RBECT
Revista Brasileira de Ensino de Ciência e Tecnologia

Revista Brasileira de Ensino de Ciência e Tecnologia
ISSN: 1982-873X

https://periodicos.utfpr.edu.br/rbect

# Studying during the pandemic: The social representations of students in Basic Education[1]

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## ABSTRACT

This article aims to present the social representations of Basic Education students regarding studying in remote learning during the Covid-19 pandemic, and to what extent these representations express autonomy in studying during this period. The theoretical framework includes the Structural Approach of Social Representations and Piaget's Moral Development. Data collection was conducted through an online questionnaire using the *Google Forms* tool, with 113 students from Elementary and High School. They were asked to write words or expressions related to the inducing term "studying in remote learning is" and justify the expression indicated as the most important. The analysis was based on the frequency and percentage of responses, supported by the *EVOC* software and the assumptions of content analysis. The social representations of students regarding studying in remote learning are predominantly composed of negative attitudes. The core elements include difficult, tiring, boring, bad, stressful, horrible, and uninteresting. The discussion highlights heteronomy in studying and the difficulties encountered by students in using technologies, excessive activities, and the consequences of social isolation.

**KEYWORDS:** Remote teaching. Study habits. Technologies. Online education.

## 1 INTRODUCTION

Study habits constitute a crucial point in teaching work and are linked, among other factors, to students' academic performance. In Brazil, since the first application of the Programme for International Student Assessment (PISA), students have been among the lowest performers (INEP, 2023; OCDE, 2022; 2018; 2010; 2005; 2000). According to data from this program regarding reading, the majority of Brazilian students only reach lower levels. These students can identify the main idea in a moderately extensive text, find information based on explicit criteria, and reflect on the purpose and form of texts when explicitly instructed to do so (OCDE, 2022). The data from this assessment also point to the relationship between the lack of study habits, reading difficulties, and students' low performance (OCDE, 2022). Moreover, the absence of a reading habit or its poor quality is associated with functional illiteracy, which contributes to interpretative and critical incapacity in post-modernity (OLIVEIRA et al., 2017).

Koga and Rosso (2015), when studying the relationships between social representations of studying and performance in the Prova Brasil in public schools in the state of Paraná, show that students have an ambivalent representation of studying. Sometimes it is seen positively, as something important for the future, while at other times it is seen negatively, characterized as boring and tiring. The authors also point out that whether high or low, students' average performance in the Prova Brasil is associated with study time, study habits, and school and family control over studying.

In 2020, the pandemic caused by the Sars-CoV-2 virus ravaged humanity, leading the entire world into a state of emergency and enacting quarantine and social isolation laws to curb the disease's spread. In this context, the contingencies related to students' study habits intensified and took on another perspective. Previously, these issues were within the school and mainly related to students' academic performance. Now, during the pandemic, they are in a remote setting, within the household, defining how students' presence and participation in school activities will occur.

During the pandemic period, teachers and students saw their school routine modified. Teachers without training and lacking necessary resources had to adapt to new pedagogical norms (NOZAKI et al., 2022). Meanwhile, students started studying at home with or without guidance and supervision from their parents and/or guardians. They experienced the same workload intensification and increased schoolwork, coupled with household chores, learned to use new technologies, methodologies, and tools that were previously ignored or underutilized, and needed to develop new study strategies and habits (MARTINS; SANTOS; MONTENEGRO, 2022; SILVA; SOUZA; MENEZES, 2020), as well as autonomy at the same time.

Given this context, the problematic issue of this research arises: What are the social representations of Basic Education students regarding studying in remote learning during the Covid-19 pandemic, and to what extent do these representations express autonomy in studying during this period? Therefore, the objective is to present the structure of the social representations of Basic Education students regarding studying in remote learning and, based on them, the autonomy of students in studying during this period. To achieve this, the theoretical framework relies on the Theory of Social Representations (MOSCOVICI,

2012), especially on the Structural Approach (ABRIC, 2003; SÁ, 1996), and on the Theory of Moral Development (PIAGET, 1994).

### 1.1 Study Habits and Social Representations

Study habits are formed from cognitively, metacognitively, or socioaffectively developed strategies consciously employed by students to achieve their learning goals (AFFONSO; QUINELATO, 2014). Cognitive strategies (memorization and elaboration) involve transforming or manipulating the content to be assimilated during the learning process. This planning is done individually to facilitate understanding of the subject studied. On the other hand, socioaffective strategies, unlike cognitive ones, involve the participation of multiple individuals and the organization of feelings in the learning process, based on cooperation and questioning. Finally, metacognitive strategies (control) lead the student to reflect on their performance, the learning process, planning, monitoring activities, and evaluating how much has been learned.

