

# CUIDADO É FUNDAMENTAL

Escola de Enfermagem Alfredo Pinto – UNIRIO

RESEARCH

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## The Lesser Evil: University Students Representations on the Use of Masks for Covid-19 Prevention

*Dos Males o Menor: Representações de Universitários sobre o Uso das Máscaras para Prevenção da Covid-19*  
*El Mal Menor: Representaciones de Universitarios sobre el Uso de Máscaras para la Prevención del Covid-19*

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### ABSTRACT

**Objective:** to know the social representations of brazilian university students about the use of masks to control COVID-19. **Method:** qualitative survey, based on the Theory of Social Representations. 283 brazilian university students were selected by convenience. Data were collected through digital form. For analysis, the Thematic Analysis was used. **Results:** a theme named “The mask for prevention: materialization of the fear of contagion” was elaborated, and three sub-themes, respectively titled “The construction of a new habit: the necessary evil of masks”; “The macrosocial in the modification of the self” and “The use of the mask in everyday life: the individualization of the social”. **Conclusion:** the understanding of the use of masks as a resource for preventing a life-threatening condition was observed. These favorable attitudes seem to be organized in contrast to the fear caused by virus and their consequences.

**DESCRIPTORS:** Masks; Preventive actions against diseases; Coronavirus infections; Qualitative research.

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## RESUMO

**Objetivo:** conhecer as representações sociais de universitários brasileiros sobre o uso de máscaras para o controle da COVID-19. **Método:** estudo qualitativo, tipo *survey*, ancorado na Teoria das Representações Sociais. Participaram 283 universitários brasileiros, selecionados por conveniência. Os dados foram coletados por meio de formulário digital. Para análise, utilizou-se a Análise Temática. **Resultados:** elaborou-se um tema nomeado “A máscara para prevenção: materialização do medo de contágio”, e três subtemas, intitulados respectivamente “A construção de um novo hábito: o mal necessário das máscaras”; “O macrosocial na modificação do eu” e “O uso da máscara no dia-a-dia: a individualização do social”. **Conclusão:** observou-se a compreensão do uso de máscaras como um recurso para prevenção de uma condição ameaçadora à vida. Atitudes favoráveis parecem se organizar em contraposição ao medo causado pelo vírus e suas consequências.

**DESCRITORES:** Máscaras; Ações preventivas contra doenças; Infecções por coronavírus; Pesquisa qualitativa.

## RESUMEN

**Objetivo:** conocer las representaciones sociales de estudiantes universitarios brasileños sobre el uso de máscaras para el control de COVID-19. **Método:** estudio cualitativo, basado en la Teoría de las Representaciones Sociales. Participaron 283 universitarios brasileños, seleccionados por conveniencia. Los datos fueron recolectados a través de un formulario digital. Para el análisis se utilizó el Análisis Temático. **Resultados:** se elaboró un tema denominado “La mascarilla para la prevención: materialización del miedo al contagio” y tres subtemas, respectivamente titulados “La construcción de un nuevo hábito: el mal necesario de las máscaras”; “Lo macrosocial en la modificación del yo” y “El uso de la mascarilla en la vida cotidiana: la individualización de lo social”. **Conclusión:** se observó la comprensión del uso de máscaras como recurso para la prevención de una condición potencialmente mortal. Estas actitudes favorables parecen organizarse en contraste con el miedo provocado por el virus y sus consecuencias.

**DESCRIPTORES:** Máscaras; Acciones preventivas contra enfermedades; Infecciones por coronavirus; Investigación cualitativa.

