

**SOCIOECONOMIC FACTORS CORRELATED WITH SOCIAL DISTANCING**

**FATORES SOCIOECONÔMICOS CORRELACIONADOS COM O DISTANCIAMENTO SOCIAL**

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## ABSTRACT

Social distancing and the like have been indicated as effective measures to help contain the spread of the new coronavirus. This study investigated what is the likelihood of an individual to fulfill social distancing considering his/her socioeconomic characteristics, financial conditions, and stand on it. To do so, an online questionnaire was sent to a convenience sample from which we obtained 193 valid respondents. The data were analyzed through logistic regression. Two models were tested. One coding education as a categorical variable and another coding it as a continuous variable expressed in years of study. Level of education as well as years of study, and people's opinion on the effectiveness of social distancing have a significant correlation with the likelihood of fulfilling social distancing (LFSD). These two variables explain about 10% of the variation in LFSD. Future studies should investigate what other variables, such as geographic region, could be added to the model to enhance its predictive power.

**Keywords:** Lockdown, Covid-19, infection peak.

## RESUMO

Distanciamento social tem sido apontado como uma medida efetiva para ajudar a conter a difusão do novo coronavírus. Este estudo investigou qual é a tendência de alguém cumprir distanciamento social considerando suas características socioeconômicas, condições financeiras, e posição a respeito do distanciamento. Para tanto, um questionário online foi enviado a uma amostra conveniente da qual obtivemos 193 respondentes válidos. Os dados foram analisados por meio de regressão logística. Dois modelos foram testados. Um codificando escolaridade como variável categórica e outro codificando-a como variável contínua expressa em anos de estudo. Nível de escolaridade, bem como anos de estudo, e opinião das pessoas sobre a eficácia do distanciamento social têm correlação significativa com a chance de cumpri-lo (LFSD). Estas duas variáveis explicam cerca de 10% da variação da LFSD. Estudos futuros deveriam investigar quais outras variáveis, tais como região geográfica, poderiam ser adicionadas ao modelo para melhorar seu poder preditivo.

**Palavras-chave:** Lockdown, Covid-19, pico de infecção.

## RESUMEN

La distancia social ha sido identificada como una medida efectiva para ayudar a contener la propagación del nuevo coronavirus. Este estudio investigó cuál es la tendencia de alguien a cumplir la distancia social considerando sus características socioeconómicas, condiciones financieras y posición con respecto a la distancia. Con este fin, se envió un cuestionario digital a una muestra conveniente de la cual obtuvimos 193 encuestados válidos. Los datos se analizaron mediante regresión logística. Se probaron dos modelos. Un nivel de codificación de la educación como una variable categórica y el otro que lo codifica como una variable continua expresada en años de estudio. El nivel de educación, así como los años de estudio y la opinión de las personas sobre la efectividad de la distancia social tienen una correlación significativa con la posibilidad de cumplirla (LFSD). Estas dos variables explican aproximadamente el 10% de la variación de LFSD. Los estudios futuros deberían investigar qué otras variables, como la región geográfica, por ejemplo, podrían agregarse al modelo para mejorar su poder predictivo.

**Palabras-clave:** Lockdown, Covid-19, pico de infección.

## INTRODUCTION

The current global pandemic of Covid-19 has challenged us heavily, evidenced structural fragilities, and required immediate and effective responses. Although not unanimously, social distancing and the like have been indicated as effective measures to help contain the spread of the virus (e.g. GATTO et al., 2020; TANG et al., 2020). Such measures have already been recommended and adopted in Brazil and it seems pretty likely that even more restrictive measures may be taken since, as of May, we advance in numbers of infected ones and the infection curve is still at growth stage (JOHNS HOPKINS UNIVERSITY & MEDICINE, 2020; OUR WORLD IN DATA, 2020), with São Paulo being the current epicenter (PORTAL GEOCOVID-19, 2020), and the infection peak imprecisely foreseen to take place between May and June (UNIVERSIDADE FEDERAL DE MINAS GERAIS, 2020). Notwithstanding these points, a recent study has suggested that prolonged or intermittent social distancing may last until 2022 (KISSELER et al., 2020).

