

Millenium, 2(27)



ENTRE A DEPENDÊNCIA EMOCIONAL E A SOLIDÃO: UM ESTUDO TRANSVERSAL COM ESTUDANTES DE MEDICINA
BETWEEN EMOTIONAL DEPENDENCY AND LONELINESS: A CROSS-SECTIONAL STUDY WITH MEDICAL STUDENTS
ENTRE LA DEPENDENCIA EMOCIONAL Y LA SOLEDAD: UN ESTUDIO TRANSVERSAL CON ESTUDIANTES
UNIVERSITARIOS DE MEDICINA

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RECEIVED: 07th February, 2025

REVIEWED: 02nd June, 2025

ACCEPTED: 23rd June, 2025

PUBLISHED: 25th July, 2025

DOI: <https://doi.org/10.29352/mill0227.40233>

RESUMO

Introdução: A dependência emocional e os sentimentos de solidão emergiram como áreas de estudo críticas, refletindo os desafios enfrentados pela sociedade contemporânea e pela educação superior.

Objetivo: Analisar a relação entre a dependência emocional e os sentimentos de solidão em estudantes de medicina.

Métodos: O estudo utilizou uma abordagem quantitativa, com desenho não experimental e transversal. Participaram 224 estudantes de medicina, com idades entre 17 e 35 anos, selecionados por meio de amostragem não probabilística. Foram utilizados dois instrumentos: o Questionário de Dependência Emocional (QDE) e a Escala de Solidão de De Jong Gierveld.

Resultados: Não foi encontrada uma correlação significativa entre a dependência emocional e os sentimentos de solidão ($p = .382$, $Rho = .059$). 61,61% apresentaram dependência emocional média e 74,55% relataram sentimentos de solidão moderados, e não foram identificadas relações entre as dimensões das variáveis. As mulheres mostraram maior suscetibilidade a se sentirem sozinhas do que os homens, mas a dependência emocional foi similar em ambos.

Conclusão: Embora os achados gerais não apoiem uma relação significativa entre a dependência emocional e a solidão, esses resultados sugerem que os sentimentos de solidão e a dependência emocional podem operar de maneira independente nessa população, com exceções em contextos específicos. Deve-se prestar atenção às mulheres em questões de solidão na área da psicologia.

Palavras-chave: dependência; solidão; medicina; relações interpessoais

ABSTRACT

Introduction: Emotional dependency and feelings of loneliness have emerged as critical areas of study, reflecting the challenges faced by contemporary society and higher education.

Objective: To analyze the relationship between emotional dependency and feelings of loneliness among medical students.

Methods: The study employed a quantitative approach, non-experimental, and cross-sectional in design. A total of 224 medical students aged between 17 and 35 years participated, selected through non-probability sampling. Two instruments were used: the Emotional Dependency Questionnaire (EDQ) and the De Jong Gierveld Loneliness Scale.

Results: No significant correlation was found between emotional dependency and feelings of loneliness ($p = .382$, $Rho = .059$). 61.61% exhibited moderate emotional dependency, while 74.55% reported moderate feelings of loneliness, and no relationships were identified between the dimensions of the variables. Women showed greater susceptibility to feelings of loneliness than men, but emotional dependency was similar in both groups.

Conclusion: Although the overall findings do not support a significant relationship between emotional dependency and loneliness, these results suggest that feelings of loneliness and emotional dependency may operate independently in this population, with exceptions in specific contexts. Attention should be paid to women regarding issues of loneliness from a psychological perspective.

Keywords: dependency; loneliness; medicine; interpersonal relationships

RESUMEN

Introducción: La dependencia emocional y los sentimientos de soledad han emergido como áreas de estudio críticas, reflejando los desafíos que enfrenta la sociedad contemporánea y la educación superior.

Objetivo: Analizar la relación entre la dependencia emocional y los sentimientos de soledad en estudiantes de medicina.

Métodos: El estudio fue de enfoque cuantitativo, diseño no experimental y transversal. Participaron 224 estudiantes de medicina, entre 17 y 35 años, seleccionados mediante muestreo no probabilístico. Se utilizaron dos instrumentos: el Cuestionario de Dependencia Emocional (CDE) y la Escala de Soledad de De Jong Gierveld.