Thus, developing study habits requires cognitive development, discipline, self-management, as well as didactic and pedagogical organization. Pedagogically, for the student to recognize themselves as the subject of their own learning process, and didactically, for them to identify their study needs and develop methods and strategies to achieve their learning goals (AFFONSO; QUINELATO, 2014).

Furthermore, study habits also demand student autonomy, the ability to perceive themselves as agents capable of establishing and defending new strategies through cooperation and reciprocity and learning on their own. In Piaget's (1994) view, morality arises from interpersonal relationships, but it is not an automatic process; rather, it is developmental, occurring in three stages parallel to cognitive development, termed anomie, heteronomy, and autonomy.

Anomie, the first to appear, is characterized by the lack of knowledge or understanding of the existing rules in society. Heteronomy, on the other hand, differs by having socially pre-established rules by adults, which are assimilated by the individual as tradition or coercion, based on unilateral respect (PIAGET, 1994). Individuals in this phase, aged 6 to 12, tend to comply with the rules and duties imposed by adults. Duty arises from fear of punishment or interest in advantages to be gained, with heteronomy dependent on external regulation (PIAGET, 1994). At this stage, students study because someone tells them to or because there is external pressure, not because they understand the importance of studying (KOGA, ROSSO, 2015). Therefore, habits do not persist "because they depend on external regulation: in some contexts, they follow certain values and in others, they do not" (VINHA; TOGNETTA, 2009, p. 529).

Finally, autonomy is characterized by the individual's conscious understanding of the rules, deciding which rules to obey, being aware of the consequences. Thus, once the individual sets their own rules, they remain faithful to their principles even without external social pressures (FREITAS, 2003; MENIN, 1996). The foundations for the development of autonomy lie in cooperative relationships. At this stage of development, therefore, the student becomes the protagonist of their own learning process, acquiring the independence necessary to make this process more dynamic, meaning they study and develop study habits and strategies because they understand the importance of studying (KOGA; ROSSO, 2015).

Circulating among these elements and considering that students, as social subjects immersed in school life, had to abruptly adapt to remote learning, they built new study strategies and habits, sometimes acting intuitively, based on their experience and constructing social representations, which are spontaneous theories, true reconstructions loaded with knowledge, attitudes, and images, which become circulating and shared, therefore, social.

Social Representations (SR), according to Moscovici (2012), are recognized as knowledge from which individuals assimilate and translate reality into their daily lives. They are defined, therefore, as "a set of concepts, statements, and explanations originating in everyday life, in the course of interpersonal communications". Thus, SRs are not merely opinions about an object but collectively formed theories that give meaning and organize reality. They have their own logic and language that indicate communications, values, or ideas present in shared conceptions among groups (MOSCOVICI, 2012). "Representing something does not simply consist of unfolding it, repeating it, or reproducing it; rather, it consists of reconstituting it, retouching it, modifying its text" (MOSCOVICI, 2012, p. 54). Thus, "to represent is to rethink, to re-experience, to remake in our own way, in our context" (MOSCOVICI, 2012, p. 59).

According to Abric (2003), the elements belonging to a social representation are organized around a Central Core (CC), which is formed by elements that are stable and resistant to change. These elements define the meaning of the representation. The CC is characterized as a point of difficult alteration because there is a concentration of common values attributed by individuals to the object, meaning a sudden change in it alters the group's homogeneity.

In addition to the central core, social representations have a more flexible and mutable system, which operates around the core, called the Peripheral System (PS) (ABRIC, 2003). The PS functions as a kind of code that translates events and allows the representation to operate in an accessible way, i.e., a filter between volatile reality and the immutable central core (FLAMENT, 2001). In this sense, the PS enables individualization during the process of constructing SRs.

## 2 METHODOLOGY

Data collection was carried out through the administration of an online questionnaire created using the *Google Forms* electronic tool. For administration, the questionnaire was shared on instant messaging applications such as *WhatsApp* and *Telegram* with students and groups of students from Basic Education (final years of Elementary School and High School). It is important to note that these student groups already existed and were characterized as places for exchanging information and activities during the pandemic. The researchers did not have direct access to them. Therefore, the questionnaire was shared by Basic Education students (participants in the research) who were part of these groups and shared them in these spaces. Data collection took place in the second semester of the year 2021, and this method was chosen due to the unfeasibility of other means resulting from the social isolation caused by the pandemic.