In Brazil, restrictive contention measures such as lockdown are not provided by law. In such a democratic condition, social distancing recommendation is the legal way to address this subject, though a few states have already decreed lockdowns (SOUZA, M., 2020). Despite that, whether containment measures are taken compulsorily or voluntarily, social factors will inevitably pose challenges to fulfilling it as Brazil is plenty of social inequalities and has a high population density in areas with poor sanitation infrastructure.

With São Paulo city as the epicenter of Covid-19, where many hospitals are close to their limit of intensive care unit (ICU) occupancy (ESTADÃO CONTEÚDO, 2020), the same for other states (COMITÊ CIENTÍFICO DO CONSÓRCIO NORDESTE, 2020), and nonetheless, people keep going out because, without any strong plan to support their economy during the pandemic, they have to work, we face a scenario that may shock us and lead to a catastrophe if our healthcare system collapses. It is worth mentioning that social distancing is not to prevent people from never getting infected by SARS-CoV-2, but rather to delay the moment for as long as possible so that hospitals will be able to treat everybody who will need treatment.

We stem from the assumption that social distancing is a measure capable of reducing the coronavirus infection rate and that a strategy to cope with a situation requires many fronts. Thus, while some managers design plans to optimize their resources, others should investigate how the demand might be like so that information from both sides can be integrated to reach the best decision and strategy (CONTI; GOLDSZMIDT; VASCONCELOS, 2015; GONÇALVES et al., 2010; LARA et al., 2020; PEDROSA; NASCIMENTO, 2019).

This study sought to answer the following Research Question (RQ): what is the likelihood of an individual to fulfill social distancing, considering his/her social characteristics, financial conditions, and stand on it? To answer this question, we applied a questionnaire to 193 people (corresponding to a response rate of 88.5%) and analyzed the results through logistic regression.

## THEORETICAL REFERENCE AND HYPOTHESES

The new pandemic has pushed the scientific community into concentrating hard on finding solutions to cope with its consequences. Several editorial articles have recently been published urging academics and researchers to contribute by offering solutions, insights, opinions, and points of view (ÅGERFALK; CONBOY; MYERS, 2020; RAHIS, 2020; PAN; ZHANG, 2020). This need crosses all disciplines and every field has a role to play. As for social distancing, researchers should investigate not only how it helps contain the spread of the virus, but also what factors are associated with the probabilities and likelihood of practicing social distancing. In this section, we present some theoretical reasoning that guided our study in this regard.

## Socioeconomic factors and social distancing

To answer RQ, we elaborated a few assumptions to be investigated. Firstly, socioeconomic factors (SEF) are often, to some extent, related to health phenomena (e.g. ÁLVAREZ-GÁLVEZ et al., 2019; ELLISON; BAUCHNER, 2007; ROCH; TURRA, 2016) because these factors affect one's decision and behavior. In addition, performing social distancing<sup>1</sup> requires people to change their work routines, including working from home. However, not all jobs allow people to work remotely. Thus, to perform social distancing, in most cases people either work remotely, are fired, or quit their job if working remotely is not possible. Quitting the job means that people will need to live off their savings. Despite not being a rule, higher-income earners usually have more conditions to live off their savings than lower-income earners. Therefore, we hypothesized that SEF could impact one's decision toward the likelihood of fulfilling social distancing (LFSD). This led us to presume that the less an individual's earnings, the less likely he/she will fulfill social distancing. Also, if one could have been able to work remotely after the beginning of the pandemic, that could affect LFSD positively. The following hypotheses were then established:

HI<sub>a</sub>: income relates positively to LFSD.

HI<sub>b</sub>: Flexible working relates positively to LFSD.

Similarly, we assumed that the level of education of an individual might have an impact on social distancing, for example by the fact that low-literate people may show less understanding and less awareness of the courses of diseases (SANTOS et al., 1998; RAMA et al., 2010).

