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Career intervention program to promote academic adjustment and success in higher education

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Introduction: The transition to higher education can be challenging for many students, requiring developing skills and strategies to help them overcome various challenges. Adjustment to university is a multifaceted process involving several dimensions. Given the difficulty that a significant percentage of students face in this process, the lack of adaptation to higher education has been widely studied, as it is often associated with academic failure and dropping out of school. To mitigate these risks, career interventions have emerged as an essential support, helping students to develop personal resources such as resilience, time management, and decision-making capacity. The aim here is to present a career intervention program focused on promoting the adjustment and academic success of first-year undergraduate or integrated master's students and evaluating the participants' feedback on this intervention.

Methodology: This intervention program aimed to provide students with an opportunity to reflect on their adjustment process to the University, identifying possible areas of vulnerability, providing personalized feedback, and proposing modules of learning and personal and academic development that would favor the adjustment and academic success process. Additionally, it aimed to organize, systematize, and make known the support structures existing at the University to which students can resort in possible situations of psychosocial vulnerability and support for academic and career development. This intervention was based on and used a computer platform developed within the framework of the SUnStar project. The intervention took place over 6 weeks using the Teams platform and consisted of three modules, with module two divided into different sessions and topics. Seventy-four university students participated in the intervention, 56 (75.7%) of whom were female. A questionnaire with four Likert-type questions was designed to evaluate the sessions by the students.

Results: The session "Pursuing my UMinho Career: Institutional Support Structures" consistently received the highest ratings across multiple evaluation criteria. In contrast, the "Social Networks and Cooperation" session received the lowest, although all sessions were rated above the average response point. The results are discussed regarding their relevance in an academic context and their implications for future interventions with this target group.

KEYWORDS

career intervention, higher education, adjustment process, psychology, students

1 Introduction

Dropout rates and the adaptation challenges university students face in their first year of undergraduate study have become an essential focus in the scientific community. One of the main objectives of the European Union's strategy for jobs and growth, known as Europe 2020, is to ensure that at least 40% of young people are in higher education (European Commission, 2020). In addition, in Europe 2020 and other strategic documents, such as the EU strategy for modernizing higher education, the European Commission aims to reduce dropout rates in higher education (European Commission, 2020). According to the OECD (2023), the current average completion rate in higher education is 77%. Even in the EU, there are countries where around 16% of students need to complete their studies successfully. In Portugal, the dropout rate is around 6% (Eurostat News, 2023). University dropouts have been studied from various perspectives. One of the possible explanations relates to students' difficulty adapting to the demands of university education. Transitioning from secondary school to university is an essential milestone in students' lives, representing a significant change in their roles (student, family, social) (Huguenel and Colleen, 2020). This transition phase to university also challenges students, impacting their emotional, social, and academic well-being.

Adapting to this new context can be challenging, requiring students to acquire new study skills, manage time effectively, and adapt to a different social life (Worsley et al., 2021). If students fail to adjust to the university context, the consequences can be severe, leading to dropout and academic failure. Studies suggest that difficulties with social and emotional adjustment and a lack of academic motivation are the main reasons for college dropout (Chen et al., 2023).

Many students feel overwhelmed by the demands of university and, with adequate support, may retain their studies, missing the opportunity to achieve academic success. Therefore, adaptation to the university context plays a key role in academic success. The challenges students face when entering higher education are determined by the resources they can mobilize to cope with these demands. The literature on transition and adjustment to higher education identifies several difficulties and describes these processes as complex and multidimensional, involving individual student characteristics and academic contexts (Thompson et al., 2021).

When entering higher education, many young people leave their parent's homes for the first time, distancing themselves from family and long-time friends (Chevrier and Lyda, 2022). In this context, it is common for students to seek new emotional relationships with their peers to avoid feelings of anxiety and loneliness during their first days or weeks at university (Kroshus et al., 2021). Social integration and creating a support network are among the first challenges new students encounter. A lack of familiarity with the new context and interactions can result in isolation and loneliness, negatively impacting students' emotional well-being (Kroshus et al., 2021).

The move also means greater responsibility for the student, who must now manage their daily activities and financial resources. In addition, higher education is new to many, especially those who are the first generation of their family to attend. These students face changes such as more flexible schedules, different teaching methods, a more distant or impersonal relationship with teachers, and a learning model that relies less on structured textbooks or frequent feedback

from instructors (Casanova et al., 2020). The balance between different roles in life is also a key concern, as many students need help managing their time between studies, work, and social activities.

