

The Study on Personal Values and Meanings Attributed to Work by Undergraduate and Postgraduate Students

Estudo sobre Valores Pessoais e Significados Atribuídos ao Trabalho por Estudantes de Graduação e de Pós-Graduação

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ABSTRACT

To investigate relationships between personal values and meanings attributed to the work of undergraduate and graduate students of a Federal Educational Institution (IES), a quantitative study was undertaken, using the Partial Least Squares Path Modeling method. [PLS-PM]. The analysis of the constructs of personal values was supported by the Motivational Types scale, PQV-21, and of meanings, by the Meanings Assigned to Work scale (ESAT-BR). The results confirmed: the self-transcendence values in the positive meaning attributed to work (H1+, $\beta = 0.348$, p-value = 0.000) and in personal achievement (H2+, $\beta = 0.268$, p-value = 0.001), in addition to the relationship between values associated with openness to change, and economic meanings attributed to work (H5+, $\beta = 0.226$, p-value=0.000). It is concluded that, in relation to positive meanings, there is a difference between undergraduate and graduate students, with greater influence in the first group; about the evaluation of values related to openness to change to the economic meanings of work, its positive contribution to both groups is observed, while it presents itself with greater influence on undergraduates. This time, possibilities of influence on values attributed to work are revealed, converging to future debates on this relationship in socio-educational processes, situating characteristics in relation to the expectations signified in undergraduate and graduate studies, as the data reveal differences in relevant points. **Keywords:** Values; Meanings; Work; University graduate; Postgraduate studies.

Submitted: 21/06/2021
Accepted: 20/03/2022

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RESUMO

Na perspectiva de investigar relações entre valores pessoais e significados atribuídos ao trabalho dos discentes de graduação e de pós-graduação de uma Instituição de Ensino Federal (IES), empreendeu-se um estudo de natureza quantitativa, por meio do método *Partial Least Squares Path Modeling* [PLS-PM]. A análise dos *construtos* de valores pessoais teve suporte na escala Tipos Motivacionais, PQV-21, e de significados, na escala de Significados Atribuídos ao Trabalho (ESAT-BR). Os resultados confirmaram: os valores de autotranscendência no significado positivos atribuídos ao trabalho (H1+, $\beta = 0,348$, $p\text{-value} = 0,000$) e na realização pessoal (H2+, $\beta = 0,268$, $p\text{-value} = 0,001$), além da relação entre valores associados a abertura a mudança e significados econômicos atribuídos ao trabalho (H5+, $\beta = 0,226$, $p\text{-value}=0,000$). Conclui-se que, em relação aos significados positivos há diferença entre graduandos e pós-graduandos, sendo maior a influência no primeiro grupo; e no que tange à avaliação dos valores relativos à abertura a mudança para os significados econômicos do trabalho, observa-se sua contribuição positiva para os dois grupos, ao passo que se apresenta com maior influência sobre os graduandos. Dessa feita, revelam-se possibilidades de influência sobre valores atribuídos ao trabalho, convergindo para futuros debates dessa relação em processos sócio formativos, situando características em relação às expectativas significadas na graduação e na pós-graduação, posto que os dados revelam diferenças em pontos relevantes.

Palavras-chave: Valores; Significados; Trabalho; Graduação; Pós-graduação.

Introduction

Work is structuring to life in society, a means of survival for some men, expression of life, sociability and networks of meanings and values related to social identity (Antunes, 2009; Anchieta et al., 2011; Borges, Guimarães & Silva, 2013, Bendasoli & Malvezzi, 2013). The meanings attributed to work in a knowledge society has permeated the generation of wealth, through science, technology and innovation (Steiner, 2006).

Recent debate has been reflecting new settings for work. On the one hand, as a result of the fourth industrial revolution, with the advancement of robotics, automation, artificial intelligence, machine learning, big data and data sciences (Bloem et al., 2014; Prüfer & Prüfer, 2019). These transformations have influenced on new ways of studying, working and socializing (OECD, 2015), with impacts on

the ways of conceiving work and defining professions (Susskind & Susskind, 2015; Schwab, 2016; Frey & Osborne, 2017). In the way of these changes, some values have influenced on innovative processes, such as openness to change and self-transcendence (benevolence and universalism), with an emphasis on collective aspects (Sánchez-Báez, Fernández-Serrano & Romero, 2018). These, for example, are also values highlighted by Crešnar and Nedelko (2020) as a pillar of work in industry 4.0.

On the other hand, the social movement for sustainability has influenced organizations to act responsibly for sustainable development (Manzhynski & Figge, 2020), when the values of environmental protection are emphasized (Casteren van Cattenburch, 2017). In this way, studies search for the understand, for example, the values of managers in promoting more sustainable companies (Klapper, Berg & Upham, 2020), not only the democratic behavior of leaders focused on sustainability (Potocan & Potocan, 2015), but also values promoters of ethical behavior (Chowdhury, 2020).

New meanings have derived from these transformations, triggered by social, political and economic changes (Schwab, 2016), which cross the young people's training process in undergraduate and young adults in graduate studies, as well as expectations regarding the job market or opportunities to professionals (Louzada & Silva-Filho, 2005; Corrêa & Ribeiro, 2013).

In this way, the meaning of work, studied in various areas of knowledge (Schweitzer, Gonçalves, Tolfo & Silva, 2016), then, incorporated into training processes in a changing society, it may be mobilized by expectations of continuous training to avoid professional obsolescence with social status of schooling (Silva, Costa & Lemos, 2015). The resulting meanings show the social and cultural role of knowledge for man's identity in society (Moreira & Velho, 2008; Andrade, Tolfo & Dellagnelo, 2012), as well as reinforce the relationship of this meaning with personal values (Schooler, Mulatu & Oates, 2004).

Since Schwartz and Bilsky (1987), Schwartz (1992, 1994), Schwartz and Bardi (2001) the human values' theory, personal or basic, has been discussed by Schwartz. His studies at a cross-cultural level, with more than 200 samples, 70 cultures, considers that values involve the goals of human beings around biological (organism), social (group) and relational (interaction) aspects (Schwartz, 1992, 2016). By defining

10 groups of values in a circular dynamic of 4 clusters (Openness to Change versus Conservatism and Self-promotion versus Self-transcendence), the study of values contributes to analyze of social phenomena, since from them, it is possible to better understand processes of valuation and meanings that support behaviors (Grad, 2008; Teixeira & Monteiro, 2008).

Then, if the context of transformations configures the meanings attributed to work, it is understood that expectations related to changes define evaluative priorities that give meaning to the ways of acting in the work context (Grad, 2008). It is evident, of course, based on data from GeoCapes (2019), that there is a training movement in Brazil with repercussions on subjective processes that, in line with values, formulate meanings, based on expectations of employment, income, work, research, teaching, survival (Fernandes, Gonçalves & Oliveira, 2012).

