

Subjective social status and psychosocial characteristics in students of stricto sensu graduate courses

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RESUMO

Objetivo: Analisar associações entre status social subjetivo e características psicossociais em uma amostra de pós-graduandos ingressantes. **Método:** estudo observacional, transversal, realizado com 321 pós-graduandos de uma universidade pública brasileira. Coleta de dados foi realizada online com questionário contendo variáveis sociodemográficas, acadêmicas e psicossociais. Realizou-se análise estatística descritiva e múltipla com modelo de regressão de Poisson. **Resultados:** Prevalência de estudantes com avaliação de status social subjetivo variou de regular a muito ruim. Sexo masculino, não ter prática de fé, ter preocupação financeira atual, baixa autoestima e renda familiar per capita menor que dois salários mínimos se associaram à baixa autopercepção de status social. **Conclusão:** Pós-graduandos se autoposicionam em níveis de regular a baixo na escada social com associação significativa de baixo status social subjetivo com variáveis psicológicas e sociais.

Descriptores: Status Social; Posição Socioeconômica; Impacto Psicossocial; Ensino de Pós-Graduação; Estudantes.

ABSTRACT

Objective: To analyze associations between subjective social status and psychosocial characteristics in a sample of incoming graduate students. **Methods:** An observational, cross-sectional study conducted with 321 graduate students from a Brazilian public university. Data collection was performed online using a questionnaire containing sociodemographic, academic, and psychosocial variables. Descriptive and multiple statistical analysis was performed with a Poisson regression model. **Results:** The prevalence of students with subjective social status assessments ranged from regular to very poor. Male sex, not practicing faith, having current financial concerns, low self-esteem and per capita family income below two minimum wages were associated with low self-perception of social status. **Conclusion:** Graduate students position themselves at fair to low levels on the social ladder, with a significant association between low subjective social status and psychological and social variables.

Descriptors: Social Status; Socioeconomic Position; Psychosocial Impact; Graduate Education; Students.

RESUMEM

Objetivo: analizar asociaciones entre estatus social subjetivo y características psicosociales en una muestra de estudiantes entrantes de posgrado. **Método:** estudio observacional, transversal, realizado con 321 estudiantes de posgrado de una universidad pública brasileña. La recolección de datos se realizó en línea con un cuestionario que contenía variables sociodemográficas, académicas y psicosociales. Se realizó análisis estadístico descriptivo y múltiple mediante el modelo de regresión de Poisson. **Resultados:** la prevalencia de estudiantes con valoración subjetiva del estatus social osciló entre regular y muy pobre. Ser hombre, no practicar la fe, tener preocupaciones financieras actuales, baja autoestima y un ingreso familiar per cápita inferior a dos salarios mínimos se asociaron con una baja autopercepción del estatus social. **Conclusión:** los estudiantes de posgrado se ubican en niveles regulares a bajos en la escala social con una asociación significativa del bajo estatus social subjetivo con variables psicológicas y sociales.

Descriptores: Estatus Social; Posición Socioeconómica; Impacto Psicosocial; Educación de Posgrado; Estudiantes.

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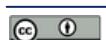
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Introduction

Social status is a theoretical construct widely used in sociology and which refers to a social classification system that demarcates, based on cultural constructions, the social position occupied by an individual within the community and/or society to which they belong^(1,2). Multidimensional in nature, social status can be conceptualized from two distinct perspectives: the first, more traditional and objective, determines social positioning based on the quantification of access to certain types of resources such as income and education, linking social allocation directly to socioeconomic aspects and material circumstances; and the second, which considers subjective and self-evaluative aspects of social ranking^(1,2).

Specifically in relation to subjective aspects, the main construct of social status assessment is known as subjective social status (SSS), which refers to an individual's self-perception or judgment about their social positioning⁽³⁾. SSS constitutes a dimension of the social gradient that is less explored when compared with objective socioeconomic measures, but which, despite this, has been shown to be a more robust marker when associated with psychosocial outcomes, such as those linked to the health-disease process and psychological well-being^(4,2).

In the context of mental health research in the academic context, this overview is no different, and SSS has been a construct rarely considered in these studies rather than objective measures⁽⁵⁾. This fact seems contradictory, given its great potential as a determinant of health-disease⁽⁶⁾.

