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THE PRESCRIBED WORK AND THE ACTUAL WORK IN THE SCOPE OF SCIENTIFIC INITIATION SUPERVISION

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Abstract

This exploratory study addresses the gaps between the actual work and the prescribed work in undergraduate supervision for the training of young researchers through the scientific initiation program. A case study was conducted at a public higher education institution (HEI) located in the Brazilian Midwest, with the application of questionnaires, interviews, and document analysis, through which aspects related to the procedures adopted by the supervisors, their perceptions regarding the established standards, and their motivations for performing this task were assessed. The results indicated that the scarcity of financial and material resources for carrying out research projects and the unavailability of the student to perform some previously agreed tasks are the main causes of overload in the supervision process. In addition, they indicated that the supervisors understand their responsibilities, adopt coherent procedures, and are aligned with established prescriptions. As a motivational factor, the contribution to the academic and scientific training of students was highlighted.

Keywords: ergonomics; task; activity; strategies.

1. INTRODUCTION

The role of the advisor is that of an educator, whose experience, more mature, is shared with the advisee, in a joint process of knowledge construction (Severino, 2009, p. 21). This understanding is in line with that suggested by Silva and Vieira (2014), who suggest that the orientation requires the researcher to be competent and imbued with knowledge and research practices that make it effective, acting as a guide for the acquisition of knowledge, as well as for the personal and intellectual development of the advisee. The work of guidance is a complex task, which permeates academic, professional and personal aspects.

In this context, the following questions emerge: what would be the motivations of professors to accumulate this task and act as advisors in scientific initiation?

What are the challenges faced? What are the weaknesses? And what strategies can be adopted to improve the orientation process?

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The orientation is part of the list of possibilities for the performance of higher education professors and that the detailing of activities, at least in their general aspects, is usually provided for in institutional standards. However, it is impossible to understand work, in all its complexity, only from the formal description of a task.

For Daniellou (2021), there is an abyss between what should be done and how it is done, since they are two very different universes. This difference between what is prescribed and what is actually performed is one of the main points of discussion in the ergonomics of the activity.

Ergonomics plays a fundamental role in conducting this reflection, having as its essence observations and analysis of real work situations. Based on this recognition, it seeks to propose strategies that improve efficiency, quality, safety and, thus, contribute to the worker being able to recognize and be proud of his work.

To reflect on these aspects and on how the diversity of interpretation of the prescribed work combined with human subjectivity, can influence the work of orientation in scientific initiation, the objective of this study was to analyze how the real work of advising students linked to the Scientific Initiation Program occurs in the face of what is prescribed, based on the Ergonomic Analysis of Work (AET), using the case of a public higher education institution (HEI) located in the Brazilian Midwest, focusing on the proposition of improvements that positively influence their real work situations.

2. DEVELOPMENT AND THEORETICAL FRAMEWORK

The Scientific Initiation Scholarship Program (PIBIC) is an instrument used by the National Council for Technological Development (CNPq) and other research support institutions to grant scholarships to encourage the academic, scientific and professional training of students. The action goes beyond the concern with the student's permanence at the University, and is mainly focused on aspects that ensure the insertion of students in research, for career improvement, as well as to stimulate and contribute to the advancement and promotion of institutionalized research in higher education.

From the point of view of student training, Massi and Queiroz (2015) highlight participation in scientific initiation as a differential in the professional trajectory of students, since students develop cognitive aspects that favor their academic performance and in the job market.

Cabrero (2007), when investigating the impact of the PIBIC on the training process of researchers at the Federal University of São Carlos, highlighted:

> "Greater engagement of professors with scientific research, encouragement to raise the titles of the faculty, the formation of critical capacity and the scientific mentality of students, the training of skills to express oneself in public and the ability to write, proven in the dissemination of articles and magazines and Congresses" (p. 214).

Studies that deal with the subject (CABRERO, 2007; MASSI & QUEIROZ, 2015; BRAATZ et al., 2021), reaffirm the positive results of the Program in terms of student training and institutional collaboration to increase the engagement of researchers and to increase scientific production. However, there is a gap in knowledge to be filled with regard to the actual work of advising young researchers, through scientific initiation, as most of the reflections and publications take place on the advising process in graduate studies.

Dias et al. (2021), when evaluating the historical process of work organization, found that it is the engagement of workers, with their informal experience and practical intelligence, that guarantees the execution of activities, since the prescribed operating procedures are often insufficient to ensure production. In line with the same sense, Rocha and Vilela (2021) state that organizations have two dimensions, that of what is prescribed (tasks, regulations, flows, among others) and another dimension related to interactions, or to the social activity of the agents, with several adaptations and exceptions in relation to what is formalized.