## INTRODUCTION

The fast spread of the disease caused by the coronavirus, COVID-19, and the absence of effective treatment imposed on society the need to adopt preventive measures, such as social distancing, hand hygiene, respiratory etiquette, and the use of masks.<sup>1-2</sup>

The recommendations for mask use by the general population changed throughout the pandemic, but were endorsed by the World Health Organization (WHO), considering the available evidence.<sup>3</sup>

Thus, N95 or PFF2 and surgical masks are recommended for healthcare professionals, the latter being also indicated for people with suspected or confirmed COVID-19 and for those belonging to groups at risk for developing severe forms, such as the elderly and people with chronic diseases.<sup>2</sup>

For the general population, considering the scarcity of professional masks, cloth masks are a realistic possibility.<sup>2,4</sup> In fact, in April 2020, the Brazilian Ministry of Health indicated that the population should make cloth masks for use, especially in places with greater movement of people.<sup>5</sup>

A review of the literature found that the protective capacity of cloth masks varies between 40 and 97%, depending on the material, the number of layers, and the frequency of washing.<sup>6</sup> Regarding the adherence of the population, in a study of Brazilians, 95.5% said they use masks, mainly of fabric.<sup>7</sup>

Unlike other countries in which masks are already part of the culture and daily life, in situations of disease or for protection against climatic factors and pollution, in Brazil, the practice has become a new reality.<sup>7-8</sup> This panorama points to the need for

prevention and control measures for COVID-19 to be better understood by recognizing the ways of thinking and acting of specific groups.

It is considered that social representations are elements of the symbolic universe that organize behavior and direct conduct.<sup>9</sup> Thus, recognizing them as factors that influence adherence to masks can contribute to the identification of barriers and the development of strategies directed to the reality of individuals. Thus, this study sought to know the social representations of Brazilian college students about the use of masks to control COVID-19.

## METHOD

Qualitative study, survey type, anchored in the Theory of Social Representations (TRS).<sup>9</sup> The qualitative survey research consists of open-ended questions, prepared by the researchers and answered by the participants through typing into electronic resources. These questions do not have standard answers, and therefore provide rich data when accessed in their entirety.<sup>10</sup>

In this study, this method allowed access to cognitive processes, materialized in language, which express material practices and the construction of meanings about a new, uncertain, changeable, and little explored phenomenon.<sup>10</sup> Moreover, it favored reaching participants from several regions, in a short period of time, even during social distance.

The inclusion criteria were: being Brazilian, residing in Brazil, being 18 years old or older, and self-reporting to be an undergraduate student in higher education institutions in the country. Students from the health and welfare areas were excluded because it was understood that they have curricular information that

enables them to access the phenomenon differently than those not previously familiarized with the topic.

The dissemination of the research and access to participants occurred through the social networks Facebook and WhatsApp and the selection of participants occurred by non-probabilistic sampling, by convenience. The students could indicate new participants.

Data collection occurred between April 29 and May 29, 2020. A digital structured form was used with the Google Forms resource composed of digital sections.<sup>11</sup> The first presented the Informed Consent Form (ICF); the next contained eligibility information; the third presented the questions: If people you care about asked you “do you find it hard to wear your masks when you leave the house?” What would you answer them and why? What if people close to you asked you “what do you think makes it easier to wear masks when you leave the house?” What would be your answer and your justification? The subsequent pages recorded the sociodemographic characteristics of the participants.

A total of 864 initial records were compiled into a database and explored for eligibility criteria for this research clipping. A total of 581 answers were disregarded: one candidate did not live in the country; four were under 18 years old; 38 did not attend undergraduate courses in the country or were graduate students; seven answers were duplicates; five records were not from native Brazilians; eight answered the open questions incompletely; 515 belonged to health and welfare courses; three refused to participate in the study. Thus, 283 college students were considered eligible and participants. To ensure anonymity, they were coded with the letter E followed by an Arabic numeral.

Data analysis was carried out using Thematic Analysis.<sup>12</sup> The following phases were followed: 1) data familiarization: the answers were organized in a text editor and read extensively; 2) coding: a code was assigned to each text segment, which expresses the meaning unit of the text; 3) creation of themes: the themes were built according to the similarity of the codes, and were interpreted in the light of TRS; 4) themes review: the themes were evaluated in relation to the codes that composed them and their external heterogeneity and internal homogeneity was observed. The pertinence of the themes in relation to the research objective and the data set was also verified. 5) Naming the themes: the themes were given a name that translated their central concept; 6) Writing the research report.

