


Predictors of Retirement Adjustment: A Comparative Study Among Occupations

Mauro de Oliveira Magalhães* 

Universidade Federal da Bahia, Salvador, BA, Brasil

ABSTRACT – This research investigated differences in retirement adjustment among workers in occupations classified by the RIASEC typology. The literature reports that this adjustment varies depending on individual access to resources such as health, finances, and personal attributes. The participants were 469 retirees, 65% women, aged between 47 and 88 years, who responded to the Retirement Resources Inventory, the Pearlin Mastery Scale and reported demographic data. The analysis revealed that retirees from social and investigative occupations have more resources and greater adjustment in retirement. Retirees from realistic occupations revealed an unfavorable perspective. Mastery proved to be the most important predictor of adjustment. The results indicate that retirement adjustment resources vary among workers from different occupational types.

KEYWORDS: professional interests, adjustment, retirement, personality

Preditores do Ajustamento na Aposentadoria: Estudo Comparativo Entre Ocupações

RESUMO – Esta pesquisa investigou diferenças no ajustamento à aposentadoria entre trabalhadores de ocupações classificadas na tipologia RIASEC. A literatura informa que esse ajustamento varia na dependência do acesso individual a recursos tais como saúde, finanças e atributos pessoais. Participaram 469 aposentados, 65% mulheres, idades entre 47 e 88 anos, que responderam ao Inventário de Recursos para Aposentadoria, a Escala de Domínio Pearlin e informaram dados demográficos. As análises revelaram que aposentados de ocupações sociais e investigativas possuem mais recursos e maior ajustamento na aposentadoria. Aposentados de ocupações realistas revelaram uma perspectiva desfavorável. Senso de domínio se revelou o preditor mais importante do ajustamento. Os resultados indicam que os recursos de ajustamento na aposentadoria variam entre trabalhadores em diferentes tipos de ocupação.

PALAVRAS-CHAVE: interesses profissionais, ajustamento, aposentadoria, personalidade

The work role is one of the pillars of identity in our culture, providing the individual with a place in the community, social esteem and recognition. Therefore, retirement, understood as the total or partial disconnection from work, has a higher stress potential at the end of adult life. Furthermore, it may be associated with financial losses and the physical decline that results from aging. In this context, many retirees struggle to adapt to their new lives and feel significant damage to their well-being (Wang & Wanberg, 2017).

Retirement has been studied from different perspectives. In a longitudinal perspective, the resource-based approach explains the retiree's degree of adjustment depending on

his or her access to individual and contextual resources, considering the changes in these accesses over time (Leung & Earl, 2012).

The relationships between personal attributes (personality, interests, skills), occupations, career choices, and transitions have been extensively investigated by vocational behavior researchers (Nye & Rounds, 2019). Venz and Wang (2019) noted that the potential usefulness of these concepts to the understanding of retirement remained unexplored in empirical research and recommended that researchers investigate the relationships between occupational interests and retirement adjustment. This study investigated whether workers

* E-mail: maomagal@gmail.com

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classified according to J. Holland's typology of interests and work environments (Holland, 1997; Nye & Rounds, 2019) show differences in retirement adjustment resources.

Resource-Based Retirement Adjustment Model

This model explains adjustment in retirement as a longitudinal process where the level of adjustment varies depending on the individual's access to resources considered essential for a satisfactory life. For example, good physical health allows the retiree to engage in leisure and sports activities; and social networking resources enable support and access to new activities and roles. Such a model has attracted the interest of researchers (e.g., Amorim & França, 2019).

Wang and Shultz (2010) classified resources into six types: physical health, financial, social, emotional, cognitive and motivational. A positive perception of health and financial resources, including the perception that income is adequate, are fundamental to well-being in retirement. Social support includes friendship, family and other networks associated with satisfaction and better psychological functioning in retirees (Barbosa et al., 2016). Finally, motivational resources refer to how much the individual pursues his goals despite obstacles, adjusting to life's losses and restrictions (Leung & Earl, 2012).

Leung and Earl (2012) developed the Retirement Resources Inventory (RRI) to operationalize and seek evidence for the multidimensional resource model proposed by Wang and Shultz (2010). Leung and Earl (2012) reported that RRI-measured resources explained 22% of the adjustment variance in addition to the 14% explained by demographics (gender, age, marital status, education, dependents, and household income).