Entry into *stricto sensu* graduate studies can be characterized as a turbulent period, in which a series of academic and social demands are experienced that are peculiar to this level of education⁽⁷⁾. In the process of transitioning to graduate school, many expectations are socially constructed, and students are more likely to make comparisons with others in order to assess/judge their own social value, at which point they may experience negative feelings, making them more vulnerable to a poor perception of their social positioning⁽⁵⁾. Low levels of SSS cause physical and psychosocial impairments⁽⁵⁾, and negatively affect performance, sense of competence, and academic achievement^(5,8).

Psychosocial characteristics encompass factors of a psychosociological nature that arise from the interaction of intrapersonal psychological aspects and aspects of the social environment that an individual is part of, and these elements are positively associated with academic performance outcomes⁽⁹⁾. Furthermore, they are characterized as potential determinants of social status, and this relational role was better investigated based on the analysis of objective indicators and less explored in relation to SSS⁽¹⁰⁾.

However, despite these potential physical, psychosocial and academic repercussions of SSS, to date, little is known about which elements or characteristics of subjects specifically enrolled in *stricto sensu* graduate studies are associated with a worse or better self-assessment of their social position⁽¹⁾. Thus, this study aimed to analyze associations between psychosocial characteristics and SSS in a sample of students entering *stricto sensu* graduate studies.

Méthods

This is an analytical study, with a cross-sectional design, conducted at a federal public university in the Brazilian Midwest between March and April 2021. The study design was guided by STrengthening the Reporting of OBservational studies in Epidemiology (STROBE) guidelines.

The target population of the study consisted of students entering stricto sensu graduate courses (master's and doctoral degrees). Data provided by the Dean of Graduate Education indicated that the institution had 597 new students entering graduate courses in the reference semester. For sample estimation, a population size (N) of 597 new graduate students, a 95% Confidence Interval, a 4% sampling error and 50% outcome proportion were considered, since the prevalence of the outcome of interest in the population studied was unknown. Considering the above parameters, the minimum estimated sample size was 299 participants; however, 321 students were recruited in order to mitigate the effects of potential losses. All those who were starting their academic training and regularly enrolled in the first semester of 2021 in any stricto sensu courses at the three campuses of the university where the study was conducted were considered eligible. Students who did not respond to the instrument related to the main outcome of this study were excluded from the final sample; however, it was not necessary to apply this criterion, since there was no missing data for this measure.

Data collection was carried out virtually, using a form created using Google Forms®, the link to which was made available to participants via email, social media, and WhatsApp® messages. Students' contact details were provided or arranged through the university's graduate course coordinators. Eligible students received an invitation letter and the link in the first two weeks of data collection. Those who did not respond had the invitation repeated in the third and fifth weeks of data collection. The data collection phase lasted 45 days. The Informed Consent Form was made available and signed online by the respondent who, after reading it, had to select the dialog box corresponding to the "yes" option, indicating that they were aware of the form and agreed to participate in the study. At this stage, participants were instructed to provide an email address and/or telephone contact, and this information was used as a marker for duplicate responses/participations.

In relation to the measures used and their respective instruments, the following variables were assessed:

a. Sociodemographic and academic characterization: through an instrument developed for the context of the study containing questions about male/female sex, age in full years, self-reported skin color (white/non-white), marital status with partner/without partner, heterosexual sexual orientation/minority sexual orientation, practice of faith (yes/no), current financial concern (yes/no), master's/doctoral courses, capital/interior *campus*, monthly *per capita* family income (\leq one minimum wage (MW)/one to two MWs/ $>$ two MWs).

b. SSS: was measured using the MacArthur Scale of Subjective Social Status. This is a visual scale that measures the self-perception of an individual's socioeconomic position in society in general⁽¹¹⁾. The instrument is visually represented in the form of a ladder made up of ten steps. At the top of this ladder are people who perceive themselves to be very well off financially, with the highest level of education and the best jobs, while on the lowest step, conversely, are people who perceive themselves to be very poor off financially, with the lowest level of education and worst jobs with the least recognition, or who are unemployed⁽¹¹⁾. It was translated, adapted and validated for the Brazilian context, having shown good test-retest stability, being considered valid for assessing SSS in adults in this country⁽¹¹⁾.

