The Effect of Anxiety and Body Weight on College Social Skills: A Review of the Evidence

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Abstract

This review article discusses the impact of anxiety, body weight, and social skills on the academic and social integration of college students. Based on six primary articles, it explores the effects of social anxiety, stigmatization associated with body weight, and negative self-image on interpersonal interactions. It also examines gaps in current strategies, including psychological therapies, group physical activities, and educational programs. The influence of the cultural and geographical context is examined in a particular case study of Peruvian medical students. Finally, the article proposes comprehensive interventions that combine psychological, physical, and social strategies to address these challenges and improve students' emotional and social well-being. This study underscores the necessity of inclusive and culturally adapted approaches within the university setting.

Keywords: Social integration, stigmatization, university mental health, comprehensive interventions and self-efficacy.

RESUMEN

Este artículo de revisión analiza cómo la ansiedad, el peso corporal y las habilidades sociales afectan a la integración académica y social de los estudiantes universitarios. A partir de seis artículos base, se exploran los efectos de la ansiedad social, la estigmatización asociada al peso corporal y la autoimagen negativa en las interacciones interpersonales, así como las carencias de las estrategias actuales, que incluyen terapias psicológicas, actividades físicas grupales y programas educativos. Se examina un caso particular en estudiantes de medicina peruanos, destacando la influencia del contexto cultural y geográfico. Por último, se proponen intervenciones integrales que combinen estrategias psicológicas, físicas y sociales para abordar estos desafíos y mejorar el bienestar emocional y social de los estudiantes. Este estudio subraya la necesidad de adoptar enfoques inclusivos y culturalmente adaptados en el ámbito universitario.

Palabras clave: Integración social, estigmatización, salud mental universitaria, intervenciones integrales y autoeficacia.

INTRODUCTION

In recent decades, the emotional and physical well-being of university students has attracted increasing attention due to its influence on academic performance, social

integration, and personal development. This stage of life, which marks the transition to early adulthood, presents significant challenges, including stress management, adapting to new environments, and developing effective social skills (Martins et al., 2020; Ramania et al., 2020). In this context, social skills are critical for facilitating interpersonal interaction, teamwork, and constructing support networks, all of which are essential for overcoming the academic and social challenges of this stage (Ghaffar et al., 2020).

However, several studies have shown that variables such as anxiety and body weight can profoundly impact the quality of social skills in university students. Anxiety, defined as an emotional response to perceived threats, can negatively affect social interactions. This is particularly evident in cases of social anxiety, where the fear of negative evaluations and judgments from others can lead to isolation and the avoidance of important social situations (Ramania et al., 2020). In turn, body weight, particularly in cases of being overweight or obese, affects not only physical health but can also trigger experiences of social stigmatization and negative self-image, which intensifies barriers to social integration (Martins et al., 2020).

The relationship between anxiety, body weight, and social skills is complex and multifaceted. Social anxiety can exacerbate the effects of body weight on the perception of social acceptance. Conversely, the low self-esteem associated with being overweight can intensify anxious responses in social contexts. Additionally, limited social interaction and isolation can perpetuate cycles of physical inactivity and unhealthy eating behaviors, creating a vicious cycle that hinders the development of social skills (Ghaffar et al., 2020).

In the university environment, these factors are especially relevant due to the unique characteristics of this population. College students are immersed in an environment where interpersonal relationships play a critical role in their academic success and emotional well-being. However, academic pressure combined with exposure to new social experiences can exacerbate the impact of anxiety and body weight on social skills (Ramania et al., 2020). This phenomenon underscores the need to better understand how these variables interact with and affect college students' lives.

Therefore, this review article critically analyzes the existing evidence on the interaction between anxiety, body weight, and social skills in university students. Through an exhaustive review of the literature, the article seeks to identify patterns and relationships, as well as key areas that allow for an understanding of the underlying dynamics. Additionally, it proposes interventions that can support the development of social skills in this population. The review also aims to highlight the importance of addressing these factors holistically, considering individual and contextual aspects.

