

Behavioral patterns in university students: a study with a humanistic approach

Clara Alejandra Beltrán Fierros¹, Carmen Estela Fierros Pérez¹, José Antonio Soto Bernal¹, Jesús Francisco Ramírez Gómez², José Aurelio Cortina Aguilar¹, Milton López Graciano¹, Luz María López Castro¹

¹ Universidad Autónoma de Sinaloa

² Universidad Autónoma de Occidente

alexandra.bf@uas.edu.mx, estelaferros@gmail.com, sotobernaljoseantonio46@gmail.com, jesus.ramirezg@uadeo.mx, drjosse@hotmail.com, milogra19@gmail.com, luzma14lopez@gmail.com

Abstract

This study employs a mixed-methods approach, utilizing the Aggression Questionnaire (AQ) by Buss and Perry (1992) and interviews. The sample consisted of 89 university students from four different academic levels, who completed the questionnaire. Subsequently, interviews were conducted with one student and with several teachers. The results indicated that verbal aggression was present in 83% of female students and 80% of male students. Physical aggression was more prevalent among male students (71%) than female students (67%). Regarding anger, it was found in 63% of female students and 54% of male students, while hostility was observed in 62% of female students and 58% of male students. The student interview highlighted instances of aggressive behavior towards both peers and teachers. The teacher interviews revealed some common characteristics of aggressive behavior among students. These findings motivated the development of a pedagogical intervention proposal based on a humanistic approach, with the aim of improving student behavior and attitudes.

Keywords: Aggressive behaviors, university students, pedagogical intervention proposal, humanistic approach.

Introduction

Worldwide, problems related to aggression and violence have increased in all sectors, and education is no exception, as these problems have been detected at all levels. In higher education, specifically at the Faculty of Biology of the Autonomous University of Sinaloa (UAS), this has been a cause for concern.

The goal is to develop peaceful and inclusive societies that facilitate access to justice for all, and, through the creation of effective and accountable institutions at all educational levels, to foster collaboration among all stakeholders—those who are part of the school community and



those who shape future generations—using solutions that address aggressive behaviors as they arise.

In this regard, the National Association of Universities and Institutions of Higher Education (ANUIES) seeks to promote comprehensive, participatory, and continuous improvement, enabling the identification and analysis of problems in higher education institutions, so that students become motivated, critical-thinking citizens capable of analyzing problems, seeking solutions, and taking responsibility.

Unfortunately, physical and verbal aggression among peers has occurred within classrooms, and the relationship between students and teachers is sometimes strained, as some professors have received direct verbal attacks from students, with comments such as "This activity is a mess," "What you write on the board is useless," "We're fed up with you," "I don't like you," etc. Some teachers have even received threats in the hallways of the Faculty building, as well as through social media.

This situation is the main reason for conducting this study, which aims to identify aggressive behaviors in the university context through the perspectives of students and faculty. The central research question was: What types of aggressive behaviors do students at the UAS Faculty of Biology exhibit?

Theoretical Framework

Various theories explain aggression in humans as an instinctive behavior stemming from the intention to harm others. Lorenz (1983, as cited in Palacio 2003) describes aggressive tendencies as a true instinct, primarily aimed at preserving the species and understanding the magnitude of danger; in other words, an instinct triggered by environmental factors.

Similarly, Freud (1929, as cited in Avendaño 2004) considers all human aggressive manifestations as an instinct, which, by definition, is related to human biological nature and is inherited.

Fromm (1989, as cited in Avendaño 2004) posits that there is a natural aggressiveness that serves the survival of the species, but also a historically and culturally determined type of aggression. Human aggressiveness is a concrete reality, experienced firsthand and observed in others.

Bandura (2009, as cited in Pascual 2009) postulates that the degree to which an individual tends to be aggressive and antisocial will depend largely on the social environment in which they were raised.

In Buss's study (1989, as cited in Molero 2017), aggression is defined as a consistent and pervasive type of response that represents an individual's characteristic, composed of two components: attitude and behavior. These derive from various aggressive characteristics and can manifest in different styles: physical-verbal, direct-indirect, and active-passive.



Rogers (1982, as cited in Sánchez 2017), a humanist psychologist known for his client-centered psychotherapy method, advocated for a balanced approach to broaden understanding of how humans feel and think.

