Anticipated work-family conflict in Brazilian university students: measurement and relationships with attachment and career success

Alexsandro Luiz De Andrade¹, Karen Rabello Ferraz², Manoela Ziebell de Oliveira³, Elaine Hatfield⁴

Abstract

Career development and work-family conflict are two areas of research with extreme theoretical and practical relevance, especially when focusing on job and non-job related life dimensions. With the intent to contribute to this debate, especially to career counseling practices with young adults, the present study investigated how the perception of interactions between roles and demands that arise from these two dimensions – family and work – influence university students' perceptions of career success. The study was structured in two parts: 1) adaptation of a measure that evaluates work-family conflict anticipation in university students in the Brazilian context; and 2) proposal of a model to evaluate the anticipation of the work-family conflict construct and its relation with the variables success perception, career adaptability and attachment styles. Participants were 424 students enrolled in different majors of public and private institutions from a state in Southeast Brazil, who answered a survey. The results point to a psychological measure with favorable indicators of validity and precision for the

¹ Psychological Measurement and Evaluation Laboratory - AMP. Universidade Federal do Espírito Santo (UFES), Brazil. E-mail: alexsandro.deandrade@yahoo.com. ORCID ID: https://orcid.org/0000-0003-4953-0363
² Psychological Measurement and Evaluation Laboratory - AMP. Universidade Federal do Espírito Santo, Brazil. E-mail: karenrferraz@gmail.com. ORCID ID: https://orcid.org/0000-0002-2041-1902
³ Group of studies on Career Development. Pontifícia Universidade Católica do Rio Grande do Sul (PUC-RS), Brazil. E-mail: manoela.ziebell@gmail.com. ORCID ID: https://orcid.org/0000-0003-0243-5115
⁴ University of Hawaii (Honolulu-HI), United States. E-mail: elainehatfield582@gmail.com. ORCID ID: https://orcid.org/0000-0002-9148-5845

Esta investigação foi realizada com o apoio da CNPQ e FAPES.

Artigo recebido a 23-04-2018 e aprovado a 31-07-2019
evaluation of the work-family conflict anticipation dimensions. Additionally, the proposed model shows that career adaptability dimensions are positive predictors of career success, while insecure attachment dimensions are negative predictors.

**Keywords:** work-family conflict; university students; career development; attachment styles; career adaptability

---

**Antecipação do conflito trabalho-família em estudantes universitários brasileiros: medida e relacionamento com apego e sucesso de carreira**

**Resumo**

O desenvolvimento de carreira e o conflito trabalho-família são duas áreas de pesquisa de relevância teórica e prática, especialmente quando o assunto em pauta são dimensões de vida trabalho e não trabalho. Para contribuir para a prática de aconselhamento de carreira de jovens adultos, o presente artigo investigou como a percepção sobre as interações dos papéis e exigências advindas desses dois âmbitos – família e trabalho – influenciam a percepção de sucesso na carreira universitária. O presente artigo foi estruturado em duas partes: 1) adaptação para o Brasil de uma medida que avalia a antecipação do conflito trabalho-família em universitários; e 2) avaliação do construto de antecipação do conflito trabalho-família a partir das variáveis percepção de sucesso, adaptabilidade de carreira e estilos de apego. Participaram da pesquisa 424 estudantes de diferentes cursos de instituições de ensino públicas e privadas de um estado no Sudeste brasileiro que responderam um questionário de pesquisa. Os resultados da primeira parte do estudo apontaram uma medida psicológica com evidências favoráveis de validade e precisão para avaliação das dimensões da antecipação do conflito entre família e trabalho. Adicionalmente, na segunda parte, demonstrou-se que as dimensões de adaptabilidade de carreira são preificadoras positivas de sucesso de carreira, enquanto dimensões de apego inseguro são preificadoras negativas do mesmo.

**Palavras-chaves:** conflito trabalho-família; estudantes universitários; desenvolvimento de carreira; estilos de apego; adaptabilidade de carreira

---

**INTRODUCTION**

Countless publications, either scientific or non-scientific, national or international, highlight the recent changes in the job market as the predecessor of a
reorganization of the relationships at work, and, consequently, a change in the way individuals and organizations conduct careers. These same publications frequently list new models, constructs and competences that are peculiar to the careers of contemporary and well-established professionals (Baruch, Szűcs, & Gunz, 2015), and less frequently refer to the young professionals’ career planning processes. Therefore, the present study aims to advance the literature in the field, by generating evidence about how the perception of roles and demands that arise from work and family influence the perception of university students about career success, and how all these aspects interact with attachment models and career adaptability.

Considering those recent changes in the context of career development, one can affirm that career adaptability is a competence of great relevance to obtain both objective and subjective success. The construct refers to the promptitude and resources that individuals have to cope with vocational development tasks that are present in different cultures and are related to the goals of each stage of career development: to prepare for, begin, and take on a work activity (Savickas, 2005). More specifically, career adaptability relates to the process and the results of the individuals’ attempts to satisfy their own and others’ expectations regarding professional life, and to achieve successful careers, as well as deal, effectively with the demands, transitions and disturbances of the worker role (Ambiel, 2014; Savickas, 2002, 2005).

The construct career adaptability, originally proposed by Super, Thompson and Lindeman (1988) as career Maturity, was composed of five dimensions, two of which were affective/emotional (planning and exploring). The other three were cognitive (seeking information, decision making, and orientation for reality). Due to this composition, according to the authors, psychological components could be the main determinants of career maturity, given that the self-concept is of great importance in organizing the stages of vocational development and promoting maturity. In addition to that, the authors argued that reaching higher levels of maturity would mean mastering the skills described (e.g. exploring and decision making) and being ready for new tasks, challenges or demands which were appropriate to the stage of development in which the individual was.