In a study by Araújo et al. (2016), students reported that their main difficulties adapting to higher education included managing activities and time and covering daily expenses. Despite recognizing these challenges, many students experience problems during their first year due to academic, social, and emotional burdens that limit their academic success. A systematic literature review study by Purnamasari et al. (2022) also pointed out that individual and contextual characteristics can influence college adjustment. Suppose students' potential is negatively affected by anxiety or low life satisfaction during their first year at university. In that case, this affects the quality of teaching at universities, as a lack of emotional well-being can disrupt cognitive processes and reduce students' learning outcomes (Barbayannis et al., 2022; Halat et al., 2023).

Adapting to the academic context is a complex process that directly influences student success, a multidimensional concept conditioned by several variables throughout their academic career (Farias et al., 2024). Success in a university depends on cognitive abilities and managing the emotional and social demands of this new context (Acosta-Gonzaga, 2023). Academic success in higher education is influenced by a series of interconnected factors that affect students' adjustment continuously. Personal reflection and feedback play an important role because by reflecting on their performance and listening to feedback from teachers and peers, students adjust their strategies, which improves performance and adjustment (Yan and Carless, 2021). Alongside this, motivation is essential: the more motivated the student is, the more commitment they will put into the tasks, and the better they will be able to face the challenges. Self-regulated learning also has a direct impact since the ability to manage one's own time and organize activities allows the student to adapt more quickly to demands and avoid overload (Ryan and Deci, 2020). Supporting social networks and cooperation, be it friendships with other students or building relationships with teachers, helps create a supportive environment that combats isolation and facilitates adjustment. In addition, good career management from the start of academic life allows students to direct their efforts, plan for the future, and reduce anxiety about the job market, which positively impacts academic success (Boda et al., 2020). Finally, institutional support, such as guidance services and support programs, offers additional resources for students to overcome difficulties and stay engaged, ensuring they have the conditions to achieve good results in higher education. Combining all these factors strengthens the initial adjustment to the university context and long-term success (Johnson et al., 2022).

Another common challenge is related to career choice. Many students enter university uncertain about their professional goals, which can lead to anxiety and doubts about the academic choices they are making. Choosing a career is a significant source of anxiety and uncertainty during the first years of higher education, and many students end up changing courses or abandoning their studies (Jaremus et al., 2023).

Several theoretical models and theories have been proposed for transition and adaptation to higher education (e.g., Lent, 2005; Manyanga et al., 2017; Tinto, 1993). However, one of the pioneering and most widely used models is that of Baker and Siryk (1984). This model identifies dimensions representing important behaviors,

decisions, or achievements in students' lives. In addition to making, it possible to locate first-year students at risk of dropping out, it also provides information on the areas in which adaptation difficulties occur that threaten the discontinuation of studies. According to the different areas that require adaptation, it highlights the assessment of four dimensions: the academic dimension, which indicates how effectively students cope with the demands related to their studies; the social dimension, which refers to the extent of success in social activities in general terms, among which the personal-emotional dimension, which relates to students' psychological state and the extent to which negative experiences can influence their physical and mental well-being; and physical and psychological well-being; and the institutional dimension, which indicates the degree of student commitment to school and institutional goals, and the quality of the bonds established between students and the educational institution (Baker and Siryk, 1984).

Studies focusing on practical solutions to the challenges of university adjustment have been instrumental in supporting struggling students. For instance, psychological career interventions are a valuable and robust strategy to help university students in their first years of university (Khurumova and Pinto, 2023; Soares et al., 2022). Ulaş (2019) concluded that career interventions affect academic preparation and the development of student's academic success.

Interventions focused on career development are powerful tools to help students cope with uncertainty about their professional future. Career guidance and counseling programs can give students the tools to make informed decisions about their studies and career goals (Gashi et al., 2023). These programs help reduce anxiety related to course choice and facilitate students' adjustment to their new context, increasing their motivation and engagement with their studies.