The questionnaire was sent to students in groups on social networks (*WhatsApp* and *Telegram*) using the snowball technique for sampling construction, where the participants themselves indicated others who accepted to participate,

and so on, until the proposed objective was achieved (reaching approximately 100 participants from different regions of the country). To conduct a snowball sampling, it is necessary to have an initial intermediary, also called a seed, who locates or points out other groups and/or people with the necessary profile for the research, in this case, Basic Education students (BALDIN; MUNHOZ, 2011). Thus, it can be defined as a non-probabilistic sampling technique that uses chains of reference, such as a network, for information collection (BALDIN; MUNHOZ, 2011).

It is important to emphasize that the construction and administration of the questionnaire followed all ethical considerations present in guidelines for research in virtual environments (BRAZIL, 2021). Additionally, the informed consent of participating students was obtained, and ethical considerations such as safeguarding against abusive power relations and anonymity were followed. The research was approved by the Committee of Ethics in Research with Human Beings (Approval Opinion No. 5,592,291).

The questionnaire began with a brief presentation of the research. Next, there was the informed consent form, which participants could select whether they wished to participate or not. The first part consisted of questions aimed at characterizing the subjects, as recommended by Ghiglione and Matalon (1993). The following questions were related to the investigated theme, aiming to highlight SRs, including the Free Word Association (FWA) question, where students were asked to list 5 words and/or expressions and rank them according to their importance, based on the inducing term "Studying in remote learning is". Then, they were required to justify the term chosen in first place. Finally, there were questions related to students' study habits and strategies during the pandemic.

After the questionnaires were administered, they were organized in an *Excel* database for subsequent analysis. Closed-ended questions were analyzed based on frequency and percentage of responses, open-ended questions based on the assumptions of Content Analysis (BARDIN, 2004), and the FWA question with the support of the *EVOC* software (*Ensemble de programmes permettant l'analyse des evocations*), used to identify the structure of the social representation of studying in remote learning. Through co-occurrence calculations, *EVOC* assists in constructing the four quadrants and identifying the likely CC and PS (MACHADO; ANICETO, 2010).

## 3 RESULTS AND DISCUSSION

The research involved 113 students from Basic Education. Table 1 presents the characterization of these participants.

Table 1 - Characterization of the 113 participating subjects.

| | Variables | Frequency | % |
|---|---|---|---|
| Gender | Female | 75 | 66,38 |
| | Male | 37 | 32,74 |
| | Other | 1 | 0,88 |
| Age | 11-14 years old | 32 | 28,32 |
| | 15-17 years old | 74 | 65,49 |
| | 18 years or older | 7 | 6,19 |

| | | | |
|---|---|---|---|
| Educational Segment | Elementary School | 36 | 31,86 |
| | High School | 76 | 67,26 |
| | EJA (Adult Education) | 1 | 0,88 |
| Regions | North | 7 | 6,19 |
| | Northeast | 22 | 19,47 |
| | Midwest | 4 | 3,54 |
| | Southeast | 19 | 16,81 |
| | South | 61 | 53,99 |
| School Type | Public | 59 | 52,21 |
| | Private | 54 | 47,79 |
| Shift | Morning | 98 | 86,73 |
| | Afternoon | 14 | 12,39 |
| | Evening | 1 | 0,88 |
| Approval | Without recovery | 89 | 78,76 |
| | With recovery | 24 | 21,24 |
| Reproval | Yes | 9 | 7,96 |
| | No | 104 | 92,04 |
| Study Condition | Study only | 94 | 83,19 |
| | Study and take course | 1 | 0,88 |
| | Study and intern | 1 | 0,88 |
| | Study and work | 14 | 12,39 |
| | Study and train | 3 | 2,66 |
| Weekly Study Hours | 1 to 3 hours | 59 | 52,21 |
| | 4 to 6 hours | 54 | 47,79 |
| | 7 to 8 hours | 0 | 0 |
| | 9 to 10 hours | 0 | 0 |
| Study Only for Exams | Yes | 49 | 43,36 |
| | No | 64 | 56,64 |

Source: Research Data (2022).

The predominant age group among the participants was 15 to 17 years old, corresponding to high school students. Regarding gender, 66.38% identified as female, 32.74% as male, and 0.88% as other. This data may indicate that the female gender is more receptive to participating in scientific research.

In terms of the region they live in, 53.99% reside in the South; 19.47% in the Northeast; 16.81% in the Southeast; 6.19% in the North, and 3.54% in the Midwest. There was a predominance of the Southern region, with most participants from the state of Paraná, as this is the region where the research originated. However, it is worth noting the representation of all regions of the country, which is due to the questionnaire being shared in *WhatsApp* and *Telegram* groups. These groups already existed before the research and were places where students exchanged information on various topics, shared activities, and so on. Access to these groups was through the participants themselves and the indication of other groups or individuals with the profile for the research.