After this first conceptualization, Super and Knasel (1981) proposed that, although the concept of maturity was sufficient for evaluation and understanding of the process of professional choice of adolescents, it did not adequately describe the process experienced by adults, and presented the notion of adaptability. The concept of Career Adaptability (which will be used in the present study) extended and deepened that of Maturity, by proposing that the individuals do not always master the necessary skills before having to face tasks, challenges or demands that are not related to their developmental stage, and which require adaptability. The concept proposed still considers all the psychological factors in career development without making
assumptions implied by the term ‘maturity’ or growth (Super & Knasel, 1981). As a result, Career Adaptability is understood as a metacompetence composed of four behavioral competences (referred to, in international literature, as “the four C’s” of career adaptability), which are necessary to manage critical tasks and transitions (that might be predictable or not) during the career construction process: concern, control, curiosity and confidence (Ambiel, 2014).

According to Savickas and Porfeli (2012), concern refers to a self-preparation to look at the future in terms of vocational expectations. Control enables people to take responsibility for deciding about their future. Curiosity is the deliberation about, as well as the exploration of different selves and alternatives for career development by individuals. Finally, confidence relates to individuals’ strivings to succeed in dealing with anticipated obstacles for their career development.

In addition, since it was presented, the Career Adaptability construct has been described in the literature as a key competence to career success (O’Connell, McNeely, & Hall, 2008). Evidence to support this data was found in a recent study which demonstrated that career adaptability (especially the concern and confidence dimensions) can positively predict career satisfaction and work performance self-evaluation (dimensions of subjective career success) beyond and more significantly than personality traits. This result suggests that career adaptability is a transactional resource for self-regulation that promotes the perception of subjective success independently of more stable characteristics (Zacher, 2014).

Results of another study show that career adaptability performed a unique role when predicting salary (objective success), after controlling the effects of demographic variables and perception of the organizational career management. It was also found that both the perception of organizational career management and of career adaptability had a negative correlation with turnover intention, being these relations measured by career satisfaction. The results also show that career adaptability moderates the relationship between perception of organizational career management and career satisfaction, being this positive relation stronger between workers with higher levels of career adaptability (Guan, Zhou, Ye, Jiang, & Zhou, 2015).

Another relevant aspect of career adaptability, according to Ambiel, is that it is “a psychosocial construct that characterizes the promptitude and resources an individual has to deal with current and imminent tasks associated with career development, occupational transitions and personal traumas” (2014, p. 18). Based on this proposition, it is possible to understand that career adaptability is not restricted to the expression of the competences of concern, control, curiosity and confidence in the world of work, but also in other dimensions of the individual’s life, such as the family.
Work-Family Conflict

In the field of vocational behavior studies, themes related to career development and conflict between work and family roles are two large and independent research areas (Westring & Ryan, 2011). Along the years both have been expanded, as well as the knowledge produced about themes that involve individuals and organizations, like organizational performance, work motivation, human resources management policies, well-being, marital quality, retirement process and others (Allen, French, Dumani, & Shockley, 2015; Brown, 2014; Butts, Casper, & Yang, 2013; De Andrade, Oliveira, & Hatfiel, 2017; Lapierre et al., 2017; Michel, Mitchelson, Kotrba, LeBreton, & Baltes, 2009; Nohe, Meier, Sonntag, & Michel, 2014).

Because of its great and wide impact, the phenomenon of work-family conflict is considered one of the classic foundations for the study of conflictual interaction between these two instances that organize human life (Greenhaus & Beutell, 1985). It occurs when one of these dimensions, in some way, harms the other. The large and recent increase in the number of publications about the subject is explained by its impacts both for individuals and their families, and for organizations.

The presence of conflict in the family domain (non-work) has been associated with lower levels of satisfaction with life and the romantic relationship, affecting specific aspects of the family context, like the parents’ dedication to the children’s education (Allen, Herst, Bruck, & Sutton, 2000; Michel et al., 2009). It also leads to poor physical health, and to psychological outcomes, such as depressive behavior, anxiety, and general psychological strain (Mihelič & Tekavčič, 2014). When the conflict emerges in the work domain, one can notice that the quality of the link between work and family can affect organizational performance as well as different aspects pertaining to the family domain, such as humor and well-being (Edwards & Rothbard, 2000). Research has shown that the following are affected by work-family conflict: work satisfaction, promotion policies, effort to seek for accomplishments at work, intention to turnover, as well as organizational loyalty (Allen et al., 2000; Hill, 2005; Voydanoff, 2005). Additionally, there is evidence that one of the pressing psychological consequences of work-family conflict is burnout, which represents “energy leakage”, (a consequence of a long-term stress at work).

Seeking to understand how the aspects of work-family interaction and career development relate, we propose, in this article, the adaptation to Brazilian Portuguese of an existing scale (short-form) proposed by Westring and Ryan (2011), based on Carlson, Kacmar and Williams’s (2000) six dimensions of work-family conflict for workers samples. The construction of Westring and Ryan (2011) assess the anticipation of work-family conflict in students and future professionals, this construct can be understood as a set of beliefs and expectations regarding the interference
of the work domain over family, or vice-versa. In other words, it is the anticipation about how much both dimensions can affect each other mutually in the future career. The dimensions of the construct follow the bidirectional parameters of family interfering with work and work interfering with family and considers three aspects: time, strain and behavior.

The first step in developing the instrument consisted of a review of the epistemological bases guiding the development of measures to assess work-family conflict and of the instruments developed to assess the phenomenon already presented in scientific articles. According to the theoretical bases, to assess work-family conflict adequately, instruments need to characterize the bi-directionality of the construct, which involves the interference of work in family (WIF) and the interference of family in work-related activities (FIW). In addition, researchers point out the need to consider the three basis of work-family conflict: time (e.g. “The amount of time my job takes up makes it difficult to fulfill family responsibilities”), strain (e.g. ”My job produces strain that makes it difficult to fulfill family duties”), and behavior (e.g. “My home life interferes with my responsibilities at work such as getting to work on time, accomplishing daily tasks, and working overtime”) (Netemeyer, Boles, & McMurrian, 1996).

