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Psychology in Education and Health

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Foreword

The Department of Psychology of the University of Évora and the Institute for Psychology of the University of Leipzig organized jointly the II Leipzig-Évora Scientific Meeting in Psychology, with the purpose of consolidating academic and scientific cooperation between both institutions, fostering mutual knowledge of scholars, scientists and students, broadening common scientific production and reinforcing institutional relations.

The meeting was a forum of scientific discussion and interchange of information on the current research fields of the participants.

This volume, called *Psychology In Education and Health* contains the main contributions presented by scholars of Leipzig and Évora, as well as by guests from the University of Madeira (Portugal) and the University of Veracruz (Mexico).

Papers on the application of Psychology in the fields of health, Well-being, education, child development and clinical were discussed. The main areas of research and application in modern Psychology are here represented, like

· Stress management
· Attention of elderly persons
· Health and Well-being
· Psychological consequences of disasters
· Research on personality
· Learning at school and at the university
· Emotional development
· Family interactions

The aim of this volume is to inform other scientists on the current developments of research on Psychology in our universities.

The Editors

A research program on stress management for health professionals

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Abstract Occupational stress has been considered a serious public health problem. Nursing is a highly specialized work done under conditions of considerable pressure, therefore a stressing profession. Stress in nurses has considerable implications on their health and on the quality of their service, and it is associated with considerable economic costs. The current contribution is a report on the stress management line of research carried on presently in Portugal. The efficacy of a stress management intervention program in a nursing professionals sample is assessed through a quasi-experimental multiple baseline design in several groups of health professionals. Three studies with different groups of nurses in different hospitals have been conducted. Preliminary results show significant levels of stress reduction, as well as an improvement of the number and efficacy of the coping skills of the participants.

Keywords *Occupational stress; stress management; multiple baseline design; nursing; cognitive-behavioral therapy.*

Introduction

Over the last two decades, stress research has known a significant increase, since stress has been recognized as a major public health problem. This is especially true for research on occupational stress. According to the American Institute of Stress, 80% of work-related accidents are related to stress and the European Foundation for the Improvement of Living and Working Conditions stresses one-third of the active population is affected by stress (Richardson & Rothstein, 2008). The latest data on stress in health professionals seems to support the hypothesis that stress is essentially visible in negative aspects, namely absence of well-being, low satisfaction, physical and psychological complaints and absenteeism (Irving, Dobkin, & Park, 2009; Silva & Gomes, 2009). According to the European Agency for Health and Safety at Work (2007), stress affects at least one in five workers in Europe and is one of the four most reported occupational health problems. Consequently, the term "stress" has become a common word both in scientific and in popular language, a situation leading to a lack of precision. The increasing number of research papers on "stress" makes a scientific analysis difficult. To avoid such a problem, in the present study we will take into account only scientific studies of stress, privileging the psychological point of view. Moreover, we will concentrate our analysis on studies focused on health professionals with emphasis on those made in Portugal, although there are not many (Silva & Gomes, 2009).

Walter Canon (as cited in Lehrer, Woolfolk, & Sime, 2007) defined the modern biomedical concept of stress as a reaction of somatic homeostasis to external threats, inducing a mobilization of bodily resources to deal with the circumstances. On the basis of this definition is the fight-flight-model introduced by Cannon in the motivational theories, according to which a set of external threats

triggers a fight or flight response in the organism. As we shall see next, the original definition of Cannon has been improved with concepts contributing to clarify the role of stress in human life.

Hans Selye (1975) defined stress as a non-specific response of the organism to a demand in his theory of General Adaptation Syndrome, which conceptualizes stress as a set of stereotyped physical responses encompassing three phases: the alarm stage, the adaptive-resistance stage and the exhaustion stage. The first stage is equivalent to Cannon's fight-or-flight response. First, there is an initial decrease in the resistance of the organism (shock reaction) followed by the opposite reaction (counter-shock), during which a mobilization of the body's defense resources takes place, triggering a reaction of the sympathetic and parasympathetic nervous system. During the second phase (adaptive-resistance), when the stressor is no longer present, homeostatic processes return the body to the state before the arousal. Finally, the third exhaustion phase results from excessive metabolic requirements arising from a prolonged alarm stage. Further, Selye considers stress as an essentially biological and organic phenomenon, whose nature is not always counterproductive, because there is a "good stress" (eustress) and a "bad stress" (distress). The eustress definition posits a beneficial stress reaction, activating the subject in dynamizing situations, whose purpose is personal fulfillment and pleasure. In this way, stress can be considered as a positive state, since it can be considered a process, contributing to adapt the organism to situations of risk. Distress, on the other hand, as a negative type of stress reaction, is a consequence of an individual's inability to adapt to a certain stressor, increasing the wear and tear and the sense of hopelessness.

Lazarus (1984) added to this conception the psychological element, postulating that stress can be a consequence of a perceived stimulus, that is, the organic and psychological state called stress is also the consequence of a cognitive evaluation of the subject. Lazarus proposed that the perception of stress (which he called appraisal) determines whether there is or not a response to it, and whether the response is positive or negative. This concept opened up the possibility of having varied responses to the same stressful event. Lazarus defined the stress according to a transactional model, which focuses basically on the cognitive processes, developing around a stressful situation as a result of the relation between the person and the environment. These relationships depend on the impact of the environmental stressor, the impact being mediated by the assessments made by the person, and depend on the personal, social and cultural resources available for the person to cope with the stress situation. Further, if the individual feels stress or not depends of three aspects of the cognitive assessment process, namely, the primary appraisal, the secondary appraisal and the reevaluation. In the first stage, the person tries to know if the situation is harmful or beneficial, relevant or irrelevant to him. In the second stage, the person evaluates the means available to him or her to deal with the situation, in order to avoid harmful consequences or to anticipate the beneficial aspects. In the last stage, the person ponders the possibilities of action according to the collected elements. In short, the nature and magnitude of our psychological reactions and physiological activation are determined by the appraisals we make of certain situations (Lazarus & Folkman, 1984).

McEwen (1998; 2003) introduces one more important concept, allostasis, referring how the body deals with a dangerous situation. Even if the fight or flight response is an innate reaction to deal with a threat, this process can undergo changes through the exposure to a persistent stressful situation, changing the sense of the subject's innate reaction, potentially turning it against the body itself. Internal agents (genetic, neural or hormonal mechanisms) or external (physical and social environment) may give rise to new situations, which may or may not be predictable. It is important to note that the activation of allostatic systems does not always cause pathologies and it does not occur only during stress situations. These systems can be activated by demands linked to the life cycle of the organism, as well as by unforeseen and crisis situations. A pathological process is triggered if the energetic cost of the activation is too high, opening the possibility of damage

to the organism. Stress can then be considered an adaptive phenomenon that, however, becomes maladaptive and even a source of problems and disturbances in certain circumstances (McEwen, 1998; 2003; McEwen & Wingfield, 2010). On the basis of the above concepts, Schröder and Reschke (2010) describe stress as a quality of psychobiotic regulation that occurs as a directed reaction in situations of critical overload. Through this regulation, the subject is able to solve a characteristic situation, or at least to optimize his/her reactions to the situation. A distinction is made between acute and chronic stress. Acute stress refers to a successful reaction of psychoenergetic preparation directed to a target, when a balance between the person and the environment is not reached. Whereas chronic stress occurs when the person cannot solve, or at least reduce, a contradiction between the organism and the environment through appropriate actions, leading to a persistent situation of threat against the own needs.

Occupational Stress

Stress-inducing situations are events, producing stress in human beings, which can be of diverse nature (psychological, physical or social) and external or internal to the individual. The working conditions in which the professional activity of a person develops are stress-inducing circumstances for most individuals (Niosh, 1998). When the manifested stress refers specifically to the function performed, this is the so called occupational stress. Occupational stress can cause unusual and dysfunctional behaviors at work and contributes to poor physical and mental health. In the short term, it can lead to a variety of disorders and diseases, from chronic fatigue to depression. In extreme cases, it can lead to psychiatric disorders (Henry & Evans, 2008; O'Donovan, Doody, & Lyons, 2013). The negative effects of stress can be reflected at the physical, psychological and / or behavioral level. At the physical level, a variety of signs and symptoms may occur, such as headaches, shoulder and neck pain, weight gain or loss, constipation, shortness of breath, heart palpitations, and increased blood pressure. At the psychological level, we find problems like insomnia, depression and anxiety. At the behavioral level, the symptoms are nervous tics, chronic fatigue, indecision, loss of work efficiency, alcohol and tobacco abuse, speaking quickly, difficulty in relaxing, among others. The negative effects of behavioral responses to stressors can affect both the individual and the organization in which he or she practices his/her profession. (Cooper, Dewe, & O'Driscoll, 2001; Hespanhol, 2005). In response to stress challenges, the scientific community has developed techniques for stress management. Stress management approaches include a variety of techniques, constantly evolving. Table 1 shows some classic stress management techniques. The stress management program that we presented in this paper is a reorganization of classical techniques systematized and proved by Schröder and Reschke (2010).

Table 1.   *Classical ways of managing acute stress states (Schröder & Reschke, 2010)*

Instrumental problem-focused. Influence on stress-inducing conditions *Examples:*	Emotion-palliative focused. Influence on body-emotional reaction *Examples:*
Actions to solve the problem	Relaxation
Change of communication behaviour	Distraction
Trying to change a situation	Sport practice
Changing the own values	Avoidance of the stress-inducing situation
Changing the own daily routines	Seeking confort
Among others	Changing one's inner dialogue
	Changing the own goals
	Reappraisal of stressors and attempts to manage stress
	Among others

Stress among health professionals

In a classic study, Menzies (1960) defined nursing as a stressful profession: the need to take deal with orders and with patients may lead nurses to experience feelings incompatible with their professional performance. These claims have been corroborated by later studies. Mark and Smith (2011) showed that health professionals suffer from the negative effects of stressful work: 27% of all hospital employees were classified as having above-average stress levels and absenteeism rates (4.82%) and 45% of nurses stated that stress at work had caused a disease or worsened an existing one. Professionals working in hospitals are confronted with emotionally strong and diverse situations (e. g. death and illness), able to lead to anxiety and to physical and mental tension. Thus, these institutions have characteristics generally related to stress, such as hierarchical relationships, the need to coordinate different tasks ran by different groups of professionals, and the high level of professional specialization. The knowledge nurses have of diseases and disorders does not make them immune nor they have a higher resilience. It is important to note they are daily dealing with death and suffering and can need psychological support in spite of their knowledge and preparation (McIntyre, McIntyre, & Silvério, 2000). According to Srinivasan and Samuel (2014), the nursing profession is by nature an occupation exposed to a stressful workload, which is in turn related to physical and psychological health problems. A very important feature associated with the activity of health professionals is the responsibility for human beings. Night shifts can reduce social and/or family activities, with negative influences on nurses' health. Studies carried out in Portugal found that nurses presented higher levels of stress than physicians or teachers. The main sources of pressure and stress seem to be related to the work climate and organizational structure, to career and professional achievement and to leading roles. Nurses are professionals with a higher level of absenteeism in Portugal. Work overload and lack of resources are the main stress inducing factors in health professionals. A greater probability for stress problems has been found in female, in less experienced and in unmarried nurses, and in those working at health centers and in rotation shifts (Gomes & Cruz, 2004; McIntyre, McIntyre, & Silvério, 2000; Melo, Gomes, & Cruz, 1997; Silva & Gomes, 2009). These studies show the importance of the stress problem among nurses in Portugal and the urgency of research on intervention programs. Nevertheless, the number of studies on intervention techniques to reduce stress in health professionals is comparatively low, in Portugal

and in the rest of the world. Some studies of stress management programs for nurses seem to show that cognitive-behavioral interventions, relaxation techniques and psychoeducational programs can be effective in helping nurses to cope with personal stress and to reduce it (Hersch et al., 2016; Kravits, McAllister-Black, Grant, & Kirk, 2010; Martín-Asuero & García-Banda, 2010; Orly, Rivka, & Dorit, 2012; Sarid, Berger, & Segal-Engelchin, 2010). Other projects applied around the world obtained an improvement of subjective physical and mental health, empathy and well-being through the practice of mindfulness (Foureur, Besley, Burton, Yu, & Crisp, 2013; Mackenzie, Poulin, & Seidamn-Carlson, 2006), or using progressive muscle relaxation (Patel, 2014). Consequently, it is urgent to carry out controlled studies on stress management programs in Portuguese nurses. We agree with authors such as Woolfolk, Lehrer, and Allen (2007), in the sense that the statistical design used in stress studies may not be the most appropriate for an examination of its complexities:

The real word utility of a therapeutic method – its effectiveness – requires, on the other hand, that the impact of therapeutic techniques be demonstrated in a study with high external validity. Effectiveness research, exemplified by the recent generation of "services research" studies, attempts to examine the impact of clinical interventions in everyday real-world contexts. In such research the external validity of the research may be accorded more importance than considerations of internal validity, resulting in the use of systematic naturalistic methods or quasi-experimental designs (Woolfolk, Lehrer, & Allen, 2007, p. 4).

A quasi-experimental design seems to be the best option. Additionally, we consider a therapeutic technique must be clinically powerful in order to provide the patient with sufficient relief from suffering, sufficiently acceptable to the population to generate a high rate of adherence to treatment, effective and cheap. Consequently, in the current study a stress management program developed by Schröder and Reschke (2010) is applied to a sample of nurses on a quasi-experimental multiple baseline design, using quantitative and qualitative measures to assess the results. This is the first study of this kind in Portugal.

Therefore, the specific objectives of the present study are: 1) to make a contribution for stress management techniques in nurses; 2) to implement training programs for skills to reduce stress levels, and; 3) to verify scientifically the effectiveness of the applied techniques. Following research questions were considered: a) Does the intervention produce positive results? b) Are the obtained results due to the intervention or to other variables? Six hypotheses were raised: H1: the stress management program reduces stress levels according to the instrument "Stress Test". H2: the stress management program decreases the stress levels according to the instrument "Stress? Your little personal test." H3: The stress management program decreases stress levels according to the instrument "Qualitative Stress Evaluation". H4: the results of the three previous measures coincide. H5: improvements occur at the onset of the intervention. H6: improvements are maintained after the intervention.

Methodology

Participants

Participants were characterized through a sociodemographic questionnaire, consisting of 6 quick response questions concerning age, gender, marital status, number of children, weekly working hours and years of experience. The sample consisted of nurses, mostly female, with ages ranging from 23 to 59 years, and with a variety of professional experience, civil status, and number of weekly working hours.