According to him, people are willing to confront threats and pain thanks to a biological tendency of the organism to achieve its basic state. The main outcome of person-centered therapy is for the individual to become more congruent and adopt a less defensive and more receptive attitude towards experiences. According to Maslow (1970), as cited in Sánchez (2017), people have two types of needs: self-actualization needs and basic needs, which are linked to the biological nature of human beings. He argues that the satisfaction of human needs—both basic and self-actualization needs—allows individuals to develop by expanding their full potential. Aggression is multifactorial; therefore, it is triggered by both biological and environmental factors. It is related to instinctive, behavioral, or experiential responses.

This type of conflict can occur in the family, cultural, social, and educational spheres, and includes behavioral factors such as physical, verbal, angry, and hostile actions, which can be direct or indirect. Studies on aggression have found results related to the sex of the aggressor and the type of aggression. Rojas and Carpintero (2011) demonstrated that women frequently exhibit verbal aggression, while physical aggression manifests itself in actions such as hitting, slapping, kicking, pushing, using foul language, insults, shouting, manipulation, isolation, pressure, and school problems, and is more common among men. According to López (2014), it is not possible to eliminate aggression; it is necessary for the survival of the species, but increasingly larger doses seem to be needed to maintain physical and psychological well-being. This means that we need to analyze cultural products in light of the transformation of material reality and the relationships between individuals.

Methodology

This research was conducted using a mixed methods approach, which is characterized by incorporating techniques from both quantitative and qualitative research. It involves data collection and analysis, as well as the integration and joint discussion of the findings from both approaches.

According to Hernández & Mendoza (2018), the two-stage model was selected. This model involves applying one approach and then the other within the same study, almost independently, with each stage following the techniques corresponding to its respective approach.

Initially, a quantitative study was conducted using the Aggression Questionnaire (AQ) by Buss and Perry (1992), as cited in López et al. (2009). Once the quantitative study was completed, semi-structured interviews were conducted with teachers and one student. This was an exploratory and descriptive study.

Description of Techniques and Instruments

The Aggression Questionnaire (AQ) by Buss and Perry (1992) consists of four factors: physical aggression, verbal aggression, anger, and hostility, with five response options on a Likert scale. It was administered to 89 students from four different classes.

The instrument measures psychometric characteristics through 40 items and is validated as a measure of aggression, as it allows for the assessment of different levels of aggression—cognitive, emotional, affective, and instrumental—with sufficient psychometric reliability. Semi-structured interviews were also conducted with three teachers, using a set of 13 questions to guide the conversation and elicit their opinions and observations regarding instances of aggression they had witnessed with their students. Similarly, a script was used to interview a student whose aggressive behavior in the classroom had been increasing.

Procedure

First, four groups were selected from the Faculty of Biology. This institution offers two bachelor's degrees: a Bachelor of Science in Biology and a Bachelor of Science in Biomedicine; the sample consisted of a total of 89 students enrolled in the Bachelor of Science in Biology program.

Second, the Buss and Perry Aggression Questionnaire (AQ) (1992) was administered to assess four factors: physical aggression, verbal aggression, anger, and hostility.

Third, semi-structured interviews were conducted with teachers and students to gather information about their experiences in the educational setting related to the study topic.

Fourth, the results obtained from the four groups were analyzed, as well as the data from the semi-structured interviews with teachers and students regarding aggressive behaviors.

Setting and Participants

The sample consisted of undergraduate students from the Faculty of Biology at the Autonomous University of Sinaloa (UAS), located on the University City Campus in Culiacán Rosales, Sinaloa. There were 89 participants in four groups: 47 female and 42 male, aged 17 to 23.

Results

Aggressive Behaviors in Students of the Faculty of Biology by Group.

The analysis began with a descriptive analysis of the total sample across the four groups. Group 1 consisted of 57% men and 43% women, for a total of 23 students. Regarding the results for the different factors, for physical aggression, with the response "completely true for me," 50% of both men and women selected this option; in the category of "quite true for me," 78% of men and 22% of women selected this option.

Regarding verbal aggression, the results showed that 80% of the men and 20% of the women selected "completely true for me," while for the response "mostly true for me," 22% of the men and 78% of the women selected that option—that is, the results were reversed.

Regarding the anger factor, on the "completely true for me" scale, 71% of the men and 29% of the women selected that option, and for "mostly true for me," men again had a higher percentage (57%) compared to women (43%).