But more than that, during this rapidly evolving pandemic, greater flexibility has been and will be required from both students and teachers, and learning methods that are not well developed may be needed (CHICK et al., 2020). It is possible to see the impact on resource-poor and socially disadvantaged students (low schooling), where limited access to technology and the Internet has had an impact on the organizational response or on student's ability to use the Internet for distance education (ZHONG, 2020).

With the increased rates of spread of the new coronavirus, many countries have adopted distance education in order to mitigate the transmission of the disease by socially distancing themselves. Among the measures adopted in Brazil, many educational institutions have had to suspend their classes and activities in person. The Ministry of Education has established *Portaria* no. 343, of March 17th, 2020, which provides for the replacement of in-person lessons with lessons in digital media while the new coronavirus pandemic situation lasts (CAMACHO et al., 2020).

Therefore, it is proposed in this paper as a hypothesis that the individual's level of education impacts positively on the adherence to social distancing during the quarantine period. The fact that individuals are enrolled at, or affiliated to, an educational institution makes access to information greater, to the detriment of those who have no formal education or are currently not studying. Several studies have pointed out ways to improve student education during the pandemic (CAMACHO et al., 2020; CHICK et al., 2020; CRAWFORD et al., 2020).

With all of this taken together, we hypothesized the following:

H2: level of education / years of study relates positively to LFSD.

## The Covid-19 pandemic affects the labor market

The Covid-19 pandemic has changed people's life and routines (DATAFOLHA, 2020) and has been pointed out to be responsible for causing the loss of many jobs, thus increasing the unemployment rate (IBGE, 2020a). IBGE analyzes the quality of life and levels of well-being of people, families, and population groups, the realization of human and social rights, as well as access to different services, goods, and opportunities, through indicators aimed at contemplating the heterogeneity of Brazilian society from

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<sup>1</sup>We do not distinguish between social distancing and physical distancing in this paper.

the perspective of social inequalities. It includes information about the workforce and the labor market. The labor market indicators for the week of August 2–8 of the National Household Sample Survey (PNAD) Covid-19, released by IBGE – 13th week of the survey – shows that the labor market continued to be characterized by low levels of occupation and participation in the workforce and a high unemployment rate (IBGE, 2020b), resulting from the significant adverse shock caused by the SARS-CoV-2 pandemic. Even if the evolution of Covid-19 allows the process of a gradual return to some kind of normality in the functioning of economic activities in Brazil to continue, the adverse effects of the crisis in the labor market tend to persist for some time and the unemployment rate will remain at a high level, and may even fluctuate upwards, pressured by the movement of return to the workforce of a portion of workers who, supported by the receipt emergency aid, stopped looking for a job due to the crisis and social distance.

Considering this scenario, we hypothesized:

H3: Having kept the job after the beginning of the Covid-19 pandemic relates positively to LFS.

Additionally, Covid-19 has had profound impacts on the Brazilian labor market. With the stoppage of productive activities, informal workers have lost their livelihood, and many companies have begun to lay off employees with a formal contract, with a consequent increase in the informal rate of the Brazilian economy, above the current 40.8% (COSTA, S., 2020). In this regard, we formulated the following hypothesis:

H3b: Having been fired because of the Covid-19 pandemic relates negatively to LFS.

The hypotheses in this section assumed that these several impacts on the labor market and employments could, to some extent, impact people's behavior toward, and stand on, social distancing, and these would vary from person to person as a function of what job consequences one might have suffered. In short, we considered that anything related to keeping the job would be taken as positive and anything related to losing it would be taken as negative toward LFS.

For in any nation, appreciating the differential impacts of this crisis on different groups within society will allow policy-makers to support the recovery most effectively, and prevent the coronavirus crisis, as far as it is possible, from becoming a long-term crisis in living standards (BREWER; GARDINER, 2020).

Furthermore, the Covid-19 pandemic has impacted economic sectors (CONFEDERAÇÃO NACIONAL DE SERVIÇOS, 2020) and employees differently. Public servers, for instance, benefit from job stability and will never be fired for budget cuts, no matter what. Private sector employees, in contrast, do may be fired for spending cuts, as has been the case indeed (COSTA, S., 2020).