METHOD

The adopted methodological approach consisted of a systematic literature review carried out in accordance with the PRISMA (Preferred Reporting Items for Systematic Reviews and Meta-Analyses) guidelines. This framework guided the objectives of exploratory research and desk analysis by implementing its four essential procedures: identification, selection, eligibility assessment, and inclusion of relevant studies.

The systematic review was developed in accordance with quality standards, and the research objectives were satisfactorily achieved by incorporating key aspects such as: (1) explicitly mentioning the systematic review in the work's title, (2) generating a synthesis through a structured summary, (3) substantiating the study with an analysis

of the existing knowledge on the subject, (4) defining a clear objective to guide the research process, (5) establishing specific eligibility criteria for selecting studies, (6) clearly identifying the consulted information sources, (7) conducting a thorough search in specialized databases, (8) rigorously selecting and analyzing relevant studies, (9) employing techniques to avoid duplication during data collection, (10) making an exhaustive record of the collected information, (11) providing a detailed description of the results, search, and selection processes, including the applied criteria, (12) justifying the used inclusion criteria, (13) analyzing potential limitations and biases, and (14) formulating conclusions aligned with the established objectives.

This exploratory study used specialized databases operating under the principles of Open Journal Systems (OJS), which facilitate open access to scientific knowledge and encourage new research. Therefore, using high-impact repositories such as Scopus is recommended.

During the identification stage, descriptors, search fields, and Boolean operators were carefully defined to construct a suitable search equation in Scopus. The details of this equation are specified in Table 1.

Table 1. Identification phase: descriptors and search fields

Bolleanus	Search term	Search field
	Anxiety	Title, abstract and keywords
or	stress	Title, abstract and keywords
and	"body weight"	Title, abstract and keywords
or	Obesity	Title, abstract and keywords
and	university	Title, abstract and keywords
or	College	Title, abstract and keywords
or	"higher education"	Title, abstract and keywords
and	"social skills"	Title, abstract and keywords
or	"social interactions"	Title, abstract and keywords

Initially, a total of 47 records were identified using the designed search equation. These records were filtered to include only publications from the period 2019-2024 (a five-year time range), and only documents classified as scientific articles were selected. This initial process reduced the number of records to 27, completing the identification stage.

The next phase, selection, involved a detailed analysis to identify possible duplicates in the consulted databases. Since no duplicate documents were found, the total number of unique records remained at 27. Since the scientific papers were distributed across different subject areas and languages, an additional criterion was applied to include only English and Spanish documents. This filter did not exclude any records, and the 27 selected documents were retained.

During the eligibility stage, the "open access" criterion was used as a filter, which led to the exclusion of six records, leaving a total of 21 accessible full-text documents. These documents were exported in CSV format to facilitate a comprehensive review of the abstracts.

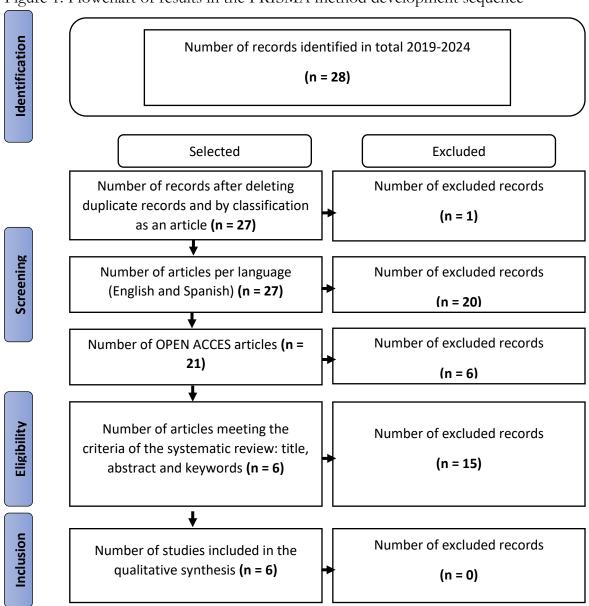
In the final stage, corresponding to inclusion, an exhaustive analysis of the 21 selected abstracts was conducted. Fifteen documents that did not meet the established criteria were excluded, leaving six articles that were subjected to rigorous scrutiny. These

studies were evaluated to verify compliance with the main inclusion criterion of exploring the impact of anxiety and body weight on the social skills of university students. The six selected documents met the established criteria, so a detailed reading and systematization of their content was performed to serve as a basis for critical analysis and the development of this review.

