# **Analysis of the Family Functionality of University Students During the Covid-19 Pandemic**

Análise da Funcionalidade Familiar de Estudantes Universitários Durante a Pandemia do Covid-19 Análisis de la Funcionalidad Familiar de Estudiantes Universitarios Durante la Pandemia de Covid-19

#### **RESUMO**

Objetivo: Analisar a funcionalidade familiar de estudantes universitários durante a pandemia do Covid-19. Método: Estudo transversal com 251 estudantes, com uso de um questionário on line para obtenção de informações acerca do perfil sociodemográfico e funcionalidade familiar, avaliada por meio do Family APGAR. Resultados: A maioria dos estudantes era do sexo feminino, idade média de 23,8 anos, autodeclarados não brancos, cursando sua primeira graduação, não provenientes do município sede da universidade, moravam em casa não própria, com pai e/ou mãe e pertenciam à religião cristã. Houve maior prevalência de estudantes pertencentes a famílias com boa funcionalidade familiar (94;37,5%; IC95%31,1-43,8), seguido de elevada disfuncionalidade familiar (88;35,1%; IC95%29,5-41,4). Quanto aos domínios do APGAR Familiar, destacou-se o "Growth" (Desenvolvimento/crescimento) e "Resolve" (Capacidade resolutiva/ tempo compartilhado juntos), com 79,8% e 77,7% nas famílias funcionais, respectivamente. Conclusão: Os estudantes universitários receberam apoio familiar, sobretudo durante o período de pandemia por Covid-19.

**DESCRITORES:** Relações Familiares; Estudantes; Universidades; COVID-19; Estudos Transversais.

#### **ABSTRACT**

Objective: To analyze the family functionality of university students during the COVID-19 pandemic. Method: Cross-sectional study with 251 students, using an online questionnaire to obtain information about sociodemographic profile and family functionality, evaluated through the Family APGAR. Results: The majority of the students were female, with an average age of 23.8 years, self-declared as non-white, enrolled in their first undergraduate program, not from the university's host city, living in a non-owned house with their father and/or mother, and belonging to the Christian religion. There was a higher prevalence of students belonging to families with good family functionality (94; 37.5%; 95% CI 31.1-43.8), followed by high family dysfunction (88; 35.1%; 95% CI 29.5-41.4). Regarding the domains of the Family APGAR, "Growth" (Development/growth) and "Resolve" (Problem-solving/shared time), were highlighted with 79.8% and 77.7% in functional families, respectively. Conclusion: University students received family support, especially during the COVID-19 pandemic period. **KEYWORDS:** Family Relationships; Students; Universities; COVID-19; Cross-Sectional Studies.

#### RESUMEN

Objetivo: Analizar la funcionalidad familiar de los estudiantes universitarios durante la pandemia de COVID-19. Método: Estudio transversal con 251 estudiantes, utilizando un cuestionario en línea para obtener información sobre el perfil sociodemográfico y la funcionalidad familiar, evaluada mediante el Family APGAR. Resultados: La mayoría de los estudiantes eran mujeres, con una edad promedio de 23,8 años, autodeclarados no blancos, cursando su primera carrera universitaria, no provenientes de la ciudad sede de la universidad, vivían en una casa no propia, con su padre y/o madre, y pertenecían a la religión cristiana. Hubo una mayor prevalencia de estudiantes pertenecientes a familias con buena funcionalidad familiar (94: 37,5%; IC95% 31,1-43,8), seguido de una alta disfuncionalidad familiar (88; 35,1%; IC95% 29,5-41,4). En cuanto a los dominios del Family APGAR, se destacó "Growth" (Desarrollo/ crecimiento) y "Resolve" (Capacidad resolutiva/tiempo compartido), con 79,8% y 77,7% en las familias funcionales, respectivamente. Conclusión: Los estudiantes universitarios recibieron apoyo familiar, especialmente durante el período de pandemia por COVID-19. PALABRAS CLAVE: Relaciones familiares; Estudiantes; Universidades; COVID-19; Estudios transversales.

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# **Original Article**

BL, Lucchese R, Freitas FS, Costa DGL, Cocco ACM, Vera I Analysis Of The Family Functionality Of University Students During The Covid-19 Pandemic

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#### INTRODUCTION

new disease, caused by a coronavirus identified at the end of 2019 in China, with a high rate of transmissibility and lethality, caused severe respiratory conditions, called Severe Acute Respiratory Syndrome Coronavirus 2 (SARS-CoV-2), popularly known as Covid-19. (1), which has evolved into a public health emergency of international concern. (2)

As a coping strategy, preventive measures were adopted to avoid exposure to the virus, such as social distancing, use of masks and isolation for suspected or confirmed cases. (3) This context has changed several daily activities, such as replacing face-to-face classes for university students with a remote digital environment. (4) Although they act as a protective factor against this stressful situation and contribute to improving people's quality of life, family relationships were also affected during this period. (5)

The definition of family is established around the need to generate healthy and harmonious bonds between the members of the family nucleus. (6) It also provides affection, support and solidarity and its strong bonds encourage the sharing of problems and provide better mental well-being to students when faced with stressful situations. (7)

Therefore, good family functioning is of utmost importance for students to more assertively face the difficulties encountered in their daily lives, especially those related to the school environment. (8) Given the above, the objective of the study was to analyze the family functioning of university students during the Covid-19 pandemic.