Regarding school type, 52.21% are from public schools and 47.79% from private schools. As for the shift, 86.73% stated they study in the morning, 12.39% in the afternoon, and 0.88% in the evening.

Regarding their school trajectory, 78.76% reported never needing recovery, while 21.24% have needed it at some point. Regarding failure, 92.04% claimed to have never been failed, while 7.96% have. The low percentage of failures and recoveries may result from students' study habits, but also reflects the pressure

schools face to pass students in order to maintain or raise their IDEB (Basic Education Development Index) indicators, as corroborated by Koga and Rosso's (2015) studies in public schools in Paraná. However, it is important to highlight the positive relationship between approval and recovery, and between school reinforcement and increased student proficiency, especially for poorer students, as highlighted in Novaes et al.'s (2023) research conducted in São Paulo between 2018 and 2020.

Regarding their study condition, 83.19% claimed to study only, 12.39% study and work, 2.66% study and engage in some type of extracurricular activity, and 1.76% study and do an internship or course. It is noticeable that the majority of participating students only study, theoretically having free time throughout the day. In this context, regarding weekly study hours, 52.21% claimed to study 1 to 3 hours per week, and 47.79% study an average of 4 to 6 hours per week. Analyzing this data considering that at the time of data collection students were in remote learning, doing school activities at home, reveals that they hardly have study habits, as they declare studying the minimum period required by the school, which is approximately 4 to 6 hours per day. No student reported studying more than 7 hours per week. However, it is worth noting that the few hours dedicated to study may also be due to difficulties in this period in balancing study time with household chores or work, and providing care for their own health or that of family members (NOVAES et al., 2023).

They were also asked if they study only for exams or not, 56.64% responded that they do not, and 43.36% affirmed that they do. These data, analyzed together with the previous ones, highlight the absence of study habits in most students and indicate heteronomy in studying (Piaget, 1994). Most students claim to study only the time required to follow remote classes, therefore, they do not dedicate more time of their day to study. These findings corroborate with the data evidenced by Koga and Rosso (2015) where 9th-grade students deliberately admit to not studying.

Next, Table 2 describes the cognitive (memorization and elaboration) and metacognitive (control) strategies used by students during their studies.

Table 2 - Cognitive and Metacognitive Strategies During Study[2]

| | TOTAL AGREE | AGREE | DISAGREE | TOTAL DISAGREE | TOTAL |
|---|---|---|---|---|---|
| MEMORIZATION IN STUDY | | | | | |
| I review some points of the subjects until I feel I can answer them alone | | | | | |
| F | 7 | 36 | 41 | 29 | 113 |
| When studying subjects, I try to memorize the answers to the exercises | | | | | |
| F | 17 | 31 | 40 | 25 | 113 |
| For solving a question, I review the examples several times | | | | | |
| F | 43 | 41 | 18 | 11 | 113 |
| To learn the exercises, I try to remember each step of a procedure | | | | | |
| F | 55 | 45 | 7 | 6 | 113 |
| ELABORATION IN STUDY | | | | | |
| When answering exercises, I think of new ways to arrive at the answer | | | | | |
| F | 29 | 44 | 28 | 12 | 113 |
| I imagine how the subject I learned can be used in daily life | | | | | |

| | | | | | |
|---|---|---|---|---|---|
| F | 36 | 29 | 31 | 17 | 113 |
| I try to understand new concepts of the subjects by relating them to things I already know | | | | | |
| F | 37 | 50 | 18 | 8 | 113 |
| When solving an exercise, I think about how the solution can be applied to other questions | | | | | |
| F | 21 | 43 | 35 | 14 | 113 |
| When learning math, I try to relate things I learned in other subjects | | | | | |
| F | 15 | 41 | 34 | 23 | 113 |
| CONTROL IN STUDY | | | | | |
| When studying for a test, I determine the most important parts to learn | | | | | |
| F | 59 | 40 | 11 | 3 | 113 |
| When studying a subject, I check if I remember the work already done | | | | | |
| F | 31 | 60 | 20 | 2 | 113 |
| When studying, I try to identify which concepts I still haven't understood | | | | | |
| F | 34 | 53 | 22 | 4 | 113 |
| When I can't understand something, I look for more information | | | | | |
| F | 41 | 52 | 14 | 6 | 113 |
| When studying a subject, I start by determining what I need to learn | | | | | |
| F | 30 | 46 | 26 | 11 | 113 |

Source: Research Data (2022).

When analyzing Table 2, constructed from the responses given by students to statements about study strategies, some interesting findings are observed. However, it should be noted that at times, agreement or disagreement with one of these statements may not correspond to what students actually do during study, but rather to an attempt to conform to what is socially correct to say about it, to the normative aspect of social representations, since study is a social object that carries a strong ideological load (ABRIC, 2005).