c. Self-esteem: was verified using the Rosenberg Self-Esteem Scale, a one-dimensional instrument composed of ten items with the possibility of responses in the format of a 4-point Likert scale. The scale was translated and validated for use in the general Brazilian population aged between 10 and 50 years⁽¹²⁾, and in this study, the internal consistency of Cronbach's alpha was 0.89.

d. Satisfaction with life: assessed using the Satisfaction With Life Scale (SWLS). This is a simple and brief unifactorial scale, consisting of five statements that assess the perception or judgment of how satisfied a person is with their life. The scale was translated, adapted and validated for use in the Brazilian context with satisfactory psychometric results⁽¹³⁾. In this study, the scale presented a Cronbach's alpha of 0.88.

e. Perceived social support: the Multidimensional Scale of Perceived Social Support (MSPSS) was used, a self-administered, multidimensional instrument consisting of 12 items, with the possibility of responses arranged on a Likert-type scale of 7. It was translated and validated for use in Brazil, with good psychometric performance⁽¹⁴⁾. Internal consistency in this study was 0.91.

The data from this study were analyzed descriptively and inferentially using the Statistical Package for the Social Sciences (SPSS) version 26.0. In descriptive analysis, the absolute and relative frequencies of each category investigated were presented, and for bivariate and multivariate inferential analyses, Poisson regression with robust estimation was used. In bivariate analysis, the unadjusted prevalence ratio and the p-value obtained by Pearson's chi-square test were reported. To construct the multiple model, all explanatory variables that presented a p-value <0.20 in bivariate analysis were tested, and these were introduced simultaneously using the backward technique. The variables that presented a p-value >0.05 in multiple analysis were removed one by one, until only variables that presented a p-value <0.05, estimated using the Wald test, remained in the final model, presenting the adjusted prevalence ratios and their respective 95% Confidence Intervals.

Regarding ethical aspects, this study complied with Brazilian National Health Council Resolution 466/2012 standards as well as Declaration of Helsinki guidelines, and was approved by a Brazilian Research Ethics Committee (Opinion 4.595.264).

Results

The sample of this study consisted of 321 students entering stricto sensu graduate courses at a Brazilian federal public university in the first semester of 2021. It was characterized by the predominance of female students (72.6%), with an average age of 32.94 years (\pm 7.65), entering master's courses (86.6%) from the university's main campus (86.6%). Concerning SSS, the sample presented a median and mode of 5 on the MacArthur ladder, which is equivalent to a regular assessment of the perception of the position they occupy in their social hierarchy. The regular judgment of SSS was indicated by the largest proportion of students (47.30%), also highlighting that a considerable percentage of new students (29.00%) had a poor perception of their social position (Figure 1).

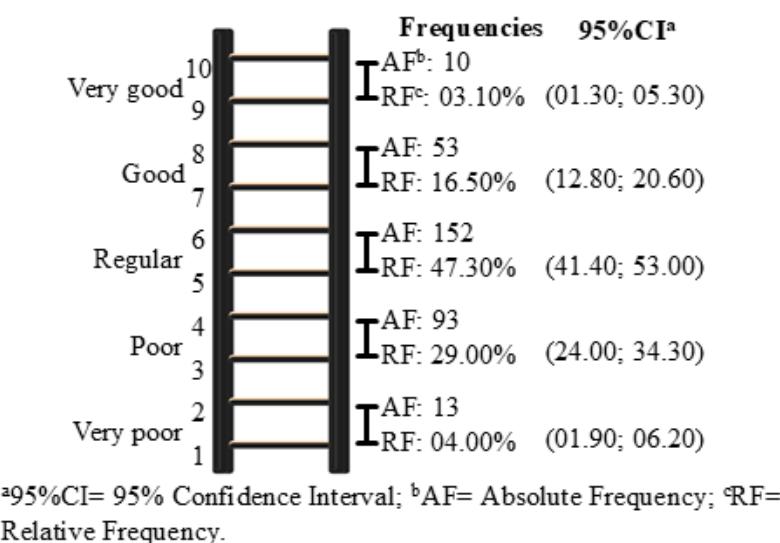


Figure 1. Characterization of subjective social status through graphic representation of the MacArthur Scale of Subjective Social Status in a sample of students entering stricto sensu graduate programs (n = 321). Cuiabá, MT, Brazil, 2021

Source: prepared by the authors (2021).