Career interventions are recognized in the literature as activities designed to foster personal and professional growth by helping individuals explore, make, and implement career-related decisions. In addition, they play a crucial role in reducing academic attrition, particularly among first-year students, by providing them with the necessary guidance to navigate their academic and professional paths (Gati and Levin, 2015; Ibsen and Rosholm, 2023). These interventions analyze various variables affecting career development and retention in higher education (Sneyers and De Witte, 2017). The main variables related to career interventions include career self-efficacy, which refers to students' belief in their ability to make career-related decisions and to implement them successfully (Bergey et al., 2019); career exploration, which assesses students' interest in exploring different professional areas and their knowledge of these areas; and exploration of the self, which notably involves setting goals and objectives (Chiteng, 2014; Ran et al., 2023). In addition, personal career management, addressed by Dobronyi et al. (2019), is another critical process involving students' ability to plan and organize their academic and professional activities to achieve their long-term goals. These interventions focus on developing professional skills and promoting academic and personal success, as Culver and Bowman (2020) suggested. Emotional intelligence, highlighted by Deighton et al. (2019), is also a competency addressed in intervention programs, as it helps students better manage the emotional and social demands that higher education and their professional futures require.

Career interventions offer individual or group sessions to guide students through their career options, personal values, and skills. Skills development workshops focus on communication, problem-solving, leadership, and time organization, which are highly valued in the job market. Mentoring programs connect students with experienced professionals or more advanced students, providing advice on their academic and professional paths. In addition, interview simulations and company visits offer practical exposure to the job market, helping students to develop a more concrete vision of different careers and, at the same time, to better structure their professional future (Khurumova and Pinto, 2023). Career management and goals are also examined to understand whether students have clear career goals and engage in activities that contribute to achieving them, such as internships and networking events. Academic and social integration are other variables observed, as more integrated students tend to be more engaged in professional opportunities, which in turn can reduce dropout rates (Pinto, 2019).

The benefits of these interventions are wide-ranging, positively affecting both the students' career path and their adjustment to the academic context (Harackiewicz and Priniski, 2018). Reducing anxiety related to academic and/or professional issues is one of the main results, as the interventions help students better understand their options and plan for the future, reducing the stress associated with the uncertainties of professional life. In addition, there is an increase in self-efficacy and confidence (Zhang et al., 2022). Participating in workshops and counseling sessions gives students greater confidence to make career decisions and deal with challenges along their academic path. This also contributes to a better adjustment to the university context, resulting in lower drop-out rates, as students who take part in these interventions tend to integrate more easily into the academic and social context, improving their performance (Corti et al., 2023).

These interventions also play a key role in developing soft skills such as communication, problem-solving, and organization - essential career competencies that are designed practically and applied through the intervention programs. By exposing students to different career options and guiding them in developing action plans, the interventions offer students a more precise and structured vision of what they want to achieve, promoting academic success and permanence in higher education, thus combating academic dropout.

Traditionally, career interventions are evaluated based on their effectiveness, often through pre- and post-intervention assessments (Sneyers and De Witte, 2017). However, recent approaches suggest that there are additional valuable methods, such as process evaluation and quality assessments (Sampaio et al., 2024).

This study aims to present a psychological career intervention implemented by psychologists and the results of the evaluation of its quality. Based on the adaptation challenges identified in the literature and different models, the study adopted the previously created modules that specifically address time management, developing social skills, and exploring career goals. These elements were chosen to help students cope with the demands of higher education more effectively.

2 Method

2.1 Participants

The CARREIRAS UMinho Intervention Program had 112 registrants, and a total of 96 students took part in the sessions. The remaining 16 did not participate in the program because eight had yet

to respond to any attempt to contact them (email and phone call), and eight did not show up despite confirming their registration. Of the total of 96 students who took part in the sessions, 74 (77%) identified themselves as women and 22 (23%) as men. In terms of course, 86 (89.6%) participants were studying for a degree in Psychology, four (4.2%) for a degree in Economics, one (1%) for a degree in Textile Engineering, one (1%) for a degree in Applied Languages, one (1%) for a Master's degree in Communication Sciences, one (1%) for a degree in Engineering Physics, one (1%) for a degree in Applied Biology and one (1%) for a degree in Accounting.

2.2 Instruments

The intervention process evaluation used a short questionnaire consisting of four questions (Table 1), which were answered on a scale of 1 to 5, about how understandable, helpful, informative, and interesting they found the session.