One of the instruments that is widely used by researchers is the scale proposed by Netemeyer et al. (1996), which contemplates the bi-directionality of the construct through two scales (one that measures work interfering with family and another that measures family interfering with work). The indices of internal consistency (Cronbach’s alpha) are over α = .82 in both dimensions. This instrument was adapted to the Brazilian context, and its final version was composed of 10 items and adequate indices of validity and precision (Cronbach’s alpha over α = .86) for the bi-dimensional model (Aguiar & Bastos, 2013).

Another widespread instrument used to evaluate work-family conflict is the scale by Carlson et al. (2000). Its theoretical and empirical advancement, when compared to others, is the capacity to integrate in a single instrument both the bi-directional and multidimensional dimensions of work-family conflict, through 18 items divided in six dimensions that assess how time, strain and behavior may cause interference between family and work dimensions (ex: “My work keeps me from my family activities more than I would like” and “Due to stress at home, I am often preoccupied with family matters at work”). The instrument presented favorable results in the validity tests and Cronbach’s alpha precision above α = .79.

Yet another work-family conflict measure, developed by Carlson and Frone (2003), includes internal (psychological) and external (outward behavioral interference) dimensions. This scale is composed by four factors: a) internal interferences of work in family happens when there is psychological preoccupation with family
while the individual is at work, interfering with the ability to become engaged in the work role; b) external interferences of work in family occur when externally generated demands from work, like working extra-hours, inhibit or prevent participation in the family role; c) internal interferences of family in work occur when the psychological involvement with work interferes with the ability to become engaged with the family role; d) external interferences of family in work occur when externally generated demands at home interfere with participation at work, such as getting to work on time.

In a study that aimed at the investigation of antecedents of work-family conflict in individuals entering the job market, Westring and Ryan (2011) proposed a measure of anticipated work-family conflict composed of six dimensions. This measure was based on the concepts of bi-directionality and multidimensionality, and assesses anticipation through the dimensions proposed by Carlson et al. (2000), using a set of items that are written using future tense (e.g. “I will have to miss work activities due to the amount of time I will have to spend on family responsibilities”). In a sample of North-American participants, the authors obtained positive indicators of validity and precision (Cronbach’s alpha over $\alpha = .85$). In the present, the authors will adapt and present a short form of the aforementioned measure.

**Attachment and Work Dimensions**

Attachment, as a psychological construct, means the affective-emotional bond established with other people. In research with humans, the theme was first investigated in an effort to comprehend the patterns of interaction between babies and maternal caregivers, as well as its consequences for human development (Bowlby, 1973).

According to theory, since childhood, individuals start to interact with their adult caregivers, establishing, modulating and reinforcing cognitive schemes about themselves and the relationship with the external context (other people and situations) (Wright & Perrone, 2008). Those schemes affect different areas in people’s lives, such as work, family and intimate relationships (Blustein, Prezioso, & Schultheiss, 1995; Hazan & Shaver, 1990). Hazan and Shaver (1987) investigated attachment patterns in adults considering their bond with romantic experiences. Conceptually, two attachment patterns can be identified, secure and insecure (anxious and avoidant) (Hazan & Shaver, 1987).

The current simplification of insecure attachment into two dimensions (anxious and avoidant), classifies individuals with intense characteristics belonging to one of the dimensions as people with insecure attachment, which can be anxious or avoiding. On the other hand, individuals with low levels in both dimensions
are characterized as having secure attachment. To measure attachment from this perspective there is the “Experience in Close Relationship Scale – ECR” (Brennan, Clark, & Shaver, 1998). This instrument has been adapted for use in different countries, like: Italy (Picardi, Bitetti, Puddu, & Pasquini, 2000), China (Mallinckrodt & Wang, 2004), Spain (Alonso-Arbiol, Balluerka, & Shaver, 2007), Portugal (Paiva & Figueiredo, 2010), and Brazil (Shiramizu, Natividade, & Lopes, 2013).

One of the first studies that propose the link between the work dimensions and attachment was elaborated by Hazan and Shaver (1990), using the concept of exploration. According to the research, to be socially competent and interact in the physical and social context, the individual has to explore. According to the authors, the working activity in adults is an event similar to the exploratory behaviors of children. In adults, working allows the perception of personal competences and the cultural and social contexts become opportunities to explore and recognize oneself as competent (Hazan & Shaver, 1990).

Among the few studies that articulate attachment and career themes, one by Wright and Perrone (2008) should be cited. In their investigation, the authors show that attachment can be crucial to the development of individuals in interaction with their environment. People with secure attachment, for example, tend to explore the environment more. Such behavior can increase their perception of self-efficacy as well as the expectations of favorable results in professional initiatives (Hazan & Shaver, 1990; Wright & Perrone, 2008). This result was explained in a study about career decisions, in which the authors found that secure attachment is associated with low levels of career indecision (Tokar, Withrow, Hall, & Moradi, 2003). Still in the career context, relationships were found between insecure attachment and negative evaluations of efficacy in career decisions (Wolfe & Betz, 2004).

Regarding satisfaction with work, it was perceived that individuals with secure attachment styles are more satisfied with different aspects of work than those with insecure attachments (Krausz, Bizman, & Braslavsky, 2001). In a recent study about adjustment to work, turnover and attachment, the authors observed that the avoidant attachment style moderates the effects of adjustment and satisfaction at work, showing weaker relations with satisfaction for workers with higher avoidance scores (Dahling & Librizzi, 2015). Attachment also relates to civility, psychological security, and burnout at the workplace (Leiter, Day, & Price, 2015). More specifically, results show that the anxious style is related to organizational civility, trust, psychological security and burnout, while the avoiding style is related to efficacy, civility and incivility with colleagues and supervisors at work.