Regarding hostility, on the "completely true for me" scale, women were predominant with 62%, while men were 38%. For "mostly true for me," 50% of both men and women selected that option, as shown in Table 1.

Table 1.
Results for group 1

Scale	Completely false for me (1)		Mostly false for me (2)		Neither true nor false for me (3)		Mostly true for me (4)		Completely true for me (5)	
	M	H	M	H	M	H	M	H	M	H
Physical Aggression	50%	50%	25%	75%	31%	69%	22%	78%	50%	50%
Verbal Aggression	37%	63%	47%	53%	37%	63%	78%	22%	20%	80%
Anger	33%	67%	67%	33%	56%	44%	43%	57%	29%	71%
Hostility	24%	76%	67%	33%	47%	53%	50%	50%	62%	38%

Note: Prepared by the author.

The second group, comprising 41% men and 59% women (a total of 22 students), showed the following results regarding physical aggression: on the "completely true for me" scale, 54% were women and 46% were men. This pattern was reinforced on the "mostly true for me" scale, with 64% of respondents being women and 36% being men.

Regarding verbal aggression, 75% of those who answered "completely true for me" were women, while 25% were men. Similarly, on the "mostly true for me" scale, 63% were women and 37% were men, confirming that this type of aggression is more prevalent among women.

Regarding anger, 50% of both men and women answered "completely true for me." On the "mostly true for me" scale, 60% were women and 40% were men.

Finally, regarding hostility, 56% of those who answered "completely true for me" were women, while 44% were men. This pattern was also observed on the "mostly true for me" scale, with 50% of respondents being both women and men, as shown in Table 2.

Table 2.
Results for group 2

Scale	Completely false for me (1)		Mostly false for me (2)		Neither true nor false for me (3)		Mostly true for me (4)		Completely true for me (5)	
	M	H	M	H	M	H	M	H	M	H
Physical Aggression	49%	51%	49%	51%	45%	55%	64%	36%	54%	46%
Verbal Aggression	57%	43%	54%	46%	53%	47%	63%	37%	75%	25%
Anger	69%	31%	38%	62%	62%	38%	60%	40%	50%	50%
Hostility	45%	55%	40%	60%	83%	17%	50%	50%	56%	44%

Note: Prepared by the author.

In the third group, comprised of 40% women and 60% men (a total of 10 students), the factor of physical aggression showed that 71% of the men and 29% of the women selected "completely true for me" as their response. However, for the response option "mostly true for me," the data was reversed, with 67% of women and 33% of men selecting that option.

Regarding verbal aggression, the same pattern emerged as with physical aggression: 80% of men selected "completely true for me," which was much higher than the 20% of women who selected that option. Similarly, 83% of women selected "mostly true for me," while only 17% of men selected that response.

For anger, 63% of women and 37% of men selected "completely true for me." For "mostly true for me," the percentages were 54% for women and 46% for men. Regarding hostility, 58% of men and 42% of women selected "completely true for me," and 62% of men and 38% of women selected "mostly true for me," as shown in the following table.

Table 3.
Results for group 3

Scale	Completely false for me (1)		Mostly false for me (2)		Neither true nor false for me (3)		Mostly true for me (4)		Completely true for me (5)	
	M	H	M	H	M	H	M	H	M	H
Physical Aggression	62%	38%	56%	44%	46%	54%	67%	33%	29%	71%
Verbal Aggression	67%	33%	67%	33%	20%	17%	83%	17%	28%	80%

Anger	67%	33%	50%	50%	25%	75%	54%	46%	63%	37%
Hostility	62%	38%	60%	40%	71%	29%	38%	62%	42%	58%

Note: Prepared by the author.

Group four, comprised of 34 students (47% male and 53% female), showed the following results regarding physical aggression: 58% of males and 42% of females responded "completely true for me," while 64% of males and 36% of females responded "mostly true for me."

Regarding verbal aggression, 89% of those who responded "completely true for me" were female, while only 11% were male. For the "mostly true for me" response, 68% were male and 32% were female, highlighting the contrast between these two types of responses for this factor. Regarding anger, 50% of both males and females responded "completely true for me," and 55% of females and 45% of males responded "mostly true for me," showing no significant differences.

Finally, regarding hostility, 52% of females and 48% of males responded "completely true for me," while 52% of males and 48% of females responded "mostly true for me," as shown in the following table.

