

## INTRASCHOOL FACTORS AND MOTIVATION TO LEARN IN EMERGENCY REMOTE TEACHING

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### ABSTRACT

This article is the result of quantitative-qualitative research, which evaluated the 600 students' motivational quality, from 9 high schools in the Rio de Janeiro state public system, in emergency remote teaching (ERE), during the Covid-19 pandemic. The precepts of the Self-Determination Theory were taken as a reference and the analyzes showed statistically significant differences in the students' motivational quality from one of the schools, with higher indicators of autonomous motivation in relation to students from the others. These results required the case study procedures adoption, listening to different members of the school community, which made it possible to identify intra-school factors associated with students' greater motivational quality. It was found that the actions undertaken to promote engagement and motivation to learn were successful and the good results were mainly due to the collaboration among managers, teachers and students, whose conditions of possibility had been previously created.

**Keywords:** motivation; self-determination; high school

### Factores intraescolares y motivación para aprender en la enseñanza remota de emergencia

#### RESUMEN

Este artículo es resultado de investigación cuanti-cualitativa, que evaluó la calidad motivacional de 600 estudiantes, de 9 escuelas de enseñanza secundaria de la red pública Estadual de Rio de Janeiro, en la enseñanza remota de emergencia (ERE), durante la pandemia de Covid-19. Se utilizó como referencia los preceptos de la Teoría de la Autodeterminación y los análisis evidenciaron diferencias estadísticamente significativas en la calidad motivacional de los alumnos de una de las escuelas, con indicadores más elevados de motivación autónoma con relación a los alumnos de las demás. Esos resultados exigieron la adopción de procedimientos de estudio de caso, oyendo distintos integrantes de la comunidad escolar, lo que permitió identificar factores intraescolares asociados a la mayor calidad motivacional de los alumnos. Se constató que las acciones emprendidas para promover participación y motivación para aprender fueron exitosas y los resultados positivos resultaron principalmente, a la colaboración entre gestores, profesores y alumnos, cuyas condiciones de posibilidad se habían sido creadas previamente.

**Palabras clave:** motivación; autodeterminación; enseñanza secundaria

### Fatores intraescolares e motivação para aprender no ensino remoto emergencial

#### RESUMO

Este artigo é fruto de pesquisa quanti-qualitativa, que avaliou a qualidade motivacional de 600 estudantes, de 9 escolas de Ensino Médio da rede pública Estadual do Rio de Janeiro, no ensino remoto emergencial (ERE), durante a pandemia de Covid-19. Foram tomados como referência os preceitos da Teoria da Autodeterminação e as análises evidenciaram diferenças estatisticamente significativas na qualidade motivacional dos alunos de uma das escolas, com indicadores mais elevados de motivação autônoma em relação aos alunos das demais. Esses resultados exigiram a adoção de procedimentos de estudo de caso, ouvindo diferentes integrantes da comunidade escolar, o que permitiu identificar fatores intraescolares associados à maior qualidade motivacional dos alunos. Constatou-se que as ações empreendidas para promover engajamento e motivação para aprender foram bem-sucedidas e os bons resultados se deveram, principalmente, à colaboração entre gestores, professores e alunos, cujas condições de possibilidade haviam sido criadas previamente.

**Palavras-chaves:** motivação; autodeterminação; ensino médio

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## INTRODUCTION

On March 13, a few days after the start of the school year, schools in Rio de Janeiro closed their doors due to the Covid-19 pandemic, a disease caused by the SARS-COV-2 virus. It was necessary to reinvent ways of continuing with pedagogical work, even in an unprecedented adverse context in the country's history. Using printed material and Information and Communication Technologies (ICT), state and municipal managers implemented educational platforms and other virtual learning environments (VLE) to continue classes remotely.

States and municipalities customized solutions within what was possible. The State Department of Education of Rio de Janeiro (SEEDUC) used the Google Classroom platform (<https://classroom.google.com>) as an official means of interaction between teachers and students. The learning, difficulties, failures and gains from this experience still require much study.