In particular, the separation of expectations of “undergraduate” (training for the market) and postgraduate (training as a researcher) may reflect on the different ways in which students attribute meanings to work. In relation to the *stricto sensu* level, for example, elements are silenced in an intense work routine, with goals, productivity installed to prestige, the management of innovation in research processes and projects, the race against time of the journals of a work that does not end (Valadares et al., 2014). One can resort to the idea of precarious work, as defended by Valadares et al. (2014), or even artisanal, or polarized between orientation and solitude, as Louzada and Silva Filho (2005) put it.

Furthermore, in relation to graduation, expectations address skills for the job market, increasingly socio-relational and socio-emotional (Deming, 2017), centered on experience-based knowledge (Brandão, Borges-Andrade & Guimarães 2012) and that stimulate innovative processes (Custodio, Ferreira & Matos, 2019). Those Behaviors based on perseverance, empathy, tolerance, resilience are expected (Krauz et al., 2014), although still not present in newly graduated professionals (Scale, 2016).

Given the context of these structural changes, the research, therefore, aims at studying relationships between personal values and meanings of work in undergraduate and graduate students. To this end, the design of hypotheses provides the analysis of constructs of personal values, supported by the Motivational Types scale, PQV-21, validated in Brazil by Tamayo and Porto (2009), and, from meanings to work, the Assigned Meanings Scale to Work (ESAT-BR), developed by Gonçalves

(2006), validated in Brazil by Fernandes, Gonçalves and Oliveira (2012). In this way, the study will contribute to improve actions in the socio-formative process of higher education students, since values play an important role in the expectations arising from the meanings attributed to work.

Personal Values to the Meanings Attributed to Work

The concept of value is required to understand human behavior (Campos, 2008). Considering those beliefs linked to affection, the hierarchy starts from judgments (evaluation) that direct the action and, therefore, mediate the relationship of man (attitudes and experiences) with society (Ros, 2006; Grad, 2008; Borges & Alvaro, 2013; Silva, Zanelli & Tolfo, 2013). While there are various types of values, from professional, religious, cultural, cognitive, social, political (Begley, 2004), and personal, they act in the process of balancing all the values that modulate the behavior of individuals (Baig, 2011).

Basic, or personal, values are value priorities that reveal the movement of people to understand the world, describe or make sense of needs in line with social approval or social inclusion (Schwartz, 2016). Whereas value consensus is the basis for the social order (Shils, 1975), and value conflicts in interaction with the social context can generate difficulties (Sverdlik, 2012), during excessive benevolence, which can give rise to difficulties (Sverdlik, 2012), exploitation, or excess of power that involves exploitation of others (Alden, Wiggins, & Pincus, 1990).

From the perspective of Schwartz (2016), because they are associated with affection, when these values are threatened, there is a mobilization of associated emotions, which may involve reactions that are not adjusted to the social context, as well as the emergence of conflicts (Schwartz, 2016), that is, as they represent desirable goals, values mobilize action around objectives that must be followed. In addition, values also transcend specific actions and situations and act as standards or criteria (selection and evaluation), based on possible perceived consequences. They also assume ordering based on hierarchy of importance, and contribute to actions insofar as they are relevant in the context (hence, probably activated) and important to the actor.

The structure of values presupposes an evaluative experience that references attitudes and behaviors in social interaction, intersubjectively instituted in everyday life (Tamayo, 2007b; Gouvêa, 2008, Borges & Alvaro, 2013; Silva, Zanelli & Tolfo, 2013). The study of these values is more widely considered from Schwartz (1992, 1994) and Schwartz and Bardi (2001) and, mainly, by the derived research instrument, widely studied in Brazil, such as Tamayo (2007a) and Porto and Tamayo (2008).

From the conception that values are universally centered on biological, social and socio-interactional aspects, it is understood to be the values necessary for survival (Schwartz, 2006, Grad, 2008). Around the three central aspects, 10 motivational types are organized (Chart 1): Power, Achievement, Hedonism, Stimulation, Self-determination, Universalism, Benevolence, Tradition, Conformity, and Security. In turn, those are grouped into two dimensions: self-promotion (aggregates Power, Hedonism and Achievement) versus self-transcendence (groups Universalism and Benevolence), which opposes the search for personal success in terms of one's own interests and power over others, with values that they emphasize the acceptance of the other as an equal and the collective well-being, transposing selfish interests (Schwartz, 1992; Tamayo, 2007b; Teixeira & Monteiro, 2008); and openness to change (aggregates Hedonism, Stimulation and Self-Determination) versus conservatism (Security, Conformity and Tradition), which opposes values of independence and autonomy of action and thought that motivate the individual to follow their own intellectual and emotional interests in an unpredictable sense to the self-restraint that causes the preservation of balance, preservation of traditional practices and protection of stability, preservation of the status quo and the guarantee of relationships with other individuals, institutions and traditions that it provides (Schwartz, 1992; Tamayo, 2007b; Teixeira & Monteiro, 2008; Schwartz, 2016).

Table 1: Schwartz's motivational types

| Motivational types | Meaning |
|--------------------|---|
| Hedonism | The gratification of organismic needs and the pleasure associated with their satisfaction are transformed into socially recognized values. The motivational goal of this group of values is pleasure and sensual gratification. Theorists from many disciplines (eg Freud 1933; Morris 1956; Williams 1968) mention hedonism (pleasure, enjoying life, fun). |
| Realization | Their goal is personal success achieved through a demonstration of competence that usually leads to social recognition (prevailing social and cultural standards). Many sources mention achievement values (Maslow 1965; Rokeach, 1973) (ambitious, successful, capable, influential). |
| Social Power | The functioning of society seems to require some system of stratification of function and responsibility, degree of power differentiation (Parsons, 1951). In this way, relationships of domination and submission, control or dominion over people and resources arise in the group (Lonner, 1980). To justify this fact of social life, power is transformed into value. Individual needs for domination and control may also be transformed into values related to power (Korman, 1974) and influence (Hays, 2013). The goal of these types of values is the search for social status, prestige and control over people and resources, which promote the maintenance or obtaining of advantages. |
| Self Determination | The values of self-determination seek independence of thought, action, choice (choose, create, explore). They derive from organismic needs for control and dominance (Bandura, 1977; Deci, 1975) and interactional requirements for autonomy and independence (Kluckhohn 1951; Kohn & Schooler 1983; Morris 1956) (creativity, freedom, curious, independent). |

Conformity Their motivational goal is the control of impulses and their own behavior in accordance with social expectations and norms. Then, actions that violate the expectations of social norms (obedience, politeness, honoring parents and elders) are restricted (Freud, 1930; Kohn & Schooler 1983; Morris 1956; Parsons, 1951).

Benevolence The motivational goal is the interest in voluntarily preserving and improving the well-being of people with whom one identifies (closest, intimate), such as family and primary groups. They derive from the quest to maintain good group functioning (Kluckhohn 1951; Williams 1968), and from the need for affiliation (Korman, 1974; Maslow, 1965). These values voluntarily promote cooperative social interactions, which is different from the conformity value, which cooperation derives from seeking to avoid negative outcomes for oneself.