Furthermore, in relation to social characteristics, it is worth noting that 56.4% of the sample was composed of students who declared their skin color to be non-white (black, brown and indigenous), and 21.2% identified with some sexual orientation considered to be a minority homosexual, bisexual or asexual. In relation to marital status, 51.7% reported living with a partner. The majority of students (77.6%) declared having some form of faith. In relation to variables related to income, 19.9% of students reported a per capita family income \leq one MW, and 71.3% expressed concern about their current financial situation.

The psychosocial variables considered in this study were dichotomized into groups below and above their respective medians, with the majority of the sample (57.0%) presenting self-esteem indicators ≤ 30 points. Moreover, 52.6% of students presented perceived social support ≤ 68 points, and 51.7% presented life satisfaction ≤ 23 points. All of these groups were considered as experiencing low indicators of these constructs. To operationalize the inferential analyses, SSS was also dichotomized based on the median, which allowed the classification of students into groups of low SSS ≤ 5 n = 186 and high SSS > 6 n = 135, highlighting in Table 1 psychosocial factors associated with the prevalence of low SSS.

Table 1. Association between psychosocial and academic factors and low subjective social status in a sample of students entering stricto sensu graduate programs (n = 321). Cuiabá, MT, Brazil, 2021

Psychosocial and academic characteristics	Low SSS n = 186	High SSS n = 135	uPR* 95%CI †	p-value‡
Biological sex				
Male (n = 88)	60 68,2%	28 31,8%	1,08 1,00 – 1,16	
Female (n = 233)	126 54,1%	107 45,9%	-	0,022
Self-reported skin color				
Non-white (n = 181)	111 61,3%	70 38,7%	1,05 0,98 – 1,13	0,163
White (n = 140)	75 53,6%	65 46,4%	-	
Marital status				
Without partner (n = 155)	99 63,9%	56 36,1%	1,07 1,00 – 1,15	
With partner (n = 166)	87 52,4%	79 47,6%	-	0,038
Sexual orientation				
Sexual minorities (n = 68)	44 64,7%	24 35,3%	1,05 0,97 – 1,14	
Heterosexual (n = 253)	142 56,1%	111 43,9%	-	0,203
Practice of faith				
No (n = 72)	52 72,2%	20 27,8%	1,12 1,04 – 1,20	
Yes (n = 249)	134 53,8%	115 46,2%	-	0,005

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Continuation

Current financial concerns				
Yes (n = 229)	156 68.1%	73 31.9%	1.27 1.17 – 1.37	
No (n = 92)	30 32.6%	62 67.4%	-	<0.001
Course				
Master's degree (n = 264)	157 59.5%	107 40.5%	1.06 0.96 – 1.16	
Doctoral degree (n = 57)	29 50.9%	28 49.1%	-	0.233
Campus				
Countryside (n= 43)	12 11.3%	23 15.1%	1.02 0.92 – 1.12	
Capital (n= 278)	160 57.6%	118 42.4%	-	0.719
Age in complete years				
≤ 32 years (n= 177)	120 67.8%	57 32.2%	1.15 1.07 – 1.23	
> 33 years (n= 144)	66 45.8	78 54.2	-	<0.001
SE				
Low SE ≤30 points (n = 183)	128 69.9%	55 30.1%	1.20 1.12 – 1.29	
High SE >31 points (n = 138)	58 42.0%	80 58.0%	-	<0.001
ASP				
Low PSS ≤68 points (n = 169)	105 62.1%	64 37.9%	1.06 0.99 – 1.13	
High PSS >69 points (n = 152)	81 53.3%	71 46.7%	-	0.109
SV				
Low SWL ≤23 points (n = 166)	120 72.3%	46 27.7%	1.21 1.13 – 1.30	
High SWL >24 points (n = 155)	66 42.6%	89 57.4%	-	<0.001
Monthly per capita family income (n = 314§)				
≤ one MW ≤R\$1,100.00 (n = 64)	56 87.5%	08 12.5%	1.34 1.25 – 1.44	
One to two MWs R\$1,101.00 – R\$2,200.00 (n = 96)	65 67.7%	31 32.3%	1.20 1.14 – 1.30	
> two MWs > R\$2,201.00 (n = 154)	61 39.6%	93 60.4%	-	<0.001

Note: *uPR = unadjusted prevalence ratio; † 95%CI = 95% Confidence Interval; ‡p-value = result of chi-square test; §Seven students chose not to declare information about income; PSS = perceived social support; SE = self-esteem; SWL = satisfaction with life; MW = minimum wage.