Resultados: No se encontró una correlación significativa entre la dependencia emocional y los sentimientos de soledad ($p = .382$, $Rho = .059$). El 61.61 % obtuvo una dependencia emocional media y el 74.55 % un sentimiento de soledad moderado y no se ha identificado relaciones entre las dimensiones de las variables. Las mujeres mostraron mayor susceptibilidad a sentirse solas que los hombres, pero la dependencia emocional fue similar en ambos.

Conclusión: Aunque los hallazgos generales no respaldan una relación significativa entre la dependencia emocional y la soledad, estos resultados sugieren que los sentimientos de soledad y la dependencia emocional podrían operar de manera independiente en esta población, con excepciones en contextos específicos. Se debe prestar atención a las mujeres en temas de soledad desde el área de psicología.

Palabras Clave: depenedencia; soledad; medicina; relaciones interpersonales

DOI: <https://doi.org/10.29352/mill0227.40233>

INTRODUCTION

In university education, one of the most relevant aspects is psychological well-being. In the academic life of medical students in Peru, the intense academic and emotional burden can pose a significant psychological challenge (Valladares-Garrido et al., 2023) that may even affect their own satisfaction (García et al., 2022). In this context, emotional dependency and feelings of loneliness become a growing issue in student life. Relevant factors such as lack of family support can negatively impact the professional skills of future doctors, including empathy and teamwork (Berduzco-Torres et al., 2020). However, the pressure to achieve high performance standards and the demands of a competitive educational environment lead students to develop unhealthy attachments to those around them, which may result in a disconnection from reality and feelings of loneliness (Lan et al., 2023).

Emotional dependency constitutes an affective need that individuals have towards others, which persists over time. It is defined as a behavioral pattern in which a person develops a strong need to be emotionally attached to another, constantly seeking their approval, validation, and emotional security. This phenomenon can lead to difficulties in making independent decisions, low self-esteem, and an intense fear of abandonment (Dias et al., 2023). During professional training, university students are surrounded by a series of factors—such as emotional dependency—that can have consequences for their mental health, primarily when they feel alone.

Research on emotional dependency has revealed its impact across various aspects of life. It has been found to act as a predictor of emotional symptoms (Macía et al., 2023), as well as other psychological factors such as emotional regulation, interpersonal relationships, and technological dependency (Conley et al., 2023; Tao et al., 2024; Wong & Cheung, 2024). This psychological phenomenon primarily affects individuals experiencing emotional imbalances, which are manifested through internal negative feelings such as loneliness, sadness, or guilt, as well as a perceived sense of emotional emptiness (de la Villa Moral et al., 2018).

In this context, another factor that has increased due to emotional dependency is the feeling of loneliness, which has been the subject of numerous studies encompassing various demographic groups and social contexts. Recent research has explored loneliness in university students (Luo & Hu, 2022), older adults (Chiao et al., 2022; O'Súilleabháin et al., 2019), and couples (Wickrama & O'Neal, 2021). Buecker et al. (2020) have provided a basis for understanding how individual differences, specifically personality traits, can influence the experience of loneliness.

Feelings of loneliness represent a complex and multifaceted psychological experience that has been the subject of extensive study in the social sciences. De Jong Gierveld and Van Tilburg (1999) define loneliness as a universal and subjective phenomenon, whose perception is influenced both by the social context and by individual factors. These authors distinguish between two fundamental types of loneliness: social loneliness, which refers to the perception of an insufficient social network, and emotional loneliness, which involves the absence of intimate and trusting relationships that the individual wishes to have. This dual conceptualization has been widely adopted in the literature, providing a robust theoretical framework for understanding the complexity of the experience of loneliness (Cacioppo & Hawkley, 2009).

Loneliness has been widely studied across various contexts, emerging as a multifactorial phenomenon that can affect individuals of different ages and conditions. Research has shown that factors such as low self-esteem, deficiencies in interpersonal communication skills, mental health issues, personal insecurity, and addiction to social media significantly increase the perception of loneliness (Chura-Quispe et al., 2025; Nottage et al., 2022; van Tonder et al., 2023; Wening et al., 2023). Consequently, this experience of isolation not only deteriorates psychological well-being but may also serve as a risk factor for the development of other affective phenomena, such as emotional dependency. Furthermore, studies have found that individuals with problematic love styles are more likely to experience social rejection, which in turn intensifies their feelings of loneliness (Michalska et al., 2023).