Cognitive resources measured by the RRI include adaptive (self-esteem, mastery, and optimism) and resources of normal cognitive functioning (memory, processing speed, problem-solving and learning). Among the adaptive resources, one item operationalizes the construct mastery. This construct encompasses aspects of self-efficacy and perception of control, and proved to be a predictor of positive consequences in retirement (e.g., Drewelies et al., 2017; Infurna & Mayer, 2015). Donaldson et al. (2010) observed that mastery, operationalized by the Pearlin Mastery Scale (PM) (Pearlin & Schooler, 1978), has a robust correlation ($r = 0.59, p < 0.01$) with retirement adjustment. In addition, longitudinal studies have found that mastery attenuates the adverse effect of physical frailty on the decline of functional independence in older adults (Lee et al., 2016) and is a protective factor against cognitive decline (Lee et al., 2017).

Amorim and França (2019) investigated the validity evidence of a Brazilian version of the Retirement Resources Inventory (RRI). The only RRI item that operationalizes the mastery construct did not show psychometric adequacy and was removed from the final version proposed by the

authors. Considering the relevance and low representation of this construct in the RRI, the present research used a Brazilian version of the Pearlin Mastery Scale (PM) (Pearlin & Schooler, 1978) to investigate relationships between mastery and retirement adjustment.

Personality, Occupation, and Retirement Adjustment

Holland's (1997) typology of people and work environments constitutes one of the main traditions of career psychology research and intervention. Foutch et al. (2014) concluded that, even in times of globalization and accelerated changes, the model remains promising for researchers and professionals. In Brazil, several studies proved the model to be consistent with empirical data (e.g., Brito & Magalhães, 2017).

Holland (1997) compiled evidence that vocational interests are expressions of personality and that workers and their activities constitute environments with characteristics that can be described through a typology. Work environments attract, select and aggregate people with similar personalities who, in turn, prefer similar activities and worship similar values (Brito & Magalhães, 2017). Occupational choice is understood as the individuals' search for environments where they can express their interests and values, interacting with people who share them. Thus, this person-environment reciprocity results in occupational cultures prone to self-preservation through processes of attraction and selection of their participants (Holland, 1997; Nye & Rounds, 2019).

There is growing recognition that workplace experiences can play a role in the development of personality traits (Hudson et al., 2012). Research has explained personality development through corresponsive mechanisms, as they result from the reciprocal interaction between people and environments. These mechanisms are based on the premise that individuals select environments suited to their personal characteristics and that these characteristics are subsequently developed, reinforced, and strengthened by the experience of the environment (Le et al., 2014; Woods et al., 2020). Woods et al. (2020), in a 50-year longitudinal study, examined associations between personality traits and occupational environments profiled in Holland's (1997) typology. The authors concluded that work environments influenced personality development from childhood to adulthood. Thus, it is reasonable to consider that the transition to retirement is influenced by individual characteristics reinforced in the reciprocal interactions between people and occupations throughout the working life. Recently, Venz and Wang (2019) recommended using Holland's (1997) conceptual scheme in studies on retirement.

Holland (1997) proposed that both workers and work environments could be evaluated through descriptions of six ideal types, popularizing the model through the acronym RIASEC: realistic (R), investigative (I), artistic (A), social

(S), entrepreneurial (E) and conventional (C). It is essential to clarify that each individual/environment has characteristics of all six types to a greater or lesser degree, although the attributes of a given type are predominant. Therefore, there are no pure person/environment types. The uniqueness of each individual/work environment is preserved in the combination of more or less predominant characteristics of each type. Individuals seek occupations compatible with their personal characteristics and interests when making occupational choices. For example, predominantly R individuals prefer predominantly R environments which, in turn, are populated by predominantly R people, and so on. Finally, stability and satisfaction in working life are associated with the degree of congruence between types of people and environments. The following is a summary of the descriptions proposed by the model for the characteristics of individuals and occupations.

The realistic environment (R) involves the explicit, orderly, and systematic manipulation of objects, tools, machines, and/or animals (e.g., industry, agriculture, and livestock). Educational and therapeutic activities tend to be rejected, as workers tend to be introverted and lack social skills. The investigative environment (I) emphasizes the theoretical, systematic, and creative investigation of phenomena (for example, scientists and philosophers) and rejects persuasive, social, and repetitive activities. Investigative workers tend to be introverted but open to experimentation and intellectual innovation. The artistic context (A) is characterized by aesthetic creation and expression, and its inhabitants reject regulated and traditional activities. The social environment (S) presents demands related to education, assistance, and care of other people. Therefore, it attracts workers with social skills such as empathy, communication, and interpersonal sensitivity. In the enterprising environment (E), social influence occurs to achieve business or individual goals, attracting professionals with skills to persuade, negotiate, and lead others. Finally, the conventional environment (C) involves the systematic and orderly manipulation of data (e.g., secretarial, accounting), attracting orderly and methodical people who reject unstructured or exploratory activities. These descriptions have been supported by consistent empirical evidence (Foutch et al., 2014; Holland, 1997; Nye & Rounds, 2019).