Security The goal of values of this type is personal integrity and the identifying people's and groups' integrity, as well as the stability of society, relationships and oneself. This value derives from the pursuit of survival (avoiding danger) of individuals and groups (social order, personal security, national security) (Kluckhohn, 1951; Maslow, 1965; Williams, 1968).

Tradition All societies develop uses, customs, practices and symbols that represent their shared destiny and common experience. Tradition is something that springs from the community and becomes symbols, practices, and beliefs of its own survival. The motivational goal of values related to tradition is respect and acceptance of the customs and ideas of a culture or religion. Acceptance involves group solidarity that contributes to the survival of the group and tradition (religious rites, beliefs, and norms of behavior) (Durkheim, 1954; Parsons 1951). Although values of tradition are close to those of conformity, since this involves subordination to the people representing the norms, and in tradition there is subordination to abstract conceptions of ideas, customs of the collective.

Stimulation Need for excitement, novelty, change, and challenges in order to maintain a satisfactory level of functioning (variety, excitement, adventure). This value derives from the organismic need for variety and stimulation that maintain high levels of activation (Berlyne, 1960), related to the values of self-determination (Deci, 1975).

Universalism The motivational goal of this group of values is the search for the well-being of all. This value includes understanding, appreciation, tolerance and protection of all people, as well as attention to nature (justice, equality, world peace, protection of the environment). They differ from the benevolence value, which aims at the well-being of specific groups. It is part of the movement for Universalism to understand the importance of others, since conflicts can jeopardize life in society, as well as the distribution of nature's resources essential to life.

Source: Adapted from Schwartz (1992, 2016), Tamayo (2007a, 2007b).

The dynamics of the values present in Chart 1 occurs in the face of the set of values experienced by people, when priority, conflicting and compatible values are defined (Teixeira & Monteiro, 2008). Schwartz (1994) teaches that the motivational types that are closer have greater compatibility, in relation to those that are more distant. The further away, the greater the likelihood of conflict. Schwartz (2016) analyzes, for example, which values stimulation, self-determination, universalism and benevolence would be related to growth and achievement; whereas power and security would be defensive values.

In this sense, values are manifested in the form of mediation of self-consciousness and the environment, which allows man to attribute meanings to work (Engels, 1952; Marx, 2004), necessary for sociability and the ability to adapt, depending on the use of work in ensuring survival (Sznelwar, Uchida & Lancman, 2011). In the perspective of Antunes (2005), capitalism has awakened meanings of work due to the degradation and alienation of man, considering the critical position of man's separation from the means of production, or the "snail from its shell".

Meanings attributed to work, still, from a critical perspective, it assumes that capital gives rise to the emptying of meaning for work, focusing on the control of physical effort, harming reflection and autonomy (Sznelwar, Uchida & Lancman, 2011).

Other meanings have emerged in new social arrangements, which, in the view of Antunes (2005, 2009), Alves (2002), Mota (2009) and Tonet (2009), reinforce the precariousness of work around neoliberal policies in expressions of exploitation of the men.

In other theories, work meanings appear associated with other formations, such as around workers' health conditions (Barros, 2012), even though these meanings are still perceived as contributing to the production process (Sznelwar, Uchida & Lancman, 2011). Ways of thinking about work have considered the expectations of broader social contexts, in which the labor market is a part. This understanding defines meanings as socially formulated constructions, in which social interactions are essential (Gonçalves, 2006).

In the scope of constructivism (Gonçalves & Coimbra, 2003; Gonçalves & Coimbra, 2004; Gonçalves, 2006), the meanings attributed to work provide a greater possibility of understanding the sociocultural context in technological revolution, as they state (Bloem et al., 2014; Susskind & Susskind, 2015; Schwab, 2016; Frey & Osborne, 2017; Prüfer & Prüfer, 2019). In this way, the studies derived from the Meaning of Work International Research Team or MOW, which, since 1987, have been referenced in studies on the meanings of work, represent a scope of analysis consistent with the moment of profound changes.

MOW studies (1987) were carried out in seven countries (USA, Japan, Germany, Belgium, Israel, Yugoslavia, Netherlands), and assume the meanings attributed to work in a multidimensional way, in which work assumes a central condition for which they are attributed affections and interpretations agreeing with other dimensions. At the same time, studies indicate inconsistencies that generate difficulties in appreciating the construct (Gonçalves, 2006; Borges & Alvez Filho, 2001), which motivated researchers to adapt the instrument to improve the psychometric properties that gave rise to studies around the Value Scale (VS) and the Salience Inventory (SI) (Lassance & Sarriera, 2009).

Brazilian path in relation to the meaning of work appears with the Inventory of the Meaning of Work (IST), by Borges (1999), improved in the version Inventory of Motivation and Meaning of Work (IMST), by Borges and Alves Filho (2001), when the motivational dimension is incorporated, based on Vroom's Theory of Expectations. Then, a new instrument was elaborated based on Schwartz's Theory of Values (1992, 1994), the Scale of Values Related to Work (EVT), with items distributed in four

dimensions (Work Achievement, Social Relations, Prestige and Stability), revised by Porto and Pilati (2010), with a reduction of 10 items from its original version.

The aforementioned scales (IST, IMST and EVT) measure the “work” category, considering that the respondents have previous work experiences (Fernandes, Gonçalves & Oliveira, 2012). To apprehend this same category by subjects who have complex work situations (between work and non-work), this research uses the Scale of Meanings Ascribed to Work (ESAT), developed and refined by Gonçalves and Coimbra (2003), Gonçalves and Coimbra (2004), Gonçalves (2006) and Sobral and Coimbra (2008), the scale evaluated the meanings that adolescents and young people have attributed to work. The ESAT-R (Table 2) was validated in Brazilian context by Fernandes, Gonçalves and Oliveira (2012) who, from 35 items of the initial instrument, 25 items are confirmed distributed in five dimensions: Personal accomplishment of work, Economic dimension of work, Positive emotional dimension of work and Negative emotional dimension of work.

Table 2: Dimensions of the scale of meanings attributed to work

| Dimensions | Definitions |
|--------------------------------------|---|
| Personal accomplishment of work | It refers to the way work is a source of personal satisfaction, contributing to the individual's fulfillment, challenging him to update his resources and personal skills. In this Dimension, aspects related to learning, personal growth, competence, motivation and achievement are highlighted. |
| Economic dimension of work | It refers to the way in which work is an instrument to respond to fundamental needs that guarantee the quality of personal and family life and social recognition. In this dimension, aspects related to the financial side of work are highlighted, such as salary, subsistence and financial stability. |
| Positive emotional dimension of work | It refers to the way in which work allows for satisfying personal and social opportunities in terms of positive, creative and relational activity. |
| Negative emotional dimension of work | It refers to the exhausting impact, in personal and family terms, of work activity as a source of concern, stress, monotony, fatigue. |

Source: Fernandes, Gonçalves and Oliveira (2012, p. 187).