Little is known about how attachment patterns relate to the interaction between the domains of work and family. The study by Sumer and Knight (2001) is one
of the few to make an attempt to understand how different attachment styles are related to work and family dimensions. It relied on the spillover model to explain the relationship between work and family. Such model underlines the extent to which effects of a specific variable, in a certain domain, such as job satisfaction, can generate positive and negative effects on the other (in this case, non-work) domain (Sumer & Knight, 2001).

In line with this, some studies showed that the anxious pattern (worried) was more inclined to present negative effects on the family domain (e.g. home life makes the individual so irritable that he/she take it out on people at work) and in the work domain (e.g. after work, the individual goes home too tired to do some of the things they would like to do) (Richards & Schat, 2011; Sumer & Knight, 2001). On the other hand, participants with characteristics of secure attachment signaled positive effects, both in the work and on the family domains the personal life improves their satisfaction with job and works domains (Westring & Ryan, 2011).

OBJECTIVES OF THE STUDY

The goal of the present study is twofold. In Section I, it will present validity evidence of a short version of a measure that evaluates anticipated work-family conflict in university students using a Brazilian sample. In Section II, it will be proposed an original structural model and tested the relationship between work-family anticipation and career success, career adaptability, and attachment styles.

METHOD

Participants

Participants were 424 (61.3% female) students from different public and private undergraduate educational institutions from a state in the southeast of Brazil averaging 23.4 years (SD = 5.40 years). Inclusion criteria were: a) being interested and informedly consenting in taking part in the study; b) being a university student; c) being at least 18 years old.
**Instruments**

The instrument used in this study was a self-applied on-line survey with different psychological scales and sociodemographic questions to characterize the sample. The scales used in the study assessed:

a) Background questions and information from participants (e.g. educational level and career-related questions);

b) Short version of Experiences in Close Relationship (Natividade & Shiramizu, 2015): a 10-item Brief Attachment Questionnaire comprising two subscales: anxiety (5-items / Cronbach’s alpha = .72) and avoidance (5-items / Cronbach’s alpha = .73). The scale makes specific reference to attachment behaviors in adult relationships. Using a 5-point Likert type scale (1 – not at all like me / 5 – very much like me), respondents indicated the extent to which items described them (e.g., anxiety – “Often, I think that my partner does not want as much emotional proximity/closeness as I would like”; avoidance – “Generally, I try to avoid a lot of emotional closeness with my partner”);

c) General Perceived Career Success Scale (Zanotti, 2016): a general perception of career success measure with seven items was used to assess the construct (Cronbach’s alpha = .80). To answer the instrument, participants used a 5-point Likert type scale (1 – completely disagree / 5 – completely agree) to indicate the extent to which items described them (e.g. “I am proud of what I do professionally”);

d) Career Adapt-Abilities Scale (Audibert & Teixeira, 2015): composed of 24 items that evaluate the individual’s capacity to face professional transitions by exploring four dimensions: concern (e.g. “Thinking about what my future will be like”; α = .88), control (e.g. “Keeping upbeat”; α = .83), curiosity (e.g. “Exploring my surroundings”; α = .88) and confidence (e.g. “Overcoming obstacles”; α = .89); using a 5-point Likert type scale respondents had to indicate how much they had developed each of the four competences (1 – Developed a little or not at all to / 5 – Developed extremely well);

e) Anticipated Work-Family Conflict Scale – Short Brazilian version (AWFC – BRA): adaptation developed by the authors for this study using the eight sample items presented in the article that reported the development of the original measure (Westring & Ryan, 2011). Table 1 contains the original items in English and the adaptation to Brazilian Portuguese.
Procedures for adapting the Anticipated Work–Family Conflict Scale for the Brazilian Context

Before starting the process of validation of the instrument, the authors obtained permission from Westring and Ryan (2011), who allowed the adaptation of the instrument for research purposes. The set of eight items from the original instrument was initially submitted to translation and semantics adaptation procedures. After that, two individuals with PhDs in Psychology, who were also bilingual and specialists in the field of career development and psychological evaluation, performed the translation and semantic adaptation of the items into Brazilian Portuguese. Prior to data collection, the items were judged in terms of clarity, coherence and dimensionality by three participants who met the criteria to enter the study. After this moment, no more items were altered, and the actual data collection was initiated.

Data collection and analysis procedures

The present study was submitted and received favorable evaluation (from the Institutional Review Board and Ethics Committee at one federal university in Brazil protocol number 248.810). Data collection was conducted thorough the online platform Google Forms.

The CORP process of personalized invitations was used in this data collection (Wachelke, Natividade, De Andrade, Wolter, & Camargo, 2014). More specifically, the authors: 1) visited educational institutions where they could find participants who fit the inclusion criteria for the study (in this case University students), 2) provided a lecture about work-family interaction, 3) invited the audience to answer an on-line survey about the subject of the lecture, and 4) sent personal e-mails with a web link to access the on-line survey of this study to the participants who agreed to be part of the study.