DEVELOPMENT AND DISCUSSION

The results have been organized based on the sequence of phases of the PRISMA method that are verified in the following figure.

Figure 1. Flowchart of results in the PRISMA method development sequence



Regarding what has been described above, the details of the 6 articles chosen below are specified:

Table 2.Articles selected after systematic review

N°	Original title of the article	Author / Year	Database

1	Depression, anxiety, and stress in medical students in Peru a cross-sectional study	Valladares, Quiroga, Berrios, Zila, Anchay, Chumán, Vera, Pereira, Failoc, Díaz, & Valladares (2023)	Scopus
2	Does how individuals handle social situations exacerbate the relationship between physique anxiety and food addiction? The role of emotional expressive suppression and social avoidance and distress	Li, Fan, Lin and Shi (2024)	Scopus
3	"I don't want them to judge me": Separating out the role of fear of negative evaluation, neuroticism, and low self-esteem in eating disorders	Clague, Prnjak, Mitchison (2023)	Scopus
4	Level of physical inactivity and quality of life in overweight female students	Ghaffar, Ilyas, and Ahmad (2020)	Scopus
5	Lifestyle choices of Brazilian college students	Martins, Marôco, Barros and Campos (2020)	Scopus
6	The effect of social interaction and environment during aerobic dance on salivary cortisol	Ramania, Iwo, Apriantono and Winata (2020)	Scopus

Relevance of anxiety, body weight, and social skills in academic and social transition

The academic and social transition is a crucial process in the lives of university students. Adapting to new academic demands, social environments, and personal responsibilities poses significant challenges. Anxiety, body weight, and social skills are critical factors that determine the success or difficulties students face during this transition. These factors interact in complex ways, influencing students' emotional and physical well-being and their ability to integrate and thrive in the university environment (Valladares-Garrido et al., 2023; Martins et al., 2020).

Anxiety: A Persistent Challenge

Social anxiety, one of the most common forms of anxiety among college students, is characterized by a fear of negative judgment and social evaluation. It directly affects students' ability to build interpersonal relationships and participate in academic and social activities. According to Li et al. (2024), students with social anxiety tend to perceive their interactions negatively, perpetuating a cycle of avoidance and negative reinforcement. This cognitive model illustrates how distorted thoughts about social interactions can lead to inhibition and isolation, hindering the development of effective social skills.

Recent studies, such as those by Valladares-Garrido et al. (2023), have revealed an association between academic and social anxiety and poor academic performance, as well as lower participation in group activities among Peruvian students. This finding aligns with previous research, including that of Rapee and Heimberg (1997), who emphasized the significance of social evaluation as a primary anxiety trigger. Additionally, Ramania et al. (2020) demonstrated that physical activity and group

interactions can reduce anxiety levels by providing a supportive environment for students.

Body Weight and Social Stigma

Body weight, particularly being overweight or obese, significantly impacts students' self-perception and social integration. Martins et al. (2020) explained that the social stigma associated with being overweight creates psychological and social barriers that negatively affect students' confidence and willingness to participate in social and academic activities. This phenomenon is especially evident in university settings, where social norms and beauty standards amplify pressures related to body weight. Martins et al. (2020) found that overweight students face physical challenges and emotional barriers that impact their ability to integrate socially. Ghaffar et al. (2020) found that physical inactivity, which is common among overweight students, contributes to greater social exclusion and a deterioration in the perception of interpersonal skills. This dynamic perpetuates a cycle in which a lack of physical activity reinforces stigmatization and a negative perception of self-image.

Additionally, Li et al. (2024) found that being overweight is associated with high levels of physical anxiety, causing students to avoid social situations where they feel their appearance will be judged. This finding underscores the connection between body weight and anxiety as combined obstacles to academic and social adjustment.