DESIGN OF THE HYPOTHESES

While studies identify a relationship between personal values and meanings of work, such as, for example, Schooler, Mulatu and Oates (2004), Ros and Grad (2005) and Kafa and Pashiardis (2020), it is understood that values influence meanings attributed to work (Grad, 2008). Likewise, the social, cultural and historical context influences the way people prioritize value, when interpreting changes and giving meaning to the needs that emerge from this context (Schwartz, 2011, 2016). Then, in contextual changes, there are variations in the meanings attributed to work (Gonçalves & Coimbra, 2003; Gonçalves & Coimbra, 2004; Gonçalves, 2006).

Based on studies by Casteren van Cattenburch (2017), Sepasi, Rexhepi and Rahdari (2020), Klapper, Berg and Upham, (2020), Chowdhury (2020), Manzhynski and Figge (2020), Nedelko and Potocan (2021) on the dynamics of values in relation to sustainability and corporate social responsibility, the values of benevolence and universalism (Self-transcendence) have been more widely associated with the perspective of social and environmental sustainability, since the stimulus to actions aimed at sustainability are related with these values. As these, therefore, are valued by current society, in particular by companies and market dynamics, it is necessary to:

- H1** – Self-transcendence values (benevolence and universalism) positively influence positive meanings attributed to work.
- H2** – Self-transcendence values (benevolence and universalism) positively influence meanings attributed to professional fulfillment.
- H3** – Personal value Self-transcendence negatively influences economic meanings attributed to work

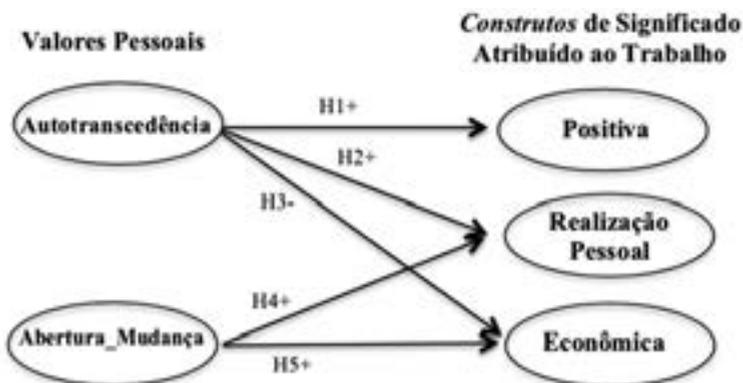
On the other hand, technological dynamics in a context of revolution have driven demands around innovation, which can move the automation process and artificial intelligence (Bloem et al., 2014; Prüfer & Prüfer, 2019), which highlights expectations about work around creation, intelligence, openness, capable of aligning potentialities, technologies, the dynamics of the labor market, and economic and social development (OECD, 2015), that is, knowledge, skills and attitudes favorable to innovation (Custódio, Ferreira & Matos, 2020), as well as the contribution of

values related to openness to change (Sánchez-Báez, Fernández-Serrano & Romero, 2018). In this way, it is expected that:

- H4** – The personal value Openness to Change (Hedonism, Stimulation and Self-Determination) positively influences the economic meanings attributed to work.
- H5** – The personal value Openness to Change positively influences meanings attributed to work related to personal fulfillment.

Finally, it is considered that personal values and meanings of work present differences between undergraduate and graduate students, since the relationship they have with the training process assumes different social expectations, which derives from Valadares et al., (2014) Louzada and Silva Filho (2005), Deming, (2015) Borges et al., (2012) Krauz et al. (2015), Scale (2016). Then, with a view to investigating relationships between Personal Values and Meanings Ascribed to Work, a quantitative study was undertaken with the aim of describing and inferring relationships through hypothesis testing, following the structural analysis procedure (Hair, Hult, Ringle & Sarstedt, 2014), according to the hypotheses set out on Picture 1.

Picture 1. Research model values and meanings of work in graduate studies



Source: Own elaboration based on readings by Schwartz (2016) and Fernandes, Gonçalves and Oliveira (2012).

Methodology

The research hypotheses were assessed using the structural model, estimated by the Partial Least Squares Path Modeling [PLS-PM] method, based on covariance, whose choice was based on the possibility of testing relationships between latent variables without the assumption of multivariate normality (Hair et al., 2014), and is also suitable for exploratory studies (Chin & Newsted, 1999). For the analysis, the SmartPLS software (version 2.0 M3 Beta) was used in a valid total sample of 467 students linked to a Federal Teaching Institution (IFE), 223 of which were undergraduate and 244 were graduate students.

For the instrument related to the meanings attributed to work, the scale (ESA-T-BR) was chosen, whose original version was developed by Gonçalves (2006), in Portugal. In Brazil, it was adapted and validated with high school students by Fernandes, Gonçalves and Oliveira (2012). It has 25 items (6-point Likert scale), distributed among four factors: (a) Dimension of Personal Achievement of Work, with 9 items ($\alpha = 0.81$); (b) Positive Work Dimension, with 7 items ($\alpha = 0.77$); (c) Economic Dimension of Work ($\alpha = 0.64$), with 3 items; and (d) Negative Work Dimension, with 6 items ($\alpha = 0.77$).

Regarding the Personal Values scale, the instrument Motivational Types, PQV-21, validated in Brazil by Tamayo and Porto (2009) and which assumes the theoretical scope of Schwartz, was used. From this, the items specifically address the values of self-transcendence (groups Universalism and Benevolence) and values of openness to change (aggregates Hedonism, Stimulation and Self-determination).

Research Results

STRUCTURAL MODELING

The first stage of structural equation modeling consisted of analyzing the measurement model, which attests to the validity and reliability of the research constructs (Hair Jr, Hult, Ringle & Sarstedt, 2016). Therefore, the correlations between the LVs (factor loadings) and the factor loadings (crossloadings) were simultaneously analyzed. Then, tables 1 and 2 were extracted, which report the level of LVs and indica-

tors, respectively, through validity (convergent and discriminant) and reliability (alpha and composite).

Table 1. Matrix of correlations between latent variables

| | 1 | 2 | 3 | 4 | 5 |
|----------------------------|-------|-------|-------|-------|-------|
| 1. Opening_Change | 0,693 | | | | |
| 2. Self-transcendence | 0,422 | 0,726 | | | |
| 3. Economical | 0,196 | 0,024 | 0,813 | | |
| 4. Positive | 0,194 | 0,348 | 0,348 | 0,693 | |
| 5. Personal Accomplishment | 0,156 | 0,286 | 0,174 | 0,487 | 0,707 |
| Alfa | 0,659 | 0,700 | 0,745 | 0,793 | 0,855 |
| AVE | 0,500 | 0,527 | 0,661 | 0,500 | 0,500 |
| CC | 0,784 | 0,815 | 0,854 | 0,845 | 0,887 |

Subtitle: Alpha: Cronbach's Alpha; AVE: Average Variance Extracted; CC: Reliability composite.