Data was analyzed using statistics software’s R (R Development Core Team, 2017), SPSS (version 18), and AMOS. First, descriptive and frequencies analyses were conducted. After that, factor analyses (exploratory) and Omega reliability tests were used to evaluate validity and precision of the measure (Lloret-Segura, Ferreres-Traver, Hernández-Baeza, & Tomás-Marco, 2014). Mean scores were created with the items results of each of the scales in the study, and then a structural equation model composed of the independent variables of anticipated work-family conflict (family interfering with work and work interfering with family) and of the dependent variables attachment style, career adaptability and perceived general career success was tested.
RESULTS

Section one: Short version of the Anticipated Work-Family Conflict Scale for the Brazilian Context (AWFC – BRA)

Initially, the items of the scale were submitted to the analysis of main components to verify the factorability of data matrices. The Kaiser-Meyer-Olkin measure obtained was .88, and Bartlett’s sphericity test was significant (1360.308, \( p < .001 \)), values which indicate that the use of factor analysis is adequate. To decide the number of factors to be extracted, the authors used information generated by the scree plot graphic with different criterias generated for a specific syntax in R software (R Development Core Team, 2017). Three out of four criteria indicated a bi-factorial extraction (eigenvalues, parallel analysis and optimal coordinates), including the parallel analysis, that is considered the more precision indicator for this decision that makes a more robust estimate of the total factors for extraction (Lloret-Segura et al., 2014). The figure 1 shows the results of this analysis.

![Figure 1. Graphic to factor decision.](image-url)
Following, the authors conducted the extraction of factors using the method of principal axis factoring, opting for the bi-factorial model, as it presented better adjustment to the data matrix and to the original WIF and FIW theoretical model. The rotation chosen was varimax, once it is octagonal, assuring thus that the factors would remain unrelated. The measure’s final items are displayed in Table 1.

Table 1

| Items                                                                 | (FIW) | (WIF) |
|----------------------------------------------------------------------|-------|-------|
| O tempo que eu gastar com as minhas responsabilidades familiares, irá, muitas vezes, interferir nas minhas responsabilidades de trabalho. OR. *The time I will spend on family responsibilities will often interfere with my work responsibilities.* | .80   | -.04  |
| No futuro, irei perder algumas atividades de trabalho devido ao tempo utilizado com responsabilidades familiares. OR. *I will have to miss family activities due to the amount of time I will have to spend on work responsibilities.* | .71   | -.02  |
| Devido ao estresse que terei em casa, frequentemente, ficarei muito preocupado(a) com assuntos da família no momento que estiver no trabalho. OR. *Due to stress at home, I will often be too preoccupied with family matters at work.* | .66   | .03   |
| No futuro, por estar, frequentemente, preocupado(a) com minhas responsabilidades familiares, eu terei grandes dificuldades para me concentrar em atividades do meu futuro trabalho. OR. *Because I will often be stressed from my family responsibilities, I will have a hard time concentrating on my work.* | .63   | .12   |
| Meu trabalho irá me manter afastado das atividades com a minha família, mais do que eu gostaria. OR. *My work will keep me from my family activities more than I would like.* | -.10  | .95   |
| O tempo que vou dedicar ao meu emprego/trabalho vai me impedir de participar, de forma igualitária, das atividades e responsabilidades domésticas. OR. *The time I will devote to my job will keep me from participating equally in household responsibilities and activities.* | .00   | .66   |
| Acredito que as demandas futuras, de meu trabalho, irão interferir na minha vida familiar. OR. *I will have to miss family activities due to the amount of time I will have to spend on work responsibilities.* | .08   | .59   |
| Devido a todas as pressões que terei no trabalho, possivelmente, quando chegar em casa, estarei muito estressado(a) para fazer atividades que gosto. OR. *Due to all the pressures I will have at work, sometimes when I get home I will be too stressed to do the things I enjoy.* | .16   | .47   |

Number of items per factor | 4 | 4
Omega reliability | .83 | .78
Percentage of variance per factor | 45.54 | 17.27
The final version of the AWFC – BRA for the Brazilian context was composed of eight items, divided into two factors. The first, named “Family interfering with work”, or (FIW), contemplated four items, obtained an omega reliability of .83, and explained 45.5% of data variance. This dimension evaluated the anticipation of the family life interfering with work, and was composed of items that explore the impressions of how aspects related to stress, concerns and emotional responsibility over family issues affect work life. The second factor, called “Work interfering with family”, or (WIF), was also composed by four items, obtained an omega reliability of .78 and explained 17.3% of the variance. They represented the perception of how aspects related to withdrawal, stress and fatigue caused by work interfere with the investment and quality of family life.

Section Two: Model of Career Success and Antecedents family, attachment and adaptability

The second section of this study was guided by five hypotheses: (H1) the bi-directional model of the anticipated work-family construct would hold for the Brazilian sample; Perceived career success would relate: (H2) positively to the dimensions of adaptability; and (H3) negatively with anticipated work-family conflict. It was also hypothesized that insecure attachment would affect: negatively (H4) career success and career adaptability; and positively (H5) anticipated work-family conflict.

Aiming at the understanding of the interrelation of the variables in this study and to test the aforementioned hypotheses, the authors developed a model based on the technique of structural equations modeling – SEM (Byrne, 2016). To design the SEM model in Figure 1, the independent variables chosen were attachment styles, career adaptability, and anticipation of work-family conflict; the dependent variable was perceived career success.
Figure 2. Model of causal success of attachment-adaptability.

The adjustment indices of the models were favorable according to all indicators considered. For the first model the indices were: $\chi^2 = 58.826$, df = 23 ($p < .001$), $\chi^2 / df = 2.25$, RMR = 0.017, GFI = 0.97, AGFI = 0.95, CFI = 0.93, RMSEA (90%CI) = 0.085 (0.061 – 0.109). This model demonstrates that three variables influenced the perception of career success in the sample. Additionally, it evidenced that the insecure attachment pattern positively predicts work-family conflict (b = 0.58) and negatively predicts career adaptability (b = -0.08). On the same hand, career adaptability was a positive predictor of perception of career success (b = 0.46), as well as of work-family conflict (b = 0.14). The perception of career success was negatively influenced by attachment styles (b = -0.15).

DISCUSSION

The present study aimed at generating evidence about how the perception of the interactions between roles and demands that arise from work and family influence the perception of university students about success in career development. In order to do so, it presented the adaptation process of the Anticipated Work–Family Conflict Scale (AWFC – BRA) for use with Brazilian samples. The AWFC – BRA presented acceptable indices of validity, which gives it status of a valid measurement for use in the contexts of research, as well as to evaluate career orientation.
programs. Additionally, the measure presented satisfactory indices of precision for both factors extracted.