Social Skills as an Axis of Adaptation

Social skills are essential for a successful transition to college life because they enable students to establish meaningful connections and navigate interactions in a dynamic and competitive environment. However, these skills are not developed in a vacuum. They are deeply influenced by anxiety and self-perception. Ramania et al. (2020) demonstrated that group activities such as aerobic dancing improve social skills and significantly reduce stress levels by providing a safe environment for social interaction.

When studying the impact of social anxiety on interpersonal relationships, Vartanian et al. (2020) concluded that students with high levels of anxiety tend to limit their interactions, which negatively affects their ability to build support networks. These findings underscore the need for interventions that build students' confidence and interpersonal skills.

Interaction of Factors and the Need for Comprehensive Approaches

The interplay between anxiety, body weight, and social skills creates a complex landscape that profoundly impacts the college experience. According to Li et al. (2024), anxiety related to one's physical appearance amplifies social avoidance patterns, and the stigma associated with being overweight reinforces negative perceptions of one's interpersonal skills. This cycle, as described by Ghaffar et al. (2020), limits students' ability to adapt to their academic and social environments, highlighting the necessity of comprehensive approaches.

Martins et al. (2020) and Ramania et al. (2020), for example, have emphasized the effectiveness of physical activity—based interventions and group support in addressing these challenges. These strategies promote physical health, strengthen social skills, and reduce anxiety levels. Valladares et al. (2023) emphasized designing programs that combine anxiety management, improved self-image, and interpersonal skill development.

Influence of Social, Cultural and Academic Factors on the Perception of Weight and Self-Image

The perception of weight and self-image in university students is profoundly influenced by a complex interplay of social, cultural, and academic factors. These

factors not only condition the way students perceive their own bodies, but also the way they relate to their peers and handle the demands of university life (Martins et al., 2020; Clague et al., 2023).

Social Factors

Social factors play a central role in shaping the self-image of college students. College social dynamics, including implicit norms about appearance and acceptance, significantly influence how students perceive their weight and physical appearance.

Martins et al. (2020) found that students who actively participate in social activities tend to have a more positive self-perception, as they receive social reinforcement that counteracts negative perceptions. However, students with social anxiety or fears of judgment are more likely to avoid these interactions, limiting their ability to receive external validation, which can perpetuate a negative self-image. This phenomenon aligns with Grilo et al.'s (2009) findings that social rejection experienced by individuals with weight issues is a significant barrier to active social participation.

Conversely, Clague et al. (2023) found that the fear of negative evaluation characteristic of students with social anxiety intensifies negative self-perceptions, particularly among those facing weight-related challenges. These findings underscore the importance of the social environment in shaping individual perceptions and reinforce the need for inclusive environments that foster acceptance and reduce stigma.

Cultural Factors

Cultural factors significantly influence weight perception and self-image. Beauty ideals and cultural norms related to the body directly affect how students perceive themselves and how they believe they are perceived by others.

Li et al. (2024) found that students who internalize cultural norms that value thinness are more likely to have a negative perception of their weight, regardless of their BMI. This finding is supported by Thompson's (1994) work, which argues that constant exposure to idealized bodies in the media can exacerbate body discomfort and appearance-related anxiety.

Conversely, Clague et al. (2023) noted that cultural differences within universities also play an important role. In multicultural college communities, students may face conflicting pressures related to cultural expectations about body weight and appearance. This creates an environment in which some students, especially those from minority groups, may experience increased social anxiety and cultural dissonance. Stice et al. (1996) emphasized that these pressures can intensify negative self-perceptions and reinforce patterns of social avoidance.

Academic Factors

The academic environment can exacerbate concerns related to weight and self-image. According to Valladares-Garrido et al. (2023), academic demands generate stress that can lead to a decrease in physical activity and weight gain, which in turn negatively affects the perception of self-image. This phenomenon is compounded by the fact that many academic programs do not offer enough resources to address students' mental and physical health needs.

In addition, Ghaffar et al. (2020) identified that overweight female students are less likely to participate in sports activities due to fear of social judgment, which perpetuates a cycle of physical inactivity and social isolation. This finding highlights the need to design academic programs that are inclusive and foster a supportive environment for students with diverse backgrounds and physical characteristics.