2.3 Procedures

This program aims to provide first-year undergraduate or integrated master's degree students at the University of Minho with an

opportunity to reflect on their process of adapting to the University, identifying possible areas of vulnerability, and then providing personalized feedback and proposing learning modules and personal and academic development that favor the process of adjustment and academic success. The program also aims to organize, systematize, and publicize the existing support structures at the University that students can turn to in possible situations of psychosocial vulnerability and support for academic and career development. The CARREIRAS UMinho Program is part of Strategic Action 2 of the proposal by the Psychology Association of the University of Minho (APsi-UMinho) within the scope of the POCH-02-53I2-FSE-000037 program, which takes place within the scope of Notice No. POCH-I2-2022-07, aimed at funding projects that are part of the Program to Promote Success and Reduce Dropouts in Higher Education.

The program is organized into three modules and different sessions, with specific themes and objectives, as described in Table 2. All the activities were carried out using the existing SunStar program and are described in Table 3.

In Module 2, "Empowering my…" students can register for multiple topics. Each session, aimed at different themes, comprises a set of activities that work on various themes. Table 3 shows the detailed structure of the UMinho Careers Program.

All first-year University of Minho students were invited to participate in the program. The sessions took place in groups and were conducted by a psychologist, with the support of a junior psychologist, either face-to-face or at a distance. The sessions used a computer platform developed as part of the SUnStAR project and other in-depth activities on the topics covered. Before the first session and after registering, students received the link to access the session via email. This process took place for all the sessions.

The program ran from October 23, 2023, to November 21, 2023. The session on Module 1: My UMinho Career: Personal Reflection and Feedback was held at different times so that we could reach as

TABLE 1 Questions to evaluate the sessions.

Question
From 1 to 5, how comprehensible did you find today's session?
From 1 to 5 how useful did you find today's session?
From 1 to 5 how informative did you find today's session?
From 1 to 5 how interesting did you find today's session?

TABLE 2 The general structure of the CARREIRAS UMinho program.

Module		Structure	No. of sessions/duration
Module 1: My UMinho Career: Personal Reflection and Feedback		- Introduction to the Intervention Program - Self-administered questionnaire for personal reflection on their academic situation - Feedback and identification of areas to enhance according to the results obtained in the questionnaire (Motivation, Academic Resilience, Self-regulated Learning, Social Networks and Cooperation, Personal Career Management, What if?…, planning for the future) - Construction of an action plan for Module 2	1 Session (1 h30)
Module 2: empowering my…	(A) Motivation (B) Academic Resilience (C) Self-regulated Learning (D) Social Networks and Cooperation (E) Career Management (F) What if? Planning for the Future	- Introduction to the Module theme (2A; 2B; 2C; 2D; 2E or 2F) - In-depth and shared reflection on the activities - Conclusion and oral assessment of what has been learned	One session/theme (2 h)
Module 3: Pursuing my UMinho career: Institutional support structures		- Personal reflection on the path taken in the intervention program - Presentation of existing support structures at the university to which students can turn in possible situations of vulnerability - Finalization and evaluation of the intervention program	1 Session (1 h30)

TABLE 3 The general structure of the sessions and activities CARREIRAS UMinho program.

Module	Activities	
Module 1: My UMinho Career: Personal Reflection and Feedback (*n* = 96)	Presentations Presentation of the CARREIRAS UMinho program Questionnaire "FAR" Individualized feedback My action plan My next sessions	
Module 2: Empowering My…	(A) Motivation (*n* = 6)	(1) Initiation and time for questions; (2) Introduction to the topic; (3) What is motivation?; (4) My academic experiences; (5) Situations and strategies; (6) Introduction to emotions; (7) Stories and their emotions; (8) My academic experience and emotions; (9) Final reflection and evaluation of the session
	(B) Academic Resilience (*n* = 0)	(1) Initiation and time for questions; (2) Self-efficacy; (3) What would you do now?; (4) What is Academic Resilience?; (5) My strategies; (6) Strategies and situations; (7) Other strategies; (8) Writing; (9) Final reflection and evaluation of the session
	(C) Self-regulated Learning (*n* = 3)	(1) Initiation and time for questions; (2) Pedro and his problem; (3) Tips for Pedro; (4) Let us help Pedro to Focus; (5) Let us test!; (6) Academic tasks and me; (7) Writing; (8) Final reflection and evaluation of the session
	(D) Social Networks and Cooperation (*n* = 49)	(1) Initiation and time for questions; (2) Introduction to the topic; (3) My communication skills; (4) Competence+; (5) Teamwork" quiz and reflection; (6) Emails; (7) Should I make an appointment?; (8) Writing; (9) Final reflection and evaluation of the session
	(E) Career Management (*n* = 34)	(1) Introduction and time for questions; (2) Introduction to the topic; (3) Oli and Ema; (4) My life roles; (5) What do I need?; (6) Writing; (7) Final reflection and evaluation of the session
	(F) What if? Planning for the future (*n* = 0)	(1) Initiation and time for questions; (2) Why am I here?; (3) Introduction to the theme; (4) Beliefs and self and reflection; (5) Consequences and reflection; (6) Added value and reflection; (7) Final reflection and evaluation of the session
Module 3: Pursuing my UMinho Career: Institutional Support Structures (*n* = 96)		(1) Introduction and time for questions; (2) Introduction to the topic of module 3; (3) Word cloud; (4) Quiz – Support; 4; (5) Writing; (6) Final reflection