#### **METHOD**

This is a cross-sectional, observational, quantitative study, and the study population consisted of undergraduate students from a public university in the central region of Brazil. The population consisted of 3,596 enrolled students, and the convenience sample consisted of 251 students, of both sexes, aged 18 or over, regularly enrolled in one of the 22 undergraduate courses at the University. Students who were absent for any reason during the data collection period were excluded.

Due to the Covid-19 pandemic, data were collected between June 2020 and December 2021, through individual invitations via email. All participants signed the Free and Informed Consent Form (FICF). Data from Google Forms generated an Excel® spreadsheet and were transposed to the statistical software IBM SPSS° for Windows version 21.0 for analysis, description, and interpretation of results. Simple statistics were performed with frequency, 95% confidence interval (95% CI), mean and standard deviation (SD±). Cronbach's alpha for the five responses of the Family APGAR was 0.887. The Excel® for Windows version 19.0 program was used to construct tables and graphs.

The questionnaire contained information about the sociodemographic profile and family functionality. This was assessed using the Family APGAR, which measures satisfaction with coexistence and relationships between family members, based on the index person (the student). The index covers five domains: Adaptation, Partnership, Growth, Affection and Resolve. Scores from zero to two points are assigned to each of these, with the response options being: always (2 points), sometimes (1 point) and never (zero) points. The total scores range from zero to ten points, namely: High Family Dysfunctionality (EDF) - 0 to 4 points; Moderate Family Dysfunctionality (MDF) - 5 to 6 points and Good Family Functionality (BFF) - 7 to 10 points(9). The research was approved by the National Research Ethics Council (CONEP) - CAAE 31123120.8.0000.8409.

## **RESULTS**

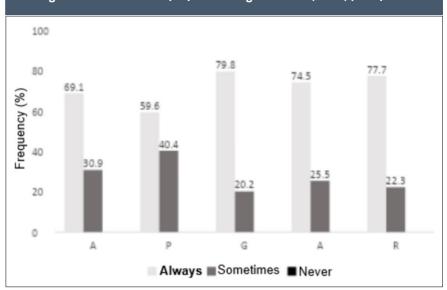
A total of 251 university students participated. Regarding the sociodemographic description, it was found that females were prevalent (62.9%; 95%CI 56.6-68.5), with a mean age of 23.8 years (95%CI 23.1-24.6, SD 6.174) with the majority concentrated in the age group between 18 and 25 years (78.1%, 95%CI 73.3-83.4). Regarding race, 127 students (50.6%, 95%CI 44.6-57.0) declared themselves as non-white. of which 93 (37.1%, 95%CI 31.1-43.4) were brown and 31 (12.4%, 95%CI 8.4-16.7) were black.

Most participants denied having a partner (n=210, 83.7%, 95%CI 79.3-88.0) and having children (n=229, 91.2%, 95%CI 87.6-94.8), 208 participants (82.9%, 95%CI 77.7-87.3) reported being only students and 25 (10%, 95%CI 6.8-13.9) students were studying for a second degree. Regarding the region of origin of the participants, of the 251 students investigated, 175 (69.7%, 95%CI 64.1-75.3) were from the central-west region and of these only 60 (23.9%) were from the city where the university is located. Regarding housing, 194 (77.3%, 95% CI 72.1-82.5) participants lived at home and 150 (59.8%, 95% CI 53.8-65.7) did not own their own home. In addition, 122 (48.6%, 95% CI 42.2-55) students lived with their father and/or mother and 40 (15.9%, 95% CI 11.6-20.7) with a partner, confirming the average number of residents in the household of 3.13 people (95% CI 2.94-3.31, SD 1.386). Just over a third (n=89, 35.5%) lived alone, with friends or in shared apartments.

Regarding the religious profile, it was found that 74 (29.5%, 95%CI 24.3-35.5) students reported being Catholic, 43 (17.1%, 95%CI 12.4-21.9) were Evangelical and 78 (31.1%, 95%CI 25.1-37.5) denied having a religion.

Regarding family functionality, it was observed that students have a higher prevalence of Good Family Functioning (94, 37.5%, 95%CI 31.1-43.8), followed by High Family Dysfunctionality (88, 35.1%, 95%CI 29.5-41.4), and Moderate Family Dysfunctionality (MDF) (69, 27.5%, 95%CI 21.9-33.5). The representation of the responses of students with functional families in the different domains is shown in Figure I.