Instruments

The stress management program "Optimistic Stress Management" (Schröder & Reschke, 2010) was used as intervention instrument. It is aimed to develop and improve the subjects' stress management skills. These skills concern an active management of stress: control of negative feelings, self-stabilization and planning of the future, discovery and use of social resources, identification of sources of well-being and learning, and relaxation exercises. As for the measures, in the current study were used two quantitative instruments, namely, the "Stress? Your Own Little Personal Test" (SYOLPT) (Schröder & Reschke, 2010) and the "Stress Test" (ST) adapted from Reschke (2011), as well as a qualitative instrument, the "Qualitative Stress Assessment" (QSA). The SYOLPT questionnaire is a 7-item measure of stress in which participants are asked to classify their stress experience according to a 4-point Likert-type scale: (1) it does not correspond; corresponds little; corresponds fairly; fully corresponds (4). A score summing the values obtained in each question is obtained for each participant. A score of less than 10 points. A score greater than 18 points indicates that stress is a clear problem and an immediate intervention is desirable. The ST instrument is a 30-item questionnaire concerning physiological, cognitive and emotional symptoms of stress. The instrument is divided three parts, each one with 10 items devoted to each of the above mentioned stress symptom dimensions: a) body symptoms, b) cognitive symptoms and c) emotional symptoms. Each participant evaluates his/her own stress symptomatology in a 6-point Likert-type scale: (1) it does not correspond, (2) it corresponds little, (3) it corresponds sometimes, (4) it often corresponds, (5) it corresponds very much, (6) it always corresponds. QSA is presented in a questionnaire format, allowing a qualitative evaluation of the stress experienced by the participant in the previous week: life areas with most stress, main consequences of the experienced stress, strategies to reduce stress, and the corresponding effectivity of the strategies.

Procedure

After obtaining a signed consent of the institution and participants, the above mentioned instruments are applied to the nurses. Nurses in psychological or medical treatment are excluded. Married (or living together) couples are not allowed in the same intervention group. Participants are then divided into three (sometimes four) groups, with the purpose of each group starting the training phase in different moments (see Table 2). The stress levels of the participants are evaluated on a weekly basis independently of the phase. The length of the baseline phase is different for each group, because each group starts the training phase in different weeks. During the training phase, the participants undergo through the "Optimistic Stress Management" program once a week (90-minute session) for five consecutive weeks. As previously mentioned, a quasi-experimental inter-subject multiple-baseline design is applied with successive application of the independent variable (training package) at different times and through different participants. After the training phase, the stress level of participants is evaluated weekly during several weeks (follow-up phase). Table 2 presents the basic timing of intervention phases, namely, baseline, intervention and follow-up.

Table 2.   An example of a multiple baseline intervention scheme for 4 participants.

Participant 1	Baseline	Training						Follow Up														
Participant 2	Baseline						Training						Follow Up									
Participant 3	Baseline												Training						Follow Up			
Participant 4	Baseline																		Training			
W E E K S	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23

Preliminary results

So far, three studies with different groups of nurses in different hospitals have been conducted. Figure 1 shows the type of data obtained at the moment. The graph shows the stress levels attained by three nurses (A, B and C) in the "Stress Test" during 15 weeks, comprising the three phases of the study (baseline, training and follow-up). In spite of individual differences, the stress levels do not change without training, they tend to be lower after training and they tend to be maintained several weeks after the end of the training. These data tend to coincide with other quantitative measures obtained with SYOLPT and with a qualitative assessment of participants with QSA. Similar results have been obtained in other studies, showing that training reduces stress levels according to the measures obtained through the three above explained instruments. Moreover, the multiple baseline design shows that decreases in stress levels occur as a consequence of training. The applied training program seems to be able to help nursing professionals to learn adequate managing strategies to cope with stress. Nevertheless, the studies have not yet been completed. Definitive data will be presented in the near future.
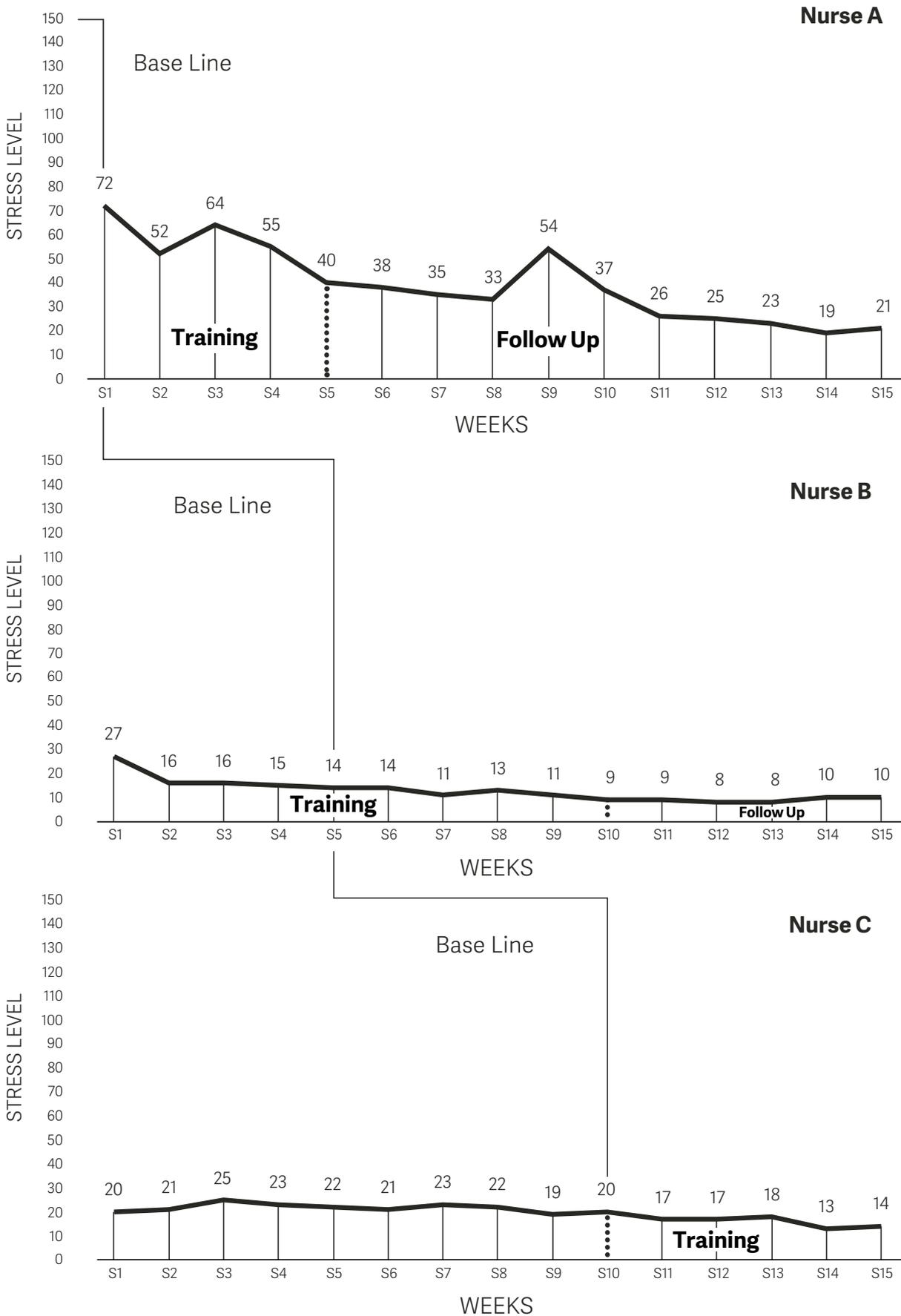
Figure 1. Stress levels according to the measure "Stress Test", in the participants A, B e C, in each phase of the present study (baseline, training and follow-up).

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Stress and Well-being in inclusive schools

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Introduction

In 2006, the Portuguese Government adopted the First Action Plan for the Inclusion of Persons with Disabilities or Disability for the years 2006-2009. With the publication of Decree-Law no. 3/2008 inclusive education for all children in regular schools came compulsory. To support this policy it was adopted the Biopsychosocial Model of assessment and intervention and the International Classification of Functioning, Disability and Health [ICF] (World Health Organization [WHO], 2001). Its use and application in the assessment procedures for describing the functional status of people more fairly and valuing their capabilities was progressively adopted in Special Education Procedures at Regular Schools.

In a short period of time, the educational community (teachers of special education, regular education teachers, administrators, and other practitioners), had to compulsory use an extensive document of the World Health Organization in Education – ICF. Since then, it has been developed various training/information across the country that aimed to enlighten and empower the educational community to include and teach all students in regular schools. The Ministry of Education began by promoting information and training sessions and direct follow-up in schools, with the collaboration of universities and polytechnic institutes, it implemented a Special Education Training Course, which involved special education teachers and regular teachers (Candeias, Rosário, & Saragoça, 2013; Saragoça, 2012). In the most recent recommendation on training for kindergarten, Primary and Secondary Education Teachers, the National Education Council (Conselho Nacional de Educação [CNE]) argues that this should focus on the various dimensions of professional development and that the influence of the training in the career progression should be diminished. It sustains too, that teachers who are waiting for a place to work or with precarious employment bonds should also be able to attend training (Recommendation no. 4/2013).

The ICF model and the underlying changings in teachers' daily work

ICF is a document from the WHO which was approved in 2001 and whose official version in Portuguese dates from 2003, and was chosen by the Ministry of Education [ME] as a framework reference in the process of assessment and intervention for students with disabilities. The assessment supported by the ICF (and the version for children and youth, ICF-CY) examine the child or young person according to different points of view: components of functioning and disability and contextual factors, as well as the interactions established between them (General Directorate for Innovation and Curricular Development [Direção-Geral de Inovação e de Desenvolvimento Curricular [DGIDC] 2008; 2009). In order to do so, the contributions of several stakeholders, such as the classroom teacher/director of the class, special education teacher, career, social worker, therapist, psychologist, health services, operational assistants, and others to consider are essential to act as a multidisciplinary team. This team are responsible to develop the whole process regarding the

assessment of the student; they will have to determine the responsibilities and the educational measures to be applied and decide on what will be the basis for preparing the Individual Educational Program [IEP] to be approved by the Pedagogical Council and ratified by the Director of the School.

These changes require new educational practices, which can be a source of stress for teachers working with children and youth with disabilities (e.g., Gersten, Keating, Yovanoff, & Harness, 2001), as a consequence of higher responsibilities associated to a population usually more difficult to motivate, to teach and to evaluate (Carlotto, 2011; Pinto, & Alvarez, 2016; Queiros, Milheiro Silva & da Silva, 2015). Some studies indicate that the more teachers perceived the stressful situation in question as a threat or loss, that generate more emotional exhaustion, the more teachers' Well-being decrease and the difficulties with the management of such students, and thus their learning abilities and Well-being in school increases, creating conditions for students' alienation, disorientation, school failure and drop-out (e.g., Boujut et al., 2016; Evers, & Tomic, 2003; Whitaker, Dearth-Wesley, & Gooze, 2015). New professional functions imply reckonings that can be perceived by teachers as an opportunity or as a difficulty. This assumption justifies the evaluation of stresse and burnout in specialists and non-specialists teachers working in mainstream schools with students with disabilities. In the case of Portugal, it is important to mention that there is few research on stress and burnout in special education teachers.

Nevertheless, these studies show similar conclusions as international studies (e.g., Jesus, 1996, 2000, 2002, 2006). For instance, Cruz (2012) asked special education teachers (N=51) about stress sources in the work and found as main problems a lack of coordination between special education teachers and regular teachers concerning time distribution, an excess of time devoted to bureaucratic work and, some times, a great number of students with disabilities to be taught jointly by regular and special education teachers during the inclusion process. A lack of coordination concerning time distribution has been pointed as a main obstacle for the development of a sound collaboration structure and a major limitation at school. Pinto, Lima e Silva (2005) studied 777 regular teachers and his results showed that 54% of them considered teaching profession as very stressful or extremely stressful, due to indiscipline of pupils and time pressures. Additionally, 6.3% revealed high burnout levels and 30% were in a risk situation.

Several authors have pointed to difficuties in the collaboration work of both types of teachers, especially limitations imposed by regular education teachers. McLeskey and Waldron (2000) found coordination difficulties in the classroom related to a lack of a proper education for working with disabilities in regular teachers, as well as lack of time to work jointly and make necessary adjustments. Glat (2007) considers that the daily work is the main difficulty for regular teachers working with children with disabilities in regular classrooms, due to the presence of a diversity of pupils requiring each of them special and different attention in their learning process. Some studies have found that teachers having more experience with children with disabilities display more positive attitudes to inclusion (Čagran, & Schmidt, 2011; Jerlinder, Danermark, & Gill, 2010; Rakap, & Kaczmarek, 2010). Portuguese studies coincide in these aspects; i.e. Pinto and Morgado (2012) found that the attitudes of regular teachers to inclusion is influenced by the experience of working with children with disabilities. In this sense, it is also evident that a more positive attitude to inclusion is correlated with higher levels of exhaustion and burnout because teachers try to cope with all the diversity in the classroom. Sometimes, that became demanding and difficult, generating a feeling of frustration and tiredness (Talmor, Reiter, & Feigin, 2005). Stress and burnout in regular and special education teachers is then a complex and multidimensional problem, resulting from an interaction of individual aspects and working environment.

Stress and burnout in regular teachers and in special education teachers

Teaching has been considered a major stressful profession. The International Work Organization has classified teaching as a profession of high physical and mental risk (Jesus, 2000; Picado, 2005). Teachers participating in inclusion processes seem to be prone to burnout states, health problems and exhaustion, incapacitating them to respond adequately to the pupils' needs. Cecil, Christopher and William (2002) questioned 658 teachers about leaving the area of special education. They found a higher rate of persons leaving the profession compared to regular teachers. A majority left the area because they were overstressed by the pupils' needs and the responsibility, and they felt disdained and without power. Also Stempien and Rogers (2002) studied 116 teachers of regular education and special education and found special education teachers is the most unsatisfied and frustrated group.

Only in Greece are results quite different. Platsidou and Agaliotis, (2008), found in 127 special education teachers low and medium levels of stress and slightly high levels of satisfaction. It seems to be due to factors related to the work conditions in the classroom and the good collaboration with other specialists and parents.

Portuguese studies coincide rather with the former international results. Carlotto (2002) studied 88 regular teachers and found among them high rates of *burnout*, characterized by physical and emotional exhaustion, anxiety, irritability, sleeplessness, even alcohol and drug abuse. Baptista (2013), found negative feeling and problems of self-esteem and wellbeing in 90 regular and special education teachers working with students with disabilities, pointing to the work environment as a cause.

The variables associated to higher levels of stress have been a field of research. In spite of the lack of agreement among different authors, some common factors have been identified (Seibt, Spitzer, Druschke, Sceuch, & Hins, 2013). These authors found significant differences related to gender, where women showed higher stress levels, and related to educational level, where teachers with lower education showed higher stress levels. Nevertheless, these data have not been confirmed by other authors. For instance, Esteras, Chorot and Sandin (2014) studied a sample of 171 regular teachers, looking for predictive factors for stress and burnout and found higher stress levels by male teachers. No differences were found concerning educational level, but authors point out teachers with a higher education are prone to show higher levels of emotional exhaustion

In this context and it seems pertinent to carry on a study on the situation of Portuguese teachers, especially due to the fact that radical changes have occurred in the educational system in recent years, as a result of inclusion processes in the regular school.