many participants as possible. The dates and times of the first session were set according to a previous survey of the teaching schedules of first-year undergraduate or integrated master's students. The remaining sessions were scheduled according to the availability of the registered students. To select the sample, invitations to take part in the intervention were sent by institutional email to all students, course directors were contacted to publicize the intervention, and posters were put up around the university. All ethical issues were handled throughout the intervention and after the data had been processed.

The process evaluation data was analyzed using IBM SPSS Statistics (Version 29). The quantitative data was analyzed using descriptive analyses (means and standard deviations) to reveal the participants' average assessment of each session.

3 Results

Table 4 shows the results of the quantitative evaluation of the intervention process for each of the sessions. The participants' evaluations were based on how understandable, helpful, informative, and interesting they found the session.

Concerning the evaluation of the comprehension of the session, the session on Module 3: Pursuing my UMinho Career: Institutional Support Structures ($M = 5$; $SD = 0.000$) had the highest average score, and the session on Social Networks and Cooperation ($M = 4.53$; $SD = 0.536$) had the lowest average score. All the sessions were, on average, rated above the average response point.

Regarding the evaluation of the usefulness of the session, the Module 3 session, Pursuing my UMinho Career: Institutional Support Structures ($M = 4.80$; $SD = 0.477$), and the Motivation session ($M = 4.80$; $SD = 0.477$) had the highest average score, and the Social Networks and Cooperation session ($M = 4.43$; $SD = 0.722$) had the lowest average score. All the sessions were, on average, rated above the average response point.

Regarding evaluating how informative the session was, the Self-Regulated Learning session ($M = 5$; $SD = 0.000$) obtained the highest average score, and the Social Networks and Cooperation session ($M = 4.38$; $SD = 0.783$) had the lowest average score. All the sessions were, on average, rated above the average response point.

Regarding the evaluation of how interesting the session was, the session Personal Career Management and Module 3: Pursuing my UMinho Career: Institutional Support Structures ($M = 5$; $SD = 0.000$) had the highest average score, and the session Social Networks and

TABLE 4 Evaluation of the CARREIRAS UMinho Program intervention process.

Session		Understandable	Useful	Informative	Interesting
		M (SD)	M (SD)	M (SD)	M (SD)
Module 1: My UMinho Career: Personal Reflection and Feedback (*n* = 96)		4.70 (0.483)	4.60 (0.699)	4.70 (0.483)	4.70 (0.675)
Module 2: Empowering My…	(A) Motivation (*n* = 6)	4.60 (0.548)	4.80 (0.447)	4.60 (0.548)	4.80 (0.447)
	(C) Self-regulated learning (*n* = 3)	4.67 (0.577)	4.67 (0.577)	5 (0.000)	4.67 (0.577)
	(D) Social Networks and Cooperation (*n* = 49)	4.53 (0.536)	4.43 (0.722)	4.38 (0.783)	4.17 (0.942)
	(E) Career Management (*n* = 34)	4.64 (0.537)	4.46 (0.756)	4.59 (0.595)	4.23 (0.872)
Module 3: Pursuing my UMinho Career: Institutional Support Structures (*n* = 96)		5.00 (0.000)	4.80 (0.447)	4.80 (0.447)	5.00 (0.000)

Cooperation (M = 4.17; SD = 0.942) had the lowest average score. All the sessions were, on average, rated above the average response point.

Concerning a more qualitative evaluation of the Intervention Program, the participants' discourse highlights aspects such as the fact that the activities promoted reflection on essential topics about their adjustment to higher education, the sessions supported their time management, study methods, and skills they need to develop or improve. Participants also said developing this initiative outside the assessment period would be helpful. It is therefore suggested that in future editions, the date of dissemination and implementation of the Programs be reviewed to avoid competing with other commitments of the students or with phases of more significant academic pressure that could compromise the participation and attendance of the participants.