Freelancers and self-employed are also in a more fragile situation because they do not have regular incomes. So, staying at home means taking the risk of not having money in the following month. In Brazil, specific sectors of the economy have been more affected by the pandemic than others. Sectors such as commerce and services have been deeply impacted. These are sectors wherein the number of informal, 'invisible' labor is more present, and consequently, they are part of the population that the government has no information about (COSTA, E.; FREIRE, 2020). Considering this situation and the impact of this 'invisible' works on the economy, the Brazilian government has deployed a comprehensive emergency program (MINISTÉRIO DA CIDADANIA, 2020). The program has more importance for economies in the North and Northeast. The estimated volume for all states in the Northeast is twice as high as the national weight. Municipal data show this trend because 80.4% of the 1,709 municipalities with a weight equivalent to 10% or more of GDP are in the Northeast (COSTA, E.; FREIRE, 2020).

Given all these particularities, we assumed that this could reflect somehow on LFS by hypothesizing the following:

H4: Having received the government benefit because of the Covid-19 pandemic relates positively or negatively to LFS.

H5: Type of job relates positively or negatively to LFS.

## **To practice or not to practice social distancing?**

Finally, as mentioned in the introduction, social distancing measures in Brazil are voluntary. It has long been known in the literature that one's opinion and personality affect one's judgments and attitudes toward a given issue (AGER; DAWES, 1965; WHITE; HARVEY, 1965). These aspects are often considered in many studies, such as in consumer science (OLIVEIRA; NETO; GONÇALVES, 2020), employees' perceptions (SOUZA, P.; SOUZA, B., 2018), or adoption of technology (MAINARDES; SOUZA, I.; CORREIA, 2020). So, unless otherwise decreed, social distancing in Brazil will initially depend on the individual's willingness to fulfill it. We then hypothesized that an individual's opinion would contribute to his/her LFS. The last hypothesis is as follows:

H6: One's stand on social distancing to help reduce the spread of the virus relates positively to LFS.

## **METHOD**

### **Study design and data collection**

An online questionnaire (see Appendix) was sent to a convenience sample from which we obtained 218 respondents (25 missing values, 11.5%). The questionnaire had two sections: the first to collect sociodemographic and socioeconomic characteristics and the second to collect data concerning the research interests and assumptions. We accepted answers for eight days. SEF such as education and monthly income were treated as independent variables (IV) and reasons for one not to fulfill social distancing were treated as the dependent variable (DV). As recommended by Creswell (2009), the questionnaire items were distributed randomly to increase reliability and it was initially sent to a sample of ten respondents to assure validity. This sample was not included in the analysis.

### **Sample characteristics**

We received 218 responses, of which 25 were missing values (one respondent was under the age of 18 and 24 respondents had selected more than one response). Thus, the analyzed sample consisted of 193 respondents, being 132 (68.4%) females and 61 (31.6%) males. Table I describes the sample distribution. The average age was 36.03 (SD = 12.68). Over one-fourth of the respondents (28.5%) has a monthly income above five times the minimum wage (MW). Over two-third is either a graduate or a postgraduate. Almost half of them have had their work routine changed since the beginning of the pandemic and most of them have kept their job. An inquiry about their stand on social distancing as a measure to help contain the spread of the virus indicated that most of them partially agree (18.7%) or strongly agree (69.9%) with it.

The sample size satisfied the ratio of cases to IVs criterion as  $N \geq 50 + 8m$ , where  $m$  is the number of IVs (TABACHNICK; FIDELL, 2013), and in our model,  $m = 6$ .

### **Data coding and analysis**

Question I0 of the Appendix, whose percentage of responses is shown in Table I, contained the responses that were treated as DV. For analysis, the groups were regrouped and transformed into binary values. The reasoning was as follows: if, when answering the question, a respondent considered any options other than 'would hardly not fulfill social distancing', this meant that he/she was having second thoughts. Therefore, only the respondents who answered that they would hardly not fulfill social distancing were labeled as 'Will fulfill it' (WF) and coded #1. All other responses were labeled as 'Will not fulfill it' (WNF) and coded#0. Such division resulted in 105 WFs (54.4%) and 88 WNFs (45.6%).