Now, stress in teachers is a variable that can influence the performance of children at school (e.g. Boujut et al., 2016; Collie, Shapka, & Perry, 2012; Evers, & Tomic, 2003; Whitaker, Dearth-Wesley, & Gooze, 2015). Consequently, it seems necessary to investigate stress and burnout conditions of teachers working presently in the educational system, as a first step for further research on the impact of those conditions on children at school and on possible intervention measures, as we plan to present in future work.

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Rights, Freedom and Opportunities: how are they experienced by the elderly in an institutional context?

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Abstract

The progressive aging of the population has led to several number of legislative measures in this area. However, the way society, in general, looks at aging is also one of the necessary changes. In fact, one of the blocking factors of aging societies is related to the social meaning that is attributed to old age. The strategy of protection for the elderly includes the strengthening of elderly rights, particularly in terms of their independence, active participation, care, personal fulfillment and dignity (Resolution of the Council of Minister No. 63/2015). Faced with an aging society, residential structures are one of the important answers for the elderly population in Portugal nowadays, and should enhance the quality of life of the elderly through the maintenance of their identity, rights, independence and autonomy. This part of the study intends to know the experiences of the elderly in residential structures, identifying their perception about their rights, specifically the decision power, freedom, autonomy and opportunities of their exercise. Data was collected through semi-structured interviews with 20 elderly individuals aged 80 to 91 years and treated through content analysis. The elderly considers as important five main rights: the right to care, freedom, health, retirement and active life. More specific rights, such as decision-making and freedom of action and expression, are mainly perceived as non-existent or conditioned in the institutional context. However, the right to autonomy and its exercise are more present. The results show the elderly as a low active part in residential institutions, in which the welfare practices are still dominant.

Keywords

elderly; residential structures; rights; autonomy; decision power; freedom.

Introduction

Both society and the phenomenon of aging are realities in fast transformation, exhibiting tensions and imbalances, that lead to the necessity of looking for new understandings of aging and the role of society in their responses. Aging must be understood in the crossing of diverse changes in the current world, such as: demographic and labor changes, individual changes, family changes and changes of the state role. The first relates to an increase of the aging population and a decrease in birth rate, as well as an increase of labor instability and mobility. According to the data released by the National Institute of Statistics, Portugal has the 4th highest value in terms of proportion of the elderly, i.e., 141 old per 100 young people in 2014 (National Statistics Institute [INE], 2015). In the future, the number of young people is expected to decline from 1.5 to 0.9 million and the population over 65 years old will increase from 2.1 to 2.8 million between 2015 and 2080 (National Institute of Statistics [INE], 2017). The familial changes mainly relate themselves to changes in its structure and

to the decrease of the availability or possibility to care for elderly relatives. Regarding to individual changes, we can verify that in the elderly there is an increase of vulnerability in terms of health, increasing loneliness, increasing number of people living alone (some in isolation) and more vulnerability due to widowhood. In fact, widowhood is one of the factors that must be taken into account as it drags down the source of instrumental and emotional support, once the conjugal relationship is one of the main sources of emotional support and of care (Zettel, & Rock, 2004). Faced with all these changes emerges the necessity of transferring the care to a professional group, bringing us back to some changes in the state role itself (Neto, & Corte-Real, 2013), through the improvement of social equipment networks, and the adoption of a different perspective regarding the elderly, which can valorize their independence and autonomy.

Changes in the role of the state in the face of aging are consonant with the emergence of new perspectives that face it as a phase of biologically susceptible development, but also with gains (Carvalho, & Dias, 2011; Baltes, & Smith, 2003). Aging starts to be seen as a biopsychosocial phenomenon and as a process that happens differently for each person (Ballesteros, 2007; Fonseca, 2006).

The elderly population is not a homogeneous group, and there are relevant differences, especially between the third and fourth ages which, although different, should be considered complementary (Baltes, & Smith, 2003). The third age (between 65 and 75 years old) is associated with the concept of the young old and the fourth age with the concept of the old old, concepts mentioned by Baltes and Smith (2003) to show that this transition happens in developed countries between the ages of 75 and 80 (Olshansky, & Désesquelles, 2001). In the third age there are substantial cognitive and emotional reserves and particular strategies to manage losses and gains, while the fourth age is marked by more pronounced cognitive losses, prevalence of dementias and greater vulnerability in social terms (Azeredo, 2016; Ferreira, Silva, Jerónimo, & Marques, 2013). The balance between gains and losses can be sustained through strategies of selection, optimization and compensation, allowing individuals to find strategies to respond to emerging challenges, to achieve high levels of functioning and to use compensatory efforts to protect those already achieved (Baltes, & Dickson, 2001).

In Portugal, in 2015, the Council of Ministers approved a strategy to protect the elderly[1], which sets out several measures aimed at reinforcing: independence, participation, assistance, personal achievement and dignity. The state is beginning to consider the scientific visions of aging and to approach it in consonance, however, it is necessary to comprehend in which measure this new understanding of the elderly person, its necessities and rights, transposes to the responses of the institutional care.

The institutionalization of the elderly stands out as one of the answers most implemented in Portugal, especially when there is dependence or a concern with its eventual emergence, although this response arises with a negative social connotation (Pimentel, 2001). This type of formal care consists of elderly's residence in institutional structures and is mainly provided by private entities, as is the case of Private Social Solidarity Institutions[2] (forward PSSI).

Older people residing in most PSSI have medium/low incomes, being part of a population with few resources. Thinking about the mission and characteristics of institutional responses allows us to understand the experience of aging and its quality in this context. The implications of elderly's residence in institutional structures for their quality of life should be considered, taking into account

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1   Resolution of the Council of Minister No. 63 / 2015.

2   They are institutions set up on the initiative of individuals, not for profit purposes, with the purpose of giving organized expression to the moral duty of solidarity and justice among individuals, which are not administered by the State.

that the adaptation to contexts of collective living refers to a certain extent to an idea of deprivation of the experience of a world with greater emotional stability and independence (Guedes, 2008). Living in residential structures implies breaking a standard of living, changing social status, limiting autonomy and independence and reducing activities that were habitual. In this sense, there is a need to prevent and overcome the difficulties of living in a collective context, strengthening the quality of life in them.

The concept of quality of life is already present in the Portuguese legislative guidelines. In the literature, the quality of life emerges as a concept that encompasses multiple dimensions presenting an objective dimension (the real-life conditions of the subject) and a subjective one, i.e., the perception about the individual's living conditions (Fernández-Ballesteros, 1998; Irigaray, & Trentini, 2009; Schalock, & Verdugo, 2010).

Shaclock (2004) identifies eight dimensions of quality of life: emotional well-being; interpersonal relationships; material Well-being; personal development; physical well-being; self-determination; social inclusion and human and legal rights. Our opinion is that groups with some vulnerability need to see their rights strengthened, fulfilled and protected. In this sense we propose to investigate its meaning for the elderly and their presence in residential structures.

Method

Aim of study

The purpose of this part of the study, consists in knowing the perception that the elderly have about their rights, as well as the presence and meaning of the same in the institutional context where they reside. It is intended: i) identify the perception of rights that the elderly think they have; ii) to know the perception about the existing decision-making; iii) identify the existence of possibilities for autonomy and implementation of its decisions; iv) identify the perception about their freedom.

Participants

This study was composed by 20 elderly people (10 men and 10 women), with ages between 80 and 91 years old, institutionalized for over a year, in two Private Institutions of Social Solidarity in the district of Évora. The inclusion criteria for the constitution of the sample, the followed criteria were: a) being in a residential structure for more than one year; b) don't have cognitive impairments identified by qualified professionals; c) being a widower; (d) aged between 80 and 91 years.

Instruments and Procedure

Initial requests for authorization and informed consent were made to the institutions and participants. In the case of the participants who don't know read or write, the informed consent was read and their authorization was given verbally. Three exploratory interviews were conducted with open questions. Based on the data from these interviews and on a review of the literature, a semi--structured interview guide about elderly rights were constituted included four subtopics (General Rights, Decision Making, Executive Autonomy, Freedom) with a total of 11 questions. The interviews were conducted individually, audio-recorded and transcribed in full. To analyze the data we used content analysis (Bardin, 2016). The analysis procedures were organized around a process of categorization of elements grouped according to their common characteristics. Within each question

we defined categories and subcategories, identifying all registration units of qualitatively different meaning and forming a unit of record whenever there was evidence that a complete meaning had been expressed [3] (Grácio, Chaleta, & Rosário, 2007).

The counting unit consisted of counting the presence of all verbalizations of the subject's discourse (i.e., units of registration) belonging to a given category or subcategory and not in the number of times that each participant has referred them. The quantitative analysis consisted of a simple descriptive analysis using frequencies and percentages to identify the aspects most mentioned by the participants (Schiling, 2006).

Results

The results presented below refer to two distinct but complementary aspects of rights. One concerning the general rights of the elderly population. Another, on specific rights namely in the residential context.

General rights of the elderly

The perception of general rights is contextualized by age group (rights of the elderly) and by the specific context of life of these participants (rights in the residential structure). The elderly consider that there should be five general rights of this age group: the right to care (N=18, 6.5%), freedom (N=4, 1.4%), health (N=1; 0.4%) and active life (N=1; 0.4%). Only one participant showed that at this stage in the life cycle they no longer have any rights. The right to care is the most mentioned and is structured mainly by relation to quality of care (N=8; 2.9%) and affective-relational aspects such as affection and respect (N=6; 2.2%), is still referred to as quality food, safety, individualization and personalization of care.

> *"Be well treated" (Subj. 7).*

> *"... I think it must be the affection of other people..." (Subj. 20)*

> *"Respect... to be respected!" (Subj. 17).*

> *"There is no shortage of food, but it is badly made, it has no condiment, it has no taste, then there is no will to eat, everything is on the plate, then everything goes to waste because it has no taste at all" (Subj. 11)*

> *"That the people who care for us should take account of our situation... each in his own way, according to the situation" (Subj. 1).*

The right to freedom is the second most mentioned right and is conceptualized by the elderly as a general right (N=3; 1.1%) and as a right to expression freedom (N=1; 0.4%).

> *"The rights of freedom... They must have the freedom to live, to live" (Subj. 13)*

> *"(...) why should we be practically in a prison...? You can not talk, you can not say, you can not talk... that's sad! This is sad "(Subj. 4)*

Regarding the existence of elderly rights in the institution, there are two dichotomous opinions

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3   The coding of the registration units was performed by two evaluation elements in order to control biases, using consensus and reflection techniques to obtain evidence of content validity (Fonseca, Silva, & Silva, 2007).

practically with the same weight: that the rights previously mentioned exist in this context (N=9; 3.3%) and that they are do not exist (N=8; 2.9%). Some participants consider that the existence of elder's rights is dependent on the caregiver (N=3; 1.1%).

"They have, they have this right" (suj13).

"We do not have no... because if we complain we are not heard" (Subj. 17).

"Sometimes it is not the one who commands... it is them [the auxiliaries] who walk there" (Subj. 9)

Elderls' specific rights in the context of residential structure

The specific rights refer to the rights related to decision-making, executive auton- omy and freedom in institution.

The decision-making right was explored according to two different aspects: the elderls' decision-making in the institution and the decision-making over their life in general and in a broader way. Participants refer exclusively to the absence of their decision-making power in the institutional context (N=18; 6.5%)

"Choose, me? Nothing... I have nothing to decide "(Subj. 1)

"Nothing, I have nothing to decide in the institution" (Subj. 20).

Most of the participants consider that they do not have decision-making power over their life (N= 14; 5.1%), which is associated with conformism, age and losses of health, financial power and spouse.

"No... what I have, I have and it's over. I'm conformed with what I have! "(Subj. 1)

"My life is at the end... I am old, I do not see, I do not walk..." (Subj. 8)

"I do not decide anything, I tell the daughter that I need this or that and everything appears to me... My daughter is receiving the pension, dividing the money, paying... buy me everything that is needed and ready" (Subj. 12)

"Nothing else... I do not decide anything else! As a widow, I no longer decide anything! "(Subj. 4)

However, others consider that they still have the power to decide about their life (N=6; 2.2%) in an unspecified general way and regarding carrying out day-to-day activities, visiting their home and family. In any case, this decision-making over their life emerges as circumscribed and limited.

"I still decide my life." (Subj. 19)

"I can decide to sew, so I still do "(Subj. 9)

"Few thing, very few... just go to my house, see my grandchildren... my life is just going to see them..." (Subj. 5)

The right to autonomy was explored considering the institution's routines, the possibility of choosing activities and carrying out activities outside the institution.

All elderly people report that they can decide about bedtime (N=20; 7.2%). Regarding the possibility of determining the time to wake up, some say they can decide (N=12; 4.3%), while others indicate that there is no such possibility (N=8; 2.9%). In both situations we understand that this decision may be conditioned by the institution's own routines and rules.

"(...) at night, we lie down when we will" (Subj. 20)

"(…) I get up at 7am but if I want to get up a little later I also get up…" (Subj. 8)

"It's not like that… to get up… if you want to choose that, it changes the work of caregivers… and its complicated" (Subj. 1)

Regarding the possibility of going to the room during the day, most participants say that they can actually do it (N=14; 5.1%), while others say they can not (N=6; 2.2%). Some also report that this possibility only exists when they are ill (N=2; 0.7%).

"Yes I can… (…) since I came here… I rarely come, but sometimes I feel like it!" (Subj. 9)

"No, that's what they do not let… they do not let them go to the rooms…" (Subj. 1)

"(…) here, we only stay here if we are sick…" (Subj. 12)

Most verbalizations indicate the possibility of choosing activities (N=14; 5.1%). However, there is also the idea that there are few opportunities to choose interesting activities (N=4; 1.4%).

"Yes… gymnastics, for example… to the swimming pools (…). I can choose… other activities do not tell me anything… and I do not participate" (Subj. 5)

"(…) the time that you go here to do things awkwardly, they should have been doing here a school to learn to read… to say like this" I have this newspaper, or this paper and I still know what is saying here… "That's what it was, I already said there… instead of certain things, it was better… a guy learns to read!" (Subj. 3)

Some elderly report a withdrawal of participation in activities (N=7; 2.5%), due to functional reasons (N=5; 1.8%), lack of will, loss of interest or due to feeling excluded (N=2; 0.7%).

"I used to participate more… not now, I can not!" (Subj. 10)

"There are no activities… they go to the pools… and there are always the chosen ones, once they invited me, but I said I could not go… It's just that little group… just that little group! I am not interested in choosing anything…" (Subj. 17)

When questioned about the possibility of leaving the institution to perform any activity of their interest, most of the verbalizations indicate the existence of autonomy to do it (N=14; 5.1%). A closer analysis allows us to understand that such autonomy is governed by an "early warning" rule in the institution.