Table 4.
Results for group 4

Scale	Completely false for me (1)		Mostly false for me (2)		Neither true nor false for me (3)		Mostly true for me (4)		Completely true for me (5)	
	M	H	M	H	M	H	M	H	M	H
Physical Aggression	45%	55%	52%	48%	46%	54%	36%	64%	42%	58%
Verbal Aggression	37%	63%	52%	48%	40%	60%	32%	68%	89%	11%
Anger	50%	50%	54%	46%	33%	67%	55%	45%	50%	50%
Hostility	35%	65%	52%	48%	40%	60%	48%	52%	52%	48%

Note: Prepared by the author.

Overall results of the instrument

Based on the data collected, a general analysis of all groups was conducted, considering the statistical results to compare the behavioral factors reported by the participants.

As a final result, the verbal aggression factor showed a high percentage in women (83%) compared to men (80%). The second highest percentage was for physical aggression, with men scoring 71% and women 67%. The third factor, anger, was more prevalent in women (63%) than in men (54%). Finally, the hostility factor was 62% in women and 58% in men, as shown in the following table.

Table 5.
Final results of the psychometric factors of the Aggression Questionnaire (AQ)

Factor	Female	Male
Verbal Aggression	83%	80%
Physical Aggression	67%	71%
Anger	63%	54%
Hostility	62%	58%

Note: Prepared by the author.

Results of the interview analysis: Aggressive behaviors perceived by teachers and student opinions

The qualitative results shown in Table 5 describe the accounts of four teachers, with years of experience in the teaching profession, who have witnessed direct aggressive behaviors both inside and outside the classroom, as well as among peers. These teachers facilitate the teaching and learning process.

The descriptions presented are based on the experiences of these teachers who have observed aggressive behavior among students. They mention inappropriate language, including shouting, raising their voices, and using offensive language (profanity) such as: "you're stupid," "you're good for nothing," and other similar expressions. They also mention threats made via WhatsApp and Facebook, as well as physical altercations among students.

Regarding the opinion of the student with a high level of aggression, he stated that he took medication to control his impulsiveness. He considered that his behavior led him to lose "reason," his sense of humanity, and even become a "beast" (animal), as he described it, thus generating fear, anxiety, anger, and other negative emotions in others. He also acknowledged that he warns his classmates about his "dark side" and threatens to endanger their lives.

Table 6.
Aggressive behaviors perceived by teachers and students

Subjects	Grade	Area	Years of service	Characteristics of aggressive behavior
Subject 1	Master's degree	Botany	22 years old	Raising their voice, showing disrespect towards the teacher and classmates, exhibiting rebellious and defiant attitudes, etc.
Subject 2	Master's degree	Botany	15 years old	He has been subjected to loud and abusive language, physical altercations with classmates, direct threats from students both in person and through social media, insults during class, and disrespect towards authority; some students have even tried to physically attack him in the school hallways.
Subject 3	Doctorate	Bioinformatics	20 years old	Verbal aggression, displays of sexist behavior by male students, temper tantrums by female students, aggressive behavior towards teachers both inside and outside the classroom, receiving direct threats via WhatsApp, etc.
Subject 4	Degree	Biology	3rd year	He displays aggressive behavior, which often manifests itself in the school environment. This behavior leads to anger and low tolerance, to the point that he loses interest and concentration. He cannot tolerate comments from his classmates or other people, and he intimidates his peers. He feels a sense of relief when he acts aggressively; for him, it is a way to gain respect.

Note: Prepared by the author.

Discussion and Conclusions

The results indicate that students in the Faculty of Biology exhibit aggressive behaviors, particularly verbal aggression, with a higher prevalence among female students. Similarly, the qualitative results revealed the presence of verbal aggression, and identified that aggression among university students stems from social reasons, due to the dynamics within the classroom, both with peers and with professors in different courses. It was also identified that students exhibit these behaviors because they are unsure of how to handle certain situations.

Regarding the teachers' perspective, they pointed out several characteristics of aggressive behavior, such as: raising their voices, disrespect toward teachers and classmates, rebellious and defiant attitudes, using harsh language, physical altercations between students, direct threats to the teacher, both in person and through social media, insults in class, and disregard for authority. In the worst-case scenario, one teacher reported being the target of a physical assault in the school hallways.