The RIASEC model classifies not only work activities but also leisure activities, family life, and hobbies (Venz & Wang, 2019). Holland (1997) stated that retirees who find ways to express their repertoire of beliefs, interests, skills and values will have a satisfactory adaptation to retirement. The transition will be problematic when people can no longer use the skills and express the interests and values they have cultivated throughout their lives or if they have difficulty creating or finding a compatible environment (Holland, 1997). These ideas have affinity with continuity theory, one of the main theoretical approaches to adjustment in retirement. This theory emphasizes that people seek to maintain consistency in their living patterns over time, accommodating changes

and transitions and avoiding disruptions. Living patterns refer to the individual's characteristics (self-concept, attitudes, interests, etc.) and include their experiences in the physical and social environments in which they participate (Atchley, 1999; Cox, 2015).

Holland (1997) suggested that occupational types are associated with different resources for the retirement transition. The author indicated that workers with a predominant I or A profile, due to their characteristics of independence and creativity, would find it easier to make a transition to retirement. They stand out for their openness to experience (Sackett et al., 2017), associated with a diversity of interests (cultural activities and hobbies, for example). These characteristics make it easier for them to explore new activities and roles in retirement. Furthermore, workers in artistic environments (which worship aesthetic values associated with the creation and expression of ideas and feelings) and investigative environments (which value the search for and innovation in the field of knowledge, scientific research and theoretical reflection) do not have significant difficulties in transposing their activities to other environments outside the formal work context. For example, a scientist will be able to continue his research and reading, give occasional lectures and consultations without being formally employed, and in this way, he will still preserve his cognitive functioning. Similarly, artistic activities tend to have the same degree of autonomy and independence. Thus, the assumption of continuity as a criterion for retirement adjustment seems to be more easily met.

On the other hand, Holland (1997) stated that predominantly R or C profiles are more dependent on the structure of the work context and have greater behavioral rigidity, these characteristics being significant obstacles to creating an agenda of their own in an independent life in retirement. In addition, R and C work environments tend to be structured, where activities are dependent on norms and routines of work processes and on handling or intervening in machines and livestock, among other aspects that are hardly reproduced outside of the formal work environment. Therefore, meeting the premise of continuity associated with a satisfactory retirement transition is difficult. Finally, R individuals tend to have deficits in social skills and are not likely to initiate and develop new social bonds. The characteristic introversion of these people is probably an obstacle to creating and enjoying social resources considered necessary for a successful transition.

Enterprising and social personality types possess greater independence and creativity than realistic and conventional, but are inferior in these respects compared to artistic and investigative types. Nevertheless, they have particular resources to find substitute activities that give vent to interests and values in retirement. Workers of the S type have advantages over others regarding social skills, especially compared to R workers. Compared to E workers, predominant S types would be more successful in post-retirement life, as

the high need for power and achievement of E types would hardly be met after leaving work (Holland, 1997).

Soh and Leong (2001) and Sagiv (2002) investigated the relationship between vocational interests and values, relating the typologies of Holland (1997) and Schwartz (1992), respectively. The authors observed that enterprising interests correlated positively with values of power (social status, dominance, etc.) and achievement (personal success according to social standards), and negatively with values of universalism (understanding, tolerance, and protection of well-being of people and nature), while social interests correlated positively with benevolence (preservation and improvement of the well-being of close people) and universalism. Investigative interests showed a negative association with power, achievement, and hedonism (pleasure or sensual gratification), and a positive association with stimulation (excitement and novelty) and self-direction (independence of thought and action). Conventional interests correlated positively with tradition (respect and commitment to cultural or religious customs), conformity (restriction of actions and impulses that may harm others and violate social expectations), and security (stability of society, relationships, and the self) and negatively with self-direction, stimulation, and universalism. Knafo and Sagiv (2004) replicated these

results by analyzing the relationships between values and work environments classified in the RIASEC model. Therefore, since workers in enterprising contexts prioritize the attainment of status, power, achievement, and social dominance, as well as hedonistic gratifications, retirement will diminish their opportunities to realize these values. On the other hand, pro-social and ecological values can facilitate the assuming of new roles and interesting activities for the individual in post-retirement life. Therefore, these descriptions of workers and their occupations allow us to propose the following hypotheses: H1 - Retirees from occupations S will present more social resources compared to retirees from occupations R and C; H2 - Variations in social resources will be important predictors of adjustment and satisfaction in retirement of retirees from occupations R; H3 - Retirees from occupations I will have more cognitive resources compared to retirees from occupations R and C; H4 - Retirees from occupations I, A and S will present a higher retirement adjustment compared to retirees from occupations R and C; H5 - Mastery will be an important predictor of the adjustment of retirees from enterprising occupations; and H6 - Retirees from I, A and S occupations will show a higher retirement adjustment compared to retirees from E occupations.