The consideration of lack of autonomy to leave the institution (N=7; 2.5%) is seen as due to: a prohibition on the part of their sons or daughters, a conditioning and dependence on the authorization of the institution or the existence of functional limitations. Only one elderly reported having no knowledge about this issue (N=1; 0.4%).

"I can… no one has hindered me so far" (Subj. 2)

"No, I have no order from my daughter… But I can not either. My physique can not, I have pains I can not walk there… "(Subj. 1)

"When I do not want to, that's when they leave!" (Subj. 11)

"I do not know if I could if I could not, I have not asked!" (Subj. 4)

The right to freedom has been exploited in terms of its existence in the context of the institution, particularly in terms of freedom in action and expression. The perception that the elderly have their freedom in action, or the possibility of acting according to their will, is considered mainly as

existing (N=14; 5.1%), as conditioned by the rules of the institution (N=7; 2.5%) and as non-existent (N=6; 2.2%).

"I have freedom, no one commands me except myself... I am free... to do what I know how to do" (Subj. 6)

"we have rules... no one can do what they want, we have to have that discipline... I think it's so!" (Subj. 19)

"No! It is not free not! (...)... I do not have the freedom to go get something and do... "(Subj. 4)

Freedom of expression is also mostly considered as existing (N=13; 4.7%), although some elderly consider that their opinions have little weight in the institutional practices.

"I can... complain, people complain, but there is nothing to do... they complain about food... but there is nothing to do" (Subj. 3)

Other elderly express the idea that their freedom of expression is conditioned by the consequences that can arise and by the concrete fear of reprisals or conflicts (N=4; 1.4%) and can even be non-existent for the same reason (N=3; 1.1%).

"There is always fear of reprisal..." (Subj. 17)

"I do not, I do not think, I do not want to... There were people who arrested me..." (Subj. 1)

When questioned about the possibility of making a complaint, most people report they can do so (N=15; 5.4%) but are afraid of the consequences (N=15; 5.4%). Residually, others reported lack of knowledge of the possible consequences that such an option might bring (N=3; 1.1%).

"(...) I can, sometimes it is necessary" (Subj. 7)

"I do not think so... I can not do it!" (Subj. 15)

"(...) I do not want to make complaints... a guy is always avoiding it, because this then falls into their hands and instead of treating a guy well treat him badly..." (Subj. 3)

"I do not know what could happen, I never did..." (Subj. 12)

Conclusion and Discussion

Human rights are one of the most important civilizational achievements emerging as a guarantee of individual and social well-being. These rights are changeable and are evolving. In this sense, the rights of the elderly have been gradually consigned. Apart from all rights inherent to any citizen, the rights of the elderly are related to: independence; participation; assistance; dignity; respect for freedom and own choices; non-discrimination, social protection, protection against violence and abuse, economic security, health promotion, family and community living. In the European Social Charter (1996; approved by the Portuguese Assembly of the Republic No. 64-A/2001), it was pointed out that institutionalized elders must be guaranteed adequate support in taking decisions on the institution and guaranteeing their fundamental rights (Resolution of the Assembly of the Republic no. 64-A/2001) In the present study, the elderly refer to the right to care, health, retirement, active life and freedom as their general rights. The right to care emerges as the most verbalized right, understood as consisting of a relational dimension marked by affection and respect and a more instrumental one, linked to the basic care of treatment, safety and food.

More specific rights such as decision-making, executive autonomy and freedom in the context of the residential structure were explored. The possibility of making decisions regarding their life in the institution is perceived by the elderly as non-existent. This non-existence is related to two aspects. i) One, related to the culture, rules and routines of the institution and lack of human resources. ii) another related with the health status of the elderly, which leads them to a state of dependency on the caregiver and a restriction of their wishes, which are limited to basic care without any other aspirations (Jakobsen, & Sorlie, 2010).

As in the various legal documents[4] on aging, a situation of physical decline can not mean a reduction of rights and the possibility for the elderly to determine their lives in line with their interests and values. The notion of non-existence of decisions about their lives in general is also notorious and linked with conformism, lack of perspective and hope, old age, health vulnerabilities, loss of financial control and death of the spouse. The elderly consider autonomy in terms of sleep and rest routines in the institution (waking and lying during the day or at night). However, we found indicators that the institution's routines tend to overlap the individualization and free will of the elderly. These routines seem to be based on both explicit and latent rules of the institution. The elderly considers that there are activities that they can do in the institution, but the available activities are more related to physical and occupational health. In some elder's opinion, the activities are not very stimulating and do not correspond to some of their desires or to the role that such activities should play (i.e., to promote lifelong learning). In this sense, measures should be taken to promote greater involvement of the elderly. This implies providing stimulating activities that could contribute to an increase of development, interest in life and a sense of belonging. The data show the elders' right to freedom of expression as quite conditioned by the position of vulnerability resulting from their dependence on their caregivers and the institutional context in which they find themselves.

The elders' rights in the institutional context are determined and limited by this context, which constitutes a risk factor for the preservation of their identity. In summary, there are no measures or practices on elders' residential institutions that seek to effectively ensure a fundamental part of their quality of life, i.e., their rights as citizens and elders.

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4   Resolution 46/91 of the United Nations General Assembly; Article 23 of the Charter of Fundamental Rights of the European Union, 2000; Resolution of the Assembly of the Republic No. 64-A / 2001; Article 72 Constitution of the Portuguese Republic, 2005.

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PSYCHOLOGY IN EDUCATION AND HEALTH

«Rights, Freedom and Opportunities: how are they experienced by the elderly in an institutional context?» – *Luísa Grácio, & Adriana Bugalho*

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Integrating the voices of ordinary people in the understanding of Well-being

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Abstract
The aim of this communication in the II Scientific Meeting in Psychology is to present some of the research, that is being done at the University of Évora, around the construct of Well-being, and to discuss the importance of integrating the voices of ordinary people in the understanding of Well-being. We will invite and argue for qualitative research that includes and facilitates our research participants' thoughtful contributions about Well-being, in a rigorous and systematic way. We will also briefly discuss some findings of a previous study, about former psychotherapy patients perspectives about Well-being, to empirically illustrate our thoughts.

Keywords
Well-being; psychotherapy outcome; qualitative research; eudaimonic *Well-being; hedonic Well-being*

Introduction

Well-being is a core construct in life and therefore it is discussed outside the frontiers of psychology in areas such as philosophy, economics, or environmental sciences and, is a construct, that has an impact on the definition of health and developmental policies (e.g. Fujiara, & Dolan, 2014; OECD, 2011). Recently, in United Nations General Assembly the importance of "ensuring healthy lives and to promote the Well-being for all, in every age" was defined consensually as one of the "17 Goals for a Sustainable Development" for the near future (United Nations, 2015).

If Well-being is conceptualized as a goal to achieve, or as an indicator of development, it is relevant to discuss this concept and defining what Well-being really is.

In Psychology, the definition of Well-being is complex, since it may either be more related to the psychological functioning, or to affects and emotions. Different perspectives about the human nature, and how to live, about the importance of Happiness and the importance of Meaning (Baumeister, Vohs, Aaker, & Garbinsky, 2013) have originated two research and theoretical traditions about Well-being: the *eudaimonic* tradition and the *hedonic* tradition (Deci, & Ryan, 2000; Ryff, & Singer, 1998; Wong, 2011).

A full discussion of the Well-being substantial empirical work is beyond the scope of this presentation. It is important to state though, that the literature on Well-being reflects different definitions, conceptualizations, and research strategies enlightening at the same time the complexity of the construct (Seligman, 2011) but also the need for more conceptual and theoretical clarity. Addressing that need, Henriques, Kleinman and Asselin (2014) proposed a *Nested Model of Well-being* that incorporates four related but differentiated domains. The first domain is the subjective Well-being,

including the phenomenological Well-being; the second, the domain of the individual psychological functioning and mental and biological health; the third domain of Well-being refers to the physical, environmental and social context where the individual lives and; the fourth domain, regards the values and ideology of the evaluator.

This last domain underlines the evaluative nature of the construct since, as the authors of the Nested Model have pointed out, the notion that one has about the nature of the world, and of what it is to have a good life, grounds the epistemological context in which an evaluation of the individual Well-being is made. So, considering a more holistic construct of Well-being implies contemplating more, besides Happiness or Subjective Well-being, namely, health and functioning, the environmental context, and also the individual values and ideology. The individual values and ideology, or the voices of common people and their perspectives, have been rather absent from the empirical Well-being literature (Jongbloed, & Andres, 2015) nevertheless, an exploration of ordinary people views and perspectives, could be enlightening.

Looking at people perspectives' about Well-being may be particularly relevant since it allows for an open exploration of Well-being multiplicity of meanings in different contexts, and more importantly, it facilitates a comprehension that may leave the researchers frameworks or research traditions about Well-being on the background (McLeod, 2011) and more importantly, it facilitates the emergence of the person's views and understandings about their own Well-being. But, exploring people's ideas about Well-being is assuming the importance of the role of an introspective process into the subjective evaluation of Well-being. This evaluation allows the revaluation and revalorization of the experiences, and it permits the free and active agency of people in deviating from more objective or external scores about their experiences. Finally, it values people's authority in relation to experience, reflecting and valuing their lives different aspects (Alexandrova, 2005) in order to reach an evaluation of their own Well-being.

Another argument to the significance of listening to the ordinary people's perspectives about well-being is based on considering each person as a major and active contributor to their own processes (e.g. Bohart, & Tallman, 2010) and Well-being, and therefore, her or his insights, based on experience and knowledge, are essential in understanding how Well-being is related to her or his experiences and live events.

Although each person may have a different perspective about their own Well-being, common aspects may be found, and we may conceive areas were the exploration of the persons' experience of Well-being may be particularly relevant. Recently, we have been developing research about the person's perspective about Well-being regarding 4 processes: Well-being in the developmental process of aging; Well-being in persons diagnosed with obesity or excessive weight; Well-being in children and finally; Well-being in the psychotherapeutic process. To the best of our knowledge, the voices of these persons and have been, systematically, infrequently eared preventing to potentiate their contributions to the theoretical conceptualization of Well-being and of the psychological interventions to enhance it.

Until now, we have been defending for research that generally uses the voices of ordinary people in order to broaden the understanding of Well-being. Although not explicitly, it is also an invitation for the integration of a qualitative approach in our studies of Well-being, one that allows to explore, describe and understand people's complex experiences, as the complex experience of Well-being, in their live contexts.

As an example, we will present some findings of a study aimed to explore and comprehend how psychotherapy contributes to Well-being, in the perspective of former patients (Vaz-Velho, 2016). We will focus on how this study made possible to explore meaningful dimensions of former patients' Well-being, and to enlighten and illustrate the nature of the relation between psychotherapy and

Well-being.

Integrating people's voices about Well-being and Psychotherapy

Psychotherapy outcome studies have been traditionally focused on symptomatic improvement and only more recently they started to integrate other aspects such as improvements on life and social functioning, and Well-being (Orlinsky, 2009). Well-being has been pointed out as a relevant type of outcome of psychotherapy to be considered (Slife, 2004; Wampold, 2013) and that it could be argued that there is a call for psychotherapy research that contemplates psychotherapy, also, as a search for a meaningful life, that is full and worth living (Deurzen, 2009).

We (Vaz-Velho, 2016; Vaz-Velho, Ferreira, & Vasco, 2017) looked at patients' perspectives on Well-being as an outcome, considering that it could be particularly relevant since it allowed for an open exploration of Well-being multiplicity of meanings in the context of the psychotherapeutic process. Also, the exploration of patients' perspectives had been signalled as a significant research gap in general psychotherapy research, and had been advocated to be crucial in complementing the research on psychotherapy outcomes (Hill, Chui, & Baumann, 2013).

In-depth interviews were carried out with 16 adults, former psychotherapy patients. The design of the study and the analysis used a *Grounded Theory* (GT) approach (Dourdouma, & Mortl, 2012). Generally, the interviews explored the positive or negative impact of psychotherapy on Well-being, as well as other factors that may have contributed to their perceived Well-being; the subjective definition of Well-being; former patients' explanations about how, what happened in psychotherapy, promoted or reduced the sense of Well-being, providing illustrative episodes when possible.

After transcription, each interview was sent to each participant for feedback, and the transcripts and patient feedbacks were analysed following the principles of an hermeneutic version of GT (Rennie, 2006) to identify the common aspects of the experiences, but also its variety and uniqueness. Different credibility checks were incorporated in the study, namely trough the involvement of an external analyst.

From the several results presented and discussed (Vaz-Velho, 2016; Vaz-Velho, Ferreira, & Vasco, 2017) we want here to underline two aspects relevant for our present discussion: one regards the definition of Well-being and, the other, the complexity of the construct.

The most relevant dimensions of former patients' Well-being included a sense of peace, equilibrium and serenity; a sense that life has a meaning and that the meaning is given by close and important relations; happiness; daily small pleasures; freedom; openness towards life and the experience of living in the present. Nonetheless, each participant had a specific, and personal way of describing Well-being.

These results are important to our present discussion as more than a-half of the participants referred a dimension of Well-being related to peace, serenity and equilibrium and that dimension is almost absent from the main psychology models of Well-being (c.f. Ryan, & Deci, 200; Ryff, 2014) and have only a marginal role in Positive psychology, which is mainly focused on happiness and hedonic Well-being (Floody, 2014). These results also revels how ordinary persons may contribute to our understanding in unexpected ways.

At the same time, in other dimensions, the perspectives about Well-being fit beautifully with different psychology models. More than half of the participants defined Well-being as a sense of meaning that emerges from interpersonal close relationships, which is consistent with *eudaimonic* models of Well-being, models that presuppose a dimension in Well-being that values good interpersonal relations (Ryff, 2014) or proximity (Deci, & Ryan, 2008). And the Well-being's definitions as

happiness (Diener, 2012) and, as being able to have pleasure in daily life (Epstein, 1993) are closer to a *hedonic* perspective. In sum, the study of the peoples perspectives about Well-being can contribute to the discussion and empirical validation of the construct of Well-being.

Another relevant finding of this study is that it revealed the complexity of studying Well-being during a process, the psychotherapeutic process, and pointed out to 3 different aspects that will enlighten our comprehension about Well-being in future studies (Vaz-Velho, 2016).

The first one is the importance of longitudinal evaluation of Well-being along the psychotherapy process, since it fluctuated throughout and, when very low, could even be responsible for therapy drop out. The second one is the need to evaluate not only general Well-being but also specific dimensions of Well-being, since we found out that they are not always related: due to therapy people may evaluate to have had improvements in specific dimensions of their Well-being, for instance in their work context, but that, did not necessarily meant, that they considered that their general Well-being had enhanced; and finally, the importance of integrating the person's subjective perspective about Well-being, and about the ways in which the psychotherapeutic process can enhance it. If we believe that enhanced Well-being is considered one desirable outcome of therapy than, it would also be useful to understand how, in each patient perspective, it can be achieved trough therapy (Rennie, 2010).