Note 1: Values in bold on the diagonal are the square root of the extracted mean variance.

Note 1: The diagonal values are the square root of the AVE.

Note 2: All correlations are significant at 1%.

In the verification of the level of the LVs, the convergent validity, under the criterion of Fornell and Larcker (1981), must present values of the average variance extracted (Average Variance Extracted-AVEs) greater than 0.50 ($AVE > 0.50$), said Therefore, the latent variables 'Openness_Change', 'Self-transcendence', 'Economic', 'Positive' and 'Personal_Accomplishment' explained more than half of the variance of their indicators. Table 1 shows the Discriminant Validity of the study ($\sqrt{AVE} > \text{Pearson correlations between the constructs}$), based on the criterion of Fornell and Larcker (1981). Then, all VLs shared greater variance with their indicators than with the other VLs, then being independent of each other. And, in relation to composite reliability (Reliability composite), the values estimated by the LVs, assumed values between $0.7 < CC < 0.95$ (being considered satisfactory) (HAIR et al. 2014). To meet the CVA and WC criteria, variables V18 (Load 0.591), S9 (Load 0.455), V9 (Load 0.444), V10 (Load 0.567), S10 (Load 0.561) were removed in six steps, respectively.

Considering the maintenance of the AVE patterns > 0.50 and $0.7 < CC < 0.95$, and also to maintain the content validity of each latent variable in the study (Savelsbergh, Van Der Eijden & Poell, 2009), we chose by keeping the variables V11(Load 0.556), S15 (Load 0.543), and S7(Load 0.495). Therefore, loads between 0.60 and 0.70 are acceptable, while loads between 0.40 and 0.70 need to be evaluated based on a reasoned decision. (Hair Jr., Hult, Ringle, & Sarstedt, 2017).

Table 2 Factor loading matrix

| | 1 | 2 | 3 | 4 | 5 |
|-----|--------------|--------------|--------------|--------------|--------------|
| V11 | 0,556 | 0,222 | 0,068 | 0,04 | 0,002 |
| V17 | 0,736 | 0,346 | 0,153 | 0,141 | 0,116 |
| V19 | 0,671 | 0,281 | 0,144 | 0,137 | 0,112 |
| V20 | 0,786 | 0,304 | 0,145 | 0,167 | 0,139 |
| V12 | 0,3 | 0,762 | 0,043 | 0,278 | 0,165 |
| V13 | 0,329 | 0,817 | -0,004 | 0,292 | 0,288 |
| V4 | 0,287 | 0,646 | 0,067 | 0,203 | 0,16 |
| V7 | 0,315 | 0,666 | -0,024 | 0,227 | 0,194 |
| S19 | 0,169 | 0,032 | 0,833 | 0,336 | 0,198 |
| S22 | 0,126 | -0,031 | 0,789 | 0,263 | 0,128 |
| S25 | 0,178 | 0,049 | 0,817 | 0,249 | 0,099 |
| S12 | 0,217 | 0,215 | 0,291 | 0,693 | 0,361 |
| S15 | 0,146 | 0,085 | 0,364 | 0,543 | 0,301 |
| S16 | 0,107 | 0,33 | 0,29 | 0,807 | 0,39 |
| S17 | 0,16 | 0,131 | 0,326 | 0,632 | 0,324 |
| S18 | 0,093 | 0,243 | 0,146 | 0,669 | 0,326 |
| S20 | 0,149 | 0,296 | 0,199 | 0,779 | 0,347 |
| S1 | 0,076 | 0,155 | 0,221 | 0,332 | 0,656 |
| S14 | 0,142 | 0,188 | 0,241 | 0,47 | 0,629 |
| S2 | 0,02 | 0,214 | 0,055 | 0,269 | 0,711 |

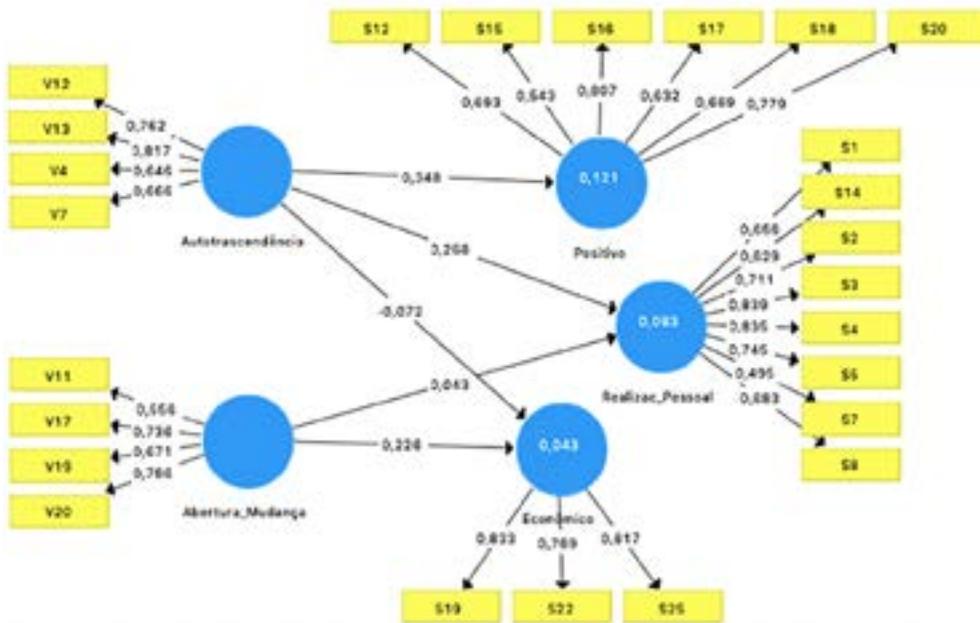
| | | | | | |
|----|-------|-------|-------|-------|--------------|
| S3 | 0,144 | 0,253 | 0,098 | 0,382 | 0,839 |
| S4 | 0,161 | 0,257 | 0,111 | 0,384 | 0,835 |
| S5 | 0,141 | 0,203 | 0,024 | 0,275 | 0,745 |
| S7 | 0,098 | 0,075 | 0,255 | 0,312 | 0,495 |
| S8 | 0,087 | 0,201 | 0,123 | 0,364 | 0,683 |

Source: research data

Note 1: All factor loadings are significant at 1%.

For discriminant validity, it was observed that the factor loadings (in bold) are greater than the cross loadings ('off-diagonal' loadings) (Table 2). The factor loadings of the model and the structural coefficients (β) of analysis were also evaluated (Picture 2).

Picture 2. Factor loadings and structural coefficients (β) of the measurement model



Source: Research data.

Nota: Output from SmartPLS software.