In the memorization strategy, most students disagree that they review certain points of the material multiple times, also disagree that they try to memorize the answers to exercises, but agree that when studying, they review the examples several times and try to remember each step of the procedure.

Regarding the elaboration strategy, which according to Delval (2008) "presupposes a reconstruction" and therefore consists of relating new information to previously acquired knowledge, seeking to understand new concepts and new ways to arrive at the answer (OCDE, 2005), the majority of students agree that when answering exercises, they think of new ways to arrive at the answer and imagine how the subject matter can be used in their daily lives, trying to relate new concepts to things they already know. However, they are evenly divided when asked if they try to relate what they learn in math to things they learned in other subjects.

It can be seen, therefore, that regardless of how the school guides and teaches students to study, they create their own procedures and strategies, develop methods to solve problems. However, the school does not always give due attention to these strategies, as well as to aspects related to interdisciplinary studies, and ends up automating mechanisms for solving problems (DELVAL, 2008).

Regarding the control strategy during study, it is noted that when studying, they start by determining exactly what they need to learn, try to identify the concepts they have difficulties with, and seek more information to understand the

problems. Considering that learning is a process conditioned to the interest and activity of the student, their control is a prerequisite for these students to learn throughout life, since when they leave school they will need to manage their learning on their own, a characteristic that was imposed by remote learning. Thus, those students who developed control over their own learning found it easier to keep up with school activities and perform better during the remote learning period, as well as will be able to learn in adulthood, in a more autonomous manner (PIAGET, 1994).

Nevertheless, it is worth noting, as Maraschin, Mombelli, and Moura (2022) point out, that there is a scarcity of research at the national level that investigates learning and reading strategies. According to the authors, Brazilian students in general use few learning strategies in their school tasks and have difficulties in reading, as widely evidenced by the results of PISA (OECD, 2022). According to Uiroz Carrión et al. (2023), cognitive, metacognitive, and socio-affective strategies are essential to promote more autonomous and effective learning, and are directly and positively related to increased academic performance, promoting greater control over the learning process and increasing student motivation. Therefore, if before the pandemic it was already necessary to develop more in-depth investigations on the subject, during and post-pandemic periods, this need is accentuated.

The words or expressions evoked by students, from the inducing term: "Studying in remote learning is..." were analyzed with the help of the *EVOC* software. To do so, words with the same semantic values were grouped. After processing by the software, it was possible to verify that, out of the total of 113 responding subjects, a list of 502 words was acquired, of which 213 were different.

The four quadrants were composed considering an intermediate frequency of 10, and the Average Order of Evocation (AOE) of 2.8, with these values being extracted from the RANGMOT report. The intermediate frequency establishes that only words with a frequency above 10 are part of the composition of the upper quadrants. On the other hand, the AOE defines the position of evocations in relation to the vertical axis (PAREDES, 2007).

Of the set of 213 different words evoked, 18 are part of the four quadrants, where the probable elements that constitute the central nucleus and the peripheral system of the social representation of students about studying in remote learning are located, and these elements are presented in Table 3, accompanied by their respective frequencies and AOE.

Table 3 - Possible elements composing the SR of Remote Learning Study.

| Words | F>=10 | AOE <2,8 | Words | F>=10 | AOE >=2,8 |
|---|---|---|---|---|---|
| Tiring | 34 | 2,441 | | | |
| Boring | 23 | 2,478 | | | |
| Uninteresting | 10 | 2,700 | | | |
| Difficult | 45 | 2,578 | | | |
| Stressful | 14 | 2,214 | | | |
| Horrible | 11 | 1,818 | | | |
| Bad | 17 | 2,353 | | | |
| **Words** | **F<10** | **AOE <2,8** | **Words** | **F<10** | **AOE >=2,8** |

| | | | | | |
|---|---|---|---|---|---|
| Complicated | 7 | 2,286 | Dedication | 7 | 3,571 |
| Confusing | 9 | 2,667 | Challenging | 8 | 2,875 |
| Different | 6 | 2,167 | Insufficient | 5 | 3,000 |
| Tedious | 8 | 2,375 | Laziness | 7 | 2,857 |
| Awful | 5 | 2,600 | Loneliness | 8 | 4,625 |
| | | | Sadness | 5 | 4,400 |

Source: Research Data (2022).

In the first quadrant, we have the words that likely form the central core: tiring, boring, uninteresting, difficult, stressful, horrible, and bad. Together, they were evoked 154 times, indicating the students' tendency to predominantly express negative attitudes toward remote learning during the pandemic, as expressed by adjectives, which according to Moscovici (2012), constitute the dimension that first appears in social representation.