This article is the result of research carried out through two quantitative and one qualitative studies, which investigated the motivation to learn of high school students from the State Public System of Rio de Janeiro during the Covid-19 pandemic. Quantities focused on students' motivation to learn in light of the adoption of ICT and printed material by schools to continue school activities remotely. The main objective of the qualitative study was to identify students' perceptions regarding the school's fulfillment of the basic psychological needs associated with the motivation to learn (relationship, competence and autonomy) and their engagement in school learning during remote teaching.

The precepts of the Self-Determination Theory - SDT (Ryan & Deci, 2000; Ryan & Deci, 2017) were adopted as a reference, which since the 1980s has been the main theoretical anchor for studies on motivation in Brazil, with strong implications for education. (Ryan & Deci, 2000) and changed the way of looking at the problem. The theory proposes an epistemological break with the dichotomous conception of motivation x demotivation that preceded it, valuing its motivational quality more. This perspective focuses mainly on the analysis of factors and social environments that are favorable and antagonistic to motivation and well-being (Ryan & Deci, 2000). Based on a consistent set of empirical evidence, the theory presupposes as a basis for motivational quality the fulfillment by the social environment of three innate and basic psychological needs: competence, relationship (or bond) and autonomy (Deci & Ryan, 2000; Ryan & Deci, 2017). Frustration or denial of these needs can even lead to the development of psychopathology.

According to Ryan and Deci (2000), TAD emphasizes people's inherent motivations, taking into account human beings' natural propensities to grow and develop, in addition to shedding light on environments, relationships and how they can support or frustrate

human development satisfaction of basic psychological needs. It envisions human motivation in a *continuum* of self-regulation, which goes from **demotivation to intrinsic motivation**, a condition in which actions and behaviors are carried out voluntarily, for pleasure or satisfaction, with autonomous regulation prevailing. Between these two levels of motivational quality, the following can be identified: **extrinsic motivation**, actions and behaviors governed by external pressures, with external reasons being able to be assimilated (**external regulation**), introjected (introjected regulation) and/or internalized (**identified regulation**); reaching **intrinsic motivation**, when actions and behaviors are governed by pleasure and personal satisfaction.

The theory defines self-regulation as the way in which people incorporate social values and extrinsic contingencies and progressively transform them into personal values and self-motivations (Ryan & Deci, 2000). By self-regulating their behavior, the person tends to act autonomously, carrying out a certain task of their own free will, recognizing its value and importance in it and, even if this is a reason external to the person, as it does not come from a genuine desire of theirs, they feel impelled to do for the well-being that the result will bring them.

## METHODOLOGY, INSTRUMENTS AND PARTICIPANTS

The research was carried out in two stages: a quantitative one, in which 600 high school students from 9 schools in the state public network of Rio de Janeiro participated, chosen by membership. Data were collected through an online questionnaire, in October 2020. To assess the motivational quality of students in their relation with emergency remote teaching, two self-report instruments were constructed and used on a Likert scale, where respondents specify their level of agreement with a statement, being the most used in opinion polls. The questions were shuffled into a single questionnaire, called the Motivation to Learn Scale in High School using ICT (EMA-EM-TIC) and Scale of Perception of Meeting Basic Psychological Needs.

Inspired by previous studies (Clement, Custódio, Rufini, & Alves Filho, 2014; Neves & Boruchovitch, 2006), the Scale (EMA-EM-TIC), with 20 items, aimed to assess the motivation to learn according to the continuum of self-regulation proposed by Self-Determination Theory (Ryan & Deci, 2000, 2017). Taking into account the most commonly used classifications in research (Guimarães & Bzuneck, 2008; Peters, Calvo, & Ryan, 2018), the items in this *continuum* corresponded to the categories of: intrinsic motivation, motivation by identified regulation, motivation by introjected regulation and motivation by external regulation, followed by demotivation. In the construction of the scale, the wording of items from existing instruments, with good psychometric qualities, such as those by Bzuneck, Megliato and Rufini (2013),

Guimarães and Bzuneck (2008), Peters et al., (2018) were observed; Ratelle, Guay, Vallerand, Larose and Sénécal (2007) and Vallerand et al., (1993). The Likert scale response format included possibilities from 1 (not at all true) to 5 (completely true) for each item.