Other studies have addressed topics related to loneliness in mental health from various perspectives. For instance, Copeland et al. (2018) explored different dimensions of loneliness and its relationship with substance use in adolescence, revealing how social isolation can lead young people to seek solace in destructive behaviors. Alimoradi et al. (2022) studied the relationship between cognitive schemas activated in sexual contexts and early maladaptive schemas in married women of childbearing age, suggesting that the loneliness experienced may be linked to harmful thought patterns that affect intimacy and emotional connectivity.

Regarding advances in research on the relationship between emotional dependency and feelings of loneliness, the literature has identified that among young adults aged 18 to 25 who have initiated romantic relationships, there is a positive association between the two variables: the greater the dependency, the stronger the feeling of loneliness (Fredella & Sosialita, 2023). Another study found that social loneliness has a stronger association with social isolation (Wolters et al., 2023). Although some studies did not directly address the association between these two phenomena, they suggest that negative emotions may be linked to an increase in loneliness (Luo & Shao, 2023). Moreover, emotional regulation appears to be correlated with either an increase or decrease in feelings of loneliness (Wols et al., 2015).

Loneliness, often perceived as a painful experience of social isolation, can have profound repercussions on the psychological well-being of university students. On the other hand, emotional dependency refers to the excessive need for support and validation from others, which can lead to unhealthy attachments and a loss of emotional autonomy. Despite the growing interest in both phenomena, there is a significant gap in understanding how these phenomena relate to each other in the medical student population. This study is particularly relevant given that medical students face unique challenges, such as lifestyle changes, concerns about professional advancement, high rates of burnout, and the demands of navigating their roles as residents (Sam et al., 2022; Kirtchuk et al., 2021), all of which may exacerbate both emotional dependency and feelings of loneliness (Dyrbye et al., 2014).

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Furthermore, within this framework, understanding Bowlby's (1969) attachment theory provides a fundamental framework for understanding how early relationship experiences influence patterns of emotional dependency in adulthood. Additionally, Ryan and Deci's (2000) self-determination theory offers insight into how the satisfaction of basic psychological needs can mitigate feelings of loneliness. Moreover, Cacioppo and Hawkley's (2009) cognitive model of loneliness suggests that negative perceptions and cognitions can perpetuate and exacerbate the experience of loneliness. The integration of these theories with recent empirical findings on emotional dependency and loneliness in university students (Luo & Hu, 2022) provides a solid foundation for exploring the interrelationship of these phenomena in the specific context of medical students.

The primary objective of this study is to analyze the relationship between emotional dependency and feelings of loneliness among medical students in southern Peru. To achieve this overarching goal, the following specific objectives have been established: a) to identify levels of emotional dependency and feelings of loneliness, b) to demonstrate the relationship between the dimensions of feelings of loneliness and emotional dependency, c) to compare the differences in feelings of loneliness and emotional dependency between men and women, thus contributing to filling the identified knowledge gap and informing future interventions and support policies for medical students.

2. METHODS

The study employs a quantitative approach as it numerically analyzes both variables; it uses a descriptive-correlational design, focusing on descriptively analyzing each variable as well as the degree of association between them. Additionally, it is comparative as it aims to compare the situation of the variables based on sociodemographic data such as sex.

2.1 Sample

The unit of study for this research comprises students in the human medicine program at the Universidad Privada de Tacna. The population consists of 453 medical students for the 2024-I semester. However, a non-probabilistic intentional sampling method was applied with inclusion and exclusion criteria, involving 224 medical students from a private university located in southern Peru. Inclusion criteria considered students enrolled in the human medicine program for the 2024-I semester, with voluntary participation and prior informed consent. Exclusion criteria included students who did not wish to participate, students in higher grades (interns), and those who completed the test incorrectly or incompletely. Participants' ages ranged from 17 to 35 years, with an average of 23.01 and a standard deviation of 2.60. Furthermore, 119 (53.1%) were male, while 105 (46.9%) were female.