The most frequently evoked word was **difficult**. Remote learning is perceived by students as a difficult task, as they had to adapt to this new form suddenly, with many students lacking the necessary resources, not knowing how to use the technologies, and often not receiving guidance and support from teachers, similar to the findings of the study conducted by Silva, Sousa, and Menezes (2020), which demonstrates students' dissatisfaction with remote learning. Below are some justifications provided by the students.

> In my opinion, studying remotely is very difficult because of various unforeseen events like internet interruptions, electronic devices freezing or shutting down, and for students like me, for example, who learn more easily by seeing the teacher write on the board. Remote classes become tiring, boring, and uninteresting, causing students to lose interest, making learning more difficult (Student 09).

> It's difficult to study without someone guiding you and demanding your attention (Student 22).

> It's difficult because if you have a question or don't understand the lessons, you have to wait until you can contact the teacher to clarify them, and it's also complicated to understand how to access the platform (Student 46).

It is evident that remote learning, represented by the word difficult, expresses both the complaint about the absence of socio-affective relationships that drive the development of study habits and strategies, as well as the lack of external demands and monitoring of school activities (PIAGET, 1994), which highlights the heteronomy of these students in their study habits. If in face-to-face education, negative attitudes toward studying were associated with teacher demands, now, in remote learning, they are associated with the lack thereof (KOGA; ROSSO, 2015).

In second place is the word **tiring**, mentioned 34 times. In general, students' fatigue during remote learning refers to spending more time in front of computer or cellphone screens, but also to the excess of online activities that students had to perform, as well as the absence of social interactions, as can be seen in the justifications below.

> It's tiring because it requires us to be in front of a computer for hours. And because of having many assignments and tests, there's no time left for other things (Student 16).

> I listed 'tiring' in first place because computer screens make me tired. If studying is already something that isn't very fun in person, it's much worse remotely because it's a square, static screen and your friends aren't there. So it becomes very exhausting (Student 71).

In third place, the word **boring**, with 23 evocations, relates to the lack of interaction with the teacher and peers. Students also perceive classes as monotonous. It is worth noting that in face-to-face education, students also perceive studying as boring, but in that context, this negative attitude was related to the demands and expectations of teachers during studying (KOGA; ROSSO, 2015), whereas now it is mainly related to the methodology of classes and the lack of interaction with the teacher and peers, as expressed below.

> I find it boring because this way we can't ask questions (Student 07).

> Because you have to be at home in front of a screen, without interacting! (Student 08).

> Because the teacher often lacks creativity to give classes, and they become monotonous and make me feel sleepy (Student 78).

The word **bad** also appears, where students express negative feelings such as not being able to focus because they are at home, as household chores and routines interfere with the learning process, as well as indignation at teachers' leniency towards students who do not complete assignments. Similarly, the words stressful, horrible, and uninteresting are related to the difficulty of concentrating at home, the lack of a suitable space, the excess of activities, problems related to the use of technology, the unpreparedness to carry out activities independently, and the need to take on other household tasks that hinder, and sometimes prevent, studying, as also evidenced by Novaes et al. (2023) regarding the difficulties of balancing studying with household chores.

> It's stressful because at home you can't concentrate properly (Student 5).

> We put more pressure on ourselves, sometimes outside of hours, so we end up overloading ourselves wanting to submit work quickly, but the internet goes down, the phone freezes, in short, it's stressful! (Student 35).

> Because of the high demand for activities, and the teachers only assigned the tasks without explanation, making students responsible for finding everything on their own (Student 47).

> It's horrible because the internet fails, and the class is interrupted (Student 30).

> It's horrible to have to study alone without support (Student 43).

> In online classes, the content becomes secondary or optional, as there is a huge variety of things to do at home. It's very easy to get distracted by something, and soon the subject that would be interesting to learn in face-to-face classes becomes boring and consequently, a burden (Student 63).

In the third quadrant, we observe the words **confusing**, **tedious**, **complicated**, **different**, and **terrible**, reinforcing the points discussed earlier, where students demonstrated negative attitudes toward remote learning, demotivation, and disinterest resulting from the employed methodology and an environment not

conducive to studying in their homes. Finally, in the fourth quadrant, which represents the periphery of the social representation, we have the words **lonely**, **challenging**, **sadness**, **insufficient**, **dedication**, and **laziness**, which are due to social isolation and are linked to the fact that these students no longer have the opportunity to interact with their peers or exchange experiences with their teachers in person, generating feelings of loneliness and sadness.