The second instrument, also on a Likert scale, called the *Perception of Meeting Basic Psychological Needs Scale*, aimed to measure how much the way teachers used the Classroom platform and printed materials contributed to the satisfaction of the basic psychological needs recommended by TAD: competence, autonomy and relationships.

The data were subjected to statistical analyses, starting with Factor Analysis, using the Parallel Analysis method<sup>3</sup> (Damásio, 2012). Descriptive statistics were also performed on the items related to the motivation *continuum*, followed by correlation analysis among variables, using linear regression. The students' scores from different schools were compared in measures of motivation and perception of meeting basic psychological needs, taking into account intrapersonal variables (such as gender, race, age) and context, such as types of schools (regular high school and technical medium) and emergency remote teaching format (digital platform or printed material). In all cases, the differences found were subjected to analysis of variance (ANOVA). Finally, the respondent grouping methodology was used, using a person-centered approach.

In order to avoid the identification of schools and respondents, schools were named with letters from A to I. After the first analyses, statistically significant differences were found in the motivational quality of students from school C, who presented higher indicators of **autonomous motivation** compared to students from other schools, with a significant difference in the autonomous motivation variable. In the variable **perception of meeting needs**, School C had a higher average than all the others and significantly higher than the school with the lowest average.

These results drew attention and required the adoption of case study procedures that would allow us to look at school C more closely, learn more about its management and pedagogical structure, listening to different members of its community in relation to how teaching was being implemented emergency remote to contextualize the data produced. Therefore, invitations were sent to the management, pedagogical coordination, teachers and students of school C requesting interviews about teaching activities and student engagement in emergency remote teaching (ERE). Thus, 02 teachers and 02 students responded to the invitation, in addition to the Deputy Director and

the Pedagogical Coordinator. Six short-term structured interviews were carried out, with an average duration of 30 minutes, digitally (videoconferencing platform), over a period of 15 days. The interviews with managers and teachers fundamentally addressed the actions adopted in emergency remote teaching (ERE) to ensure students' connection with school and their engagement in school tasks, focusing on meeting basic psychological needs associated with motivation (relationship, competence and autonomy).

The interviews with the students indirectly focused on the perception they had of meeting their motivational needs, that is, whether the actions adopted by the school and the teachers ensured, in some way, their autonomy in relation to school tasks in the ERE, the competence in the acquisition of content and mainly, belonging to the school and the peer group (relationship). They were subjected to content analysis (Franco, 2018) based on three categories of analysis: a) students' perspective in relation to ERE; b) teachers' perspective in relation to ERE; c) perspective of school management in relation to ERE. Furthermore, additional information about the school was sought from School Census data (Instituto Nacional de Estudos e Pesquisas Educacionais Anísio Teixeira, 2021) and photographs of the physical space sent by interviewees.

#### **Human interactions and school climate: factors that influence motivation to learn**

Analyses of the pedagogical actions promoted by school C in the context of emergency remote teaching can support reflections regarding pedagogical actions that promote motivation in regular and adverse moments. We believe that the reports obtained in interviews with members of this school make it possible to expand knowledge about the factors that contributed to maintaining engagement (Bzuneck Et Al, 2013; Reeve, 2012) and the well-being of students in a very complex context of isolation social security, school closures and adoption of ERE.