2.2 Data collection instruments

Two questionnaires were applied in the research. The first was the Emotional Dependency Scale, evaluated using a questionnaire adapted by Castro Alburneque and Quiroz Macera in 2022. This instrument is designed to measure the intensity of emotional dependency and consists of six dimensions: Separation Anxiety (6 items), Affective Expression from the Partner (4 items), Modification of Plans (4 items), Fear of Loneliness (3 items), Extreme Expression (3 items), and Attention-Seeking (2 items). The questionnaire totals 23 items and takes between 10 and 15 minutes to complete. It is applicable to adolescents and adults of both sexes. For content validity, it was evaluated through 7 expert judgments using the Aiken index, obtaining a significance of 0.008 across the 23 items. Construct validity was determined using the total domain convergence method with the Spearman coefficient, achieving a general scale of 1. Confirmatory factor analysis yielded a KMO of 0.894 and a Bartlett test of $p = 0.000$, achieving a factorial structure with 5 factors and a cumulative variance of 60.064%. The overall reliability, measured through the omega coefficient, was 0.947, with dimensions ranging from 0.70 to 0.94. Finally, three categories for percentile norms were defined: low, medium, and high (Castro Alburneque & Quiroz Macera, 2022).

The second instrument was the De Jong Gierveld Loneliness Scale, adapted by Ventura and Caycho (2016). This is a booklet-type questionnaire, consisting of 11 questions with three response options: no, somewhat, and yes. Scoring is achieved by dichotomizing the responses, giving one point to the student for responding "somewhat" or "no" on items (1, 4, 7, 8, and 11); while on the remaining items (2, 3, 5, 6, 9, and 10), one point is awarded if the response is "somewhat" or "yes." The final score is interpreted as follows: 0 indicates absence of loneliness, and 11 indicates extreme loneliness. The application of the test takes approximately 10 minutes and can be conducted either individually or collectively (Incil, 2023). The validity of the De Jong Gierveld Loneliness Scale is based on the internal structure and reliability of the scoring across the 11 questions. A total of 851 students with an average age of 15.07 years were evaluated, of whom 417 were girls (49%) and 434 were boys (51%) from schools in Metropolitan Lima, ranging from 1st to 5th grade of secondary school. Factor analysis showed that the scale has a bidimensional oblique structure between social and emotional loneliness, demonstrating good fit indicators ($CFI \geq .90$, $RMSEA \leq .08$). Additionally, reliability was found through the omega coefficient ($\omega = .827$), considered acceptable ($\geq .70$). Therefore, the scale shows adequate psychometric properties and can be used in future research on loneliness among Peruvian adolescents.

DOI: <https://doi.org/10.29352/mill0227.40233>

2.3 Procedure and Data Processing

The research process began with a request for permission to conduct the study from the management of the Professional School of Medicine on May 21, 2024. Subsequently, with the support of instructors from the 2024-I semester across various cycles, a schedule (dates and times) was established for data collection. The data collection process was conducted in two modalities: via a QR code linked to a virtual questionnaire generated with Google Forms, as well as in person. Participants were informed and, after providing their informed consent for voluntary participation, completed both tests. The application took place between May 27 and June 7, 2024; each participant took an average of 15 minutes to complete both tests.

The study consistently adhered to the fundamental ethical principles for research, in accordance with the Declaration of Helsinki and current institutional regulations, as stipulated in Article 17 of the Code of Research Ethics approved by R. No. 162-2018. Participation was voluntary, following the signing of an informed consent form that outlined the study objectives, procedures, confidentiality, and anonymity of the collected data. Additionally, participants' rights to withdraw from the study at any time were fully guaranteed.

The collected data were processed using Microsoft Excel 2021 for tabulation and the statistical software SPSS version 27 for data analysis. The normality of distribution was assessed using the Kolmogorov-Smirnov test, given that the number of participants exceeded 50. The interpretation was based on the statistical significance level ($p < .05$), with values greater than this threshold indicating the appropriateness of a parametric test. Additionally, Levene's test was employed to verify the assumption of homogeneity of variances, with a significance level set at 5%. However, the data did not meet the necessary assumptions; therefore, nonparametric statistical tests were used for hypothesis testing. Spearman's Rho test was applied to assess correlations, while the Mann-Whitney U test for two independent samples was used to compare variables according to sex. In both cases, a p-value less than the statistical significance threshold ($p < .05$) was expected. Moreover, the Z-value was interpreted, considering that the number of participants exceeded 20.