We want to stress the relevance of qualitative research about ordinary people perspectives' which, as the study just showed, can make a contribution to the theory of Well-being and the relation between Well-being and the several processes or psychological interventions that we may want to study.

Despite qualitative studies do not aim at generalisations, they can provide with significant insights to rethink and reframe our theoretical models that should than be tested with different types of research designs. It is important to stress that the specific design and procedures have to potentiate participants' reflexivity by creating favourable conditions that allow people to elaborate on their experiences and perspectives, as well as feeling confident in expressing their views. Reflexivity is also needed to adequately analyse those contributions; all these methodological careful procedures are, unfortunately, very resources consuming.

The question we have to ask though it is if there are other ways of researching ordinary people's perspectives in such depth that give us confidence to validate results. If not, I believe that resources are in the end paid back.

These studies will possibly bring further depth and clarity to the construct of Well-being, and to the way it relates to other psychological or even physical processes, that so many of us in this scientific meeting, are quite interested in.

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The experimental study of personality: some methodological considerations and data

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Abstract   Personality has been traditionally studied through psychometric methods. These methods examine individuals according to their scores in tests, as part of a population distribution. Among other reasons, this explains why items and scores in tests are not descriptive or predictive of actual behaviors in real-time situations. The concept of personality should deal with the idiosyncratic consistencies of individuals' behavior, that make every individual different to others in the way in which interact with situational events. Current approaches do not deal with these consistencies, qualifying individuals in terms of population typologies. We present an alternative methodology and data to study "personality" as individual consistencies in interactive styles. Styles are conceived as idiosyncratic profiles that characterize individuals interacting with gradients defining situational contingencies. Styles must show consistent quantitative profiles in the same situation in different times, and in different particular but similar functional situations at the same time, as measures of temporal and cross-situational validity. Styles are identified through a functional classification of situational contingencies, and are evaluated through various sessions as real-time interactions under virtually presented contingencies. We show some preliminary data on one interactive style and functional situation: frustration contingency. Data represent the individual profiles showing consistent and idiosyncratic interactions in the frustration situation of the same six participants. This analysis seems to satisfy the predictive and descriptive nature of the concept of personality.

Keywords   *personality, individuality, interactive styles, contingency, frustration.*

Personality has been traditionally considered in terms of the organization of enduring traits that characterize the idiosyncratic behavior of individuals. Traits are either considered to be general aspects of behavior (Allport, 1961; Cattell, 1965; Eysenck, 1953; Guilford, 1959), or specific to types of situations (Bandura, & Walters, 1963; Hartshorne, & May, 1928; Mischel, 1968). In both cases, nevertheless, traits are always referred to ways in which individuals behave (acting or reacting) in relation to circumstances. Surprisingly enough, the assessment of personality traits has been done through standard tests or questionnaires and inventories that do not consider actual behavior (Cattell, Eber, & Tatsuoka, 1970; Hathaway, & Mckinley, 1940; McCrae, & Costa, 1987; Murray, 1943). This assessment strategy does not allow to identify the singularity of uniqueness in behaving that entails the concept of personality. Individuals are only compared as different to others in their scores in a population, but scores are not descriptive of any type of behavior. A score does not tell anything

about what individuals do, did, or may do in given situations or under certain circumstances. This explains why personality classifications consist of general categories in which all individuals fit with a higher or lower weight, depending on the scores being obtained in test or questionnaire situations, which are built supposing that items are pertinent samples or measures of a given trait. Items replace real situations and verbal responses replace real interactions. Personality assessment has resulted in allocating individuals in a population distribution assuming that they show a given amount of an operationally defined trait.

An alternative strategy is to conceive personality as interactive styles under different contingency situations (Ribes, & Contreras, 2007; Ribes, Contreras, Martínez, Doval, & Viladrich, 2005; Ribes, & Sánchez, 1992). The concept of interactive styles emphasizes the unique manner in which every individual behaves in relation to general types of contingencies. Contingencies are understood as interdependent relations between the individual and events conforming the circumstances of a situation. Therefore, situations can be functionally classified in terms of their contingencies organization under defined quantitative parameters. This approach allows to replace verbally-referred situations by different actual real-time situations, with the same functional characteristics irrespectively of the sceneries being represented. Interactive styles are concerned with the consistent ways in which each individual behaves in each type of contingencies organization. Actual performance in real time in each type of contingency situation allows for the identification of an idiosyncratic profile characteristic of each individual.

Interactive styles are conceived as biographical consistencies, that is, as the outcome of a personal history of interactions. Interactive styles may be conceived as initial tendencies when contacting diverse contingencies organizations. These tendencies, as initial conditions, may bias the course and outcomes of oncoming interactions in the situation. In order to evaluate styles as tendencies, it is necessary to design situations with open contingencies, in which adjustment restrictions are cancelled out. Otherwise, behavior will be determined primarily by present circumstances and goals, and historical factors (biographical tendencies) become embedded and minimized. Whereas adjusted interactions occur under closed contingencies, interactive styles are observable only under open contingencies. These contingencies consist in situations in which no achievement criteria are established or required, in contrast to closed contingencies in which individuals have to achieve predetermined criteria or outcomes. It is assumed than under open contingencies all individuals will show different performances, whereas under closed contingencies they will show uniform performances.

Approaching personality from the standpoint of interactive styles precludes any classification of types or factors of personality. On the contrary, to the extent that every individual shows idiosyncratic styles, the emphasis is turned to identifying generic contingency situations in which individuals deploy their particular interactive styles. Although twelve contingency situations were initially identified (Ribes, & Sánchez, 1990), they were afterwards reduced to eight, in terms of the possibility of evaluating true covariations between events and behavior, and not simple behavioral correlations as usually occurs in traditional psychometric approaches. The contingency situations identified so far are risk, decision, frustration, ambiguity, achievement persistence, conflict, distraction, and scanning. From these situations, two already have been experimentally assessed and correspond to personality factors explored time ago: risk and achievement persistence contingencies (Atkinson, 1957; Feather, 1961; Kahneman, & Tversky, 1979). Contingency situations were presented as a video-game like situation on a computer monitor screen and individuals interacted in real time with the events presented by using two joysticks during a series of sessions, during which values of the contingency parameters were varied. Every style was assessed in two ways: as a consistent performance between situations with equivalent contingency parameters, and between time presentations of the same situation, usually after one month or more. The latter afforded for across

time validation, whereas the former afforded for across task validation. Individuals were exposed to open contingency situations and, as a control procedure, they were additionally exposed to the same situation under closed contingencies. As a result of this last procedure, it was expected that individual differences will disappear. As previously reported, that exactly happened (Ribes, & Contreras, 2007; Ribes et al, 2005; Ribes, & Sánchez, 1992).

Recently, the present authors have carried out a series of experiments on the styles related to the eight different identified contingencies situations. These experiments included always the same participants, in such a way that it was possible to evaluate all styles in every individual participant. Due to space limitations, we'll report only some preliminary results obtained under one contingency situation different to those previously studied. This was the frustration contingency (Barker, Dembo, & Lewin, 1941; Dollard, Doob, Miller, Mowrer, & Sears, 1939; Maier, 1949; Miller, & Miles, 1935). In this experiment, frustration was defined as the maintenance of the response during an uninformed blocking-period when there wasn't possibility of keeping the response. The situation was designed in terms of gradients including 9 values of the parameters defining the contingency organization. This gradient supported the use of eight-degree polynomial regressions to depict the performance profiles of the resulting interactive styles. The gradients allowed also for a continuous scale to compare the covariation of the events parameters and response characteristics under evaluation.

Methodology and some preliminary data

The experimental situation was set as follows. The participants, six undergraduate students, were asked to play a shooting-like videogame on the computer screen. The screen displayed instructions, stimuli and outcomes. Participants used a videogames joystick to respond, moving the pointer to aim and shoot the target. The experiment was divided in three Stages. In Stage 1 participants were exposed to a navy-battle game. Four and eight weeks later, the same participants were exposed again to the same navy-battle game (Stage 2) and to a duck-hunting game (Stage 3), respectively. Figure 1 shows the screens of both tasks. The replication of the study in different stages allowed for within-subject comparisons across time with respect to the navy-battle situation and for within-subject comparison across situations (the navy-battle and the duck-hunting games). Every Stage involved three experimental phases. In each Stage, phases 1 and 2 involved open-contingency conditions, while Phase 3 involved closed contingency conditions. Each Phase involved 9 sessions, and in each session, subjects were exposed to ten trials. In order to assess the individual consistency in the participants in a frustration contingency, it was manipulated the temporal positions and duration of a blocking-of-the-response period in terms of a frustration gradient. Since the frustration contingency implies a response-blocking period, this frustration gradient was constituted by the temporal overlapping-spacing between those response-blocking periods. The response-blocking period consisted in the uninformed time-lapse when the shooting-response was not activated even when the participant press the right button on the joystick and try to shoot the target. In every session, the parametric manipulation was paired with the corresponding value of a frustration gradient. While the presentation of the gradient was ascending through the sessions in Phase 1 (values 1 to 9), it was presented in a descending fashion in Phase 2 (values 9 to 1), and again ascending in Phase 3 of every Stage.
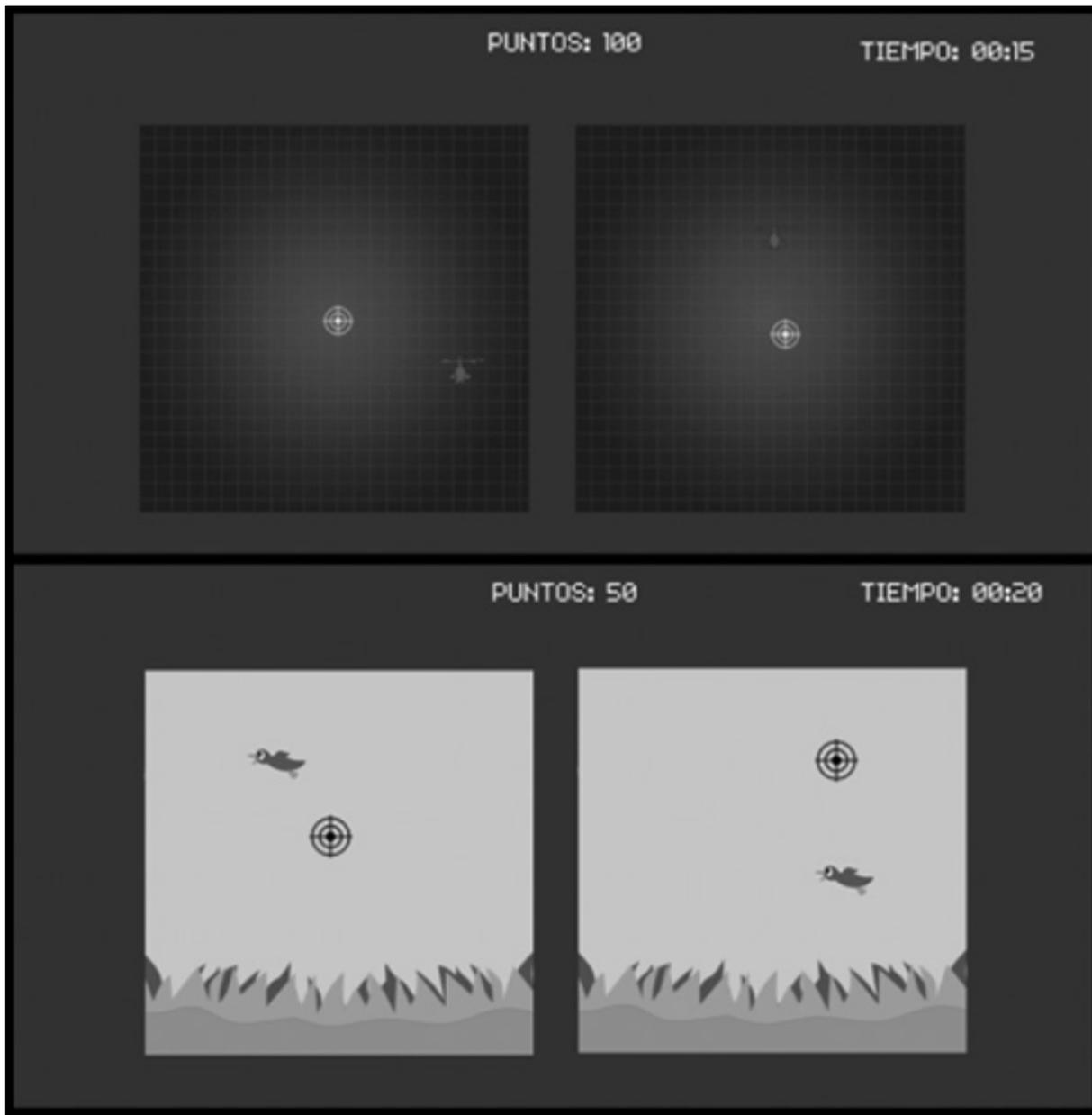
Figure 1. Examples of the screen displays shown in stages 1 and 2 (top panel) and in Stage 3 (bottom panel).

The navy-battle game was presented on a partitioned screen. A different battle was displayed on each side of the screen. Participants could shoot the target on only one of the two simultaneous battles (Figure 1) in each trial. At the top-center of the screen, the total number of points won in each Phase were shown. At the right-top of the screen, a counter showed remaining time. Participants could move the pointer over the enemy targets using the analogue handler of the joystick. In order to change over from one battle to the other, the participants had to choose and move the analogue handler in the opposite side. By pressing the "L" or "R" buttons, to left or right battle, respectively, the participants could shoot and try to destroy the enemy target in that particular battle. On each trial, the participants could only shoot once and on one battle only. Whether or not the enemy target was hit, the trial ended when the shooting button was pressed. The duck-hunting task was similar to the navy-battle game, both in operation and instructions.

Each trial lasted 20 seconds and inter-trial intervals were 3 seconds long. If the participant shot an enemy target or duck before the 20-s period elapsed, the screen display was frozen during the inter-

trial interval. For each enemy target destroyed, 10 points were added to the total points. The total amount of points that the participant could win on each phase was 900.

During phases 1 and 2 of each stage, when the open-contingency conditions was presented, the instructions asked the participants only to play the videogame, shoot the target and have fun. No explicit achievement criteria were given. On the contrary, during Phase 3 of each stage, when the closed-contingency condition was presented, the participants were encouraged to earn a specific amount of points and destroyed targets in order to win a prize at the end of the experimental session.

In order to find a general function describing individual consistencies across time and situations in a decision contingency, an eight-degree polynomial regression was calculated, correlating latency of the shooting response in both sides with the value of the gradient of opportunity across sessions under open contingencies. The use of an eight-degree polynomial regression added variability to the profiles representing individual behavior, in such a way that obtaining similar profiles provided a stronger support for within-subject consistencies.