In this context, knowing the dimension and understanding the adaptations that are being necessary in a work environment for the execution of an activity is essential to promote the articulation between these two worlds and for the living organization to be part of its formal and prescribed structure.

Ergonomic Work Analysis can be understood as a set of methods and techniques that seek to understand and transform work situations, through the study of the activity in a real situation and through the systematic participation of the operator.

In view of this, this study, in an exploratory phase, proposes the analysis of the real work of orientation in scientific initiation in order to contribute, through the production of knowledge, to the prescription of future works and to the improvement of management and monitoring processes.

3. METHOD

From November 2022 to April 2023, a descriptive study was undertaken, with a qualitative approach, considering the dynamics between the real world and the subject, aiming to analyze, from the perspective of the ergonomics of the activity, the work of orientation in undergraduate courses, for the training of young researchers through the scientific initiation program.

Theoretical narrative and documentary research was used, as well as a case study carried out in a public HEI located in the central-west region of Brazil.

For Bressan (2004, p. 09), through the case study it is possible to obtain evidence from six data sources: documents, archival records, interviews, direct observation, participant observation and physical artifacts. In addition, according to Yin (2001, p. 27), it can be applied to evaluate contemporary events, where it is possible to make direct observations and systematic interviews, but without intervention in behaviors.

In this sense, for data collection, in addition to documentary analysis, a questionnaire (*survey*) was used, applied through a Google electronic form, complemented with face-to-face interviews.

The questionnaire was composed of 22 questions, 19 multiple-choice questions distributed in the following themes: procedures adopted by the advisors in the face of the prescribed tasks (13 questions), perception of their responsibilities (6 questions), and 3 essay, which related to: motivation, difficulties faced and strategies to overcome the problems faced.

14 professors from the institution's permanent staff answered the questionnaire, and 2 of them also participated in the interview stage, in which they detailed their positions on the issues addressed in the questionnaire.

4. FINDINGS

From the documentary analysis of the institutional norms, it was identified that the regulation for participation in scientific initiation occurs through institutional selection instruments (internal notices/calls), which define the procedures, norms and criteria for both registration and selection, monitoring and presentation of results.

Of the 14 professors who responded to the questionnaire of this research, 79% are male and 21% female. All have a doctorate-level degree and work as professors at the institution, in addition to developing research activities linked to the eight major areas of knowledge.

Regarding the procedures adopted by the advisors in the scope of scientific initiation, the results indicate that most of the advisors understand and seek to put into practice the guidelines prescribed in the institutional normative instruments, according to the answer to questions 1 to 4 (Chart 1).

Chart 1 - Results regarding the procedures adopted by respondents in the scope of the scientific initiation orientation work (C: agree; CT: I totally agree; NOF: I have no opinion on the matter; DT: I totally disagree; D: disagree; FA: absolute frequency).

Affirmative	CT		C		NOF		D		DT	
	FA	%	FA	%	FA	%	FA	%	FA	%
1a. The research projects I coordinate are registered with a focus on participation.	4	29%	5	36%	0	0%	5	36%	0	0%
1-b. The research projects I coordinate usually encompass only 1 (one) scientific initiation work plan.	0	0%	1	7%	0	0%	8	57%	5	36%
1-c. The research projects I coordinate usually encompass several scientific initiation work plans.	8	57%	5	36%	0	0%	1	7%	0	0%
2a. Before registering students, I Do the reading of the Notice/Internal Call for selection to know and update me on the rules.	10	71%	4	29%	0	0%	0	0%	0	0%
2-b. Before registering students, I strongly recommend that my advisee candidates read the Notice/Internal Call for selection to learn about and update themselves on the current rules.	12	86%	1	7%	0	0%	1	7%	0	0%
2-c. I follow the entire process of elaboration and writing of the work plan that will be used for registration in the selection process and later developed during the 12 months of scholarship.	9	64%	5	36%	0	0%	0	0%	0	0%
3a. I encourage the student candidate to prepare and write the work plan for the 12 months of the scholarship and, before applying, I make only small corrections and adjustments, when necessary.	6	43%	4	29%	1	7%	3	21%	0	0%
3-b. I prepare and write the work plan that will be used for registration in the	0	0%	2	14%	0	0%	8	57%	4	29%
selection and later developed by the student during the 12 months of the scholarship.										
4a. I request the presentation of results monthly to involve the students and avoid problems and delays on the occasion of presentation of PIBIC reports.	4	29%	6	43%	1	7%	2	14%	1	7%
4-b. I read all the documents (work plans, reports, summaries, etc.) that are prepared by my advisees before submit them for analysis by the Institutional Evaluation Committee.	9	64%	5	36%	0	0%	0	0%	0	0%
4-c. The reports (partial and final) are prepared by the scholarship holders.	10	71%	4	29%	0	0%	0	0%	0	0%