The analysis of the results was carried out collaboratively by the authors, with expertise in the method and the theoretical framework. To ensure credibility, transferability, dependability, and confirmability, we sought to guarantee the clarity of the methodological path, presented the statements that subsidized the interpretations, and sought to interpret the results critically, in dialog with the literature.<sup>13</sup>

The approval was obtained from the Research Ethics Committee (CAAE no. 30964820.0.0000.5142; opinion no. 4.109.280).

## RESULTS

The mean age of the 283 participants was 23.7 years [Variance (Var) = 45.8; Standard deviation (SD) = 6.8; median = 21.0; mode = 20.0], with a minimum age of 18 and a maximum age of 59. The other sociodemographic characteristics are presented in Table 1.

The interpretative work allowed the construction of the theme and subthemes, summarized in Chart 1.

The theme “The mask for prevention: materialization of the fear of contagion”, refers to the elaborations of the participants about why they wear the mask, in which we noticed a counterpoint to the virus, to contagion, and to the disease. In this scenario, the mask seems to be assumed as a concrete resource for prevention of a life-threatening condition.

The favorable inclination to use the mask is permeated by the justification of personal protection and that of the people with whom one lives.

*[...]the mask is one of the only tools to fight the virus [...] The fear of getting contaminated, you just have to think about your neighbor or even family members who live with you and that the lack of protection can bring this disease to your home. (E184)*

*The fact of knowing that by using it I am protecting myself and the other, either someone from my family or a neighbor, is an incentive for me. (E198)*

It was observed that the representations about the masks are also guided by fear, materialized in verbalizations of the consequences of illness, hospitalization, loss, and death.

*It would be more difficult not to wear masks at home, while mourning the loss of loved ones, who could not even have a dignified farewell. (E221)*

*It is harder for me to find a respirator when I am short of breath. (E258)*

*My motivation for using them is: just thinking about dying without being able to breathe or seeing a relative in that situation. (E9)*

*The hard thing is to get sick, that is bad. But it is better to breathe through a mask than through a machine. (E70)*

In this direction, the use of masks, although recognized as uncomfortable and disturbing, emerges as a necessary evil to be incorporated into new habits, an aspect that was organized in the sub-theme: The construction of a new habit: the necessary evil of masks.

*Most of them are too big for my face and sometimes when I look down I can't see [...] I also can't eat anything, take medicine or even put a piece of gum in my mouth in public*

**Table 1** - Sociodemographic and academic characteristics of university students. Alfenas, MG, Brazil, 2020

Sociodemographic characteristics		Frequências	
		N	%
Gender	Female	176	62.19
	Male	105	37.1
	Genderfluid	2	0.71
Skin Race	Yellow	6	2.12
	White	167	59.01
	Indigenous	1	0.35
	Brown / Mixed Race	85	30.03
Estado civil	Black	24	8.48
	Married / Living together	35	12.37
	Separated/Divorced/Divorced	3	1.06
Family income	Single	245	86.57
	Up to 1 minimum wage	48	16.96
	Above 1 to 1.5 minimum wage	42	14.84
	Above 1.5 to 3 minimum wage	57	20.14
	Above 3 to 4.5 minimum wage	31	10.95
	Above 4.5 to 6 minimum wage	28	9.89
	Above 1 to 1.5 minimum wage	24	8.48
	Above 10 to 30 minimum wage	18	6.36
	I prefer not to answer / I don't know	35	12.37
Undergraduate course in progress*	Management	11	3.89
	Visual Arts	8	2.83
	Biological Sciences	37	13.07
	Social Sciences	8	2.83
	Law	22	7.77
	Civil engineering	8	2.83
	Geography	9	3.18
	Math	8	2.83
	Veterinary Medicine	14	4.95
	Pedagogy	12	4.24
	Psychology	22	7.77
	Chemistry	17	6.01
Year currently attended	Others	107	37.8
	1st year	56	19.79
	2nd year	74	26.15
	3rd year	72	25.44
	4th year	52	18.38
	5th year	26	9.18
6th grade / other	3	1.06	

\*The top 12 most frequent courses were mentioned by 176 students and accounted for 62.2% of the participants; the remaining 53 course names mentioned by 107 participants (37.8%) were grouped in the "Other" category.