The work-family conflict anticipation construct proposed by Westring and Ryan (2011) was operationalized in its original version as a measure with six dimensions, according to the model proposed by Carlson et al. (2000), encompassing the bi-directionality of the relationship between work and family in aspects of time, behavior and roles. Although the eight items of the version adapted in the present article do not contemplate the specific dimensions proposed by Carlson et al. (2000), the measure adapted to the Brazilian context showed to be more robust and had a clearer and more adequate adjust to the WIF and FIW dimensions. Therefore, it followed the same pattern of a Brazilian measure used with general samples of adults, by Aguiar and Bastos (2013), aspect that, in a general matter, confirms H1.

Although its factorial arrangement has been restricted to two dimensions of the conflict, the authors did not consider it to be a limiter for the use of the scale when investigating work-family conflict anticipation among university students. Researches on the field are very recent in Brazil, and despite great effort, show parsimony in suggesting that the construct in its original dimensions, proposed by Greenhaus and Beutell (1985), is valid. It is important to point, however, the importance of developing instruments that can be used when considering the career planning of university students who are still preparing to enter the job market, and have not yet constituted families – either as a diagnostic tool or as a follow-up instrument – as an important element for career planning, especially because it allows and incentives the reflection on which are the relevant roles occupied in an individual’s life.

Considering that the AWFC – BRA is consistent for evaluating anticipated work-family conflict, the authors assume that the model tested in the present article advances in the integration of different established theoretical fields in the vocational psychology area. Bearing in mind that the work-family conflict construct is a phenomenon which integrates the career development perspective (e.g. adaptability; career success) and interactions between family and work, when investigating samples of young professionals, the model offers the possibility to advance in research, while also contributing with the understanding of both contexts and taking the attachment theory as reference.

Based on the individual attachment dimensions model, insecure attachment, represented by the avoidance and anxiety dimensions, was a negative predictor of career success, confirming H3. Such predictive capacity can be credited to the effect of the internal prototypical models that associate low self-esteem and uncertainties about affective responses to the environmental context in modulating professionals’ self-concept, and, consequently, their perception of career success. As it was observed by Wolfe and Betz (2004), there is a relationship between the insecure
style and negative evaluations about career decision efficacy, more specifically the belief in personal competence to adequately decide important aspects of the personal trajectory. In relation to career satisfaction, Krausz et al. (2001) noticed that individuals with a secure attachment style are more satisfied with aspects related to work than those with insecure attachment. Assuming that career dimensions and work are related, data confirmed, even in an indirect form, the negative predictive relationship between insecure attachment and career satisfaction.

When interpreting the model, one can also perceive that indicators of insecure attachment operate as the best predictors of work-family conflict anticipation, confirming H5. Interaction patterns of avoidance or fear to make connections generate perspectives of greater insecurity regarding interpersonal relationships and future interference between roles played at the work and family domains. Sumer and Knight (2001) pointed that the anxious pattern is inclined to negatively affect family aspects, aside from work. In an opposite direction, the authors also affirm that people with secure attachment patterns usually present positive feelings related to both work and family. As mentioned in the studies by Hazan and Shaver (1990), and by Wright and Perrone (2008), and considering that individuals with secure attachment tend to have more exploratory behaviors, it is possible to infer that this effect is extended to the career context, enlarging the perception of self-efficacy and expectations of favorable results in relation to professional investments.

Finally, analyzing the dimensions of adaptability and anticipated work-family conflict, H4 is partially confirmed, as attachment styles did not predict adaptability. On the other hand, H2 was partially confirmed, as it was possible to observe the predicting effect of both variables on the perception of career success. It is important to note that career adaptability refers to the promptitude and the individual resources to face career decisions, the occupational transitions and personal traumas with which individuals are faced (Ambiel, 2014). Those are aspects that can lead to the perception of career success. It is also important to highlight that the anticipated work-family conflict was a positive predictor – opposed to what was expected – of career success. In the sample of this study, the perception of future tension between work and family, in some way, denoted intense commitment or involvement with the career, aspect that justifies the positive results.

The lack of a more detailed exploration of the anticipated work-family conflict in relation to aspects of career and work was a limitation of this study, and should be explored in future investigations. Additionally, in this study, the authors did not analyze differences and similarities in the moderation of models according to gender. We consider that this could be an interesting venue for future studies in order to clarify the effect and consequences of the conflict between family and work for men and women.
We believe that, even with its limitations, the relevance of this study resides in the fact that a transition from University to work is characterized by a period of accentuated conflict, in which the young professional perceives him or herself as the main (and sometimes only) responsible for important and meaningful decisions. In this sense, the contribution of a model that shows the integration of variables which are relayed to attachment, family, and career evidences the collaboration of the affective experiences with caregivers to the quality of adult interactions with their families. It contributes also to the generation of relevant material for the career orientation practice with young adults.

Finally, some implications of the present study for the professional practice of psychologists are evident. For example, the results suggest that conflicted relationships with caregivers, experienced in the past (anxious attachment), impact on how individuals currently manage the resources to cope with the demands of family and work, which are limited. Studies indicate that the presence of conflict between the demands of these two domains can be related to outcomes such as addition to work and turnover intention (Braun, 2017), phenomena that have an extremely negative impact on both professionals and organizations.