Figure 2 shows the polynomial regression function correlating the number of pressing-button responses with the nine values of the frustration gradient during phases 1 and 2 (open-contingency condition), in every Stage for each participant. The solid line shows the polynomial function of Stage 1, the hyphen line shows the function of Stage 2, and the pointed line shows the function of Stage 3. In general, the figure shows that the polynomial functions are singular and idiosyncratic for each participant, and also very consistent between stages for all of them. Additionally, the figure shows that the pattern of response was very sensitive to the changes in the values of the frustration gradient.
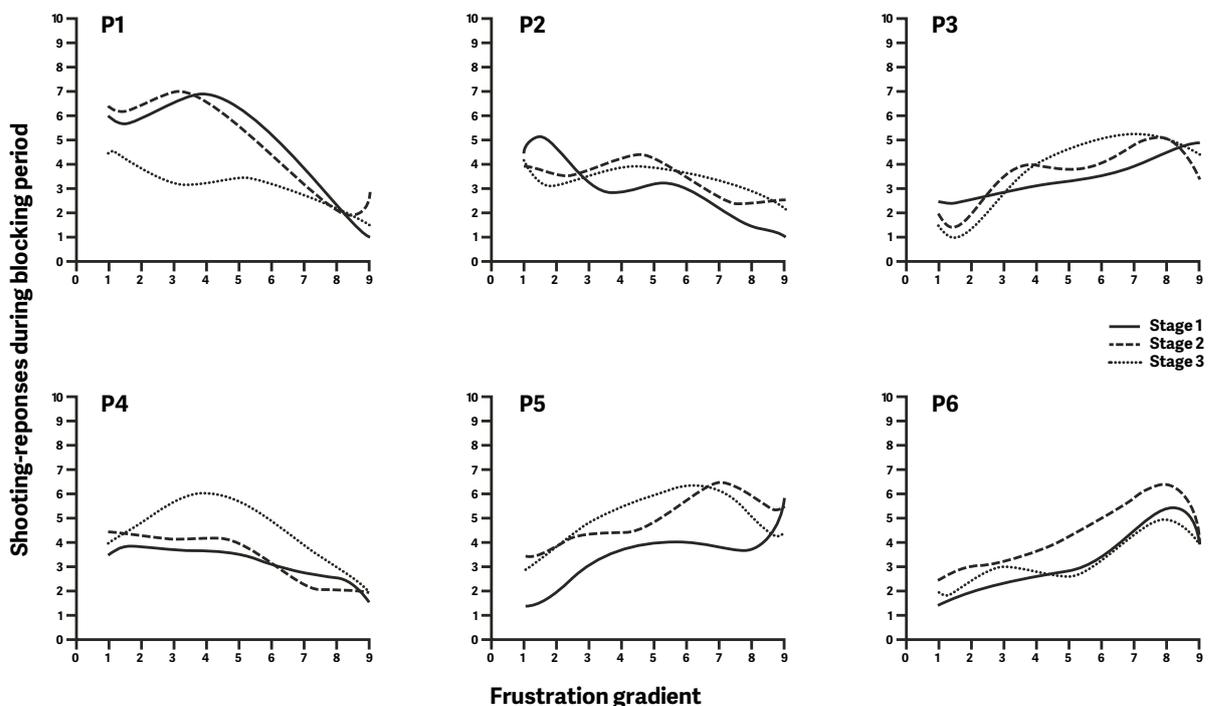
Figure 2. Eight-degree polynomial regression correlating the number of shooting-responses during blocking period with every value of the ambiguity gradient for each participant in all stages of Experiment 2 during open contingency condition.

Summary

In general, data support the assumption that individual behavior may show idiosyncratic consistencies when there aren't predetermined criteria to fulfill, and that when specific criteria is imposed, the pattern of behavior between individuals tends to become homogeneous. Finally, present data confirmed the possibility of finding interactive styles, as individual consistencies, in both frustration and persistence contingencies.

Unpublished data (Martínez-Montor, 2017), with the same participants of this study, show similar findings when the interactive styles in other contingency situations were explored. The situations involved decisions, conflict, distraction, scanning, risk, achievement persistence, and ambiguity contingencies. In general terms, it was found again that each participant deployed particular functional profiles in each situation, that closed contingencies promoted similar performances between participants, and that within-subject profiles were orthogonal to each other. These findings confirm that individual consistencies in behavior may be identified, but that these consistencies, in the form of interactive styles are unique to each person. For this reason, individual differences may be better understood as within-subject consistencies in behavior, and not as erroneously interpreted in terms of intrinsic variability inherent to a given population. Individual differences may be seen as the side-effects of within-individual consistencies in behavior when interacting in generic functional situations.

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Assessing family interactions by the PicNic Game

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Abstract   The PicNic Game (PNG) is a tool used to observe familial interactions. This situation, used evaluate the functioning of the family, was developed by Frascarolo and Favez (2005). The PNG is a window for observing, understanding and assessing the family's functioning through the game during the act of a meal, used in both research and clinical practice. Through the observation of the family's interactions during the PNG it is possible to assess the resources and difficulties in the different dimensions of the family's life such as participation, distribution of leadership structure of tasks and transitions, richness and fluidity of configurations, co-parenting, marital exchanges, setting limits, family warmth and children's autonomy. The instrument was created based on the results of studies that highlight the difficulties of coordination between the parents (father and mother) and their repercussions on the quality of the interactions between each parent and the child.

Introduction

The PicNic Game (PNG) is a tool used to observe family interactions. This situation for the evaluation of the functioning of the family was developed in the "Unité de recherche du Centre d'Etude de la Famille" – University of Lausanne-Switzerland by Frascarolo and Favez (2005).

The PNG is a window for observation, understanding and assessment of family functioning through the play putting in act of a meal, used in both research and clinical practice.

According with Frascarolo and Favez (2005) the instrument was created supported by the results of studies that highlight the difficulties of coordination between parents (father and mother) and it's repercussions over the quality of the interactions between each parent (father or mother) and the child. Beyond that, it was verified that some studies would only consider the interaction between mother and child and that there was a lacking of studies with nuclear families.

The richness of PNG results is the fact that this evaluation scenario of family interactions doesn't call only for the game itself and the sharing, but it also equally integrates daily aspects of domestic life such as preparing a meal, setting the table or tidying the toys (Frascarolo, & Favez, 2005).

The scenario is presented to the family as a game, inviting them to explore their creativity, developing the ludic part of the situation and even taking advantage of the situation (Frascarolo, & Favez, 2005). Still according to the authors, this is an evaluation scenario that is normally perceived as a ludic moment. Necessary material is table, chairs, a bench, a basket with toy tea set, bags with toys (one per child).

Instructions

For the begin the instructions are as following: "We ask you to pretend you're having a picnic. Imagine you are going with X (and Y) in a park. The green carpet represents the area of grass you can use. You take the picnic altogether on the grass, or on the bench or at the table. If you picnic at the table, you can place the chairs as you want. Here, in this basket, there is a doll's tea set. And in this/ these bag(s) there are toys. You organize everything as you want… "You are invited to tidy up when you are finished. Do take your time. In general, the whole game lasts about a quarter of an hour.

You can begin when I leave, I will be behind the window, please call me when you are finished or if there is any trouble."

When the consultant leaves s/he says "bon appétit" or "bon picnique".

Procedure

Any family can participate. No restriction concerning the age of children or the number of family members. The whole game is recorded. The game can take place in the lab or at home. The implicit aim is to have fun altogether.

Assessment

The PNG is evaluated using a 7-point Likert scale where the highest score corresponds to the optimal functioning. Like in a normal day of the family's life, in the PNG we evaluate by answering to nine questions concerning the resources and difficulties of the family/ couple / children.

Dimensions and Assessment of PNG evaluate the underlying interactions on the dimensions described as follows and some guidance questions for the evaluation:

1. Participation – Evaluates the participation and the involvement while playing, the family's cohesion during the game and the ability that the family has of being all together. Each one has its place as an individual, disregarding what is his role. On this field is considered the availability of each family member to the others. Are all members included? Are they all available to interact with the other members?

2. Distribution of leadership – Evaluates the sharing of leadership between father and mother on their role as picnic organizers while caring for the children. It must be checked if the parents are the picnic organizers and if they lead the activity's organization or, in the case where the child is leading the game, if the parents follow her or give her freedom to explore her initiative. Do both parents organize the Picnic and are responsible for the children? Are children parentified?

3. Task structuring and transitions – Evaluates the development of the game, its different elements specified in the instruction and the elapse of the game (ex. arrival, the picnics preparation, meal, the game and its structure and the way how the transitions between different moments of the game are made). The members of the family are free to organize as they wish regarding the sequence and duration of the game. Although, it must be possible to identify the different moments. Every game must give the idea that the family has built a story. Is there a narrative curve (arrival, meal, play, tidying up and departure)? Do family members have fun and are they creative? No structure; practically the same episode throughout; no meal, do not set the table?

Structure is visible but transitions are chaotic or rough / length of the game very short / set the table but do not eat.

The game shows a clear structure, all the episodes are clearly separated, and one notes the presence of creative elements (red ant attack, crocodiles in the river, building a fire to cook the sausages, etc.).

4. Richness and fluidity of configurations – In this field is evaluated the way how the members utilize the different relational possibilities. The number of observed configurations comparing to the possible number does not matter. Nevertheless, it is important to state that when children are present the evaluation must be taken more lightly. If, for example, there are three children present, it won't be possible to observe all the possible combinations of the siblings' subsystem nor all the interactions of this subsystem with each parent. The fluidity with which the partners go from a relational configuration to a different one is also observed, as well as the trades between the created subsystems. Can anyone be with anyone? Are several configurations observed?

For the next 5 dimensions, there is a 5-point Likert scale to assess the participation (based on answering to some questions).

5. Co-parenting – This dimension evaluates the cooperation and the support between parents, accounting the compliments the approval, and the backup in the behaviour or words directed to one another regarding the child or children, the interferences, the competition and the conflict (explicit or latent) related with the parenting role exercising. Co-parenting, cooperation and support v/ competition and conflict between parents in their parental roles. Do parents work together as a team including the children? Are they supporting each other or are they in competition or in conflict?

According to the observation it is attributed one point when it is verified that the overall climate of hostility, conflicts, competitiveness (behavioral or verbal competition), personal attacks / strong coordination between the parents to the detriment of the child / strong parentification; three points in the absence of competition and support / One of the parents supports the other but it is not mutual/ Moments of competition counter-balanced by moments of active support; five points when it is verified a real support, active co-parenting, complementarity of the parents, cooperation, all of that accompanied by complicity

6. Marital exchanges – In this dimension is evaluated the presence or absence of one or many marital exchanges. The evaluation is valid even if that moment is very short. Are marital exchanges observable? If so, are they positive, neutral or negative?

It is attributed one point when it is verified a clear refusal of conjugal exchanges (refusal to respond) / verbal escalation / persistence of a conflict unrelated to the child; three points in the in case of no conjugal incidents, and no conflict (the partners talk to each other in general or via the children, but without direct exchanges) / some neutral exchanges / mild verbal conflicts followed by repairs; and five points when there can be verified some warm and close conjugal good times.

7. Setting Limits – In this dimension is evaluated the parents attitude regarding the limit determination (ex. laxism and/or correction versus clear, flexible and adaptive limits). For example, during the PNG, it's verified, relatively to children, warnings regarding certain behaviours, recall the established limits, remember the rules of education, convenience and social interaction, etc. Do the parents give clear limits? Are they lax, authoritative or authoritarian?

In limit setting (children) it is attributed one point when it is verified the attitude of the parents disconnected, alternating laxity and coercion; laxity of one parent and coercion by the other; laxity/negligence with one child and coercion/over-stimulation with the other ; three points in the in case of alternation of laxity and strict limits or coercion and strict limits; strict limits (if there is laxity and coercion then see note 2 or 1); and five points when there is verification of clear limits, expressed and applied with subtlety in each relevant situation (consistency).

In limit setting (babies) it is attributed one point when it is verified lots of intrusion by the parents and/or lack of stimulation and signs of interest, occasional child distress, not adjusted parenting to the child; three points if we can verify rather adjusted stimulation but where the child's behaviours and initiatives are to much or less taken into account // one parent very adjusted and the other not so (not enough or too much); and five points when there can be verified stimulation adapted to the current needs of the child (with periods of relief) and when the answers and initiatives of the child are taken into account.

8. Family warmth – Evaluates the affective climate emerging from the family's interaction, the positive or negative expression of emotions. This field evaluates the overall emotional tone of the family's relations, this is, the circulation of the affection between partners. Are positive affects shared? Are emotions validated?

It is attributed one point when a cold family atmosphere is verified , no expression of positive emotions and/or expression of negative ones / family members squabble, depreciate one another, demonstrate hostility /false emotions; three points if we can verify a neutral atmosphere / spontaneous expression of negative and positive affects / behavioral and factual validation but not emotional ; and five points when there can be verified a warm family atmosphere, great variety of positive emotions expressed verbally and/or non-verbally, the ability of family members to recognize and respond to individual needs, demonstration of empathy, mutual understanding, affective harmonization and positive connectivity.

9. Autonomy of children – Its evaluated the autonomy seen as the ability of being alone considering the existing possibilities. It is also considered the capability of asking for one's help in an adequate way when its own resources are limited and joining in the family's group when necessary. Are the children autonomous? Do parents leave space to their children? Is there a specific coding system for siblings?

While applying the PNG with babies the observation of parents-babies (dyad and triad) should be more naturalistic, observing the marital interactions, co-parenting and family warmth.

Conclusion

According to Frascarolo, Dimitrova, Steiner, Lavanchy-Scaiola, & Favez, (2007).The nine dimensions described above are used in clinical evaluation scenarios. Although for investigation purposes is used a reduced scale comprising five dimensions: Task structuring and transitions; Co-parenting; Martial exchanges; Setting limits and Family warmth.

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Cross-sectional study of Emotion Understanding in Portuguese children

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Abstract *Emotion understanding in children* is a complex process involving the conjugation of different other processes of emotional information. It has been considered a key component of emotional skills in young children and an important predictor social skills development.

This study aims to describe the emergence of emotion understanding different components according to age and degree of complexity.

The sample comprises 401 portuguese children, ages 43 to 77 months (M=64.17, DP=7.05), attending preschool, and the instruments used were the Test of Emotion Comprehension (TEC) and Raven's Colored Progressive Matrices (CPM).

Results have shown that different components of emotion understanding do not appear all at the same time, but evolve over the years along with cognitive development. Children at earlier ages are more able to recognize the expression of basic emotions, but the ability to reflect upon emotions consolidates later. Results haven't shown significant differences considering gender and socioeconomic status.

Introduction

In due time, it is expected that children develop emotional competence (Denham et al., 2011; Santos, & Faria, 2005). Emotional understanding is a key component of emotional competence of young children (Belacchi, & Farina, 2010). This is a construct that encompasses the developmental abilities of children to express, regular, and understand emotions. The failure to obtain that competence can sometimes lead to disastrous consequences (Schaffer, 2004).