METHOD

Participants

Participants were 469 Brazilian retirees, mostly residing in the state of Bahia (84.9%), 65% women, aged between 47 and 88 years ($M = 65.1$; $SD = 6.9$), with retirement time between 10 months and 20 years ($M = 6.1$; $SD = 5.2$). All met the inclusion criteria: being the recipient of public and/or private retirement benefits and declaring themselves retired. Family income ranged from 1 to 5 minimum wages in 43.2% of the participants and from 5 to 10 minimum wages in 34.1%. Education was grouped into elementary school (18.6%), high school (30.2%), higher education (28.8%), and postgraduate (22.4%). Marital status varied among married (55.5%), divorced (16.2%), widowed (13.8%), and single (14.5%). Almost all reported having children (95.2%). On the other hand, the number of financial dependents varied between none (41.2%) and five or more dependents (2.5%). The ethnic-racial composition was brown (56.4%), white (33.3%), and black (10.3%).

Instruments

Retirement Resource Inventory (RRI)

RRI comprises 35 items divided into six dimensions (physical, financial, social, emotional, cognitive, and

motivational resources). Items are answered on a five-point Likert scale. For example, "I have ... financial support from my personal savings" (1 = *very little*, 5 = *a lot*). The total and partial scores are obtained by adding the points of each item, with higher scores meaning that the respondent perceives greater adjustment resources. A Brazilian version of RRI showed a five-factor structure in the study of Amorim and França (2019). The cognitive and motivational resources items are loaded in the same factor, with six items from the original version excluded. In the present research, the 35 items were used in order to verify the psychometric characteristics of RRI in a sample that has a very different demographic composition from the sample of Amorim and França (2019), where 29.8% of the respondents had a post-graduate degree and 3% elementary school.

Pearlin Mastery Scale

A first Portuguese adaptation of the Pearlin Mastery Scale was used (Pearlin & Schooler, 1978), in its first application to the Brazilian population. This scale is composed of seven items with responses on a five-point Likert scale (1 = *strongly disagree*, 5 = *strongly agree*). Examples are "There's really no way to solve some of the problems I have" and "Sometimes I feel like I'm pushed in life." The final score is obtained by adding the points for each item, with the score being inverted in five items so that higher scores represent greater

perception of mastery. In the present study, the scale showed an internal consistency index (Cronbach's alpha) of $\alpha = 0.73$.

Retirement Adjustment Scale

Retirement adjustment was measured by a first adaptation to Portuguese of the measure proposed by Wells et al. (2006) in its first application in the Brazilian population. It is a measure of 13 items with responses in a five-point Likert format (1 = *strongly disagree*, 5 = *strongly agree*). Example item: "I feel adjusted to changes resulting from retirement." The final score is obtained by adding the points for each item, with higher scores representing greater adjustment. This measure has shown internal consistency (Cronbach's alpha), from $\alpha = 0.81$ to 0.88 (Donaldson et al., 2010; Wells et al., 2006). The present study sample showed an internal consistency index (Cronbach's alpha) of $\alpha = 0.83$.

Hierarchy of Interests

Participants were invited to rank six sets of work activities, corresponding to the six occupational environments of the RIASEC model, and place the most interesting set of activities in first place, and so on until the sixth place (least interesting). This simplified interest assessment procedure was adopted to minimize fatigue effects on respondents, considering the extension of the data collection form.

Classification of Work Activities Before Retirement

Participants provided their occupational title and brief descriptions of their pre-retirement work activities, which were classified using the Occupational Information Network (O*NET). O*NET is a database made available online by the US Department of Labor/Employment, which exhaustively

describes and classifies occupations using Holland's (1997) model. The occupational descriptions reported by the research participants were compared to those presented on O*NET, verifying the correspondence and adequacy of the classification offered in each case (National Center for O*NET Development, n.d.).

Procedures

Data collection was carried out in person and through an online platform (www.surveymonkey.com). The procedures were approved by the Ethics Committee of the Institute of Psychology of the Federal University of Bahia (Review Number: 2,072,449; CAAE: 66427716.7.0000.5686).