In Table 2, we can see variables that, after multiple regression, remained significantly associated with $p < 0.05$ and low SSS, namely biological sex ($p = 0.034$), not having a practice of faith ($p < 0.001$), current financial concern ($p = 0.001$), low self-esteem ($p = 0.012$), per capita family income \leq one MW ($p < 0.001$) and family income between one and two MWs ($p < 0.001$).

Table 2. Multivariate analysis with robust estimation of factors associated with low subjective social status in beginning stricto sensu graduate students (n=321). Cuiabá, MT, Brazil, 2021

Variable	Category	aPR	95%CI†	p-value‡
Sex				
	Male	1,07	1,00; 1,14	
	Female	1,00		0,034
Practice of faith				
	No	1,15	1,08; 1,23	
	Yes	1,00		<0,001
Current financial concern				
	Yes	1,15	1,06; 1,25	
	No	1,00		0,001
SE				
	Low SE	1,09	1,02; 1,18	
	High SE	1,00		<0,001
Monthly per capita family income				
	\leq one MW***	1,28	1,18; 1,38	
	one to two MWs	1,19	1,11; 1,38	
	> two MWs	1,00		<0,001

Note: *aPR = adjusted prevalence ratio; †95%CI = 95% Confidence Interval; ‡MW = minimum wage in effect at the time of data collection R\$1,100,00; SE = self-esteem.

Discussion

The present study demonstrated that the perception of SSS varied from fair to very poor for the majority of students entering stricto sensu graduate courses (80.30%), highlighting that, of these, 33% presented poor or very poor perception. This indicates the low self-perception of social belonging of a considerable portion of students, which may

negatively influence this university transition, since low levels of SSS are associated with a higher prevalence and/or severity of indicators of mental illness among students with worrying repercussions on academic performance⁽⁵⁾, which may lead to university dropout⁽⁸⁾.

Some psychological and social elements were associated with a higher prevalence of low SSS among the *stricto sensu* graduate students in this sample. Among the psychological factors tested in this study, only low self-esteem was shown to be a factor significantly associated with low SSS. Individuals with moderate to high levels of self-esteem tend to assess themselves more positively, while individuals with low self-esteem are more likely to express self-deprecating perceptions of themselves and their social positioning⁽¹⁵⁾.

Some studies indicate that, during graduate studies, students are more vulnerable and prone to making social comparisons to assess their own worth, which can accentuate feelings of worthlessness, low self-esteem and low social belonging^(5,15). Others demonstrate that enrolling in graduate studies can represent an important personal and social achievement, due to the possibility of advancement in the professional/academic career and better salary rewards⁽¹⁶⁾. These expectations can increase students' self-esteem, allowing them to see themselves as better placed socially when compared to their social peers with less education⁽¹⁶⁾.

The gender differences evidenced in this study are also in line with the literature that predicts that self-assessment of social positioning varies between men and women^(17,18). Women may be more likely to be placed lower on the social ranking scale, due to disparities and impacts of a society marked by gender inequalities, which could result in lower prestige and social representation^(17,18).

However, as low SSS was more prevalent in male graduate students in this sample, it is believed that enrolling in *stricto sensu* graduate studies may represent a delay in the insertion of these students into the job market, as it may require exclusive dedication to studies⁽¹⁹⁾.

As, socially, men have the role of financial providers for their households, not being formally included in the job market can impact the social level in which they find themselves, perceiving themselves as being at a lower level in social allocation⁽²⁰⁾.