Based on the above, it is crucial to ask ourselves: Are we willing to intervene in education to prevent aggression? And how can we help people to be less aggressive? It is essential that education promotes and emphasizes a culture of non-violence and peace in all educational contexts, where conflict resolution through peaceful means is considered a fundamental skill to be developed in everyone.

Educational systems need to be founded on values, and all decisions—regarding content, methodology, and teacher training—should be based on a set of shared values. The despair and

pessimism that today's society faces are exacerbated by the fact that the educational system emphasizes the informational aspect while neglecting the formative one.

Therefore, education is essential to help overcome the lack of values. From this perspective, it is possible to examine culture to more fully discover, understand, and interpret the dynamics that characterize the practice of values, whether in school, family, or community. Based on this knowledge, we can generate alternatives inspired by the formative approach, allowing individuals to safeguard their values and develop new ones, both spiritual, material, social, or of any other kind, that are relevant to the current times. Considering the research conducted, it is recommended that educational institutions promote and develop values education, as it is the key factor that will largely enable social change.

Furthermore, it is necessary to strengthen these values by fostering tolerance, acceptance of pluralism and diversity, respect for human rights, and engagement in addressing societal problems. For these reasons, a pedagogical approach with a humanistic perspective was designed, focusing on values such as respect, honesty, tolerance, empathy, integrity, personal growth, and commitment, among others.

The goal is to teach students to fulfill their duties and become more responsible individuals, to think clearly and patiently, and not act impulsively. By committing themselves to those around them, they will build strong and lasting interpersonal relationships, provided they are involved in specific goals and projects that allow them to achieve their life objectives in a healthy way. In short, a successful school culture depends on effective communication among all members of the community, based on respect, and never on aggression.

References

- [1] Avendaño., O. (2004). La agresividad humana. Revista electrónica “Actualidades investigativas en educación”. Universidad de Costa Rica. San Pedro de Montes de Oca, Costa Rica 4 (2). P.6 <https://www.redalyc.org/articulo.oa?id=44740216>
- [2] Hernández-Sampieri., R. & Mendoza, C. (2018). Metodología de la investigación. Las rutas cuantitativa, cualitativa y mixta. Mc Graw Hill Education.
- [3] López., M. Sánchez., A. Rodríguez., L. y Fernández., M. (2009). Propiedades psicométricas del cuestionario AQ aplicado a población adolescente. Departamento de Psicología. Facultad de Ciencias de la Salud. Universidad Camilo José Cela. Revista de Psicología y Educación. 8(1). file:///C:/Users/com%20mixtas/Downloads/Dialnet-PropiedadesPsicometricasDelCuestionarioAQAplicadoA-3040319-2.pdf
- [4] López., O. (2014). La agresividad humana. “Actualidades investigativas en educación “. Revista. 4 (2). Pp. 1-14 <https://www.redalyc.org/pdf/447/44740216.pdf>
- [5] Molero., L. (2017). Niveles de agresividad en estudiantes de tercer año de secundaria de la institución educativa particular Trilce Villa el Salvador, Lima 2017. P.3 <http://repositorio.uigv.edu.pe/handle/20.500.11818/1542>
- [6] Palacio., R. (2003). La agresión y la guerra desde el punto de vista de la etología y la obra de Kanrad Lorenz. Revista de estudios sociales. Universidad de los Andes. Bogotá, Colombina. 14. <https://www.redalyc.org/articulo.oa?id=81501405>
- [7] Pascual., P. (2009). “Teorías de Bandura aplicadas al aprendizaje”. Educación y Aprendizaje. p.7



https://archivos.csif.es/archivos/andalucia/ensenanza/revistas/csicsif/revista/pdf/Numero_23/PEDRO%20LUIS_%20PASCUAL%20LACAL_2.pdf

- [8] Rojas., J. y Carpintero., E. (2011). Sexismo y agresiones físicas, sexuales y verbales-emocionales, en relaciones de noviazgo de estudiantes universitarios. Departamento de Psicología Evolutiva y de la Educación, Universidad de Salamanca, Salamanca. España. 9(2). P. 542 <https://www.redalyc.org/articulo.oa?id=293122840004>
- [9] Sánchez., A. (2017). En Antología del curso del Programa de Maestría en Desarrollo Humano con Orientación Pedagógica, Escuela Normal de Sinaloa. Introducción al desarrollo humano. La teoría centrada en la persona.