Statistics on Social Anxiety and Overweight/Obesity

Social anxiety: Clague et al. (2023) reported that up to 30% of college students experience significant social anxiety, which affects their participation in group activities and their academic integration. These levels are especially high in students who also face challenges related to self-image.

Overweight and obesity: Ghaffar et al. (2020) found that more than 35% of the students evaluated were overweight or obese, with a direct correlation between physical inactivity and negative perception of self-image. Martins et al. (2020) reported similar rates, underscoring the need to address these challenges from a multifaceted perspective.

Interactions Between Factors and the Need for Interventions

The interplay of social, cultural, and academic factors creates a challenging environment for college students facing issues related to weight and self-image. Li et al. (2024) and Clague et al. (2023) highlighted the need for comprehensive interventions that address the complex dynamics of social anxiety and weight perception. These interventions should include promoting an inclusive environment, designing culturally sensitive support programs, and implementing academic strategies that reduce stress and encourage participation.

Combined Impact of Anxiety and Body Weight on Social Skills

Anxiety and body weight represent two critical factors that profoundly affect college students' social skills. Their combined impact creates a complex dynamic that amplifies difficulties in interacting, building interpersonal relationships, and adapting to the academic environment. The effects are compounded by challenging social interactions, negative self-image, and stigmatization, resulting in significant impairment of social skills essential for academic and personal success (Valladares-Garrido et al., 2023; Ramania et al., 2020).

Social Anxiety

Social anxiety, a subtype of anxiety characterized by fear of negative evaluation and social judgment, has a significant impact on students' social skills. This type of anxiety directly affects students' ability to interact effectively, participate in group activities, and build essential support networks in the university setting (Clague, Prnjak, & Mitchison, 2023; Valladares-Garrido et al., 2023).

Effects on Interpersonal Interaction and Academic Isolation

Students with social anxiety tend to avoid situations where they perceive they might be judged, such as class discussions, group activities, or social events. According to Valladares-Garrido et al. (2023), these students focus their attention on negative thoughts about how they are perceived, which reinforces avoidance patterns and further deteriorates their social skills. In addition, they highlighted that up to 40% of Peruvian university students experience moderate to severe levels of social anxiety, which significantly affects their academic performance and social integration.

Ramania et al. (2020) noted that students with high levels of anxiety have difficulty participating in group physical activities, even though these could provide a safe and supportive environment for developing social skills. This avoidance contributes to academic isolation and limits opportunities to build healthy interpersonal relationships.

Body Weight

Body weight, particularly in cases of overweight and obesity, affects self-image and the way students perceive themselves in social contexts. This phenomenon has a significant impact on social skills by influencing confidence, willingness to participate in social activities, and perception of social acceptance.

Consequences of social stigmatization and negative self-image

The social stigma associated with being overweight and obese creates emotional and social barriers for students. According to Ghaffar et al. (2020), more than 35% of overweight female students face difficulties participating in physical and social activities due to fear of social judgment. Martins et al. (2020) also found that these students often avoid situations where they might be judged by their appearance, negatively affecting their perception of social self-efficacy.

Ramania et al. (2020), explained that social stigma reinforces a negative perception of self-image, resulting in less confidence to interact in social settings. This phenomenon not only affects students' emotional well-being but also perpetuates a cycle of social avoidance and deterioration of interpersonal skills.

The interaction between anxiety and body weight amplifies difficulties in social skills, creating a vicious cycle that perpetuates social avoidance, isolation, and negative perception of self-image.

How Body Weight and Anxiety Amplify Deficits in Social Skills

Li et al. (2024) found that students who experience anxiety related to physical appearance tend to avoid social situations where they believe they will be judged by their weight. This behavior reinforces patterns of social avoidance and hinders the development of essential social skills. Valladares-Garrido et al. (2023) highlighted that these students are less likely to participate in academic and social activities, which affects their ability to build support networks.

Ramania et al. (2020) emphasized that a lack of social skills is not only a result of anxiety and body weight, but also contributes to a cycle of social isolation. This cycle perpetuates anxiety, reinforces concerns about self-image, and further limits students' ability to interact in group settings.