3. RESULTS

Table 1 presents the levels of emotional dependency among students. It is evident that 61.61% of students exhibit a medium level of emotional dependency. In the dimensions of distress after absence (34.38%) and alteration of plans (35.71%), a low level predominates; in affective reaction (34.82%) and need for care (36.61%), a medium level is reached; while apprehension of being alone (35.71%) and limit expression (37.50%) are categorized as high levels. In all cases, the percentage differences were low, which does not allow for a clear identification of predominance.

Table 1 – Emotional Dependency and Dimensions

Variables	Low		Medium		High	
	n	%	n	%	n	%
DIA	77	34.38	74	33.04	73	32.59
AFR	73	32.59	78	34.82	73	32.59
ALP	80	35.71	75	33.48	69	30.80
ABA	65	29.02	79	35.27	80	35.71
LIE	72	32.14	68	30.36	84	37.50
NEC	74	33.04	82	36.61	68	30.36
EMD	62	27.68	138	61.61	24	10.71

Note: DIA = Distress after Absence; AFR = Affective Reaction; ALP = Alteration of Plans, ABA = Apprehension of Being Alone; LIE = Limit Expression; NEC = Need for Care; EMD = Emotional Dependency

The levels of feelings of loneliness indicate that 74.55% are classified as moderate, while 16.07% report not feeling lonely. Regarding emotional loneliness, it was also identified that 75.89% fall within a moderate range, and 16.96% express not experiencing this feeling. Concerning social loneliness, medical students report that 70.10% experience moderate loneliness, while 17.86% claim not to suffer from it (Table 2).

Table 2 – Feelings of Loneliness and Dimensions

Variables	Absence		Moderate		Severe		Very Severe	
	n	%	n	%	n	%	n	%
EML	38	16.96	170	75.89	13	5.80	3	1.34
SOL	40	17.86	157	70.09	21	9.38	6	2.68
OFL	36	16.07	167	74.55	16	7.14	5	2.23

Note: EML = Emotional Loneliness; SOL = Social Loneliness; OFL = Overall Feeling of Loneliness

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The findings in Table 3 indicate that no significant relationship was identified between loneliness and emotional dependency ($Rho = .059$, $p = .382$). The same is observed among the dimensions, except for the correlation between social loneliness and the need for care ($Rho = .157$, $p = .019$); however, this relationship was low. These findings suggest an absence of a relationship between the two phenomena in medical students.

Table 3 – Correlations between Feelings of Loneliness, Emotional Dependency, and Their Dimensions

Variables	Coefficient	DIA	AFR	ALP	ABA	LIE	NEC	EMD
EML	<i>Rho</i>	.077	.090	.007	.072	.019	.084	.077
	<i>p</i>	.248	.178	.922	.281	.773	.210	.252
SOL	<i>Rho</i>	.045	.030	.001	.061	-.071	.157	.035
	<i>p</i>	.498	.652	.989	.364	.289	.019	.607
OFL	<i>Rho</i>	.061	.065	-.006	.071	-.023	.116	.059
	<i>p</i>	.361	.336	.927	.292	.736	.083	.382

It is identified that women ($M = 16.07$, $SD = 3.09$) report a higher feeling of loneliness compared to men ($M = 14.59$, $SD = 3.61$), and this difference is significant ($Z = -4.170$, $p = .000$). Regarding emotional dependency, no significant differences were found ($Z = -1.318$, $p = .188$) between men ($M = 71.66$, $SD = 13.89$) and women ($M = 73.97$, $SD = 11.48$). Significant differences were detected in the dimensions of emotional loneliness ($Z = -4.608$, $p = .000$) and social loneliness ($Z = -2.652$, $p = .008$), where women exhibited greater feelings of loneliness than men. No differences were detected in the dimensions of distress after absence ($Z = -.469$, $p = .639$), affective reaction ($Z = -1.758$, $p = .079$), alteration of plans ($Z = -.977$, $p = .329$), apprehension of being alone ($Z = -.133$, $p = .894$), limit expression ($Z = -.070$, $p = 0.944$), and need for care ($Z = .537$, $p = .591$) (Table 4).