Data Analysis

Participants and their occupations were classified by the RIASEC typology. Participants who showed acceptable congruence between interests and occupations (C-type index > 1) were included in the analysis, following the procedure adopted by Brito and Magalhães (2017).

MANOVA was used to examine differences in retirement resources between groups. All RRI factors were included as dependent variables, as well as mastery, family income, age, number of dependents and education. Univariate analyzes investigated differences among the six occupational categories (RIASEC). Regression analyses investigated the adjustment predictors in each group. All RRI factors, mastery, and demographic variables (gender, age, marital status, education, family income, and number of dependents) were included as independent variables. Marital status categories were grouped into two options: having or not having a civil partnership.

RESULTS

An exploratory factor analysis was carried out to verify the replicability of the findings of Amorim and França (2019) in the participants of this study, which differ in aspects of income and education. The analysis was performed using the Factor program (10.9.02) (Ferrando & Lorenzo-Seva, 2017), using Optimal Implementation of Parallel Analysis (PA) to determine the number of dimensions, matrix dispersion by Pearson correlations, extraction by the Unweighted Least Squares (ULS) method with Direct Oblimin rotation. Amorim and França (2019) found the cognitive and motivational resource items loaded on the same factor. In the present study, the factor loadings of RRI items were distributed in six specific factors, according to the theoretical expectations of the authors of the original measure (Leung & Earl, 2012). The adjustment statistics were satisfactory (NNFI, CFI, BIC, GFI, AGFI above 0.98), and the six factors explained 58.9% of variance. The internal consistency indexes (Cronbach's Alphas) of the factors varied between 0.70 and 0.90.

After categorizing the participants' occupations, there were no cases of workers retiring from artistic careers. Therefore, analyzes were performed for five occupational categories (R, I, S, E, C). Twelve cases that did not meet criteria for congruence between interests and occupation prior to retirement were excluded.

Levene's tests of homogeneity of variance reported significant differences only in the education variable, $F(4, 442) = 8.917, p < 0.05$. The M Box test suggested homogeneity of the covariance matrices ($p > 0.001$). The multivariate analysis of variance showed significant differences between retirement resources depending on the occupational type, $F(48, 1,454.282) = 7.395, p < 0.001$, Wilk's $\Lambda = 0.431, \eta^2 = 0.190$. Table 1 presents the differences found in Post Hoc (Tukey) analysis. Univariate tests reported differences in cognitive, emotional, social, motivational, health, financial resources, family income, schooling, and retirement adjustment. No significant

differences were related to mastery, age, and number of dependents.

Post hoc analyzes (Tukey) reported that cognitive resource scores were higher in retirees from environments I, S, and C compared to R and higher in retirees from environments I compared to E and C. Emotional resource scores were higher in retirees from environments I compared to R, E and C and higher in retirees from environments S and C compared to R. Social resources were higher in retirees from environments S compared to R and C. The scores of motivational resources were higher in retirees from environments I compared to R. Health resources were higher in retirees from environments I compared to R, E and C and higher in retirees from environments S compared to R and C. Financial resources were higher in retirees from environments I compared to R. Family income was higher in retirees from environments I compared to all others (R, S, E, C) and higher in S environments compared to R and C. Educational levels

were higher in retirees from environments I compared to all others (R, S, E, C), higher in environments S compared to R and C, and higher in environments E and C compared to R. In these comparisons, effect sizes, as measured by partial eta squared, ranged from small to medium. Mastery scores and the number of dependents did not reveal significant differences between groups.

Multiple regression assumptions were examined. The indicators of normality, homogeneity of variances, linearity and independence were considered satisfactory, meeting the recommendations of literature (Tabachnick & Fidell, 2019). An examination of influential cases identified five cases to be discarded. Bivariate correlation analyses between predictors were used to examine aspects of multicollinearity. The correlation between emotional resources and cognitive resources was the highest ($r = 0.59$; $p < 0.01$), followed by the association between schooling and family income ($r = 0.53$; $p < 0.01$). The magnitudes of the other correlations

Table 1
Results and Effect Sizes of Adjustment and Retirement Resource Comparisons Across Occupational Categories (RISEC)