Pons et al. (2004), have described that emotion understanding in children have at least nine different components: (1) emotions recognition, based on facial expressions; (2) understanding the external causes of emotions; (3) understanding of aroused desire; (4) understanding the beliefs based on emotions; (5) understanding the influence of recall in circumstances of evaluation of emotional states; (6) understanding the possibilities of controlling emotional experiences; (7) understanding the possibility of hiding an emotional state; (8) understanding of the existence of multiple or even contradictory (ambivalent) emotional responses; (9) understanding of moral expressions. These 9 components, depending on the level of development», can be grouped into three phases: an external phase (3-6 years); a mental phase (5-9 years); and a reflexive phase (8-12 years) that includes the possibility to identifying what a person can feel more than an emotion, includes moral emotions (such as guilt) and mental control of emotions.

Emotional understanding is a socio-cognitive ability and it has been shown to be an important predictor of the development of social skills (Belacchi, & Farina, 2010). Halberstadt et al. (2001) showed that children who have high abilities to understand emotional signals develop better social skills and positive interpersonal relationships. Thus, emotional understanding contributes to the crucial task of social competence between 2 and 5 years: the successful initiation of peer relationships (Denham et al., 2003). The growing complexity of social demands in our society, both personally and professionally, increases the interest in the study of this component of emotional competence.

Thus, the aim of the present study was to study emotional understanding in preschool children, and the questions that guided this investigation were:

- Does emotion understand increases with age?

- Emotional understanding relates to nonverbal intelligence?

- Do sex, socioeconomic level influence the emotion understanding?

For that, a quantitative, cross-sectional and correlational study was developed (Almeida, & Freire, 2008).

Method

Participants

The sample was collected in the 2nd and 3rd term in a pre-school in Madeira Island (Portugal). The study comprises 401 children aged 43-77 months (M=64.18), 205 girls (51.1%) and 196 boys (48.8%), 258 have low socioeconomic level (64.3%) and 123 and average level (30.7%) (Morais, Peneda, Neves, & Cardoso, 1993).

Instruments

To evaluate emotion understanding it was used the *Test of Emotion Comprehension* (TEC., developed by Pons, Harris, & de Rosnay, 2004 and translated by Roazzi et al., 2008 to portuguese population). This test analyze the following dimensions: I – Emotion Recognition; II – Understanding external causes; III – Understanding that a desire can cause an emotion; IV – Understanding belief-based emotions; V – Reminde on a present emotional state; VI – Emotion regulation; VII – Hiding an underlying true emotional state; VIII – Understanding mixed emotions; IX – Understanding the role of morality. The Portuguese version is computerized, for each component there is a situation / problem (female voice), there are five emotional responses optional that child can choose (e.g., happy, sad, angry, affraid, OK); only one is correct. Each child can obtain a minimum of zero and a maximum of nine points. Using the Kuder-Richardson coefficient as a measure of reliability, acceptable levels of internal consistency have been found (KR-20-= .72).

To measure nor-verbal intelligence was used the Raven's Coloured Progressive Matrices (CPM, Raven, 1938 adapted to Portuguese population by Simões, 1995). It is composed by 36 items divided in three sets of items: A, AB, and B, each one with twelve items in an increasing order of difficulty. Each item is a figure where misses a piece, six solutions are given to the child to complete the figure; one is the correct. The total score is the total number of correct answers.

Procedure

Data collection took place in the school, after school board and parents authorization. The instruments were applied individually, in an appropriate place, during about 30 minutes. The child could stop or give up the participation as soon as they expressed that desire. It was guaranteed. the ethical and deontological principles of the Portuguese Psychologists Board (2011). After collecting data, they were introduced in the SPSS software, version 23.0 for Windows. Statistical and non-parametric statistical tests were used according to whether or not the assumptions for its use were met (normality of the distribution of the interval variable and homogeneity of the variances according to Morgan, Leech, Gloeckner and Barrett (2011) of 95%). The magnitude of the effect (ES) was also determined for all the tests used, following the formulas developed by Cohen (cited by Coelho, Cunha, & Martins, 2008).

Results

In the first analysis, each of the nine components was analyzed according to the percentage of correct answers. The components were ordered according to the percentage of children who scored on each of them. As expected, the best performances were in components I, II and V, which together form the external phase, which appears between 4 and 5 years (Pons et al., 2004). It is verified that in almost all the components as the age advances, the number of hits tends to increase with small variabilities, always having a significant association (χ^2), with the exception of component 9. It is also observed in a horizontal reading of the picture, that the number of hits tends to decrease with the complexity of the task and the level of processing emotional information.

Table 1   *Percentage of correct answers, and the results of the chi-square (χ^2) that was conducted to evaluate effect of age for each component.*

Age	N	I	II	III	IV	V	VI	VII	VIII	IX
4	28	75	82.1	7.1	25	39.3	17.9	10.7	7.1	10.7
5	97	91.3	80.4	27.2	27.2	48.9	28.3	22.8	17.4	22.8
6	52	92.3	92.3	36.5	42.3	50	42.3	28.8	44.2	21.2
7	90	85.6	96.7	46.7	42.2	58.9	47.8	34.4	45.6	26.7
8	55	98.2	98.2	49.1	40	61.8	56.4	40	50.9	34.5
9	47	95.7	100	55.3	48.9	83	72.3	61.7	68.1	31.9
10>	37	97.3	100	54.1	51.4	78.4	70.3	78.4	59.5	32.4
Méan		91.0	92.3	40.1	38.9	59.1	46.6	37.4	40.9	26.2
χ^2	401	18.7**	34.3***	30.3***	12.7*	27.2***	54.1***	57.4***	57.2***	8.2

Note: ***p> 0,01, **, p> 0,05

The overall results of emotion understanding also increase with age (cf. Figure 1). However, as noted by Albanese et al. (2007) Ponst et al. (2004), individual differences are present at any age.
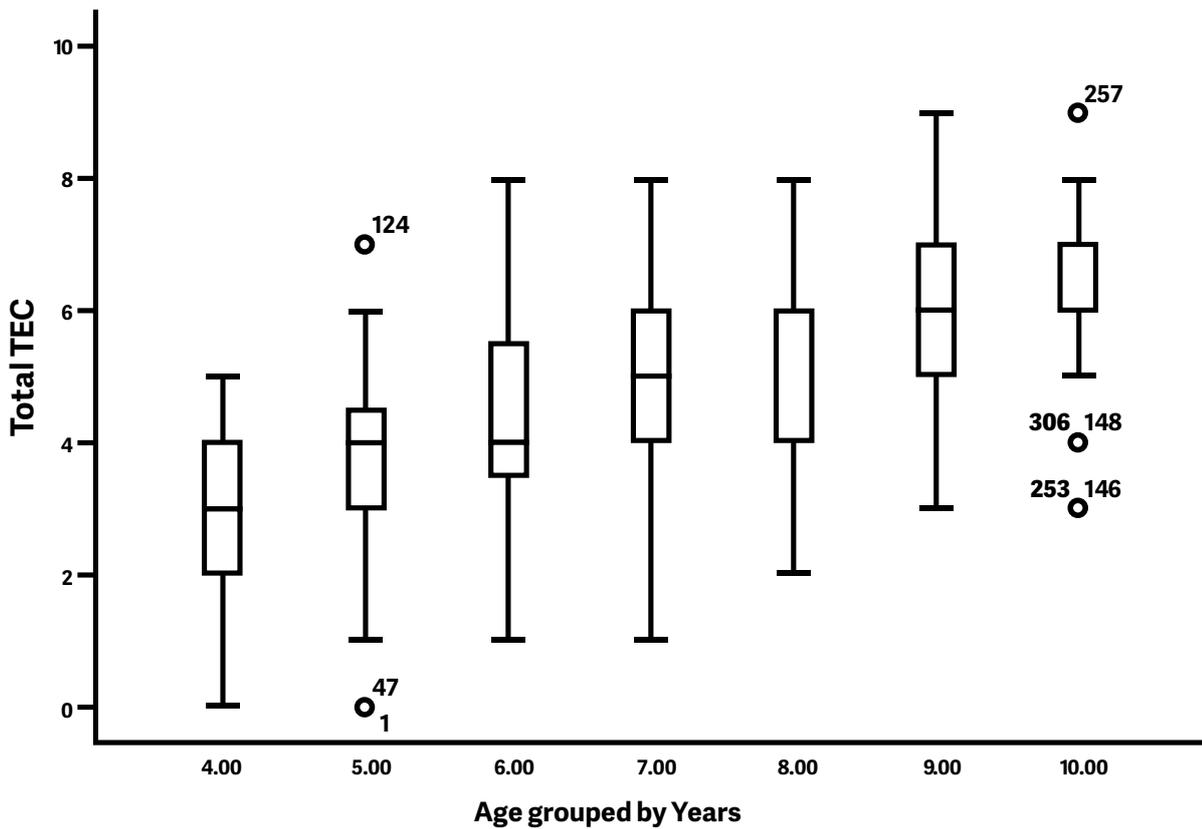
Figure 1 TEC total results and age

Analyzing the difficulty of the components (Table 2), the results indicate that the proportion of hits (the degree of difficulty) is different between component (Q (8)=770.25, p< .001). The results of the contrast analysis (Friedman test comparing the number of hits in each pair of components) shows that the nine components may be divided into four groups with a different difficulty level. In the first group, the components I and II (both components of the external phase) have the highest number of hits and the lowest levels of difficulty. With a higher level of difficulty are the components V and VI (the first phase but external phase belonging to the second reflective described by Pons et al. 2004). Then, again the component VI with components VIII, III, IV and VII (two-phase and two-phase external reflective) and finally the components more difficult for students were IV, VII and IX (two-phase mental and the reflective).

Table 2 *Analysis of the difficulty of the components*

	I	V	VI	VIII	III	IV	VII	IX
II	-0.06^{ns}	1.59***	2.05***	2.31***	2.34***	2.40***	2.47***	2.97***
I		1.49***	2.00***	2.26***	2.29***	2.24***	2.41***	2.92***
V			0.56^{ns}	0.82**	-0.85***	-0.91***	0.98***	1.48***
VI				0.26^{ns}	-0.29^{ns}	-0.35^{ns}	0.41^{ns}	0.92***
VIII					-0.03^{ns}	-0.09^{ns}	-0.16^{ns}	0.66*
III						0.06^{ns}	0.12^{ns}	0.63*
IV							0.07^{ns}	0.57^{ns}
VII								0.50^{ns}

Note: ***p> 0,01, **, p> 0,05, ns Not significant

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Table 3 *Pearson correlations, bivariate and partial controlling for age, between the TEC (total score) and the CPM*

Control variable		MPCR	IC 95%	
			LL	UL
Noned*	TEC	.19***		
Age in month	TEC	.21***		

Note: n=397; a=Cells contain zero-order correlations (Spearman); CI=confidence interval;
LL=lower limit; UL=upper limit p< .05.

Table 4 *Biserial correlations, bivariate between componentes and CPM*

Control variable		I	II	III	IV	V	VI	VII	VIII	IX
None	MPCR	.18*	.24**	.20**	.11	.01	.24***	.01	.13*	.01

Note: *n*=395; a. Cells contain zero-order correlations

We verify (Table 3) that the emotion understanding is correlated with fluid intelligence, rs (395)= .19, p< .001. After the controlled variable age, the correlations between the emotion understanding and cognitive development remain significant (r (392)= .21, p< .001). Significant relationships were also found between the scores of CPM (Table 4) and component I, recognition (rb (393)= .18, p= .045), and component II, external causes (rb (393)= .24, p= .009) the component III, desire (rb (393)= .20, p= .003), the component VI, regulation of emotions (rb (393)= .24, p< .001), and component 8, mixed emotions (rb (393)= .13, p= .049). The associations continue to be statistically significant, even after controlling for age. It can be inferred that the higher fluid intelligence, best children are to recognize emotions and understand the external causes of emotions, aroused desire, regulate emotions and understand ambivalent emotions. Using the guidelines of Cohen (quoted by Morgan et al., 2011) we can state that the size of effect of fluid intelligence is between small and moderate.

Regarding, de variable sex, no differences were found in total scores when analyzed using a t-test for independent samples (t (399)= 0.155, p= .877), nor in the different components using the #2 test. The same append with the socioeconomic level, were no significant differences were found for total score (t (379)= .09, p= .932) or for the different components.

Discussion

As we stated at the beginning, the aims of this research were, in the first place, to verify if emotion understanding increases with age, as well as the mastery of more complex processes of emotional information, secondly, if it would depend on nonverbal intelligence and, thirdly, if it was influenced by individual (sex) and contextual variables (socioeconomic level).

Regarding first aim, the children in our study were able to identify and recognize expressions for basic emotions and to identify their triggers (Schultz et al., 2005). They also revealed being aware of beliefs, desires and emotional memories influences on their responses, and furthermore, they revealed emotional regulation strategies (Rosnay et al., 2004; de Rosnay et al., 2014).

As expected, accordingly to literature, in each component of emotion understanding children performance increased with age, in almost all components (Pons et al., 2002; Pons et al., 2004; Albanese et al., 2006). Likewise, children resolved more successfully complex tasks as age increase. Therefore,

as age increases, children were abler to recognize the emotions expressed by others, to relate different circumstances involved in one situation, to differentiate true emotion expressions from false ones, to understand different mechanisms involved in emotional regulation processes, and to perceive these regulations as important to moral judgments and consequently to social relationships.

Further, results were consistent with Tenenbaum et al. model (2004). Emotion understanding at mental and reflexive phases showed up to work at a more complex level of representation than at external phase. As explained by Albanese et al. (2010), emotions can be considered as abstract objects at mental and reflexive phases. For example, children are only able to understand mixed emotions if they have the ability to think both positive and negative emotions simultaneously. Therefore, the more children are able to represent emotions in an abstract form, the better they will understand it.

Regarding the relation between emotion understanding and non-verbal intelligence, correlations found were not as strong as correlations found in other studies (Albanese et al., 2010). But although correlations were weak and moderate, they remained independent of children's age, thus revealing a constancy throughout development.

The results suggested that children are abler to solve problems measured by CPM as they integrate multiple sources of information, since it allows them to into account different variables when they have to solve a more complex emotional situation. The ability to analyze problems from multiple perspectives and integrate them is critical to achieve the reflexive phase of emotion understanding (Albanese et al., 2010).

Regarding our third objective, and similarly to other studies, neither sex nor socioeconomic level had been shown to influence development of emotion understanding (Albanese et al., 2007; Belachi, & Farina, 2010; Farina et al., 2007; Gustafson, 2009).

Thus, this study has contributed to further corroborate the data that had already proven the development of emotion understanding with the age.

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Epistemological development in higher education.