It should be noted that, in the interviews, the word "engagement" was used to instigate dialogue with the interviewees about the pedagogical actions implemented by school C to promote students' motivational processes, knowing that motivation and engagement are distinct concepts, although related, as Reeve (2012, p.151) explains:

Motivation is a private and unobservable psychological, neural, and biological process that serves as an antecedent cause for the publicly observable behavior that is engagement. While motivation and engagement are inherently linked (each influences the other), those who study motivation are interested in engagement primarily as an outcome of motivational processes, while those who study engagement are primarily interested in motivation as a source of engagement.

<sup>3</sup> Exploratory factor analysis (EFA) method that involves the generation of uncorrelated random data and the comparison between the EFA eigenvalues and the eigenvalues of the random data (Damásio, 2012).

Thus, motivation is the relatively more private, subjectively experienced cause, while engagement is the relatively more public, objectively observed effect (Reeve, 2012, p. 151).

We are aware that economic, social and psychological factors, associated with social isolation, not included in the research, may have influenced the quality of students' motivation. The report from the Pedagogical Coordinator of school C offers elements that corroborate this hypothesis:

*There were students who actually gave up, dropped out. Because later we found out that they had depression. (Educational coordinator)*

However, the objective of the research was to investigate possible impacts of **intra-school** factors on the quality of motivation to study among public high school students in Rio de Janeiro and we believe that the data produced at school C offer important support for thinking about this problem.

Located outside the city of Rio de Janeiro, in the metropolitan region of the State, with its own building, school C serves 241 students in the second segment of Elementary and High School, of which 39 answered the questionnaire. It is the smallest of the schools participating in the research and, despite appearing in the school census as an urban school, it is located in a rural area. It does not have a computer or science laboratory. Second dad According to the school census (INEP, 2021), 31% of students took the ENEM, with an average score of 494.17 points. According to the Deputy Director, *"many students from other schools wanted to go there to school (...) there was a kind of "fame of the school", which attracted these other people, due to results", which also occurred during the Covid 19 pandemic.*

The two teachers interviewed reported working at the school for over ten years and highlighted a strong emotional and professional bond with the school, their colleagues, management and students. They had access to Google's Classroom platform, and received some specific courses and workshops from SEEDUC for using the platform. The management and teachers reported that the use prior to the pandemic of communication via voice and text applications (WhatsApp) between school and parents, management and teachers, school and students, and students and teachers favored maintaining the bond of the school community during the ERE.

In 2020, the focus of managers and teachers at most public schools in the country was more focused on maintaining students' connection with their studies than on evaluating performance, as indicated by research carried out during this period (GESTRADO/CNTE/CONTEE, 2020). However, the research also identified a considerable effort for students to continue learning, which was evidenced in the statements of members of school C, interviewed for this research:

*We were more concerned about having this student always in contact with us. What if he didn't learn now, so he wouldn't get desperate. That he would then be able to ask the teacher. (Educational coordinator)*

*Look, I'll tell you that I think [the work]... if it can't [be] "half and half" [I think it is] more about maintaining the bond. (Teacher 1)*

*[...] we didn't have the intimacy to use classes in this format, and this took everyone by surprise and what hit me the most was this question of how to **design a class so that our students don't lose motivation**, can understand the content being given. It was a learning experience for us. (Teacher 2)*

Controlling students' results based exclusively on grades ends up leading to a reduction in the quality of engagement and motivation (Ryan & Deci, 2000). In relation to working with content, developing skills and evaluating performance, the school ends up prioritizing external motivational factors, most of the time promoting extrinsic/controlled motivation, of poorer quality. School C followed the opposite path by prioritizing the maintenance of their bond with the school, so that they would not drop out and as a way of seeking their engagement in studies, learning what was possible about the content even in very adverse conditions. Therefore, it adopted an assessment more focused on participation than on the assessment of the content learned. Faced with the uncertainty of the criteria that could be adopted by SEEDUC for the possible promotion of students, the school managers and teachers valued the number of tasks carried out and sent to compose the final grade, if and when they were asked to issue it:

*We had a good result! But our concern, really, was not whether or not the student learned that content. Do you know why? There's no way you can measure this. So, our objective was to see the student's participation, their interest. (Educational coordinator)*

*Because if at this initial stage we don't give this attention **or show, at least, to the student that we are here**, that this is difficult for everyone, but **that we are together, that we will make this work**, We're going to get lost, we're not going to have these people participate on the platform. (Teacher 1)*

**The important thing was to have students' participation. (Educational coordinator)**

Reeve (2012) highlights that the social context and the teacher are fundamental to supporting student motivation and engagement. To this end, he suggests that teacher-student interaction be based on the recognition that the teacher has internal motivational

resources to engage in learning, which in turn, can support or frustrate these resources, in a relationship of mutual affect.

For teacher 1, interviewed in this research, this relational affection between teacher and student, this bond, capable of interfering with students' engagement and performance, is built in coexistence:

*We have also taken these students in previous years. This also creates a bond. This year, I took a high school class at another school. I'm not going to have the same result there that I have [here]... We need, first, to prepare this ground to then gain trust and have this level of engagement.* (Teacher 1)

This corroborates the position of Guimarães (2010, p. 183) that

Although much of the research on bonding has focused on relationships between parents and children, work on teacher-student interaction confirms the relevance of promoting an environment in the classroom that is favorable to the establishment of secure bonds, through the interest and availability of the teacher with regard to satisfying students' needs and perspectives (Guimarães, 2010, p. 183).

The students interviewed also reported realizing the importance of the teacher/student relationship in their interest in remote classes:

*Interesting classes were when the teacher was with us, through Meet, live. The majority of the class preferred the live class, with direct contact with the teacher so they could ask questions right away.* (Student 2)

*Most [of the teachers] were available to answer our questions, especially at the beginning. **They were very concerned, asking us what we preferred, whether to use YouTube videos or to actually take a class*** (Student 1).

The student recognizes that the school, as a whole, is concerned about the well-being of students and realizes that this was beneficial for them also during remote activities. We identified in the statements of other interviewees signs of satisfaction and well-being in coexistence within the school, which may indicate the existence of a good school climate<sup>4</sup>, defined in research in this field (Collie, Shapka, & Perry, 2012;

<sup>4</sup> The assessment of school climate was not part of the objectives of the reported research, which is why we did not focus on producing empirical data on the topic. This is being mentioned here because the interviewees referred to the good relationships established at school between members of the school community and the satisfaction and well-being perceived in this coexistence.

Vinha, et al., 2016) such as cohesion around school learning, harmonious and respectful coexistence of the school community, physical and socio-emotional safety, structure, among other dimensions. The following extracts are representative of the perception of a positive climate by school members:

***We have a very united team.***

*[...] welcoming is an important thing.* (Deputy Director)

***We have a lot of relationships with the management side.*** *And this support has always been very important because, sometimes, we don't have this support at home.* (Student 1)

***There's this family atmosphere there.*** (Teacher 1)

*We already have school projects. Every year there is. But **the ideas of how to do what will happen, that is decided as a group. It's not something that the school and coordination impose.*** (Deputy Director)

*I really like my school. The relationship with the employees is excellent, with the management staff it is excellent, with the colleagues too, there were no fights. All very good.* (Student 2)

We believe that this may have favored the fulfillment of the basic psychological needs of autonomy, belonging and competence (Ryan & Deci, 2017) in school C, which had the highest average in the perception of meeting these needs, 3.63), which by in turn, it may be associated with high averages in autonomous motivation and low averages in demotivation.

Collie, Shapka and Perry (2012) investigated the school climate in light of several theories, including the Self-Determination Theory, and concluded that this intra-school factor influences the experiences of individuals in this system, as in interactions with others and in daily experiences the culture and rules of the school space are being assimilated and integrated into people's ways of being and acting. Thus, a positive school climate tends to be associated with the perception of meeting the needs of competence, autonomy and belonging and, consequently, favoring internal motivational resources of students, which translates into greater involvement with studies and learning (Guimarães, 2010).