Examples of vicious cycles described in the base articles

Martins et al. (2020) described a cycle in which overweight students avoid social activities due to fear of judgment, resulting in less social interaction and reinforcing the perception of isolation. This isolation contributes to higher levels of social anxiety and impaired self-image.

Ramania et al. (2020) highlighted that students who avoid group activities due to social anxiety and negative weight perception miss out on critical opportunities to develop social skills. This perpetuates a cycle in which a lack of interpersonal skills reinforces social avoidance and aggravates anxiety and body weight problems. Li et al. (2024) added that the interaction between social anxiety and body weight creates a cumulative impact, where students face greater barriers to participate in group activities, limiting their ability to adapt to the academic and social environment.

Evaluation of a Particular Example and Reality

The article "Depression, anxiety, and stress in medical students in Peru: a cross-sectional study" by Valladares-Garrido et al. (2023) will be used as a basis to analyze a particular context. This study offers a clear perspective on the levels of anxiety and stress in Peruvian medical students, a subgroup of the university population with specific characteristics that allow exploring the interaction between emotional, academic, and social factors in a distinctive cultural environment.

This article directly addresses the impact of anxiety and stress on Peruvian university students, a group that faces unique academic challenges due to the intensity of medical training and resource constraints in the Peruvian education system. The analysis of this context provides an opportunity to examine how factors such as anxiety and stress affect social skills in a particular geographical and cultural environment, offering

meaningful comparisons with the findings of other studies conducted in international contexts.

Levels of anxiety, stress and their impact on social skills

Valladares-Garrido et al. (2023) found that 42% of the medical students evaluated had moderate to severe levels of anxiety, while 36% reported high levels of stress. These factors are directly related to difficulties in essential social skills, such as the ability to establish support networks, manage conflict, and participate in group activities. According to the authors, students with high levels of anxiety tend to avoid social interactions due to fear of negative judgment, which perpetuates a cycle of social isolation and emotional decline.

This phenomenon is consistent with the findings of Clague, Prnjak, and Mitchison (2023), who highlighted that fear of negative evaluation and low self-esteem in students with social anxiety limit their ability to participate in social activities, negatively affecting their self-image and interpersonal relationships. Similarly, Martins et al. (2020) stressed that students with high levels of stress face difficulties in integrating group physical activities, which reinforces social isolation.

Comparison with other contexts

Compared to other international contexts, such as the Brazilian one explored by Martins et al. (2020), similarities are observed in the prevalence of anxiety and stress among university students. However, the Peruvian cultural environment, characterized by an educational system with limited psychological support resources, aggravates the impact of these factors on social skills. Ramania et al. (2020), when studying students in an Asian context, also identified that the lack of structured support to manage stress and anxiety intensifies social avoidance and impairment of interpersonal skills.

On the other hand, Ghaffar, Ilyas, and Ahmad (2020) showed that in their context, overweight university women face a double burden: the stigma associated with weight and academic pressures. These experiences are comparable to those of Peruvian students, where stigma and lack of adequate support contribute to lower participation in social activities and a decline in interpersonal skills.

Reflection on possible interventions

The evidence highlights the need for specific interventions to address anxiety and stress in Peruvian university students. Valladares-Garrido et al. (2023) suggest the implementation of psychological support programs in universities, along with group activities designed to build confidence and reduce stress levels. Ramania et al. (2020) emphasized that group physical activities, such as aerobic dancing, can be effective in reducing cortisol levels, a marker of stress, and improving social interactions.

Li et al. (2024) noted that programs that combine anxiety management with strategies to improve self-image perception have the potential to strengthen social skills and reduce social isolation. These strategies must be culturally adapted to address the specific barriers faced by Peruvian students, including limited access to resources and the social stigma associated with seeking psychological support.

CONCLUSIONS OF THE EXAMPLE

The analysis of the case of Peruvian medical students reveals a strong connection between anxiety and stress levels, the deterioration of social skills and the cultural context in which they operate. These local observations reflect general trends identified in other international studies, such as those conducted by Martins et al. (2020) and Clague et al. (2023), underlining that the interaction between emotional

and social factors is universal, although it manifests differently depending on the cultural environment.