4-d. The reports (partial and final) are prepared by the advisor.	0	0%	0	0%	0	0%	6	43%	8	57%
4-e. I accompany the scholarship holders in their face-to-face presentations during the Seminar of Scientific Initiation.	7	50%	5	36%	0	0%	2	14%	0	0%

Source: Authors, 2023.

Regarding the institutional registration of research projects (questions 1-a, 1-b and 1-c), for 64% of the respondents, research projects are registered with a focus on participation in the scientific initiation program. For the vast majority, 93%, the research projects he coordinates encompass more than one work plan.

Regarding the effort to become aware of the Program's rules in advance, evaluated through statements 2-a and 2-b, all respondents stated that they read the selection notice and 93% of them stated that they request that their advisees do the same to know and update themselves on the rules in force at the institution.

Regarding the preparation of the work plan to participate in the selection process, all respondents stated that they follow the entire process of preparing and writing the work plan. However, there is no unanimity regarding the procedure for preparing the plan. While 71% of the respondents stated that they encourage the student candidate to prepare and write the work plan, a part of them, corresponding to 14%, affirm that they prepare the student's work plan.

Asked about the presentation of the results obtained by the student, all respondents stated that the reports are prepared by the scholarship holders and not by the advisors. And, the majority (86%) stated that they attend the face-to-face presentations of the advisees at the Scientific Initiation Seminar.

Regarding the perception of the advisor's responsibilities, the answers showed that most understand that they are responsible for monitoring deadlines and that, despite being responsible for advising students, they recognize the importance of institutional monitoring of the work developed (Chart 2).

Chart 2 - Results regarding the perception of the advisor's responsibilities (C: agree; CT: I totally agree; NOF: I have no opinion on the matter; DT: I totally disagree; D: disagree; FA: absolute frequency.).

Affirmative	CT		C		NOF		D		DT	
	FA	%	FA	%	FA	%	FA	%	FA	%
5a. I feel responsible for following the deadlines for presentation of results (reports and seminar).	9	64%	3	21%	0	0%	2	14%	0	0%
5b. I believe that the responsibility of keeping track of the deadlines for filing Results (reports and seminar) are the scholarship holder's.	2	14%	6	43%	0	0%	4	29%	2	14
6a. I believe that the institutional request for a partial report is important as part of the follow-up process.	7	50%	4	29%	0	0%	2	14%	1	7%
6-b. I believe that it is important for the institutional request for a final report as part of the evaluation process.	11	79%	3	21%	0	0%	0	0%	0	0%
6-c. I believe that the oral presentation of the work at the Scientific Initiation Seminar is important as part of the evaluation process.	13	93%	1	7%	0	0%	0	0%	0	0%
7a. I believe that the reports should be presented only to the advisors, without the need to submit to the Institutional Evaluation Committee.	0	0%	1	7%	0	0%	3	21%	10	71

Source: Authors, 2023.

Regarding the monitoring of the deadlines for the delivery of the artifacts for the presentation of results, based on the positions presented in the face of the statements that deal with the responsibility of the advisor (5-a) and the scholarship holders (5-b), it was possible to verify that 43% of the respondents believe that this is a shared responsibility between scholarship holders and advisors. The same percentage was observed among those who understand that this is the responsibility of the advisor. Most respondents (85%) understand that they have responsibility for this topic. On the other hand, for two of the respondents, this responsibility is exclusive to the scholarship holder. The participants of the research pondered on the importance of the preparation of the partial report (6-a), the final report (6-b) and the oral presentation of the results of the research in the Scientific Initiation Seminar (6-c) for the evaluation process of the scholarship holder. In this context, all respondents expressed themselves in favor of the relevance of the final report and the oral presentation at the Seminar. However, when it comes to the partial report, there is no unanimity, as 21% disagree that it is important for the institution to request this instrument as part of the process of monitoring scholarship holders.