According to the managers, during remote teaching, the physical and socio-emotional safety of students was reinforced with the distribution of food carried out by the school, which guaranteed assistance to families at risk of food insecurity, when many people lost their sources of income due to the closure of workplaces, necessary to contain the spread of the virus. This dimension may also have been ensured by the constant monitoring of students, who felt "cared for", both by the management team and the teachers.

*Psychologically, some feel the need to always be talking to us.* (Deputy Director)

*There was a student of ours who lost his mother because of Covid. We had to provide assistance, basic food baskets.* (Educational coordinator)

**We were always making ourselves available** [to the students]. **Then, they felt a little safe.** *And they wouldn't let go of us.* (Educational coordinator)

**We are there as guides in their vision, as colleagues, as friends, people who care about them.** (Teacher 1)

[...] **he** [the student] **feels comfortable knowing that he is going to talk to someone who will listen and is not there to judge him.** (Teacher 2)

Peer collaboration may have been another important factor in the good functioning of this school. The statements collected in the interviews allow us to assume that there is a collective action organized around the various administrative and academic tasks. This attitude probably also influences students' actions. The deputy director reported, in the interview, how the school's students welcomed a new student, who had been bullied at the previous school. Regarding the implementation of ERE, she highlighted the management's partnership with teachers and students to add everyone to WhatsApp groups and "leave no one out":

*We got in touch with the representative who made this connection with the student, who got in touch. And then, **we managed to rescue a lot of people. That was a really cool integration!!*** (Deputy Director)

Faced with so many uncertainties and the possibility of classes mediated by ICT, it was necessary to create a collective pact so that teachers and students could be engaged. At that moment, the good relationship already established among members of the school community was decisive in achieving the intended objectives:

**One teacher helping another.** *The students themselves, with this group they have, helped each other.* (Deputy Director)

*So, these exchanges were very important, because **all the teachers came together, they were having the same difficulties, so when a teacher learned something, he shared it with others, creating an information network.*** (Teacher 2)

This good relationship between the school community, witnessed and reported by students, is a factor that encourages engagement in school life and is a vital basis for students' motivation, involvement and self-realization. When teaching practices are structured in relational terms, they are more likely to promote better quality motivation and obtain better learning results. The

connection with the teacher and peers and the sense of belonging provide the necessary emotional security that individuals need to self-determine their behaviors. Fulfilling the need for relationships is a motivational factor for people to internalize social regulations and adapt to environments.

Characteristics of the teacher and the classroom environment decisively affect student performance (Paul & Barbosa, 2008), in addition to generating greater levels of confidence, positive emotions and skills for coping with conflicts in a more adaptive way (Guimarães, 2010). The significant engagement of students from school C in the activities proposed in the virtual learning environment - of the 241 students regularly enrolled, only 8 did not access the platform - indicates a planned action by this school community with a view to maintaining the bond with the school and reducing drop out risks.

*I created another group to talk about careers and personal development. Because I perceive it as a lack, sometimes familiar. It lacks a little guidance.* (Teacher 1)

*They were very engaged, very interested in the evaluations, always wanted to return to the activities, and asked questions. Even in a very far away place, with little internet signal, the students still had a lot of energy to learn.* (Teacher 2)

The constant feedback from teachers certainly made the difference in these interactions.