Some recent studies have investigated the role of religiosity/faith practices in people's socioeconomic status and perceptions of social injustice^(21,22). They indicate that having a religion and faith practices increases life satisfaction and self-esteem, causing individuals to reduce risk behaviors, expand their social support network and increase their physical and mental resilience⁽²²⁾, allowing them to better adjust to social adversities⁽²¹⁾.

Although objective indicators of social status are not always determinants of SSS, especially when assessed at the community level, in this study, two proxy variables for objective measures of social status were associated with low SSS among graduate students: current financial concern and monthly per capita family income.

In relation to the first variable, studies conducted with the general population have demonstrated a positive relationship between SSS and aspects such as family income and the feeling of future financial security⁽²³⁾. Financial concerns and insecurities are problems frequently reported by students at various levels of education⁽²⁴⁾, including *stricto sensu* graduate studies⁽¹⁹⁾. Especially in the Brazilian scenario, several courses require incoming students to dedicate themselves exclusively and full-time to meeting the demands of teaching, research and extension, requiring many to abandon or leave their jobs, or intentionally remain outside the job market to pursue academic training⁽¹⁹⁾.

Added to this is the reduction in the distribution of academic scholarships and their values, which are stagnant and are currently below what is necessary to meet the needs of students and their families⁽¹⁹⁾. This overview of difficulties justifies the association of the report of current financial concern with the perception of lower social positioning, especially in a society in which the perception of social position is strongly influenced by capitalist precepts⁽²³⁾.

This also supports the higher prevalence of low SSS found among groups with lower monthly per capita family income. Traditional objective measures of social status, such as income, employment, and education, appear to be important predictors of SSS and are often associated with this construct. However, it is important to note that such measures are not the only determinants of SSS, especially when considering social positioning in community contexts⁽¹⁾.

This study is not without limitations, including: its cross-sectional nature, which makes it impossible to point out the directionality of the proposed relationships; having been developed in a sample of graduate students from a single center, which makes it difficult to generalize the results, considering the large regional and national differences; not having measured negative affects in graduate students, psychological elements that have a recognized detrimental impact on SSS assessment in other populations; in addition to the fact that the final regression model adopted in this study was controlled only by a proxy variable of objective social status, monthly *per capita* family income, not including other traditional measures, such as current occupation, which could help in estimating a better adjusted statistical model.

Finally, considering that the factors associated with SSS differ between social and demographic groups⁽¹⁾ and that the understanding of this construct and its determinants in graduate students still seems incipient⁽⁵⁾, this study contributes to expanding the state of the art of how psychosocial elements relate to self-perception of social position in a sample of Brazilian graduate students, highlighting a series of factors that can decrease or increase allocation on the social hierarchy ladder.

Furthermore, considering the beneficial impact of SSS on mental health, on the academic performance of graduate students and on factors associated with better indicators of social positioning, there is a need to promote greater visibility of this construct in programs and/or interventions in academic environments, in order to promote strategies to develop self-esteem and life satisfaction in graduate students, especially when they are first admitted. In fact, this evidence can support the care provided by

nursing professionals as part of academic psychosocial care programs, emphasizing actions that provide and promote mental health and psychosocial well-being.

Conclusions

It was shown that a large percentage of incoming graduate students presented SSS indicators consistent with a self-assessment of social allocation characterized as regular to very poor. Self-esteem, satisfaction with life and age were variables that were positively associated with better SSS indicators, while reporting current financial concerns and non-white (black, brown and/or indigenous) skin color were determinants for worse social positioning in the proposed hierarchical ladder.

Author Contributions

Nascimento, F.C.S. contributed to: conception and design of the research, data collection, statistical analysis, funding acquisition, manuscript writing, and critical review of the manuscript for important intellectual content. Marcon, S.R. contributed to: conception and design of the research, data collection, funding acquisition, manuscript writing, and critical review of the manuscript for important intellectual content. Kogien, M. contributed to: conception and design of the research, data collection, statistical analysis, funding acquisition, manuscript writing, and critical review of the manuscript for important intellectual content. Modena, C.F. contributed to: manuscript writing and critical review of the manuscript for important intellectual content. Oliveira, A.F. contributed to: manuscript writing and critical review of the manuscript for important intellectual content.

Conflict of Interest

The authors certify that they have no conflicts of interest regarding this manuscript.

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