4 Discussion and conclusions

This study aimed to evaluate the implementation of a psychological intervention aimed at academic adjustment and the development of essential skills for student success in higher education. The results show that participants received the intervention well, with all sessions rated positively in terms of understanding, usefulness, information, and interest. Overall, the institutional support and career management sessions were rated the highest, while the social networking and collaboration sessions were rated the lowest. Existing literature highlights the importance of self-reflection and feedback in the process of academic adjustment (Yan and Carless, 2021).

Self-reflection allows students to analyze their performance, identify areas for improvement, and adjust strategies, while feedback from teachers and peers provides essential guidance for improving performance. Students who regularly practice self-reflection and integrate the input they receive tend to adapt better to the academic context and enhance their academic success. The results of this study support this idea, showing that participants recognized the usefulness of these activities for their development. The session on self-reflection and feedback was well received, confirming that these practices are adequate for the population studied.

Motivation is another critical factor discussed in the literature as a predictor of academic success (Ryan and Deci, 2020). More

motivated students tend to be more engaged in their tasks and more proactive in facing challenges. In this study, the session on motivation was one of the most highly rated by the participants, confirming the relevance of this variable in the context of the intervention.

Self-regulated learning, which includes the ability to manage time and organize tasks independently, also plays a key role in adapting to higher education. Students with a greater capacity for self-regulation tend to cope better with the workload and avoid burnout. The study's results confirm the positive evaluation of the intervention in this area, with the session on self-regulated learning receiving one of the highest scores in terms of information and usefulness.

On the other hand, social networks and collaboration help create a supportive environment that facilitates adjustment and combats isolation. The literature emphasizes that building relationships with peers and teachers is essential for academic success (Acosta-Gonzaga, 2023). However, in this study, the social networks and collaboration session had relatively lower ratings in some categories, suggesting the need to reformulate or reinforce this module in future interventions, perhaps with more practical or collaborative activities.

Finally, career self-management is emerging as an increasingly important dimension of academic success. Planning one's professional future from an early age reduces anxiety and facilitates decision-making throughout one's academic career (Boda et al., 2020). The evaluation of the career management session was extremely positive, demonstrating that students value this type of support in their academic and personal development process.

Although it is possible to discuss each of the dimensions of Module 2 separately, the overall findings suggest that these dimensions are interrelated and that an effective intervention should address all of them in an integrated manner to maximize the impact on academic success.

Institutional support is critical in ensuring that students have access to resources that enable them to overcome difficulties and remain motivated throughout their academic journey (Johnson et al., 2022). Advising services, support programs, and other institutional structures assist students as they navigate the challenges of higher education. The session on university support structures was consistently one of the highest rated in understanding and interest,

underscoring the importance of ensuring that students are well-informed about available resources. The results suggest that students recognize the value of these structures and are interested in having greater access to these services.

In conclusion, the results of this study seem to show that the intervention successfully promoted personal reflection, strengthened essential skills and provided useful information about institutional support structures. These are topics that the literature has highlighted as being important in the adaptation process and in students' academic success. However, future programs could benefit from adjustments to modules such as social networking and collaboration to ensure an even more effective and integrated approach. It is also important to mention some limitations of the study related to the sample, and in future studies, it would be interesting to administer the program in different universities. On the other hand, the measure used to evaluate the sessions could be improved in future studies with another type of Likert scale and more detailed questions about each aspect of the intervention/session.

Data availability statement

The raw data supporting the conclusions of this article will be made available by the authors, without undue reservation.

Ethics statement

The studies involving humans were approved by Commission of Social and Human Sciences of the University of Minho. The studies were conducted in accordance with the local legislation and institutional requirements. The participants provided their written informed consent to participate in this study. Written informed consent was obtained from the individual(s) for the publication of any potentially identifiable images or data included in this article.

Author contributions

CS: Conceptualization, Investigation, Methodology, Writing – original draft, Writing – review & editing. CC: Conceptualization,

Writing – original draft. MT: Conceptualization, Investigation, Supervision, Writing – review & editing. AS: Conceptualization, Investigation, Methodology, Supervision, Writing – review & editing.

Conflict of interest

The authors declare that the research was conducted without any commercial or financial relationships that could be construed as a potential conflict of interest.

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