Adjustment Resources	Occupational Categories					Post hoc (Tukey)	F (4, 442) (η^2)
	R	I	S	E	C		
	n=110	n=61	n=95	n=59	n=117		
	<i>M(SD)</i>	<i>M(SD)</i>	<i>M(SD)</i>	<i>M(SD)</i>	<i>M(SD)</i>		
Cognitive	19.86 (3.44)	25.04 (2.92)	22.38 (3.68)	21.88 (3.21)	21.57 (3.51)	I, S, C > R; I > E, C	11.95** (0.116)
Emotional	9.06 (2.64)	12.26 (2.07)	11.39 (2.59)	10.25 (2.96)	10.68 (2.86)	I > R, E, C; S, C > R	15.35** (0.137)
Social	19.19 (4.37)	20.24 (3.76)	21.54 (4.15)	20.10 (4.05)	19.61 (4.62)	S > R, C	4.34** (0.040)
Motivational	15.07 (2.29)	16.39 (2.09)	15.87 (2.71)	15.23 (2.24)	15.54 (2.19)	I > R	3.10* (0.030)
Mastery	12.09 (4.50)	10.51 (4.51)	10.24 (4.86)	11.20 (4.65)	11.25 (4.58)	-----	2.45 (0.017)
Health	15.30 (2.65)	17.87 (2.08)	16.75 (2.37)	16.21 (2.54)	15.30 (2.42)	S > R, C; I > R, E, C	12.96** (0.118)
Financial	8.00 (2.98)	10.12 (3.06)	9.06 (2.94)	8.85 (3.21)	8.61 (3.32)	I > R	3.57** (0.034)
Family Income	1.37 (0.637)	2.59 (0.773)	2.01 (0.814)	1.74 (0.788)	1.61 (0.761)	I > R, S, E, C; S > R, C	29.88** (0.231)
Education	2.04 (1.32)	5.58 (1.16)	4.56 (1.63)	3.55 (1.64)	3.95 (1.24)	I > R, S, E, C; S > R, C; E, C > R	71.36** (0.415)
Adjustment	43.51 (9.60)	48.54 (11.76)	48.41 (10.81)	41.94 (11.35)	47.03 (10.90)	S, I > R, E C > E	5.283** (0.052)
Age	66.06 (7.09)	65.16 (6.61)	64.41 (7.34)	65.35 (6.50)	64.70 (7.14)	-----	1.709 (0.010)
Dependents	1.56 (1.41)	1.73 (1.70)	1.48 (1.65)	1.75 (1.24)	1.55 (1.26)	-----	0.336 (0.004)

Note. Standard deviations are in parentheses. R = Realistic. I = Investigative. S = Social. E = Enterprising. C = Conventional.
* $p < 0.05$; ** $p < 0.01$

were lower, supporting the non-collinearity assumption. Tolerance and VIF (Variance Inflation Factor) indicators allowed us to take this assumption. The retirement

adjustment predictors were inserted into the equation using the stepwise method. Table 2 presents the results for each occupational category.

Table 2
Regression (Stepwise) for Demographic and Psychological Variables Predicting the Adjustment of Retirees from Different Occupations (RISEC)

Predictors / Occupational Environments	Models		
	1	2	3
Realistic (<i>n</i> = 110)	β		
Marital Status	0.315**	0.362**	0.386**
Social Resources		0.393**	0.283*
Emotional Resources			0.222*
<i>R</i> ²	0.088	0.234	0.262
Δ <i>R</i> ²	-	0.142	0.028
<i>F</i>	9.349	14.100	12.233
Investigative (<i>n</i> = 61)			
Health Resources	0.604**	0.405**	
Mastery		0.381**	
<i>R</i> ²	0.339	0.426	
Δ <i>R</i> ²	-	0.087	
<i>F</i>	14.325	10.665	
Social (<i>n</i> = 95)			
Mastery	0.469**	0.406**	
Social Resources		0.253*	
<i>R</i> ²	0.205	0.252	
Δ <i>R</i> ²	-	0.047	
<i>F</i>	14.414	9.751	
Enterprising (<i>n</i> = 59)			
Mastery	0.541**	0.603**	
Social Resources		0.286*	
<i>R</i> ²	0.275	0.337	
Δ <i>R</i> ²	-	0.062	
<i>F</i>	16.135	11.177	
Conventional (<i>n</i> = 117)			
Health Resources	0.336**	0.333**	0.258**
Dependents		- 0.316**	- 0.349**
Family Income			0.210*
<i>R</i> ²	0.104	0.196	0.226
Δ <i>R</i> ²	-	0.092	0.030
<i>F</i>	11.976	12.583	10.243

Note. R = Realistic. I = Investigative. S = Social. E = Enterprising. C = Conventional.
p* < 0.05; *p* < 0.01

DISCUSSION

The comparisons between the groups highlighted that the retirees from investigative environments (I) showed a higher set of scores in retirement resources than the others.