Still on the importance of institutional evaluation, the participants answered whether they believed that the reports should be evaluated only by the advisors or if they should really

be submitted to an Institutional Evaluation Committee (7-a). In this regard, the majority of respondents (93%) recognize the importance of the evaluation of the reports prepared by the students, which is carried out by the Institutional Committee. But, for one of them, the evaluation could be carried out by the advisor himself, because, according to him:

> "Sometimes the reports may not be evaluated by people from the same line of research and this limits the possible contributions" (Professor "A", 2023).

The research participants talked about what motivates them to guide students in the scientific initiation program (Chart 3). There were recurrent manifestations that contributing to the education of students, as well as preparing students for graduate studies, are the factors that motivate them to participate as advisors in scientific initiation. In addition, some of them highlighted the importance of student participation in supporting the execution of activities in the projects.

Chart 3 - Synthesis of the answers presented by the participants about what motivates them to participate as advisors in the scientific initiation.

Identification	8. Motivation to participate as an advisor in scientific initiation
The	Train and insert students in research projects.
B	Stimulate science learning in undergraduate students and stimulate advising learning among graduate students.
C	Strengthen the initial training of students as well as research groups and projects.
D	Train new researchers from graduation. In addition, graduates who do scientific initiation generally arrive more prepared for the master's degree.
And	Enjoying teaching and the possibility of doing it more closely through scientific initiation. Opening the paths of curiosity and creativity are my inspirations.
F	To allow undergraduate students to have contact with my area of expertise in research, in addition to the students are a great support in the execution of projects.
G	Provide scientific training for students.
H	Collaborate for the training of researchers, scientific production, promotion of graduate studies.
I	Stimulate the qualification of the teaching-learning environment in undergraduate courses and obtain support in the execution of research projects.
J	Research, knowledge and contribution.
K	To train future researchers in the area of knowledge in which I work.
L	Initiate students in the perception of the importance of science. In addition, it helps to select possible candidates for the master's degree.
M	Educating students is extremely important for the development of skills (such as creativity, critical thinking, autonomy, improvement of scientific writing, meeting goals and deadlines, ability to work in a team, among others) that will be
	of great value for the exercise of the profession, especially for those who will pursue a career in academic research and/or future studies in graduate school.
N	Train human resources.

Source: Authors, 2023.

Participant "A" highlighted, in an interview, that it is gratifying to know when the student decides to continue his academic career:

> "My motivation is to see the advisees are learning, enjoying what they are doing. Well, learning and liking what you do go together. So, when the advisee learns, he likes what he is doing. One of the things that motivates me a lot is knowing that the student followed an academic career, because it shows that we had an important role for him to enjoy and learn. So, when he does a master's degree, it is very rewarding. And I can say that most of my advisees followed this path to graduate school. In addition, I had a student who is now a university professor. This is a source of great pride. It is this pleasure and recognition that motivates, in addition, of course, to the learning that comes with mentoring" (Participant "A", 2023).

For participant "D", the workload accounted for the activity of advising undergraduate and scientific initiation students does not seem to be a determining factor to motivate professors to perform this function:

> "It is common for the workload that can be accounted for to be reached only with graduate students. Therefore, it is likely that a graduate advisor will not feel motivated to advise in scientific initiation" (Professor "D", 2023).

Both interviewees (Professors "A" and "B") emphasized that the performance in scientific initiation guidance is more related to the satisfaction of being able to enrich the students' education, through their inclusion in research activities, and, in this way, prepare them for graduate studies, than necessarily in publishing the orientation in their teaching workload or publishing in journals of great impact at the end of the scholarship cycle, since they consider the 12-month time interval short for this purpose. However, they highlighted that when student participation extends for more than one cycle, these expectations and possibilities tend to be expanded and eventually fulfilled.

When asked about what usually negatively affects the orientation process and the strategies usually adopted or what strategies could be adopted to resolve the difficulties faced, the participants highlighted similar difficulties, but pointed out different strategies to overcome them (Chart 4).

In their answers to the questions about factors that usually negatively affect the orientation process, the respondents related the problems faced to factors such as: lack of financial and material resources to carry out the experiments provided for in the work plan; lack of resources for the acquisition and maintenance of equipment; problems in carrying out on-site studies; difficulty in reconciling the workload of the undergraduate course with the workload necessary for the development of the research; and lack of time and commitment from students. The lack of financial resources and the lack of time and commitment of the students are the most recurrent allegations.