**Chart 1** - Themes and subthemes of the social representations of university students about the use of masks for prevention of COVID-19. Alfenas, MG, Brazil, 2020

Topics	Subtopics
1. The mask for prevention: materialization of the fear of contagion.	1.1 The construction of a new habit: the necessary evil of masks.
	1.2 The macrosocial in the modification of the self.
	1.3 The use of the mask in everyday life: the individualization of the social.

Source: elaborated by the authors

*settings. It seems that people listen to me less. In fact, sometimes I even have a weird feeling that I am being seen less by people, it is hard to be a nice person if you can only smile with your eyes, so every conversation seems colder and more distant. [...] Now, the discomfort about using it, there is not much you can do, you just have to get used to it. (E182)*

*Well, acquiring a new habit is always a complicated thing, but I would say that although using a mask is uncomfortable, it is essential. (E137)*

*When we are aware of the needs, and create habits of things that previously did not exist, this initial difficulty is extinguished and we adapt to the needs. (E160)*

It was noted that the macro-social aspects, such as culture, the media, and the attitudes of the governmental spheres are important in the construction of the representations about the masks and the socialization of the new phenomenon, elements organized in the subtheme: The macro-social in the modification of the self.

Thus, there are university students who recommend the compulsory use of masks, accompanied by inspection and guaranteed access, as a driving force for cultural change. There were also opinions in favor of awareness-raising actions that culminate in the cultural acceptance of masks in everyday life, which ultimately enables individual modification of the habit.

*What facilitates are the prevention against the virus, news channels and internet showing the importance of mask use, also laws and decrees that make us use [...] and also seeing other people using, this gives me an image of example. (E143)*

*Municipal legislation, because with the obligation, everyone, both those who understand the forms of transmission, and those who don't, will use the mask. (E228)*

*[...] campaigns in social networks encouraging the use of masks and how they are essential in fighting the virus. In addition, the government could distribute free masks to the population that is in a situation of socioeconomic vulnerability. (E137)*

*[...] municipal ordinances do help. Because, if there is someone who opposes it, this same person needs to comply with a rule, so he loses space to ridicule those who decided to use it. (E51)*

In another aspect, the adoption of new habits in daily life is marked by the subjectivity of each individual. It was noted that individual efforts were made to manage the new phenomenon, such as the adaptation of the models of the masks for more comfort and their insertion in the routine, leaving them nearby so that they remember to use them.

*Make them available at all times and close to the exit. (E50)*

*Always leave a mask in easy reach to use, and leave it in plain sight too so you don't forget. (E196)*

*[...] the use of a more elaborate mask, matching people's outfit - since I understand that people are also missing getting ready to go out, so feeling good to go to the market helps - in addition to the masks that help not to fog up the glasses, would facilitate the use. The mask needs to be comfortable and the elastic cannot pinch the ears. (E24)*

*[...] think that something of the look, an accessory like rings, bracelets or earrings. With time it gets easier, if you want to make it easier you can leave it with a perfume that is pleasant, this way you make the experience more bearable. (E105)*

*[...] Disposable masks, being able to discard your mask when you get home, instead of washing it to be able to use it again. (E195)*

## DISCUSSION

Masks existed in the setting prior to the COVID-19 pandemic, commonly related to healthcare professionals or to specific circumstances of medical treatment.<sup>14</sup>

In Western culture, people were not accustomed to wearing or seeing masks on a daily basis in public spaces. Thus, they remind subjects at all times of the concerns imposed by the pandemic scenario.<sup>14</sup>

The results of the research denote that the masks materialize, for university students, meanings of protection in the face of fear of the disease, the virus, and death. Accordingly, a study conducted in Italy in April 2020 identified that the social representation concerning COVID-19 at that moment was also structured around fear.<sup>15</sup>

In the same direction, a qualitative research reported that, for Brazilians, aspects related to health and preservation of life occupy a prominent place in symbolic constructions about the pandemic.<sup>16</sup>

A study conducted in July 2020 identified that 53% of respondents had high levels of fear of COVID-19, with higher scores among young adults, especially among those who cohabited with people belonging to risk groups for worsening the disease.<sup>17</sup>

This may be related, according to the authors, to the fact that the pandemic may have led young people to reflect on their own mortality and that of their families.<sup>17</sup> Thus, the representation elaborated around the fear of illness seems to organize attitudes favorable to the search for protection.