Based on the set of elements derived from the *EVOC* analysis, the elements present in the four quadrants were grouped, which enabled the construction of four distinct categories of evocation: 1) **Negative attitudes**: boring, tiring, uninteresting, horrible, bad, terrible, insufficient, and tedious; 2) **Adaptations to remote learning**: difficult, complicated, confusing, different, and challenging; 3) **Feelings**: stressful, lonely, and sadness; 4) **Disposition toward remote learning**: dedication and laziness. After organizing the evocations into categories, the different types of words and their corresponding frequencies and percentages in the central core, the intermediate core, and the periphery were distributed, as shown in Table 4:

Table 4 - Distribution and percentage of word types in categories

| CATEGORIES | Central Core | Intermediate Elements | Periphery | TOTAL |
|---|---|---|---|---|
| Negative Attitudes | 5<br>27,7% | 2<br>11,11% | 1<br>5,55% | 8<br>44,44% |
| Adaptations | 1<br>5,55% | 3<br>16,66% | 1<br>5,55% | 5<br>27,77% |
| Feelings | 1<br>5,55% | 0<br>0% | 2<br>11,11% | 3<br>16,66% |
| Disposition | 0<br>0% | 0<br>0% | 2<br>11,11% | 2<br>11,11% |
| TOTAL | 7<br>38,88% | 5<br>27,77% | 6<br>33,33% | 18<br>100% |

Source: Research Data (2022).

Analyzing Table 4, it's evident that out of the total of 18 different words composing the four quadrants, 38% belong to the central core, 27% refer to intermediate elements, and 33% make up the periphery. The elements comprising the central core appear more frequently and have a higher frequency compared to those in the other quadrants. Regarding the analysis of the categories as a whole, Table 3 showed that the words most evoked by the students were negative attitudes toward remote learning (44%), followed by adaptations to it (27%). These two categories are present in all quadrants.

Considering Abric (2003) and Flament (2001) defining that the peripheral system functions as a grid between reality and the central core, and that it is important for the dynamics and functioning of RS, one must ponder how negative the students' experience was with remote learning, since negative attitudes are present in all quadrants.

These data align with the research conducted by Martins, Santos, and Montenegro (2022) and Silva, Sousa, and Menezes (2020), which investigated students' perceptions of Remote Learning, both demonstrating the difficulties in the learning process during this period, as well as the dissatisfaction of students,

related not only to difficulties accessing the internet and equipment but also to its imposition affecting the quality of teaching and learning.

Students were also asked about their perception regarding their study habits:

Table 5 – Regarding your study habits, do you:

| Statements | Frequency | % |
|---|---|---|
| Are studying **LESS** than before the pandemic | 65 | 57,52 |
| Are studying the **SAME** as before the pandemic | 18 | 15,93 |
| Are studying **MORE** than before the pandemic | 30 | 26,55 |

Source: Research Data (2022).

According to the data in Table 5, 57% of students claimed to be studying less than before the pandemic, 26% are studying more than before, and 15% are studying the same as before. These data corroborate with the previously discussed data regarding study habits and suggest that students who are studying less than before the pandemic may be feeling the absence of the school environment as well as the lack of self-discipline and time management for study since, remotely, they are susceptible to other daily activities that distract them from studying. Moreover, these data may indicate heteronomy in studying, as students at home, away from teachers' pressure, do not study, and by representing remote learning predominantly negatively, they express dissatisfaction with the absence of control mechanisms, as evidenced earlier.

Next, when students were asked if they attend and/or participate in all remote classes and activities, 53.10% responded yes, 35.40% responded sometimes, and 11.50% responded no. Taking into account the social representations expressed mainly in negative attitudes toward remote learning and the responses regarding the time dedicated to studying, it is seen that even though they represent studying predominantly negatively, most of them participate, often due to pressure and coercion related to the grades of the activities, and consequently, passing or failing, i.e., they participate in classes and do the proposed activities heteronomously, not because they understand the importance of studying, as previously evidenced by Koga and Rosso (2015).

When asked if they copy ready-made answers from classmates and/or the internet, 59.29% responded yes, and 40.71% responded no. When asked if they use instant answer websites and/or apps during activities, 71.68% affirmed yes, and 28.32% affirmed no. These data corroborate with the previous ones and again evidence heteronomy during remote learning as students deliberately admit to not studying and copy answers directly from the internet or classmates during school activities (PIAGET, 1994).

When students were asked if their parents or other family members offer any kind of support and/or help regarding their remote learning, 27.43% stated that they actively receive help and/or support, 38.94% mentioned having little participation, and 33.63% do not receive any help. This data is concerning because it is already known that parental involvement is often necessary for guiding and monitoring activities in remote learning, especially since students are distant from their teachers who usually fulfill this role, particularly for elementary school students who require more supervision in their schoolwork due to their age. However, it is worth considering that parents often do not have the time to engage

in their children's activities, especially during the pandemic when many had to juggle work with household chores since they were also working from home. Additionally, many lack the necessary knowledge for such assistance (DELVAL, 2008).