Therefore, addressing these challenges requires comprehensive approaches that combine individual interventions (such as psychological support) with structural strategies (such as inclusive group programs) to improve the emotional well-being and social skills of university students in various contexts.

Critical Analysis of Current Interventions

Interventions designed to mitigate anxiety and improve social skills in college students have evolved significantly over the past few decades. However, the impact of social anxiety and body weight on self-image and interpersonal skills remains a challenge. This is followed by a critical analysis of the strategies mentioned in the base articles, along with an identification of gaps in current approaches and a comparison between individual and contextual interventions.

Review of Strategies

Individual psychological therapies

Psychological therapies, especially cognitive behavioral therapy (CBT), play a crucial role in managing social anxiety. Clague, Prnjak, and Mitchison (2023) highlighted the effectiveness of CBT in reducing fear of social judgment and improving trust in interactions. These therapies help students identify and challenge negative thoughts, which can break the cycle of social avoidance.

In the context of university students, Valladares-Garrido et al. (2023) emphasized the need for psychological programs adapted to the characteristics of the student population, highlighting the importance of including components that specifically address academic stress and cultural dynamics. However, they also acknowledged that access to these services in countries such as Peru remains limited.

Group physical activities

Ramania et al. (2020) identified that group physical activities, such as aerobic dancing, not only reduce cortisol levels, a marker of stress, but also improve social skills by encouraging interactions in a safe environment. These activities have proven to be particularly effective for students facing challenges of social anxiety and negative self-image perception.

Martins et al. (2020) complemented this idea, underlining that students who participate in regular physical activities show greater confidence in their social skills and a more positive perception of their self-image. However, both studies pointed out that the lack of accessibility and cultural adaptation of these activities can limit their impact.

Educational programs and group workshops

Li et al. (2024) mentioned group workshops focused on emotional education as an effective strategy to address social anxiety and improve self-image. These programs include components such as emotional regulation, social skill development, and improved body weight perception. According to Ghaffar, Ilyas, and Ahmad (2020), this approach is particularly relevant for overweight students, as it directly addresses the psychological barriers associated with social stigma.

Identifying Gaps in Current Approaches

Despite the variety of strategies available, the base articles identify several significant gaps in current approaches:

Lack of accessibility: Valladares-Garrido et al. (2023) noted that access to psychological services remains limited in many contexts, especially in low- and middle-income countries, where universities lack the resources to implement comprehensive programs.

Insufficient cultural adaptation: Li et al. (2024) and Martins et al. (2020) highlighted that many interventions do not adequately consider cultural differences and the specific needs of students in diverse contexts. This limits their effectiveness and acceptance.

Fragmented approaches: Although there are effective programs to address anxiety and improve social skills, the base articles suggest that they are often implemented in isolation. Ramania et al. (2020) argued that integrated strategies, which combine physical, psychological, and social components, are more effective, but less common.

Proposals to Improve Social Skills in University Students

Improving social skills in college students requires a comprehensive approach that considers the complex dynamics of anxiety, body weight, and self-image perception. Based on the evidence obtained, practical strategies and comprehensive programs are proposed that address these challenges holistically, combining psychological, physical and social interventions.

Physical activity as a key tool

Group physical activity has proven to be an effective strategy for fostering social skills by providing an environment of safe and positive interaction. Ramania et al. (2020) noted that activities such as aerobic dancing not only reduce cortisol levels, a marker of stress, but also promote trust and group cohesion. These activities can be designed to include students with different fitness levels, ensuring they are inclusive and accessible.

Martins et al. (2020) complemented this idea, highlighting that regular exercise not only improves physical health, but also reinforces positive self-image, a critical factor for social skills. Colleges can implement physical activity programs that integrate recreational and competitive components to maximize engagement and emotional benefits.

Stress management and emotional skills development

Stress management is critical to improving social skills in students facing social anxiety. Valladares-Garrido et al. (2023) recommended including stress management workshops in university programs, with a focus on relaxation techniques, mindfulness, and coping strategies. These workshops can be combined with group sessions designed to build confidence in social interactions.