In light of the meaning of the mask as protection of life and avoidance of illness and death, the participants are faced with the need to build a new habit, a process that sets in motion the creation of forms of understanding the phenomenon, which allow them to live with and overcome fear, and develop strategies to increase the sense of control.

If, on one hand, the preponderant representation in the thought of the group studied is organized around fear, we also observed verbalizations that refer to altruism and the protection of others in the collective, an aspect already identified in the literature.<sup>18-19</sup>

The new habit of wearing masks, as reported by the students, was permeated by inconveniences such as difficulty breathing, blurred glasses, heat, and also difficulties of expression and communication, also reported in studies in different places.<sup>18,20-21</sup> However, the inconveniences are minimized because they are compared to the risks of disease and death, central to the imaginary universe of the public studied.

The macro-social elements that permeate a given sociocultural formation, particularly the media and governmental authorities, play a relevant role in this process.

For the participants, the media reports contribute to the community's appropriate use of masks. It is known that the use of social media by professionals and/or official health agencies provides an opportunity to spread reliable information quickly.<sup>22</sup> This mode of widespread communication, predominant in the beginning of the pandemic, favors the creation of a collective ethos that rejects divergent beliefs and behaviors, and has exerted an important influence in shaping the thinking of university students.<sup>23</sup>

As for the government, in the view of the university students, it is up to facilitate access to masks to vulnerable parts of the population and establish measures that make the use of masks compulsory, in order to homogenize social behavior.

Regarding the influence of policies on the adoption of health measures, an experiment conducted in Germany in a realistic setting showed lower compliance when mask use was voluntary, and also that those who used them voluntarily were more stigmatized or judged as belonging to risk groups.<sup>24</sup> Additionally, even for people already inclined to use them, government recommendations and decrees can contribute to reinforce the new habit.<sup>18</sup>

Nevertheless, individuals also imprint personal characteristics in the conformation of this habit, an aspect noted in the repeated mentions of the university students about their efforts to manage the use of masks in daily life.

For some participants, this included keeping them visible, near the exit of the house or in the bag to avoid forgetting, which has also been pointed out in the literature as a way to face this

challenge.<sup>18</sup> For others, cognitive and practical efforts focused on adapting the models of the masks.

Given the scarcity of professional masks, homemade cloth masks, although requiring sanitization processes for reuse, have been recognized as an accessible, economical, and environmentally sustainable alternative.<sup>25</sup> Respecting the technical specifications for manufacturing, they allow adjustments to be made for the comfort and preferences of the user regarding colors, fabrics, and models, even because the masks have currently acquired an aesthetic dimension.<sup>5,26</sup> We can see an anchoring process, as if the masks - a strange object - were familiarized, becoming just another clothing accessory.

This puts into perspective the complexity of the construction of new habits, which is related to the construction of meanings that can mobilize subjects to adopt the desired behavior, or even distance them.

Because participation in the study is conditioned to access to social networks and the Internet, we may have inadvertently excluded college students with greater vulnerability, which is a limit of the study.<sup>10</sup> Moreover, the period of data collection corresponded to the beginning of the implementation of preventive measures in Brazil and the results denote the cut-off of this specific period. Continuity of studies is required in view of the long duration of the pandemic and its resurgence in the national context.

## CONCLUSION

The social representations of the participating college students indicate an understanding of the masks as a resource for prevention of a life-threatening condition. The favorable attitudes seem to be organized in counterpoint to the fear caused by the virus and its consequences, such as hospitalization, death, and loss of loved ones.

This symbolic scheme situates the mask as a necessary evil that, although uncomfortable, should be stimulated. Such a collective construction is influenced by the media and governmental spheres, but also takes into account the particularity of the individual and his cognitive and practical efforts in the materiality of everyday life.

The results of this research contribute to the understanding of the processes that go through the social changes resulting from the pandemic of COVID-19.

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