On the other hand, they emphasize that the establishment of satisfactory early interpersonal relationships can have a positive impact on attitudes and behaviors that favor positive performance at work (Hazan & Shaver, 1990; Wright & Perrone, 2008). An example is the observed relationship with career adaptability and perceived career success. Individuals with secure attachment tend to feel more comfortable with exploring the environment (Wright & Perrone, 2008). Such exploration requires them to reflect on a possible future (concern), to understand that this future depends on them (control), to imagine what they would like to do or choose (curiosity), and to question their ability to achieve their own goals (confidence). According to the literature, this reflection on and the development of career adaptability aims to develop the perception of success, as well as satisfaction with career choices (Ambiel, 2014).

Therefore, the present research evidences the importance of investigating, in the client’s previous history, how the client’s relationship with his parents was, as well as the possible similarity between these and those established throughout the working life and in different environments. Doing this is important, as there are similarities between the patterns of interpersonal relationships and of how individuals relate to the environment in childhood and adulthood, in the context of work. Understanding such patterns (the meanings attributed to the experiences which were lived and which are projected) is important for individuals to understand their meaning and to give coherence and continuity to their action in the different roles and domains of their life, connecting past and present experiences to be able to plan and expect for successful experiences in the future (Cardoso, 2011).
REFERENCES

Aguiar, C. V. N., & Bastos, A. V. B. (2013). Tradução, adaptação e evidências de validade para a medida de Conflito trabalho-família. Avaliação Psicológica, 12(2), 203-212. Retrieved Jan 25, 2019, from http://pepsic.bvsalud.org/scielo.php?script=sci_arttext&pid=S1677-04712013000200011

Allen, T. D., French, K. A., Dumani, S., & Shockley, K. M. (2015). Meta-analysis of work-family conflict mean differences: Does national context matter? Journal of Vocational Behavior, 90, 90-100. doi: 10.1016/j.jvb.2015.07.006

Allen, T. D., Herst, D. E., Bruck, C. S., & Sutton, M. (2000). Consequences associated with work-to-family conflict: a review and agenda for future research. Journal of occupational health psychology, 5(2), 278-308. doi: 10.1037//1076-8998.5.2.278

Alonso-Arbiol, I., Balluerka, N., & Shaver, P. (2007). A Spanish version of the Experiences in Close Relationships (ECR) adult attachment questionnaire. Personal Relationships, 14(1), 45-63. doi: 10.1111/j.1475-6811.2006.00141.x

Ambiel, R. A. (2014). Adaptabilidade de carreira: uma abordagem histórica de conceitos, modelos e teorias. Revista Brasileira de Orientação Profissional, 15(1), 15-24.

Audibert, A., & Teixeira, M. A. P. (2015). Escala de Adaptabilidade de Carreira: Evidências de validade em universitários Brasileiros. Revista Brasileira de Orientação Profissional, 16(1), 83-93.

Baruch, Y., Szúcs, N., & Gunz, H. (2015). Career studies in search of theory: the rise and rise of concepts. Career Development International, 20(1), 3-20. doi: 10.1108/CDI-11-2013-0137

Blustein, D. L., Prezioso, M. S., & Schultheiss, D. P. (1995). Attachment theory and career development: current status and future directions. The Counseling Psychologist, 23(3), 416-432. doi: 10.1177/0011000095233002

Bowlby, J. (1973). Attachment and loss: Separation: Anxiety and anger. New York: Basic Books.

Braun, A. (2017). Conflito Trabalho-Família em Executivos. Pontifícia Universidade Católica do Rio Grande do Sul, Porto Alegre, Brazil.

Brennan, K. A., Clark, C. L., & Shaver, P. R. (1998). Self-report measurement of adult attachment: An integrative overview. In J. A. Simpson & W. S. Rholes (Eds.), Attachment Theory and Close Relationships (pp. 46-76). New York, NY: Guilford.

Brown, T. J. (2014). Work Family Conflict Among Parents of Atypically Developing Children: Exploring the Impact of Worker, Work, and Child Factors. Journal of Child and Family Studies, 23(5), 854-862. doi: 10.1007/s10826-013-9739-9

Butts, M. M., Casper, W. J., & Yang, T. S. (2013). How important are work-family support policies? A meta-analytic investigation of their effects on employee outcomes. Journal of Applied Psychology, 98(1), 1-25. doi: 10.1037/a0030389

Byrne, B. M. (2016). Structural Equation Modeling With AMOS : Basic Concepts, Applications, and Programming. Third Edition. Taylor and Francis.

Cardoso, P. (2011). Psicologia vocacional: a interface do económico, do social e do educacional para a construção de projectos de vida. Retrieved Jan 25, 2019, from http://hdl.handle.net/10174/3202

Carlson, D. S., & Frone, M. R. (2003). Relation of behavioral and psychological involvement to a new four-factor conceptualization of work-family interference. Journal of Business Psychology, 17, 515-535. doi: 10.1023/A:1023404302295
Carlson, D. S., Kacmar, K. M., & Williams, L. J. (2000). Construction and initial validation of a multidimensional measure of work-family conflict. *Journal of Vocational behavior, 56*(2), 249-276. doi: 10.1006/jvbe.1999.1713

Dahling, J. J., & Librizzi, U. A. (2015). Integrating the Theory of Work Adjustment and Attachment Theory to Predict Job Turnover Intentions. *Journal of Career Development, 42*(3), 215-228. doi: 10.1177/0894845314545169

De Andrade, A. L., Oliveira, M. Z. de, & Hatfield, E. (2017). Conflito trabalho-família: Um estudo com brasileiros e norte-americanos. *Revista Psicologia: Organizações e Trabalho, 17*(2), 106-113. doi: 10.17652/rpot/2017.2.12738

Edwards, J. R., & Rothbard, N. P. (2000). Mechanisms linking work and family: Clarifying the relationship between work and family constructs. *The Academy of Management Review, 25*(1), 178-199. doi: 10.2307/259269

Greenhaus, J. H., & Beutell, N. J. (1985). Sources of conflict between work and family roles. *Academy of Management Review, 10*(1), 76-88. doi: 10.5465/AMR.1985.4277352