These retirees reported higher cognitive, emotional, health, income, and education resources than retirees from realistic (R), conventional (C) and entrepreneurial (E) environments.

Income and education stood out with the highest effects, whereas investigative (I) retirees showed superiority to the other categories, followed by social (S) retirees.

The association between income and retirement adjustment is well documented (França & Hershey, 2018). In investigative retirees, high income is associated with the high level of education of these professionals, most of whom are highly qualified scientists and technicians (Brito & Magalhães, 2017). Work tasks in investigative environments are predominantly cognitive. Kajitani et al. (2017) observed that workers in occupations that encourage the development of reasoning and language have their cognitive functioning preserved in retirement. On the other hand, performing predominantly physical tasks during working life resulted in impairments in cognitive functioning in retirement. In this sense, retirees from investigative occupations had more cognitive resources than others, confirming H3; and retirees from R environments, with a high demand for physical activities, showed lower cognitive resources than retirees I, S and E.

The comparisons between groups showed that investigative retirees also stood out in emotional resources, which may be associated with their characteristics of introspection, rationality, and openness to experience. Due to his introspective and imaginative characteristics, the investigative worker obtains pleasure and enjoys intellectual creativity (Sackett et al., 2017), associated with diverse interests (cultural activities and hobbies, for example). Intellectual development, dedication to learning, and involvement in various activities were associated with well-being in retirement (Barbosa et al., 2016).

Regarding emotional resources, there were no differences between S and I retirees, and both showed superiority to R retirees. Retirees of realistic occupations (R) showed lower scores in all retirement resources, except for mastery, which did not show significant differences between the groups. Corroborating theoretical expectations (Holland, 1997), S retirees showed higher social resources than R and C retirees, confirming H1.

Retirees from I and S occupations showed superiority to others, considering the set of resources evaluated. Thus, they obtained greater adjustment in retirement than retirees from occupations R and E, partially confirming H4, since retirees from occupations C did not show significantly lower adjustment scores compared to retirees I and S. Hypotheses H4 and H6 were partially confirmed in this study due to the absence of retirees from artistic occupations (A).

Retirees from C occupations had lower cognitive resources compared to retirees from I occupations, and lower social resources compared to retirees from S occupations, corroborating the advantages in intellectual activity and social skills, respectively attributed to types I and S (Holland, 1997; Woods et al., 2020). On the other hand, C retirees showed greater adjustment than E retirees. People with enterprising personalities can be assertive and extroverted

(Holland, 1997; Woods et al., 2020), but the loss of status and power accompanying the transition to retirement can be experienced particularly negatively by them. These values, dominant in enterprising occupations, are hardly achievable in retirement. It is known that mood states are influenced by the individual's perception of social status, and the loss of status is associated with anxious and depressive states (Gilbert, 2016). The loss of status conferred by the work role can be more problematic for individuals with a heightened need for power, control, and status. This is not a problem for investigative workers, as they prioritize self-improvement and value intrinsic career satisfaction (meaning, autonomy, variety, and challenge) as opposed to extrinsic factors (such as salary, benefits, status and recognition), which are mostly valued by entrepreneurs (Magalhães, 2012). In this sense, the results showed that workers retired from enterprising occupations had lower cognitive, emotional and health resources compared to investigative retirees.

Magalhães (2012) observed that enterprising professionals link their careers to a particular company, making an affective commitment to the organization. On the other hand, investigative professionals are prone to exploratory activities and job changes in search of personal goals, establishing a less affective relationship with employers. It is possible that this more instrumental and less affective commitment to the organization favors a smoother transition to retirement, where the exploratory behavior and independent attitude of investigative workers can facilitate the assumption of new roles and activities.

Regression analyses brought complementary information to understanding between-group differences, examining intragroup variations. Mastery scores, which did not vary significantly between groups, proved to be an important predictor for the adjustment of retirees I, S, and E. There is growing evidence that mastery, or perception of control, is related to core health indicators, well-being, and cognition (Drewelies et al., 2017). However, with advancing age, people increasingly realize that environmental changes depend less on their actions and preferences, generating and amplifying perceptions of restriction and powerlessness. (Drewelies et al., 2017; Infurna & Mayer, 2015). Thus, variations in mastery perceptions are crucial for understanding the adjustment to and during retirement.

