focus on strengthening self-esteem and addressing the specific needs of high-risk subgroups.

Limitations

This study has several limitations that should be considered when interpreting the findings. First, the cross-sectional design limits the ability to draw causal inferences between self-esteem and suicidal ideation, and reverse causality cannot be ruled out. Second, the relatively small sample size may restrict the generalizability of subgroup analyses. Additionally, the study was conducted exclusively in the Turkish Republic

of Northern Cyprus, which may limit the external validity of the findings to other cultural contexts. The reliance on self-report measures may also introduce response biases, including social desirability and recall bias. Furthermore, potentially important confounding variables such as gambling severity, comorbid depression, anxiety, and substance use were not directly controlled in the analyses. Future research should address these limitations by employing longitudinal designs, larger and more diverse samples, and incorporating clinical assessments alongside self-report measures.

Declarations

Ethical Approval and Consent to Participate

This study was approved by the Scientific Research Ethics Committee of Near East University on August 14, 2025

(Approval No: YDÜ/SB/2025/2081). All participants provided informed consent prior to their participation.

Publication Permission

Not applicable.

Availability of Data and Materials

Not applicable.

Conflict of Interest

The authors declare no conflict of interest.

Funding

Not applicable.

Authors' Contributions

M.Ş. contributed to the study design, data collection, analysis, and writing of the manuscript. H.Ç.S. contributed to the supervision of the study, interpretation of the findings, and critical revision of the manuscript.

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