**Table I** – Sample distribution.

Model	Variables	N	%
WF <sup>a</sup> vs WNF <sup>b</sup> (N = 193)	Demographics	Gender	
		Male	61 31.6
		Female	132 68.4
	Independent variables	Income	
		Up to the MW	30 15.5
		Between the MW and 2x the MW	42 21.8
		Between 2x and 3x the MW	21 10.9
		Between 3x and 4x the MW	27 14.0
		Between 4x and 5x the MW	18 9.3
		Above 5x the MW	55 28.5
	Level of education	Basic school	5 2.6
		High school	54 28.0
		Graduate	66 34.2
		Postgraduate	68 35.2
	Job type or sector	Public server	50 25.9
		Private sector	70 36.3
		Self-employed	32 16.6
		Unemployed	41 21.2
	Pandemic impact on job status and conditions	Haven't been fired	69 35.8
		Have changed work routine	91 47.2
		Have been fired and got a new job	5 2.6
		Have been fired and got no other job	28 14.5
	Opinion on social distancing	Strongly disagree	5 2.6
		Partially disagree	7 3.6
		Indifferent	10 5.2
		Partially agree	36 18.7
		Strongly agree	135 69.9
	Government benefit	Yes	39 20.2
		No	154 79.8
	Reasons why they would not fulfill it	Work informally	12 6.2
		Work formally	47 24.4
		Interaction with family or friends	7 3.6
		Reduce stress or anxiety	22 11.4
		Would hardly not fulfill	105 54.4

<sup>a</sup> Will Fulfill it (WF). <sup>b</sup> Will not Fulfill it (WNF).

Source: Elaborated by the authors.

All statistical procedures were conducted in IBM SPSS®. Two models were tested. Variables were considered significant at the level of  $\alpha = 0.05$  for both models. In Model I, except for the variable opinion, which was ordinal, all IVs considered for analysis were categorical. Then, we conducted a stepwise logistic regression analysis with a forward conditional method because such procedure begins with no variable in the equation (LAUKKANEN, 2016; TABACHNICK; FIDELL, 2013) and add to the equation only those variables that are statistically significant for the model.

Given the results of Model I, we tested Model II by converting the variable education into a continuous variable represented by years of study as follows: basic school (8yr), high school (11yr), graduate (15yr), and postgraduate (17yr), to enhance the precision of the model so that we could understand how much the odds ratios would change at the year-of-study level. We verified the existence of multicollinearity between the continuous and ordinal variables by employing Spearman’s correlation.

## FINDINGS

The final logistic regression models (Table 2), which included the variables education (Model I), years of study (Model II), and opinion (both models), presented weak pseudo- $R^2$  (0.13 and 0.094 respectively, Nagelkerke test), indicating that the explanatory power of the equations is weak. Hosmer-Lemeshow test (DIAS FILHO; CORRAR, 2017) indicated that there are no significant differences between expected and observed values (Table 3).

**Table 2** – Regression analysis results

Model	Dependent variable	Independent variables	$\beta$	S.E.	Wald	Sig.	Exp( $\beta$ )
(I)	WF [1] vs WNF [0]	Level of education (Basic school) <sup>a</sup>			9.41	0.024	
		High school	1.32	1.17	1.27	0.260	3.75
		Graduate	1.10	1.17	0.89	0.346	3.00
		Postgraduate	2.09	1.17	3.20	0.074	8.12
		Opinion	0.55	0.18	8.89	0.003	1.73
		Constant	-3.78	1.41	7.19	0.007	0.02
(II)	WF [1] vs WNF [0]	Years of study	0.12	0.06	4.42	0.036	1.13
		Opinion	0.51	0.18	7.96	0.005	1.66
		Constant	-3.86	1.20	10.42	0.001	0.02

<sup>a</sup> Reference category.

Source: Elaborated by the authors.