In the structural model, hypotheses 1, 2, 3, 4 and 5 were evaluated using the path diagram, allowing to reject it or not. Before evaluating the model's R2, the hypothesized relationships (Picture 2) were tested to verify the significance of the standardized coefficients (path coefficients) using the bootstrapping procedure (re-sampling technique) in SmartPLS with 5000 samples involving 25 variables. Then, for values above 1.96 for Student's t test, standard error ((O/STDEV)) and p-value less than or equal to 0.05, the relationships are significant.

Table 3. Significance test of hypothesized relationships

| | H | β | STDEV | t | p-value | R | R2 adjusted |
|---|-----|---------|-------|-------|---------|-------|-------------|
| Opening_Change -> Economic | H5+ | 0,226 | 0,048 | 4,682 | 0,000 | 0,043 | 0,039 |
| Self-transcendence -> Economical | H3- | -0,072 | 0,054 | 1,321 | 0,187 | | |
| Opening_Change -> Personal_ Performance | H4+ | 0,043 | 0,052 | 0,836 | 0,403 | 0,083 | 0,079 |
| Self-transcendence -> Personal_ Performance | H2+ | 0,268 | 0,077 | 3,472 | 0,001 | | |
| Self-transcendence -> Positive | H1+ | 0,348 | 0,051 | 6,769 | 0,000 | 0,121 | 0,119 |

Source: Research data.

Subtitle: β = structural coefficient; STDEV = standard error; t = t of student.

Note: Highest external VIF value = 2.698.

To analyze collinearity, the value of the variance inflation external factor (VIF) should be observed, which was between 1.0 and 2.698, that is, less than 5 (Hair Jr. et al., 2017). Regarding the explanatory capacity of the model, the structural coefficient (R2) is used as a parameter, with values ranging from 0 to 1, representing by R2=2%, small effect, R2=13%, a medium effect and R2 =26%, a large effect (Cohen, 1988). With this parameter, it is observed that the effects of the relations “Abertu-

ra_Change->Economic and Autotranscendence->Economic”, as well as “Abertura_Change->Personal_Realizac and Autotranscendence->Personal_Performance” are considered small $R^2=3.9\%$ and $R^2=7.9\%$, respectively. And the relationship “Self-transcendence->Positive” had an approximately average effect ($R^2=11.9\%$). Then, there are small and medium effects of the hypothesized relationships on the explanatory capacity of the proposed model.

To analyze the direct effects of predictive latent variables, the blindfolding technique was performed using a specific module in SmartPLS. The analysis of this effect defines the relative importance of the predictor (Table 4), in reference to Cohen (1977) and Hair Jr. et al., (2014), who define (f^2) of 0.02, 0.15 and 0.35 considered small, medium and large, respectively.

Table 4. Relative importance (f^2)

| | SSO | SSE | $Q^2 (=1-SSE/SSO)$ |
|-------------------------|------|----------|--------------------|
| Opening_Change | 1868 | 1579,058 | 0,155 |
| self-transcendence | 1868 | 1448,243 | 0,225 |
| Economic | 1401 | 950,356 | 0,322 |
| Positive | 2802 | 2005,895 | 0,284 |
| Accomplishment_Personal | 3736 | 2392,521 | 0,36 |

Source: Research data.

Note: Data taken from the Blindfolding module (SmartPLS), while f^2 represents the reading of the Commonalities (cross-validation in the commonality of the construct).

Supported by Table 4, which presents the Cohen indicator, or effect size (f^2), it measures the strength of the theoretical relationship by representing the degree to which the phenomenon studied is considered in the sample, also evaluated by the ratio between the part explained by the model and the unexplained part ($f^2 = R^2 / (1 - R^2)$). After analyzing the output of the blindfolding module in relation to the validation of commonalities, it is observed that the predictors Opening_Change (0.155), Self-transcendence (0.225), Positive (0.284) and Economic (0.322) have medium effects (f^2), and Personal_Performance (0.36), with an effect (f^2) greater than 0.35, defines it as a great prediction effect, being, certainly, the most representative of model.

Regarding the cross-validation of the redundancy of the constructs (Table 5), also obtained by the blindfolding module in SmartPLS, the predictive capacity of the model (Q2) was obtained, or Stone-Geisser indicator, in which the perfect model can be observed by Q2=1, as defined by Hair Jr. et al. (2014).

Table 5: Predictive capacity or relevance

| | SSO | SSE | Q ² (=1-SSE/SSO) |
|-------------------------|------|----------|-----------------------------|
| Opening_Change | 1868 | 1868 | |
| self-transcendence | 1868 | 1868 | |
| Economic | 1401 | 1365,644 | 0,025 |
| Positive | 2802 | 2665,994 | 0,049 |
| Accomplishment_Personal | 3736 | 3607,011 | 0,035 |

Source: Research data.

Note: Data taken from the Blindfolding module (SmartPLS), whereas Q2 represents the redundancy reading (construct redundancy cross-validation).

While table 5 presents values of predictive relevance (Q2 >0), the predictive accuracy of the study model is satisfactory, satisfying the criterion established by Hair Jr. et al. (2014), regarding the assessment of the model predictive relevance.

Finally, to evaluate the significance test of the hypothesized relationships through the bootstrapping procedure, the significance of the standardized coefficient (β = path coefficient) was evidenced. It appears that, for t test > 1.96 and p-value < 0.05, the relationships are significant. Then, it was found that hypotheses H1, H2 and H5 presented a positive and significant coefficient (at the level of 5%, p value < 0.05), supporting them in the structural model proposed for this study.

MULTI-GROUP ANALYSIS (MGA)

Subsequently, the Measurement Invariance of Composite Models (MICOM) and Multi-Group Analysis (MGA) tests were carried out. Therefore, the research sample was subdivided into two subsamples by moderator category: Vínculo_Grad, 223 (group 1) and Vínculo_Post 244 (group 2).

Initially, to validate the equivalence (or invariance) of the measurement model between the groups (Millsap, 2011), the measurement invariance of composite models using the MICOM test was carried out with the following steps; (1) configuration invariance, (2) composition invariance and (3) equality of mean values and variances of the constructs. Then, to assess whether the relationships between the constructs (structural coefficients) vary depending on the group (Hair Jr. et al., 2017), the path coefficients were compared using the permutation test (Henseler, 2017; Ringle & Sarstedt, 2017).

The results of the first one, the configuration invariance, are not obtained by statistical means, for this, it is necessary to verify if the same indicators are used to measure the same construct in different groups. This fact becomes evident when observing the configuration of the structural model of the study. Subsequently, compositional invariance assesses whether the scores of the constructs differ significantly between groups. To do so, it tests the null hypothesis that the correlation is one, that is, it may not be rejected (Hair Jr. et al., 2017). As shown in Table 6, it is possible to see that, at a significance level of 5%, the study constructs had a p-value greater than 0.05 (H0 not rejected), then, composition invariance was confirmed. As a result, the partial measurement invariance of the model was obtained, already guaranteeing the permission to carry out the multigroup analysis, since the measurement models are equivalent (or can be used) for both groups.