Figure I. Family APGAR domains in the perception of university students who belong to functional families (≥ 7). Central region of Brazil, 2022; (n=94).



A = Adaptation: I am satisfied that I can turn to my family for help when something is bothering or worrying me.

P = Partnership: I am satisfied with the way my family and I talk and share problems.

G = Growth: I am satisfied with the way my family accepts and supports my desires to start or pursue new activities and to seek new paths or directions.

A = Affection: I am satisfied with the way my family shows affection and responds to my emotions, such as anger, hurt, or love.

R = Resolve: I am satisfied with the way my family and I spend time together.

Regarding the Family APGAR domains, the student's satisfaction with his family regarding accepting and supporting his desires or search for new activities, paths and directions was 79.8% for total satisfaction (response always) and 20.2% for partial satisfaction (response sometimes). This finding was followed by satisfaction with how time is shared by the family, being 77.7% for total satisfaction and 22.3% for partial satisfaction.

#### DISCUSSION

Regarding the prevalence of age of students, this corroborates data from the Brazilian population that show the predominance of women and young people between 20 and 24 years old in federal institutions. (10) This result reveals that young women have prevailed in higher education, which is a means of entering the job market in a more qualified and valued way. (11)

Looking at race, the data reveals that the Quota Law expanded access for non-whites to university, especially public universities, reducing historical racial inequalities and promoting greater diversity among entrants. (12-13)

Looking at race, the data reveals that the Quota Law expanded access for non-whites to university, especially public universities, reducing historical racial inequalities and promoting greater diversity among entrants. (14) According to the occupational profile, it is beneficial for university students not to have an employment relationship, since the double shift, divided between work and study, provides a higher level of stress and a lower quality of life, as well as influencing their satisfaction with the institution, the course and the opportunities for academic development.

According to data from the region of origin, there is a democratization of access to higher education, since adher-

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ence to the Unified Selection System (Sisu), created in 2010, allows admission to public universities throughout the country, without the need to travel to take the test. Thus, students from different parts of Brazil and from lower socioeconomic conditions have a greater chance of entering higher education institutions. Regarding students who still live with their parents, previous research with Portuguese university students showed that students who do not leave home to study have a better quality of life compared to those who do and are less likely to develop anxiety, stress and depression, with the family, therefore, being a protective factor. (16)

Most participants reported having a religion, in line with other studies that indicate a predominance of Christian beliefs among university students. Spirituality, whether it comes from a religion or not, is essential in the university context, as it promotes the maintenance of mental and emotional health, well-being and meaning in life during this period marked by stress, anxiety and uncertainty. (17)

International surveys of university students also found a higher prevalence of functional families among participants (18,19), as well as in this one. Family support during this university period is of utmost importance, since family functionality plays a fundamental role in the student's performance and is associated with good academic performance. (18;20)

The Covid-19 pandemic has impacted not only the academic routine of university students and the inclusion of remote classes, but has also been responsible for significantly increasing the levels of stress and anxiety of these students, having a negative effect on their mental health. (21) In this sense, it is known that family support, especially from parents, is essential, since high levels of parental support were associated with lower levels of stress perceived by university students during this period. (22)

The family's availability to face changes in roles, achievement of maturity and emotional development, through support, assistance and guidance (Development), as well as time spent together and family dedication (Resolution capacity), reflects good family functionality and a less stressful environment. (9)

In this sense, family support and well-being are essential for university students to face stressful situations more assertively and maintain physical and mental balance in the face of these issues.

(23)



The favorable results for good family functioning, as well as the predominance of "always" responses in the five domains evaluated, suggest harmony, integration, and affection among families regarding collective functions. During the COVID-19 pandemic, this finding may be even more relevant, since greater contact with family members during this period was associated with greater emotional support and a lower incidence of depression and anxiety in university students. (24)

Finally, the positive influence of family relationships on students' involvement in academic issues and learning is discussed. This fact has been evidenced by several studies, especially during the Covid-19 pandemic, when learning was done remotely and family support was even more necessary. (23;25)

#### CONCLUSION

This study, during the COVID-19 pandemic, concluded that the sociodemographic data of the participating university students were mostly women, young, who self-reported non-white skin color, denied having a partner or children, with only student activity and studying their first degree. In addition, the majority came from municipalities other than the university's headquarters and lived in houses, not their own, with both parents and denied having a reli-

Regarding family functioning, there was a prevalence of good family functioning among university students, followed by high levels of family dysfunction. The most prevalent domains were development/growth and problem-solving ability/sharing time to-

These findings suggest that family support, especially during the period assessed in which there was social distancing and rules of coexistence as measures to prevent and mitigate the pandemic, is essential for university students.

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