Table 4 – Differences in Loneliness, Emotional Dependency, and Dimensions by Sex

Variables	Female (n = 105)		Male (n = 119)		U	Z	p
	M	SD	M	SD			
EML	9.219	2.171	8.025	2.576	4056.50	-4.608	.000
SOL	6.857	1.362	6.563	1.660	5009.00	-2.652	.008
OFL	16.076	3.094	14.588	3.609	4241.00	-4.170	.000
DIA	18.857	3.720	18.579	3.905	6021.50	-0.469	.639
AFR	13.200	3.027	12.504	3.189	5401.00	-1.758	.079
ALP	13.210	2.706	12.706	2.978	5777.50	-.977	.329
ABA	9.619	2.059	9.420	2.596	6183.50	-.133	.894
LIE	9.124	2.252	9.101	2.420	6214.00	-.070	.944
NEC	6.591	1.833	6.445	2.011	5991.00	-.537	.591
EMD	73.971	11.483	71.664	13.890	5610.00	-1.318	.188

4. DISCUSSION

In relation to the general objective, the results indicate that there is no significant correlation between emotional dependency and feelings of loneliness among medical students. This notably contrasts with previous findings suggesting a close relationship between these phenomena. For instance, Lemos and Londoño (2006) conceptualize emotional dependency as a pursuit of emotional needs that could be intrinsically linked to loneliness.

Moreover, De Jong Gierveld and Van Tilburg (1999) emphasize that loneliness is a universal and subjective phenomenon, implying that its presence can vary significantly from one individual to another, depending on their specific contexts. Urbiola et al. (2017) point out that emotional dependency is characterized by a distorted perception of interpersonal relationships, suggesting that the relationship between emotional dependency and loneliness may be more complex. It is possible that there are mediating or moderating factors influencing this dynamic, which allows for future studies aimed at deepening the interaction between both constructs and considering contextual variables that may alter their relationship.

It appears that medical students have developed coping strategies that enable them to manage emotions effectively. Some strategies include distraction, seeking support from social networks, or strengthening meaningful relationships that, although marked by emotional dependency, do not necessarily imply loneliness (Vasileiou et al., 2019). Additionally, some students may feel emotionally dependent on others without experiencing loneliness due to the social context they have forged or the nature of their relationships. The number of hours that a medical student spends at the university may contribute to their immersion in a highly social and collaborative environment with professors and peers, helping to mitigate feelings of loneliness (Hussin et al., 2021). In other words, even if a person suffers from emotional dependency, they can still feel fulfilled and satisfied with their social life. Other intrinsic factors, such as personality, resilience, or past experiences, may help students know how to cope.

Regarding the first specific objective, it was identified that 61.61% of participants exhibit a medium level of emotional dependency, while 74.55% report a moderate degree of feelings of loneliness. These findings are consistent with previous research indicating

DOI: <https://doi.org/10.29352/mill0227.40233>

that 40.6% of adolescents exhibit high emotional dependency, and 14.5% even reach an extreme level of dependency (Arbinaga et al., 2021). This suggests that the perception of emotional dependency is common among university students; however, it can also be observed that a significant portion of the student population maintains balanced and healthy interpersonal relationships. Moreover, many university students in romantic relationships tend to experience some degree of emotional dependency towards their partners (Quiroz et al., 2021). This phenomenon may reflect the search for emotional support and the need for intimate connection, characteristics typical of the university stage. Additionally, another study indicates that 72.1% of students also report low emotional dependency (Damian et al., 2024), reinforcing the idea that despite the inherent challenges of academic and emotional life in this context, many individuals manage to develop relationships that do not subject them to excessive dependency. Regarding feelings of loneliness, our study found a higher prevalence compared to previous studies, where between 20.6% and 32.4% of university students reported moderate to severe levels of loneliness (Diehl et al., 2018; Zahedi et al., 2022). This difference could be explained by contextual, cultural factors, or by sample characteristics, as our study focused on medical students. Although extreme levels of loneliness were not predominantly observed, the results suggest the need for a thorough and longitudinal analysis throughout the entire course of university education.

Regarding the second objective, it has been demonstrated that there is no significant relationship between the dimensions of feelings of loneliness and emotional dependency. Although there is a scarcity of previous studies aimed at evaluating these dimensional aspects, this may be attributed to the lack of a relationship between the variables, resulting in emotional and social loneliness not showing representative correlations with factors linked to emotional dependency. Recent research has explored related topics; for example, Michalska et al. (2023) investigated the connection between feelings of depression and loneliness, considering that this depends on the predominant love styles of individuals. Bell et al. (2022) focused on emotional dysregulation and dependency in relationships, while Macía et al. (2023) identified how emotional dependency can predict emotional symptoms. Loneliness is not simply reduced to the absence of social relationships but is a response to the lack of specific attachment figures that students find in their social circles. This invites further exploration of the relationship between the studied variables.