A Study at University of Madeira

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Abstract

The present study fits into the emerging adult cognitive development domain, more precisely in the analysis of higher education student's epistemological beliefs development. The scientific literature of the area considers that student's epistemological beliefs evolve, throughout the academic formation, of more simplistic/absolutist forms to more complex/relativistic forms (Baxter-Magolda, 2004; Perry, 1999). However, most of the students do not reveal higher levels of epistemological complexity (Figueiredo, Pinheiro, & Huet, 2015).

In this paper we present and compare the results of two studies carried out at the University of Madeira, in 2010 and 2016, respectively, which main goal was to analyse the epistemological development of students of higher education and the influence of social and academic variables in the epistemological development.

The research adopted a quantitative methodology and the sample was composed of students from the University of Madeira (295 in study 1 and 232 in study 2), of the 1st and 2nd cycle, distributed by different academic areas. The data were evaluated through the portuguese version of the Parker Cognitive Development Inventory (Ferreira, & Bastos, 1995).

The analysis of the results revealed, in both studies, a predominance of absolutist thinking in the students of the University of Madeira, Contrary to the literature and the studies carried out in this field, there has not been a developmental progression in terms of an absolutist for a more relativistic thought, but rather an increase of absolutism as one advances in the academic formation, being that the students of the 2nd cycle have proved to be more absolutist than students in the 1st cycle. Concomitantly, in both studies, the epistemological development of students varies according to social and academic variables.

Keywords

Epistemological development; Emerging Adulthood; Higher Education

Introduction

Higher education, in Portugal and in most industrialized countries, continues to be the main goal of many young people and their families, representing the most desired level of education. The frequency of this level of education is mostly made up of young people who are considered, from the development point of view, to be in the so-called emerging adult stage (Arnett, 2010). The emerging adulthood is a stage of development that stands between adolescence and adulthood and we can situate it in terms of age between 18 and 25 years, being that nowadays it can extend until the 30

years. In terms of development, it involves multiple exploratory questions, experiences and tasks in the most diverse domains: identity, affective, professional and ideological. In this sense, emerging adulthood has specific and distinct characteristics of the other phases of development and it is a period of life when important developmental changes take place, all of them interrelated, among which stand out: a) from the psychological point of view, the resolution of certain tasks, namely, the consolidation of autonomy, self-sufficency, the process of separation-individuation; b) from a relational point of view, great changes in the relationship with parents, friends, boyfriend/girlfriend and contexts of education/work that imply gains and losses; c) from an epistemological/ cognitive point of view, a progression from an absolutist to a more relativistic, complex level of thinking (Arnett, 2010).

Epistemological development refers to the changes that occur in personal beliefs about knowledge and the process of knowing (Figueiredo, Pinheiro, & Huet, 2015). Several theoretical models, among which stand out Perry's Intellectual and Ethical Model of Development (Perry, 1981) and the Epistemological Reflection Model (Baxter-Magolda, 2004), which were based on the present study, evidence that during the years of academic formation students progress in a qualitative and hierarchical way (stages/positions) of an absolutist way of thinking, in which everything is right or wrong, in which the teacher always holds the right answer, to a more relativistic, more complex way of thinking, in which it is admitted that there is not always a right answer to a problem, that the most important is to assume and defend a perspective based on facts and evidences and that knowledge is something uncertain and in permanent construction (Baxter-Magolda, 2004; Perry, 1981).Therefore, throughout the academic formation it is not only the quantity and the knowledge that an individual has to change, but also, and essentially, the way of knowing and thinking. It is important to note that although the scientific literature of the area considers that student's epistemological beliefs develop, throughout academic formation, from more simplistic/absolutist to more complex/relativistic forms (Baxter-Magolda, 2004; Perry, 1999), most students are not at the highest levels of epistemological complexity (Figueiredo, Pinheiro, & Huet, 2015).

We can divide the studies of epistemological development into two poles: the studies which focus on the factors that influence the epistemological beliefs and the studies on the impacts of epistemological beliefs. With respect to the former, the studies show that the epistemological development varies according to: the academic area, students from social and human areas show more relativistic levels of epistemological development compared to students of engineering/ technology (Pirtilla-Backman, & Kajanne, 2004); the academic year, students of the first years tend to present an absolute knowledge while the students of the last years present a more relativistic knowledge (Bastos, Faria, & Silva, 2007); gender, studies have shown that there are no gender differences in epistemological development (Baxter-Magolda, 2002; Faria, 2008; Medeiros, 2008), however, a study of Martins (2005), showed significant differences, with the female being more relativistic than the male. About the impact of epistemological beliefs, on the investigations carried out in the field the following conclusions emerge: epistemological beliefs influence learning (Sen, Yilmaz, & Yurdugul, 2014), academic performance Martins, & Ferreira, 2011; Zhang, & Watkins, 2001) and academic motivation (Lin, Deng, Chai, & Tsai, 2013; Mellat, & Lavasani, 2011); the most relativistic epistemological beliefs are a good predictor of self-regulated learning (Braten, & Strømsø, 2005).

The present research was guided by three main goals: 1) identify and describe the level of epistemological development of students of higher education; 2) analyze the influence of personal (gender) and academic (academic year) variables on epistemological development; 3) comparing the results of the two studies, in order to understand if the pattern of epistemological development verified in study 1 is maintained in study 2. For such, two studies were carried out, the first (study 1) in the year 2010 and the second (study 2) in the year 2016.

Method

Participants

In study 1 take part 295 students from the University of Madeira, aged between 17 and 52 years. The majority of participants are female (n=222, 75.3%) and are mostly single (n=257, 87.1 %). Regarding the academic situation, the majority of participants were attending the 1st cycle (n=227, 76.9%), with a higher concentration of participants in the 1st year (n=132, 44.7%). The participants are distributed by different academic areas, with a higher percentage in basic education (n=78, 26.4%) and a lower percentage in engineering and mathematics (n=36, 12.2%).

In study 2 take part 233 students from the University of Madeira, aged between 18 and 48 years. The majority of participants are female (n=163, 70%) and are mostly single (n=217, 93.1 %). With regard to the academic situation, the majority of participants were attending the 1st cycle (n=157, 67.4%), with a higher concentration of participants in the 1st year (n=132, 44.7%). The participants are distributed by different academic areas, with a higher percentage in psychology (n=78, 33.5%) and a lower percentage in design (n=32, 13.7%).

Measures

Two instruments were used to collect data: socio-academic questionnaire and Parker Cognitive Development Inventory (PCDI) (Portuguese version of Ferreira, & Bastos, 1995). The PCDI is composed of 150 items on a Lickert scale of four points (ranging from totally disagree to completely agree), divided into three subscales: Education, Career and Religion. The instrument evaluates the levels of epistemological development (absolutism, relativism and commitment in relativism) within the framework of the intellectual and ethical scheme proposed by Perry (1981).

The internal consistency was measured for each of the subscales, taking into account the three modes of thinking (absolutism, relativism and commitment in relativism). The values of the Cronbach's alfa are acceptable: Career – Absolutism=.68, Career – relativism=.71, Career – commitment in relativism=.72, Education – Absolutism=.70, Education – Relativism=.78, Education – commitment in relativism=.76, Religion – Absolutism=.77, Religion – Relativism=.80, Religion – commitment in relativism=.71).

Due to the fact that it is a long questionnaire (150 items), and in order to safeguard people participation, in both studies it was decided to use only two of the three subscales of PCDI, that is, the Career and Education subscales, making a total of 100 items.

Procedures

Firstly, it was requested an authorization to the University of Madeira to carry out the studies. The questionnaires were applied in the classroom, requesting the voluntary participation of students. Each questionnaire took 45 minutes to complete.

The data were analyzed through *Statistical Package for the Social Sciences*, version 17 (SPSS 17). We used descriptive analyses (frequencies, means and standard deviation) and inferential analyses (t-test and anova).

Results

Through the analyses of the results we tried to describe the level of epistemological development of higher education students. In both studies there was a predominance of absolutist thinking among students (Table 1).

Table 1   *Means and standard deviations of the level of epistemological development*

		Absolutism		Relativism		Commitment in relativism	
	n	**M**	**SD**	**M**	**SD**	**M**	**SD**
Study 1	295	126.2	14.4	95.8	13.0	104.3	13.0
Study 2	233	85.91	13.3	63.53	12.2	62.13	12.1

(Levels of thinking)

We also tried to analyze the influence of personal variables, in this case gender, and academic variables, namely the year of academic formation, in the epistemological development of students.

With regard to gender, there were significant differences in the two subscales of PCDI both in study 1 (Career – Absolutism: $t=-2.680$; $p=.008$; Education – Absolutism: $t=-5,981$; $p=.000$), and Study 2 (Career – Absolutism: $t=-1.540$; $p=.008$; Education – Absolutism: $t=-4.972$; $p=.000$). As can be seen in Table 2, the female were more absolutist in the two subscales of PCDI than the male participants.

Table 2   *Levels of epistemological development according to gender*

		Study 1		Study 2	
Subscales of PCDI and levels of thinking	Gender	n	M	n	M
Career – ABS	Male	71	35.5	70	34.5
	Female	218	37.1	163	37.2
Education – ABS	Male	71	43.7	70	44.8
	Female	219	49.3	163	49.4

With regard to academic year, there were significant differences in the two subscales of PCDI both in study 1 (Career – Absolutism: $F=18.233$; $p=.000$; Education – Absolutism: $F=37.866$; $p=.000$), and study 2 (Career – Absolutism: $F=19.232$; $p=.000$; Education – Absolutism: $F=36.763$; $p=.000$). In both studies there was an increase of absolutism as the students progressed in the academic year, being that the students of the 2nd cycle turned out to be more absolutist than the students of the other years (Table 3).

Table 3 *Levels of epistemological development according to academic year*

Subscales of PCDI and levels of thinking

		Study 1				Study 2			
		Career – ABS		Education – ABS		Career – ABS		Education – ABS	
Study cycle	Academic year	n	M	n	M	n	M	n	M
1st cycle	1st year	130	119.7	131	124.2	79	80.2	79	83.3
	2nd year					36	81.3	36	82.7
	3rd year	94	147.5	94	136.8	42	81.7	42	84.1
2nd cycle	1st year	65	191.9	65	200.8	76	84.6	76	85.2
	Total	289		290		233		233	

Discussion

The studies carried out in the field of epistemological development of the student of higher education reveal that student's progress from an absolutist to a more relativistic thinking, along they advance in academic formation (Baxter-Magolda, 2002, 2004; Faria, 2008; King, & Kitchener, 1994, 2002; Perry, 1981). On the contrary, in the present study the results point to a predominance of absolutism in all years of academic formation, without any progression in the type of thinking. Thus, the predominance of absolutist thinking may be due to the traditional teaching-learning processes, namely to the teaching methods used. The Portuguese education system, from primary education to higher education, continues to be based on traditional teaching, in which teachers have as their main mission the transmission of information and students assume, mainly, a passive role, limiting themselves to absorb this information. Traditional teaching does not encourage or provide sufficient challenges for the epistemological development of students. According to Marchand (2008), the epistemological development is, in Perry's perspective, activated by the use of teaching methods that encourage the risks, research and analyses of complex problems, propitiators of cognitive conflicts, that facilitate the awareness of the incongruities of reasoning.

It should be noted that one of the main goals of higher education institutions should be to promote changes in the students' level of thought. For such, it is necessary to adapt educational practices and policies to the students' level of thinking, challenging the existing ideas in individuals with ideas with a higher level of complexity in order to promote the critical conflict and the restructuring (Faria, 2008). A greater stimulation of self-regulated learning is required, encouraging students to take greater responsability in organizing their school curriculum and encouraging them to think more reflectively (Marchand, 2008). The student should gradually assume a more active role in the learning process, while the teacher leaves the role of specialist and knowledge holder.

But we can not atribute responsability for the predominance of absolutist thought only to the education system. In this way, another of the aspects that can explain this finding is time. As O'Donovan (2010) points out, epistemological development is something that occurs in time. We can not expect students to mature at the thought level if there is no personal maturation, if there are no life experiences that put them face-to-face with diversity.

Regarding gender, the studies do not reveal differences when considered this variable (Baxter-Magolda, 1992; Pirttila-Backman, & Kajanne, 2004; Medeiros, Ferreira, Almeida, Peixoto, Tavares, & Morais, 2002). However, a study by Martins (2005) showed that female participants were more relativistic compared to male participants. In the present study there were also differences in relation to gender, however, and contrary to the results of the study by Martins (2005), the female presented higher levels of absolutism.

Bearing in mind that some studies (Bastos, Faria, & Silva, 2007; Friedman, 2004) evidenced that the students of higher education present higher levels of epistemological development in the more advanced years of academic formation, it would be expected that the students of the 2nd Cycle would reveal a more relativistic level of thought and the 1st Cycle students a more absolutist thought. On the contrary, in the present study there was an increase of absolutism as students advance in the academic formation, being that, in a general way, the students of the 2nd Cycle proved to be more absolutist than the students of 1st Cycle. These results are in agreement with the results obtained in an Elwell (cited by Faria, 2008) and Zhang (2004) study, in which there was an inversion of the developmental sequence proposed by Perry, and students become more absolutist as they progress in academic education. It should be noted that in the present study, as in the Elwell study (cited by Faria, 2008), the sample integrates non-traditional students. Nontraditional students have different characteristics in terms of development than traditional students. The vast majority of these students are in the 2nd cycle, so it may contribute to the explanation of the increase of absolutist thinking in this cycle. It should be noted that this is a recent reality, and the studies carried out for the elaboration of explanatory models of the epistemological development of the student of higher education do not integrate these students. As Faria (2008) points out, the limited research with this type of student is not yet sufficient to allow us to understand if there are indeed developmental differences in epistemological terms in these two groups.

Conclusion

From the present work emerge two aspects of extreme relevance: a) there is a predominance of absolutist thinking in the students of the University of Madeira; and b) there has not been a developmental progression in terms of an absolutist thought for a more relativistic thought, as the literature in the area indicates, but rather an increase of absolutism students advances in academic formation. These facts can be explained by the current characteristics of Portuguese higher education, which continues to be based on traditional teaching, by personal characteristics of the students and by the current particularities of life contexts, which lead more and more students with different developmental and intellectual specificities to higher education.

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The Department of Psychology of the University of Évora and the Institute for Psychology of the University of Leipzig organized jointly the II Leipzig-Évora Scientific Meeting in Psychology, with the purpose of consolidating academic and scientific cooperation between both institutions, fostering mutual knowledge of scholars, scientists and students, broadening common scientific production and reinforcing institutional relations.

This volume, called *Psychology In Education and Health* contains the main contributions presented by scholars of Leipzig and Évora, as well as by guests from the University of Madeira (Portugal) and the University of Veracruz (Mexico).

Papers on the application of Psychology in the fields of Health, Well-being, Education, Child Development and Clinical were discussed. The main areas of research and application in modern Psychology are here represented, like

· Stress management
· Health and Well-being
· Research on personality
· Emotional development

· Attention of elderly persons
· Psychological consequences of disasters
· Learning at school and at the university
· Family interactions