Perceptions of mastery and social resources were the predictors of adjustment in retirees from social (S) and entrepreneurial (E) occupations. In retirees from E environments, mastery showed greater influence, explaining 27.5% of the variance of retirement adjustment, corroborating that the perception of control is a priority for these individuals (Knafo & Sagiv, 2004; Sagiv, 2002) and that variations in this aspect influence their adjustment. Therefore, H5 was confirmed. Social resources also contributed, albeit modestly, to the adjustment of S and E retirees, reiterating that these individuals value social interaction, which brings opportunities to express their values and skills (Holland, 1997;

Knafo & Sagiv, 2004; Sagiv, 2002). Therefore, these results suggest that the lack of social connections in retirement can be especially harmful for these individuals.

Regarding the adjustment of workers retired from investigative occupations (I), variations in health perception explained 33.9% of the variance, and mastery added 8.7% to this explanation. Considering that these individuals are psychologically capable of developing new interests and dedicating themselves to new activities (preferably intellectual activities, stimulating and independent of social connections) (Holland, 1997; Sackett et al., 2017), it is understood that variations in motivational, emotional, social and cognitive resources are not especially relevant to explain their adjustment. The favorable demographics in terms of education and financial resources indicate the same in these aspects. Thus, health resources are naturally limited by aging, which can affect the concrete possibilities of investigative workers to dedicate themselves to their preferred activities.

Social and emotional resources explained 17% of the variation in the adjustment of retirees from realistic environments (R), and marital status (being in a civil partnership) added another 9% to this explanation, confirming H2. R occupations are characterized by objective and concrete tasks, with little social interaction and expression of emotions. The limitations in social skills of retirees R can make it difficult to develop social support networks after retirement, especially when the individual does not have a stable relationship, is single, divorced, or widowed. Work tasks in occupations R may require coordination and interaction between people. However, this interaction is mediated by work processes and their technological and/or

concrete interfaces, where aspects of empathy, spontaneity, and social resourcefulness are less important. In retirement, R workers may have difficulty initiating and developing new social connections that compensate for the estrangement from co-workers. Therefore, being in a stable marital relationship becomes an important resource, as the spouse can be a bridge to social connections. The importance of marital status for the retiree's social resources has already been pointed out in other studies (Barbosa et al., 2016). Thus, variations in social and emotional resources and having or not having a marital relationship, are especially important for the adjustment of these people.

The predictors of adjustment of retirees from conventional environments (C) were health, the number of dependents and family income ($R^2 = 0.226$), which are characterized by being tangible and not psychological. Conventional workers and environments prioritize values of tradition (adherence to cultural customs), conformity (impulse control to meet social expectations) and security (stability of social relationships), and are characterized by traits of scrupulousness and discipline (Knafo & Sagiv, 2004; Sackett et al., 2017; Sagiv, 2002; Soh & Leong, 2001). Therefore, the adjustment of these retirees depends more on financial conditions that ensure family support, the stability of their social relationships, and the feeling of security associated with the integrity of their physical health. On the other hand, this adjustment is likely to depend less on the possibilities of innovating in roles, activities, and interests. Therefore, family and financial planning seem to be fundamental for the preparation for the retirement of workers of conventional characteristics.

FINAL CONSIDERATIONS

The findings of this study reiterate the importance of social, financial, and health resources for retirement adjustment. Mastery, or perception of control, stood out among the predictors of retirement adjustment. This construct does not have sufficient coverage in the Retirement Resource Inventory (Leung & Earl, 2012). However, the present study showed its relevance for understanding retirement adjustment, corroborating previous studies (Drewelies et al., 2017).

The study concluded that the Retirement Resource Inventory and the Pearlin Mastery Scale can be useful for identifying aspects to be incorporated into retirement preparation programs depending on the characteristics of workers, helping to plan interventions appropriate to the reduction of deficits that specific groups of retirees may present in the aforementioned resources. This research identified theoretically significant differences in retirement adjustment resources among retirees from different occupational categories, corroborating theoretical predictions. The classification of occupations in the RIASEC model

(Holland, 1997) proved useful for identifying specific and significant adjustment predictors for each type of occupation.

Among the limitations of the study, we highlight the absence of retirees from artistic careers and the irregular distribution of participants among the RIASEC categories, which recommends more careful planning of data collection. Given the relative difficulty in finding retirees from artistic careers, it is recommended that specific strategies for their recruitment be adopted in future research.

Finally, the results encourage the understanding of retirement adjustment depending on the worker's occupational type, reaffirming and expanding the recent suggestions by Venz and Wang (2019). The results recommend that the planning of retirement preparation programs consider the occupational categories of the workers involved. RIASEC occupational classification is recommended in new research to identify strengths and vulnerabilities related to the transition to retirement in workers from different occupational categories.

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