*I liked doing it individually for each student, leaving comments about the activity, **they loved receiving the compliments and noticed that I was paying attention to the details.*** (Teacher 2)

Studies attest to the importance of feedback for student engagement with learning activities (Bzuneck, 2020; Hattie & Timperley, 2016). It can be observational, so that the student is aware of mistakes, but without discouraging new attempts and can be positive, pointing out successes and encouraging them to face new challenges, with autonomy and competence. Students who receive constant feedback from teachers tend to become more engaged and engagement is a condition for autonomous motivation, as it concerns an effort made by the student to learn (Bzuneck et al, 2013). It is also closely related to the student's perception of the bond with their teachers. Thus, it is possible to affirm that positive feedback feeds on the satisfaction of basic psychological needs, but care must be taken in the way it is practiced, so that it does not become "bureaucratic" and no longer make sense. It must be adopted sparingly, always given directly to the student, on an individual basis and if there is a need for "repairs" on the part of the student, it must be configured more as advice than as criticism (Bzuneck, 2020).

According to Bressoux (1994), feedback is an

essential part of human communication, in which a sender transmits a message to a receiver and the latter responds, returning another message to the sender. Without it there is no communication, only transmission, therefore, it is an essential element in the teacher-student relationship.

The pedagogical coordinator of the researched school reported, in an interview, that she noticed a relation between the feedback given by teachers to students during the ERE and their better quality engagement in school activities.

*I noticed that the classes in which the teachers demanded more were more rigorous, both in terms of activities, explanations and dates... **When the teacher was there, every week, constantly, the students were more frequent. And the students got better grades. The student knew that someone was correcting his activity.*** (Educational coordinator)

The deputy director highlighted the efforts of some teachers who, even without many ICT skills, committed themselves to providing feedback to the students regarding the tasks carried out. In addition, there was also feedback from the school team regarding students' anxieties, fears and expectations regarding learning the content.

Based on research data, Neubauer, Davis, Tartuce, & Nunes (2011) listed eight recurring practices in 35 Brazilian schools and their relation with students' academic success. Among them the school climate as a pleasant place to teach and learn, in addition to teamwork. Reports from members of school C indicate that it presents these characteristics. The explicit commitment to students' learning and well-being can be seen in the teachers' statements:

*We are all professionals there, excellent professionals and **there is a concern for teaching, good participation and intention to really deliver good content to students.*** (Teacher 1)

This was certainly decisive for students' engagement in remote school activities and helps explain the mostly autonomous motivational profile identified among the participants in the research reported here.

The size of the school is also seen as an important factor in whether high school students remain or drop out (Cohen et al., 2009; Machado, Alavarse, & Arcas, 2016). The fact that school C is small, with only 241 students, distributed in 9 classes, may have favored the rapprochement among the management team, teachers, students, family members and other members of the school community, allowing for more communication directly, through social networks, according to reports

*I know Sicrano's mother, I know Sicrano's grandmother, and Beltrano, and so on... So, I think*

*this is something like that we can also achieve there because it's a small school.* (Teacher 1)

The school already had this communication practice before the pandemic, which reinforced the dimension of the relationship. Data from the TIC Education surveys (CETIC.br, 2019) indicated that between 2016 and 2019 the percentage of urban public institutions whose parents or guardians used profiles or pages on social networks to interact with the school increased from 32% to 54% (CETIC. br, 2019). Results of this research indicate that the use of instant messaging applications and social networks and the search for information on the internet are media activities most cited by high school students.

The popularity of real-time messaging media led to their adoption by schools to contact students and their families and this feature became fundamental in ERE. The fact that school C already has this form of access to families incorporated into its regular administrative practices - "it's been about 4 or 5 years since we decided to create Whatsapp groups for parents", reported the assistant director - may have favored the permanent interaction with students during ERE. This interaction, in addition to strengthening the bonds between students and the school, gives meaning to the school space, helps to build an environment of healthy social relationships, where it is good to be, and this affects the level and quality of motivation to learn.