Regarding the strategies to resolve the difficulties faced, the participants highlighted: holding frequent meetings; establishment of a schedule with clear deadlines and goals; adequacy of the proposed methods; use of equipment in partnerships and reception of donations of inputs for the execution of experiments. One of them mentioned the need to change the institutional norm to extend the deadline for replacing scholarship holders in the same work plan. And, two others mentioned factors that involve the granting of the scholarship: one mentioned that it conditions the maintenance of students as scholarship holders to the presentation of reports on time and another, who highlighted as a difficulty "the lack of commitment of the students" mentioned that he believed that granting the scholarship was a strategy to reverse this situation.

Chart 4 - Summary of the answers presented by the participants about the factors that usually negatively affect the process of advising in scientific initiation and the strategies that they usually adopt or that could be adopted to resolve them.

Identification	**9. What usually goes wrong or gets out of control (expectation).**	**10. Strategies adopted or that could be used to resolve such difficulties.**
The	Lack of financial resources; Difficulty in maintaining equipment; and Personal problems of students.	Holding meetings to identify the student's needs and stipulate deadlines according to difficulties.
B	High workload of students' disciplines; Difficulty in making it compatible agendas for field activities.	Carrying out work stages on Saturdays and encouraging interaction with graduate students. graduation.
C	Lack of financial resources for field activities; Difficulty of access to the institutions surveyed, due to restrictions against COVID-19.	Alteration of research methods.
D	Low adherence of advisees to deadlines defined by the advisor and/or the institution.	Holding face-to-face meetings and feedback and explaining the advisor's expectations.
And	Lack of financial resources; Withdrawal of the student.	Encouragement to carry out activities collaboratively among students and reception of donations of inputs for the experiments.
F	Lack of financial resources; Prioritization of the student to other activities to the detriment of research; Student's family difficulties; and Disinterest of the student in the line of research.	Carrying out activities not performed. Availability of a previous internship in the laboratory for the student to get to know the line of research, before proposing a work plan.
G	Lack of time for students.	Demand for compliance with the schedule.
H	Delays in the delivery of reports limit the time for correction and consequently compromise the quality of the research.	Conditioning of the continuity of participation to the presentation of reports (partial and final), as the biggest concern of the scholarship holders is losing the scholarship or having to return it.
I	Lack of commitment to deadlines on the part of students; Engaging students in side projects without the advisor's consent; and low dedication and performance of the student to his plan and prospecting of research material.	Establishment of deadlines, which may imply dismissals or opinions that reflect the fragility of the research developed, including the non-recommendation of granting certification.
J	Lack of financial resources; Lack of commitment from students.	Constant alignment with the student, stipulation of goals and adjustments in the schedule.

K	Excessive commitments on the part of advisors; Excessive commitments of the students.	Integration of the guidelines with the undergraduate works to meet the objectives.
L	He rarely has problems in this process.	Proposal to change the institutional norm to extend the period that can be replaced by students.
M	Lack of financial resources; Difficulty in maintaining the equipment.	Use of equipment in partnership with other researchers within the university or at other research institutions in which we collaborate.
N	Lack of commitment from students.	The scholarship is the motivation.

Source: Authors, 2023.

The respondents mentioned making adjustments to the method proposed in the work plan to adapt it to the necessary changes in the absence of a reagent or other type of material, or even when equipment is unavailable; seek sponsorship and donations in the private sector for the acquisition of materials; seek to establish partnerships with other institutions for shared use of equipment; they hold frequent meetings to discuss the research with the advisee, to identify the strengths and potential weaknesses in order to, based on this recognition, establish new deadlines for each of the tasks, according to the difficulty reported; foster the integration of undergraduate and graduate students to stimulate collaboration among the members of the working group; and perform part of the tasks under the student's responsibility to assist in the progress of the research, but with reservations, because they understand that this is a responsibility that should be performed by the student.

Providing greater interaction between undergraduate and graduate students is seen by the respondents as a viable and very promising alternative for the development of the research. Teacher "A" made a report that describes a part of how this integration occurs:

> As the projects usually integrate undergraduate and graduate studies, the first contact of the scientific initiation student with the laboratory is mediated by the graduate students, who are responsible for presenting the dynamics of the laboratory, the equipment, the techniques and the basic instruments necessary for the beginning of the development of the research. The scientific initiation students, then, first accompany the master's students and, later, start their own research, when they begin to do their own processing under my guidance (Professor "A", 2023).