The final classification (Table 3) presented an overall accuracy percentage of 61.7% for both models against 54.4% if the constant ( $\beta_0$ ) is in the model alone. Overall, the models explain little the variance in the odds ratios of the DV.

**Table 3** – Logistic regression goodness of fit measures

Model fit statistics	Model I	Model II
-2 Log likelihood	246.263	251.992
$\chi^2$ (df)	19.793 (4), p < 0.05	14.063 (2), p = 0.001
Hosmer-Lemeshow test	4.050, p = 0.542	5.542, p = 0.353
Classification percentage	61.7	61.7

Source: Elaborated by the authors.

Verification of multicollinearity between the continuous and ordinal variables found no

significant correlation (Spearman's  $\rho = -0.08$ ,  $p > 0.05$ ). The analysis supported H2 and H6. In Model I, Education ( $p < 0.05$ ) significantly correlates with LFSD. Postgraduates are 8.12 times more likely to fulfill social distancing than those with a basic degree. Interestingly, from basic school to high school the odds ratios increase almost four times, which means 25% ( $3.75/3$ ) greater than the difference between graduates and the ones with a basic degree. People's opinion on social distancing strongly correlates with LFSD ( $p < 0.01$ ). As its odds ratio is 1.73, this means that for each additional point one attributes to the effectiveness of social distancing, one's LFSD increases by 73%. This valuable information suggests that institutions, government, and the like should actively foster awareness campaigns to increase people's positive stand on social distancing.

Model I provides a picture of how different people's opinions can be from an education degree to another. Again, social distancing has been proved to be effective to reduce the spread of the virus (GATTO et al., 2020; TANG et al., 2020). So, a partial explanation for such differences may be that low level of education is often associated with a lack of awareness of, and familiarity with, characteristics and courses of diseases, as well as how to tackle them (SANTOS et al., 1998; RAMA et al., 2010).

For Model II, years of study positively relate to LFSD ( $p < 0.01$ ). Their odds ratio (1.13) indicates that one's LFSD increases by 13% for each additional year of study. In a long-term perspective (KISSELER et al., 2020), this information, far from doing it alone, draws yet again attention to the importance of investing in and fostering the education of people. Surprisingly, income does not correlate with LFSD significantly.

Though not all variables were statistically significant, a few comments on the whole analysis results are worth being made. Different from our initial assumptions, data exploration suggested that income and having had work routine changed correlate negatively, despite insignificantly, with LFSD. On the other hand, having kept the job, having become unemployed, or having received the government benefit correlate positively, despite insignificantly, with LFSD. The same may be said about people who work in the private sector or are self-employed.

## DISCUSSION

This study aimed to investigate which SEF correlate with LFSD. For that, 193 responses of an online questionnaire were analyzed through logistic regression. The variables education, years of study, and people's opinion have been shown to be significantly correlated with LFSD, but about only 10% of such likelihood may be explained by these variables. This study provides evidence that Covid-19 pandemic impacts on job status and people's life do not have a significant correlation with LFSD. Therefore, it paves the way for inquiries into what factors could better explain LFSD during epidemics, particularly during the current coronavirus pandemic.

We sought to inquire about one's predisposition to cooperate voluntarily with the contention of the virus by performing social distancing by staying at home. No legal obligation was considered for analysis. The focus was on SEF that contribute positively or negatively to an individual fulfilling social distancing.

Given the weak explanatory power of the model, much remains to be discovered to help hospitals, government, and managers understand how they can stimulate people to stay at home. For now, our findings have provided evidence that people's agreement on social distancing has a high impact on their LFSD. Alignment between competent bodies to pass a unique, concise message to the population is a key to reaching adequate social distancing levels, which must be at least above 50% (COMITÉ CIENTÍFICO DO CONSÓRCIO NORDESTE, 2020), and is subjected to take place intermittently until 2022 (KISSELER et al., 2020).