Table 6. Compositional invariance test

| | Original Correlation | Correlation of mean permutation | 5.0% | P-values- of permutation |
|-------------------------|----------------------|---------------------------------|-------|--------------------------|
| Opening_Change | 0,909 | 0,957 | 0,881 | 0,100 |
| self-transcendence | 0,977 | 0,982 | 0,954 | 0,280 |
| Economic | 0,962 | 0,982 | 0,950 | 0,099 |
| Positive | 0,987 | 0,982 | 0,951 | 0,501 |
| Accomplishment_Personal | 0,995 | 0,986 | 0,969 | 0,836 |

Source: Research data.

Note: Measurement Invariance of Composite Models – MICOM.

Additionally, to establish the total invariance (scalar invariance), according to MICOM, the means and variances of the relationship between the constructs, moderated by the Link_Grad, 223 (group 1) and Link_Post 244 (group 2) were compared. Based on simple partial invariance (compositional invariance), analysis of table 6, or total (compositional invariance + scalar invariance), analysis of table 7, it is observed that the model under analysis has partial invariance, since there is composition invariance and scalar invariance in relation to the mean difference between the groups in the construct (self-transcendence, p -value > 0.05) and in relation to the variance difference between the groups in the constructs (Opening_Change; Self-transcendence; Personal_Accomplishment, p -value > 0.05).

Subsequently, the MGA, nonparametric test, Table 8, assesses whether there is a significant difference between the categorical variables (undergraduate and graduate), whose p -Value ≤ 0.05 and $p \geq 0.95$ indicate statistically significant differences between the structural coefficients (β) of the groups (Hair Jr., Hult, Ringle, & Sarstedt, 2017).

DISCUSSION OF RESULTS

A study of the relationships between personal values and meanings attributed to work in undergraduate and graduate students identified a relationship between values associated with openness to change (hedonism, stimulation and self-determination) and economic meanings attributed to work (H5+, $\beta = 0.226$, p -value=0.000), but does not confirm a negative relationship between self-transcendence values (benevolence and universalism) and economic meanings attributed to work (H3-, $\beta = - 0.072$, p -value= 0.187).

Regarding the meaning attributed to personal fulfillment, the research data show that this meaning is influenced by values of self-transcendence (benevolence and universalism) (H2+, $\beta = 0.268$, p -value = 0.001), although it does not confirm the influence of values of openness to change (hedonism, stimulation and self-determination) (H4+, $\beta = 0.043$, p -value= 0.403). Regarding the attribution of positive meanings to work, the influence of self-transcendence values (benevolence and universalism) is observed (H1+, $\beta = 0.348$, p -value= 0.000).

For a much better understanding of the items by construct of the study, the statements made by the respondents for the Openness to change value were part of

Table 7. Scalar invariance (equality of composite means and variances)

| | Mean - Original Link - Post_Link) | Mean - average difference of the permutation (Grad_ | 2.5% | 97.5% | P-values Permutation | Variance - average difference of the permutation (Grad_ | Link - Post_Link) | Variance - average difference of the permutation (Grad_ | 2.5% | 97.5% | P-values Permutation |
|----------------------------------|--------------------------------------|---|--------|-------|-------------------------|---|-------------------|---|-------|-------|-------------------------|
| Opening_ Change | 0,27 | 0,001 | -0,178 | 0,17 | 0,003 | -0,057 | 0,001 | -0,262 | 0,238 | 0,657 | |
| self-trans- cendence | -0,08 | 0,004 | -0,182 | 0,198 | 0,377 | 0,356 | -0,01 | -0,385 | 0,373 | 0,065 | |
| Economic | 0,371 | 0 | -0,182 | 0,175 | 0,007 | -0,534 | 0,007 | -0,337 | 0,324 | 0,001 | |
| Positive | -0,474 | 0,002 | -0,178 | 0,175 | 0,36 | 0,36 | -0,004 | -0,338 | 0,343 | 0,034 | |
| Accom- plishment_ Personal | -0,216 | -0,002 | -0,19 | 0,185 | 0,018 | 0,358 | -0,006 | -1,082 | 1,091 | 0,542 | |

Source: dados da pesquisa.

Note: Only the self-transcendence construct p-value > 0.05, the mean difference between the groups is confirmed

Note: Only the positive construct has a p-value < 0.05, rejecting the variance difference between the groups.

Tabela 8. MGA bootstrapping

| | C.E.O. (Link_Grad) | C.E.O. (Link_Grad) | C.E.O. (Link_Grad) | C.E.O. (Link_Grad) | C.E.O. (Grad_Link) | Standard Deviation (Link_Grad) | Standard Deviation (Post_Link) | t values (Grad_Link) | t values (Link_Post) | p values (Grad_Link) | p values (Link_Post) |
|--|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------------------|--------------------------------|----------------------|----------------------|----------------------|----------------------|
| Opening_Change -> Economic | 0,251 | 0,206 | 0,257 | 0,227 | 0,097 | 0,072 | 2,592 | 2,874 | 0,01 | 0,004 | |
| Opening_Change -> Personal_Performance | 0,12 | 0,076 | 0,134 | 0,081 | 0,07 | 0,145 | 1,727 | 0,527 | 0,084 | 0,598 | |
| Self-transcendence -> Economical | -0,132 | -0,032 | -0,117 | -0,029 | 0,129 | 0,088 | 1,026 | 0,357 | 0,305 | 0,721 | |
| Self-transcendence -> Positive | 0,456 | 0,244 | 0,473 | 0,278 | 0,066 | 0,062 | 6,92 | 3,954 | 0 | 0 | |
| Self-transcendence -> Personal_Performance | 0,323 | 0,146 | 0,331 | 0,182 | 0,1 | 0,114 | 3,244 | 1,283 | 0,001 | 0,2 | |

Fonte: Research data.

C.E.O. Original structural coefficients

HUNDRED. Average structural coefficients

C.E.D.M.P Structural coefficients mean difference

Note: The paths “Abertura_Mudança -> Economic” and “Self-transcendence -> Positive” comply with the criterion, p-Value ≤ 0.05 and $p \geq 0.95$.

the research: “She likes surprises and is constantly looking for new things to do. She thinks it’s important to do many different things in life”, related to Stimulation (V20, load 0.786); “It’s important for her to make her own decisions about what she does. She likes to be free and not depend on others” related to Self-Determination (V19, load 0.671); “She looks for every opportunity to have fun. It is important for her to do things that bring her pleasure” (V17, load 0.736) and “Enjoying the pleasures of life is important for her. She likes to pamper herself” (V11, load 0.656) related to Hedonism

Regarding the Self-transcendence value, the latent variable comprises the items: “It is very important for her to help the people around her. She wants to take care of their well-being” (V12, load 0.762) and “It is important for her to be loyal to her friends. She would like to dedicate herself to the people close to her” (V13, load 0.817) who represent benevolence; and the items “She firmly believes that people owe nature. Taking care of the environment is important to her” (V4, load 0.646) and “She believes that it is important that all people in the world are treated equally. She believes that everyone should have equal opportunities in life” (V7, 0.666) which represent universalism.