The respondents understand that part of the role of the advisor is to provide conditions for the student to carry out the research, through the provision of equipment, materials, and to assist in the bibliographic survey. But they are aware that, in addition to all this, guidance requires sensitivity to recognize the limitations of the advisee, whether cognitive or even interpersonal. The dynamics of the orientation, in addition to requiring a good relationship

between advisor and advisee, requires conflict management among the members of the work group.

5. DISCUSSION

Participation in scientific initiation is recognized as an opportunity for undergraduate students to consolidate knowledge. Massi and Queiroz (2015) highlight participation in scientific initiation as a differential in the professional trajectory of students, as it develops cognitive aspects that favor academic performance and in the job market. Cabrero (2007, p. 214) also highlights this contribution to the critical and scientific training of students, to the training of skills to express themselves in public and to the improvement of writing skills.

The work of orientation is fundamental in this process, as it leads the student to build knowledge in an autonomous and genuine way. However, the path to be covered is extensive and permeates the awakening in the orientation of the necessary commitment for the development of tasks, the provision of instrumentation and the management of interpersonal relationships, in addition to the instrumentation for research itself.

It is not a simple task, but based on the information collected in this study, the possibility of contributing significantly to the qualified training of students stands out as a factor that greatly motivates the insertion of professors in the activity of advising undergraduate students in scientific initiation.

Studies by Vieira et al, 2020; Silva and Vieira, 2015; Bianchetti and Machado, 2009; Leite Filho and Martins, 2006 on the relationship between advisors and advisees in graduate studies, identified that the main difficulties faced are related to the short time for presenting results and, thus, highlights the importance of student commitment, repeatedly mentioned by the participants in this research.

As in graduate studies, scientific initiation requires the student to present the results obtained. Nationwide data published by the Center for Strategic Studies Management (CGEE, 2017, p. 16), which indicate that 58% of the scholarship holders declared that they had disclosed the results of their research at a national or international scientific initiation event, while 19% of the scholarship holders reported publication in national or international journals. However, for the participants of this study, the period of validity of the scholarship, 12 months, is considered short and, consequently, a limiting factor for the contributions made by the initiation student to culminate in scientific publications of great impact.

The results obtained indicated that, in the understanding of the advisors, the participation of these students in research projects is primarily aimed at learning research methods and techniques, which enable effective collaboration in projects, and serves as an opportunity to stimulate the entry of students into the master's degree, qualify them so that they are able to carry out research with greater impact in graduate studies and to be efficient in the face of the deadlines inherent to the stricto *sensu programs*.

This understanding is in line with the prescriptions established by the National Council for Technological Development, which defines the Program's guiding objectives to contribute to the training of human resources for research and other professional activities, as well as to reduce the average length of stay of students in graduate studies (Normative Resolution No. 017/2006/CNPq).

However, to achieve this goal, the advisor often puts himself in a condition of a doer, imbued with raising financial resources, materials and inputs to carry out research activities. This is a potentially challenging situation, especially when added to the lack of time for students to carry out research activities, given the simultaneity with classes and other activities inherent to graduation. Therefore, the institutional evaluation of students, through the preparation of partial and final reports, as well as the oral presentation at the seminar is, in general, understood by the advisors as an ally in the process of monitoring the advisees, especially when exercised by peers, who work in lines of research compatible with the works assigned for their evaluation. However, the eventual absence of commitment may cause overload to the advisor, who, due to the need to comply with the accountability standards, is forced to carry out actions initially delegated to the scholarship holder, since they understand that there is little autonomy to make adjustments to the methods initially proposed in the work plan.

6. CONCLUSION

The present study, in an exploratory phase, identified and discussed the differences between the prescribed work and the actual work of orientation in scientific initiation, and, based on the information collected, made it possible to reflect on the discomforts and constraints to which these workers are subjected.

The main factor of overload reported involves the limitation of financial resources, unavailability of equipment and materials to carry out the experiments. The unavailability of the advisee to perform some previously agreed assignments was also highlighted in the manifestations.

To overcome these difficulties, the holding of periodic meetings and the frequent review of the schedule and methods were the main strategies mentioned.

The results also indicated that the advisors understand their responsibilities and adopt procedures consistent with established prescriptions, and are aligned with the objectives of the program regarding the student. However, there is an opportunity to expand the clarification regarding the institutional implications in the face of possible withdrawals. As a motivational factor, the contribution to the students' education was highlighted.

However, it is important to think of strategies that expand the appreciation of this activity that is so relevant to the education of undergraduate students and, in this sense, this analysis stands out as an opportunity for future studies.

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