*(...) they feel the need to always be talking to us. During the pandemic, then, they send messages via WhatsApp [regularly]. (...) Students have our phones.* (Deputy Director)

*The Art teacher did a project that was very interesting, about the search for a professional placement, seeking personal growth. This really motivated me to study. It was a separate group, for those who wanted it, it had nothing to do with the content* (Student 2)

When the student sends a message to the school, whatever the content, he is looking for it, interacting with an institution that has some importance for him. This was accentuated during social isolation, when, more important than ever, being connected to others was a factor in maintaining mental health balance, as many people felt sadness or developed depression due to loneliness and separation from friends and family.

School C remains receptive to students even after completing the school cycle, as many of them remain in contact with the school and teachers through social media:

*We also have a Facebook page, where there are former students and current students.* (Deputy Director)

*Yes, the school is concerned about maintaining ties with these students. **Both during the years of study and after graduation.*** (Teacher 1)

Although the school already had some communication with students in digital environments, the increased use of ICT during emergency remote teaching was seen by teachers as an opportunity to incorporate these technologies into school culture. Teacher 2 saw possibilities for improving pedagogical practices in this form of communication, incorporating elements that could make them more motivating:

*I see that there are several resources that can be used in the classroom, technology has come to help us, if we know how to use this in the learning process, that will be wonderful! I found this interesting, with the mindset I have today, I see that we only have something to gain.* (Teacher 2)

### FINAL CONSIDERATIONS

The literature on factors associated with motivation to learn, which supports this article, indicates that meeting, by the school and the teacher, students' needs for autonomy, belonging (or relationship) and competence is directly related to the best motivational quality, classified as intrinsic or autonomous self-regulated motivation. The research that gave rise to this article identified better motivational quality among students at one of the schools researched. A closer relationship with the school, carried out through interviews with 6 members of the school community and the search for additional information about the school, allowed us to better understand its functioning and identify some of the factors that probably explain the results of the students' motivational profile.

The greater engagement in online school activities, associated with a greater perception of meeting basic needs, identified in the reports of the students interviewed indicate that this school brings together factors that can favor motivation to study. Interviews with managers and teachers indicate that the school has democratic and participatory management (everyone reported support, constant conversations and joint planning for the implementation of ERE), that there is permanent communication with students and their families (the school already regularly used the communication via WhatsApp before the suspension of face-to-face activities and the adoption of remote tasks), strong cohesion and low turnover of the pedagogical team (interviewees reported that the majority of teachers have been at the school for more than 5 years and intend to remain) and that, during the ERE, all demonstrated commitment to learning and the well-being of students. The actions implemented during this period encouraged collaboration between peers and permanent interaction between teachers and

students, with listening and feedback from the teacher in the learning processes. It is worth noting that it is a small school, with less than 250 students, a factor that makes it possible for teachers and management to understand the reality of each student and for greater attention to individual learning processes, which also favors motivation.

During the implementation of ERE, in a context that was extremely adverse to engaging in school activities and maintaining interest in studies, these characteristics favored the collective construction of pedagogical practices that, apparently, met the students' needs for belonging and autonomy, essential for motivation to study.

It is worth noting that the absence of the Ministry of Education in coordinating state and municipal management and in providing the necessary resources for the implementation of remote school activities in the country resulted in high losses for school management and teachers, who had an absurd increase in their workload, including unpaid work. Teachers, often alone, bore the burden of incorporating digital technological resources into teaching to continue classes quickly, with negative impacts on their physical and mental health and family life (GESTRADO/CNTE/CONTEE, 2020).

On the other hand, it is also important to recognize what was learned by teachers in this process. We rediscover the value of care; we overcome the supposed contradiction between caring and teaching; we have become more autonomous in relation to the curriculum and the management of the content of our subjects, defining priorities in relation to the context; and, above all, we see the fundamental importance of peer learning. Collaboration between peers was indicated as the main legacy of ERE by the majority of teachers who participated in research carried out during the pandemic by GESTRADO (GESTRADO/CNTE/CONTEE, 2020). The solutions created by school C to keep students motivated, despite the enormous difficulties experienced during the pandemic, were the result of this form of collaboration, whose conditions of possibility had been previously created.

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