Additionally, as proposed by Lara et al. (2020) and argued by us in the introduction, dealing with such a challenging situation as that of the Covid-19 pandemic requires multiple fronts and strategies. Lara and colleagues focused on the health service providers' resources, infrastructure, and limitations by

proposing a model for supply chain management in a town of Minas Gerais State. Our findings add to the other side of this mechanism by partially providing administrators with a clue as to people's LFSD, meaning that hospital capacity and demands may, perhaps, balance out.

Although income has been shown not to be significantly correlated with LFSD, this should not be fully accepted. A recent Datafolha's (2020) research indicated that there is a large difference in the levels of fulfilling social distancing between low-income people and high-income ones. We suspect that our study has not found a significant correlation because we used short intervals between incomes, which ranged the difference between the highest and lowest ones from 1 to 5. We hypothesize that enlarging this difference to, say, 1 to 9, may provide some evidence that income somehow influences LFSD.

Finally, the model developed in this study poorly explains LFSD. It has only given us a clue about which variables may somehow contribute to LFSD and which ones are misleading. Future studies should investigate this question by considering geographic regions and comparing high Covid-19 incidence regions with low incidence ones to test whether the confirmed presence of the virus around somebody influences his/her LFSD. Also, to estimate such likelihood based on financial factors, investigate whether the number of people sharing a house influences one's LFSD.

### **Limitations**

This study has several limitations. First, it lies in people's opinion to address the DV. Since opinions change, besides sometimes being expressed to sound socially desirable, it is therefore not guaranteed that people classified in WF or WNF belong to one group or the other. Second, it uses a convenience sample method, which restricts generalization. Lastly, the sample size restricted us from adding more variables, which led us to limit the model to six variables to not compromise the statistical analysis.

### **CONCLUSION**

This study investigated SEF related to LFSD. Covid-19 pandemic impacts on job status and people's life do not correlate significantly with LFSD. Instead, LFSD is positively correlated with people's opinions and years of study. These two variables explain about 10% of the variance in LFSD. Future studies should investigate what other variables, such as geographic region, could be added to the model to enhance its predictive power.

### **ACKNOWLEDGMENTS**

We thank the Coordination for the Improvement of Higher Education Personnel (CAPES) for the doctoral fellowships awarded to G.N.S., A.G.B., and R.A.P.B., and Getulio Vargas Foundation's São Paulo School of Business Administration (FGV EAESP) for resource support. G.N.S. dedicates this paper to Laura Santana, who passed away in May 2020.

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## APPENDIX

- 1) Sex
  - a) Male
  - b) Female
- 2) Age
- 3) Education level
  - a) Elementary school
  - b) High school
  - c) Undergraduate/bachelor's
  - d) Postgraduate
- 4) Race or ethnicity
  - a) Asian
  - b) White
  - c) Black
  - d) Multiracial (brown)
  - e) Undeclared
- 5) Monthly income
  - a) Up to the minimum wage (MW)
  - b) Between the MW and 2x the MW
  - c) Between 2x and 3x the MW
  - d) Between 3x and 4x the MW
  - e) Between 4x and 5x the MW
  - f) Above 5x the MW
- 6) State
- 7) Concerning your occupation
  - a) Public server
  - b) Private sector
  - c) Self-employed
  - d) Unemployed
- 8) Have you been fired, changed your job, or changed your work routine since the beginning of the quarantine?
  - a) Haven't been fired
  - b) Haven't been fired, but have changed work routine
  - c) Have been fired and got a new job
  - d) Have been fired and got no other job
- 9) Do you receive or have you received the government benefit due to the current coronavirus epidemic?
  - a) Yes
  - b) No
- 10) In case of social distancing measures become more restrictive in your region, what factors would cause you not to fulfill rigorously the social distancing?
  - a) Necessity to work informally
  - b) Necessity to work formally
  - c) Necessity to interact with family and/or friends
  - d) Necessity to go out (of the house) to reduce stress and/or anxiety levels caused by social distancing
  - e) Would hardly not fulfill social distancing
- II) On a scale of 1 to 5, where 1 means strongly disagree and 5 means strongly agree: Social distancing is an effective measure to help contain the current coronavirus pandemic in Brazil.