Clague, Prnjak, and Mitchison (2023) emphasized the importance of working on emotional regulation, especially in students who experience fear of social judgment. Activities that integrate role-playing, social simulations, and constructive feedback can be effective in reducing anxiety levels and strengthening interpersonal skills.

Self-image development and stigma reduction

Developing a positive self-image is essential for overcoming social barriers related to body weight and anxiety. According to Ghaffar, Ilyas, and Ahmad (2020), educational programs that address the stigma associated with being overweight can significantly improve students' confidence and willingness to participate in group activities. This can include awareness campaigns about body diversity and support sessions for students facing stigmatization.

Li et al. (2024) proposed combining these efforts with self-efficacy improvement strategies, such as setting achievable goals and celebrating individual and group achievements. These interventions can be integrated into physical and educational activities to reinforce their impact.

Design of Comprehensive Programs

Psychological interventions

Psychological interventions should include group or individual cognitive behavioral therapy (CBT), focused on identifying and restructuring negative thoughts. According to Clague et al. (2023), CBT is highly effective in reducing fear of social judgment and improving trust in interactions. These therapies can be complemented by social skills coaching sessions, designed to encourage practice and learning in a safe environment. Physical interventions

Ramania et al. (2020) and Martins et al. (2020) highlighted the importance of physical activity in reducing anxiety and improving body weight perception. Comprehensive programs should include activities such as yoga, group sports, and recreational exercises tailored to the needs of students. In addition, it is recommended that these activities be carried out in inclusive and non-competitive environments, encouraging the participation of all students.

Social interventions

Integrating social interventions, such as support groups and recreational activities, can strengthen interpersonal connections. Valladares-Garrido et al. (2023) suggested that social programs should be designed to foster inclusion and empathy, using group activities that promote teamwork and cooperation.

Evidence-Based Proposals

Creation of comprehensive support centers in universities

The studies analyzed agree that social anxiety and body weight must be addressed from multiple perspectives. The creation of centers in universities that offer psychological services, physical activity programs and educational workshops is proposed. These facilities can serve as safe spaces for students to develop their social skills and receive one-on-one support.

Awareness campaigns

Educational programs that address stigma related to body weight and social anxiety are essential to reducing cultural and social barriers. Li et al. (2024) and Ghaffar et al. (2020) highlighted the importance of changing social perceptions through campaigns that promote acceptance of body diversity and respect for individual differences.

Continuous Program Evaluation and Adjustment

Finally, programs should include evaluation mechanisms to measure their effectiveness and make adjustments according to student needs. Ramania et al. (2020) and Valladares-Garrido et al. (2023) emphasized the importance of using feedback tools to improve the relevance and accessibility of interventions.

CONCLUSIONS

This review article critically analyzes the interaction between anxiety, body weight, and social skills in university students. It underscores the importance of addressing these variables from a comprehensive, contextualized perspective. Evidence from the reviewed articles shows that social anxiety and body weight generate significant barriers to social integration and the development of interpersonal skills when they interact. These difficulties affect students' emotional well-being and limit their ability to take full advantage of academic and social opportunities.

Group physical activities, emotional regulation workshops, and educational interventions have been identified as effective tools for mitigating the negative impacts of these variables. However, implementing these strategies faces challenges such as lack of accessibility, insufficient cultural adaptation, and an absence of comprehensive approaches in many university institutions.

The findings also underscore the necessity of creating programs that integrate individual interventions, such as cognitive behavioral therapy, with contextual approaches, such as inclusive group programs and adaptive physical activities. These programs must address students' specific needs and consider the cultural and social dynamics that influence their college experience.

Finally, analyzing the case of Peruvian medical students allowed us to contextualize the interaction between anxiety, body weight, and social skills in a specific geographic and cultural environment. This demonstrates how these universal dynamics manifest uniquely in different contexts. This approach reaffirms the importance of designing comprehensive, culturally relevant interventions to maximize their effectiveness and promote the well-being of university students worldwide.

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