Regarding the third objective, it has been confirmed that women experience a greater feeling of loneliness than men; however, emotional dependency is similar in both groups. This differs from other previous research that detected higher emotional dependency among women than men (Castillo-González et al., 2024) and another study that demonstrated a low level of emotional dependency among the majority of female students (Vargas et al., 2024). Similarly, a study by Buecker et al. (2020) on individual differences in the experience of loneliness suggests that gender dynamics may influence how these feelings are perceived and experienced. Additionally, the complexity of emotional relationships between men and women in her research on attachment behaviors and fear of abandonment. Women are more likely to admit to feeling lonely compared to men, possibly because the negative consequences of admitting loneliness are less for them (Borys & Perlman, 1985). However, other studies have not been able to identify representative differences in the loneliness experienced by men and women, suggesting that the perception of loneliness may be more nuanced and not solely determined by sex (Maes et al., 2019). These findings raise important questions about the social and cultural norms that may affect the emotional expression of male and female medical students.

The practical implications of the research highlight the relevance of empirical results, as they will allow for pertinent measures, primarily in strategies aimed at helping women reduce feelings of loneliness. Although no relationship between the two variables was identified, our study provides a relevant contribution to exploring other phenomena that may be associated with these issues among students. The constant pressure on health sciences students is exacerbated as they enter the final cycles and begin their internships. Detaching from family or partners could lead to feelings of loneliness. Therefore, it is pertinent for university institutions to propose workshops or mental health programs.

Regarding theoretical implications, although the study does not align with Bowlby's (1969) attachment theory—which posits that insecure attachment patterns in childhood predispose individuals to emotional dependency and feelings of loneliness later in life—the absence of a significant correlation between the study variables among medical students suggests that, in this specific context, other factors may be modulating the relationship between these two phenomena. On the other hand, the findings align more closely with Ryan and Deci's (2000) self-determination theory, which proposes that individuals can develop strategies to fulfill psychological needs for autonomy, competence, and social relatedness, thereby mitigating experiences of loneliness regardless of their level of emotional dependency. In this regard, it is important to develop strategies that students can implement to avoid feelings of loneliness during their university years.

LIMITATIONS

The study has significant limitations, including its cross-sectional nature, which prevents establishing causal relationships, and its focus on a single educational institution, which limits the generalization of the results. For future research, it is recommended to expand the sample to include different universities and regions, conduct longitudinal studies that allow for a better understanding of the temporal evolution of these variables, incorporate mixed methodologies that include qualitative analyses to better understand the underlying mechanisms of the relationship between borderline expression and loneliness, and consider mediating or moderating variables such as academic stress and coping strategies, following the research line of Dyrbye et al. (2014) regarding the unique challenges faced by medical students.

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CONCLUSION

The study concludes that there is no correlation between emotional dependency and feelings of loneliness; furthermore, the dimensions of both variables do not show significant relationships. The level of emotional dependency is medium, and the feeling of loneliness is moderate among medical students. Finally, women report feeling lonelier than men; however, emotional dependency is similar in both groups.

ACKNOWLEDGEMENTS

The present study thanks the contribution of the volunteer students who participated in the research.

AUTHORS' CONTRIBUTION

Conceptualization, L.C. and G.C.Q.; data curation, L.C. and G.C.Q.; formal analysis, G.C.Q.; funding acquisition, L.C. and C.F.R.; investigation, L.C., G.C.Q. and C.F.R.; methodology, G.C.Q. and B.D.L.C.; project administration, L.C. and G.C.Q.; resources, C.F.R. and B.D.L.C.; software, G.C.Q.; supervision, C.F.R. and B.D.L.C.; writing-original draft, L.C., G.C.Q., C.F.R. and B.D.L.C.; writing-review and editing, L.C., G.C.Q., C.F.R. and B.D.L.C.

CONFLICT OF INTEREST

The authors declare no conflict of interest.

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