The Personal Achievement dimension was tested using the items “A possibility of career progression” (S1, load 0.656); “Taking new responsibilities” (S2, load 0.711); “The possibility of exploring and realizing new ideas” (S3, load 0.839); “The possibility of using my knowledge in new situations” (S4, load 0.835); “The possibility of using my abilities and skills” (S5, load 0.754); “A form of personal fulfillment” (S7, load 0.495); Make new learning (S8, load 0.683); Increasing demand, dedication and commitment (S14, load 0.629). The Economic dimension was a survey with the items “Guarantee of economic success” (S19, load 0.833); “Stability and security guarantee” (S22, load 0.789); “Guarantee of a good salary” (S25, load 0.817). Finally, the study of the meanings attributed to work tested the Positive dimension, composed of the items “The possibility of appreciating the beauty of things” (S12, load 0.693); “Being able to be in a pleasant physical environment” (S15, load 0.543); “The opportunity to build a more solidary and fair society” (S16, load 0.807); “A source of happiness and well-being” (S17, load 0.632); “An opportunity to make friends” (S18, load 0.669); “An opportunity to make friends” (S20, load 0.779),

In this sense, aware that contextual changes influence the attribution of value (Schwartz, 2011, 2016), which the research investigates in relation to work (Gonçal-

ves & Coimbra, 2003, Gonçalves & Coimbra, 2004, Gonçalves, 2006), considered if the new dynamics that have sparked discussions in society about sustainability and critical issues such as; social and environmental responsibility of organizations (Casteren van Cattenburch, 2017; Sepasi, Rexhepi & Rahdari, 2020; Klapper, Berg & Upham, 2020; Chowdhury, 2020; Manzhynski & Figge, 2020; Nedelko & Potocan, 2021), has prioritized values in attributes of benevolence (preserving and voluntarily improving the well-being of people with whom they identify (closest, intimate)) and universalism (understanding, appreciation, tolerance and protection of all people) are present (Schwartz, 2016) .

With this, the research identifies the relationship of these values (Self-transcendence) with the professional fulfillment (H2) of undergraduate and graduate students, as they assess that work is a source of satisfaction and fulfillment, as well as a source of personal development (Fernandes, Gonçalves & Oliveira, 2012), while confirming the relationship between these values and a positive perception of work (H1), considering the assessment that creative exercise and the development of satisfactory social bonds are possible through work (Fernandes, Gonçalves & Oliveira, 2012). Regarding the attribution of positive meanings, there is a difference between the groups “undergraduates” (CEM 0.473) and “graduate students” (CEM 0.278) (Table 8), and the influence of self-transcendence values on these meanings is higher in the group of undergraduates.

Another relationship of values (Self-transcendence) tested and not confirmed (H3) involves the attribution of economic meanings to work. The hypothesis considers that these values negatively influenced these meanings, which, although not confirmed, the sign of $\beta = (-0.072)$ is in line with the discussion presented.

On the other hand, contextual analysis regarding the technological revolution with advances in the field of innovation that has driven new expectations for future professionals (Bloem et al., 2014; Prüfer & Prüfer, 2019; Custódio, Ferreira & Matos, 2020), was analyzed, in this research, as having an impact on evaluative priorities related to openness to change. With the data, a relationship between these values and the attribution of economic meanings to work is confirmed (H4), but no relationship is confirmed with professional fulfillment between undergraduate and graduate students (H5). These results suggest that economic expectations may be disconnected from personal fulfillment, which involves the need to deepen in the face of the

relevance of attributions aimed at achievement from the perspective of professional development in various aspects, such as performance and as health (Fernandes, Gonçalves & Oliveira, 2012). Furthermore, it is observed that there are differences in relation to the attribution of economic meanings based on values of openness to change between “undergraduates” (CEM 0.257) and “postgraduates” (CEM 0.227), being greater in the group of undergraduates.

Conclusion

Reaching with the study of relationships between personal values and meanings of work in undergraduate and graduate students, the data confirm hypotheses related to the contribution of values of self-transcendence (benevolence and universalism) with the attribution of positive meanings and personal fulfillment at work, and, in relation to positive meanings, there is a difference between undergraduate and graduate students, with greater influence in the first group. Considering the relevance of attributing these meanings to people, to groups and work teams and to organizations, these results suggest particular relevance in relation to the socio-educational context in relation to the stimulation and strengthening of values of self-transcendence, in which there are pro-movements – collectivity and social well-being.

Regarding the evaluation of the values related to openness to change to the economic meanings of work, its positive contribution to the two groups under study is observed, while it presents itself with greater influence on undergraduates, which may be suggestive of training courses whose focus is employability in a social and market context that strives for the logic of competitiveness and success. Since this finding arises in interaction with the non-confirmation of the influence of these values on the meanings of personal fulfillment associated with work, it is suggested that the point be more widely discussed, given the worrying horizons in terms of social life and work when the economic dimension is a priority considering the values widely expected by economic and governmental actors.

Finally, to understand that the values of self-transcendence, due to a context focused on sustainability, and values of openness to change, as a result of the conjuncture raised by economic development, reveal possibilities of influence on values

attributed to the work converging so that researchers are interested in debating the influence of values and meanings in socio-educational processes, placing specific characteristics in relation to expectations meant in undergraduate and graduate studies, since the data reveal differences in relevant points.

Among the set of values and dimensions attributed to work expressed in the instruments used, it was decided to develop analyzes on those that converge to the discussion of contexts (sustainability) and (innovation-economic development). Other contributions may emerge based on the analysis of other combinations between the investigated phenomena. In this case, decisions related to the continuity of the study will consider the maintenance of indicators with loads between 0.4 and 0.7, which, although justified by the combined analysis of other adjustments, may be a limitation to be overcome in future research.

It is understood, therefore, that considering the results found, a new look at the variables must be incorporated, since students are influenced differently depending on their level of education. In this way, the actors who plan, coordinate and lead the process of training students, whether undergraduate or graduate, must consider the different forms of impact at each level, as well as the perception of each group, enabling strategies and more assertive and affirmative actions, contributing to market insertion, better employability, better meeting social demands, finally, contributing to the fulfillment of the social role of IFES, which is the local, regional and/or national socio-economic development.

Furthermore, as an agenda for future research and within the scope of investigation proposed in this study, a possible expansion of the research field is suggested, that is, including other IFEs in Brazil, since geographic and, in turn, demographic issues can impact on the understanding of the phenomenon within the scope of personal values and meanings attributed to work.

Therefore, it is suggested that researches advance in studies that add understanding of social-formative aspects in relation to the processes of subjective and constitution of personal-social identity, due to the relevance of these aspects assumed as an educational responsibility in relation to life in society and the possibility of socioeconomic development, with work (or occupation) as a central element.

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