## 4 FINAL CONSIDERATIONS

This research aimed to present the social representations of basic education students regarding remote learning during the Covid-19 pandemic and to what extent these representations express students' autonomy in their studies. Data were collected through an online questionnaire shared on the *WhatsApp* and *Telegram* social networks.

A total of 113 basic education students participated in the study, with most of them attending high school and identifying as female. Regarding study conditions, most reported studying for an average of 1 to 3 hours per week, and the majority also claimed to be studying less than before the pandemic. These data indicate the absence of consistent study habits and heteronomy during the pandemic.

It is worth noting that the lack of time management and the development of goals, strategies, or study habits are aspects that hinder the teaching and learning process, especially in remote learning. However, the passivity of students in their learning process often occurs not because they want it to but because they have not been accustomed to a more active role. In other words, students know how to be taught but have not learned how to learn (AFFONSO; QUINELATO, 2014). The school does not guide students in building study habits, there are rarely tasks to be done at home, and suddenly, in remote learning, students are expected to have autonomy and organization in their studies to carry out these activities at home. In the context of the pandemic, classrooms became virtual, notebooks became luminous screens, and pens became keyboards. In this scenario, student autonomy, study habits, and self-management of study time have become fundamental characteristics for the smooth progress of the teaching and learning process and academic performance.

Regarding study strategies, it is noteworthy that even without explicit guidance from the school, they are present. Students create their own procedures and strategies, develop methods to solve problems and school activities, as they agree with statements that express cognitive and metacognitive strategies, such as elaboration and control during study, respectively.

When representing remote learning, students predominantly express negative attitudes such as **difficult**, **tiring**, **boring**, **bad**, **stressful**, **horrible**, and **uninteresting**. These elements constitute the core and point to the difficulties faced in studying during the pandemic. Among them, the distance from the school environment, the lack of teacher-student and student-student relationships, the excess of activities, the lack of motivation to attend classes, the lack of equipment and quality internet, and the worsening of psychological problems, mentioning emotions and feelings such as sadness and loneliness, stand out. When analyzing the four quadrants, it is observed that the majority of elements have a negative sense, reinforcing students' rejection of remote learning, which is represented as an extremely difficult period full of adaptations.

Finally, it is considered that the social representations of study, whether in face-to-face or remote learning, constitute a fertile field, as there are few studies that analyze them from the perspective of basic education students, as well as cognitive and metacognitive strategies. It is hoped that the findings presented in this text can stimulate reflections and discussions in schools because, for there to be real change in the quality of education, there must first be a change within and outside schools, aiming to invest in building study habits to improve students' performance, but above all, to critically educate them so that they understand the world around them and are able to exercise their rights and duties as citizens.

# STUDYING IN THE PANDEMIC: THE SOCIAL REPRESENTATIONS OF BASIC EDUCATION STUDENTS

**ABSTRACT**

This article aims to present the social representations of basic education students about studying in remote teaching, during the Covid-19 pandemic, and to what extent these representations express autonomy in studying during this period. As a theoretical reference, Piaget's Structural Approach to Social Representations and Moral Development is used. Data collection was carried out by applying an online questionnaire, using the Google Forms tool, to 113 elementary and high school students. They were asked to write words or expressions related to the inductive term “studying in remote education is” and justify the expression indicated as the most important. The analysis was based on the frequency and percentage of responses, with the support of the EVOC software and the assumptions of the content analysis. Students' social representations about studying in remote teaching are predominantly composed of negative attitudes. The elements difficult, tiring, boring, bad, stressful, horrible and uninteresting appear in the central nucleus. The discussion expresses heteronomy in the study and the difficulties encountered by students in the use of technologies, excessive activities and the consequences of social isolation.

**KEYWORDS:** Remote teaching. Basic Education. Technologies. Online education.

## NOTES

1. The paper was submitted and presented during SINECT 2022.

2. F corresponds to frequency.

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**Received:** May 19th, 2023
**Approved:** Apr. 06th, 2024
**DOI:** 10.3895/rbect.v17n2.16973
**How to cite:** CAMILO, D. H. V.; KOGA, V. T. Studying during the pandemic: The social representations of students in Basic Education. **Brazilian Journal of Science Teaching and Technology**, Ponta Grossa, v. 17, Special Edition, p. 1-21, 2024. Available at: <https://periodicos.utfpr.edu.br/rbect/article/view/16973>. Access on: XXX.
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