Guan, Y., Zhou, W., Ye, L., Jiang, P., & Zhou, Y. (2015). Perceived organizational career management and career adaptability as predictors of success and turnover intention among Chinese employees. *Journal of Vocational Behavior 88*, 230-237. doi: 10.1016/j.jvb.2015.04.002

Hazan, C., & Shaver, P. (1987). Romantic love conceptualized as an attachment process. *Journal of Personality and Social Psychology, 52*(3), 511-524. doi: 10.1037/0022-3514.52.3.511

Hazan, C., & Shaver, P. R. (1990). Love and work: An attachment-theoretical perspective. *Journal of Personality and Social Psychology, 59*(2), 270-280. doi: 10.1037/0022-3514.59.2.270

Hill, E. J. (2005). Work-Family Facilitation and Conflict, Working Fathers and Mothers, Work-Family Stressors and Support. *Journal of Family, 26*(6): 793-819, doi: 10.1177/0192513X05277542

Krausz, M., Bizman, A., & Braslavsky, D. (2001). Effects of attachment style on preferences for and satisfaction with different employment contracts: An exploratory study. *Journal of Business and Psychology, 16*(2), 299-316. doi: 10.1023/A:1011169419048

Lapierre, L. M., Li, Y., Kwan, H. K., Greenhaus, J. H., Direnzo, M. S., & Shao, P. (2017). A meta-analysis of the antecedents of work-family enrichment. *Journal of Organizational Behavior, 1-17*. doi: 10.1002/job.2234

Leiter, M. P., Day, A., & Price, L. (2015). Attachment styles at work: Measurement, collegial relationships, and burnout. *Burnout Research, 2*(1), 25-35. doi: 10.1016/j.burn.2015.02.003

Lloret-Segura, S., Ferreres-Traver, A., Hernández-Baeza, A., & Tomás-Marco, I. (2014). El análisis factorial exploratorio de los ítems: Una guía práctica, revisada y actualizada. *Anales de Psicología, 30*(3), 1151-1169. doi: 10.6018/analesps.30.3.199361

Mallinckrodt, B., & Wang, C-C. (2004). Quantitative methods for verifying semantic equivalence of translated research instruments: A Chinese version of the Experiences in Close Relationships Scale. *Journal of Counseling Psychology, 51*(3), 368-379. doi: 10.1037/0022-0167.51.3.368

Michel, J. S., Mitchelson, J. K., Kotrba, L. M., LeBreton, J. M., & Baltes, B. B. (2009). A comparative test of work-family conflict models and critical examination of work-family linkages. *Journal of Vocational Behavior, 74*(2), 199-218. doi: 10.1016/j.jvb.2008.12.005

Mihelič, K. K., Tekavčič, S. M. (2014). Work-Family Conflict: A Review of Antecedents and Outcomes. *International Journal of Management & Information Systems, 18*(1), 15-26.
Natividade, J. C., & Shiramizu, V. K. M. (2015). Uma medida de apego: versão brasileira da Experiences in Close Relationship Scale - Reduzida (ECR-R-Brasil). *Psicologia USP*, 26(3), 484-494. doi: 10.1590/0103-656420140086

Netemeyer, R. G., Boles, J. S., & McMurrian, R. (1996). Development and validation of work-family conflict and family-work conflict scales. *Journal of Applied Psychology, 81*(4), 400-410. doi: 10.1037/0021-9010.81.4.400

Nohe, C., Meier, L. L., Sonntag, K., & Michel, A. (2014). The Chicken or the Egg? A Meta-Analysis of Panel Studies of the Relationship Between Work-Family Conflict. *Journal of Applied Psychology, 100*(2), 1-15. doi: 10.1037/a0038012

O’Connell, D. J., McNeely, E., & Hall, D. T. (2008). Unpacking personal adaptability at work. *Journal of Leadership and Organizational Studies, 14*, 248-259. doi: 10.1177/1071791907311005

Paiva, C. A., & Figueiredo, B. (2010). Study of validation of the Portuguese version of the inventory Experiences in Close Relationships. *Interpersona, 4*(2), 237-270. doi: 10.5964/ijpr.v4i2.51

Picardi, A., Bitetti, D., Puddu, P., & Pasquini, P. (2000). La scala “Experiences in close relationships” (ECL), un nuovo strumento per la valutazione dell’attaccamento negli adulti: traduzione, adattamento e validazione della versione italiana. *Rivista di Psichiatria*, 35(3), 114-120.

R Core Team (2017). *R: A language and environment for statistical computing*. R Foundation for Statistical Computing, Vienna, Austria. Retrieved Jan 25, 2019, from https://www.r-project.org/

Richards, D. A., & Schat, A. C. H. (2011). Attachment at (Not to) Work: Applying Attachment Theory to Explain Individual Behavior in Organizations. *Journal of Applied Psychology, 96*(1), 169-182. doi: 10.1037/a0020372

Savickas, M. L. (2002). Career construction: A developmental theory of vocational behavior. In D. Brown (Ed.), *Career choice and development* (pp. 149-205) (4th ed.). San Francisco, CA: Jossey-Bass.

Savickas, M. L. (2005). The theory and practice of career construction. In S. D. Brown & R. W. Lent (Eds.), *Career development and counseling: Putting theory and research to work* (pp. 42-70). Hoboken, NJ: Wiley.

Savickas, M. L., & Porfeli, E. J. (2012). Career Adapt-Abilities Scale: Construction, reliability, and measurement equivalence across 13 countries. *Journal of Vocational Behavior, 80*(3), 661-673. doi: 10.1016/j.jvb.2012.01.011

Shaver, P. R., & Mikulincer, M. (2007). Attachment theory and research: Core concepts, basic principles, conceptual bridges. In A. W. Kruglanski & E. T. Higgins (Eds.), *Social psychology: Handbook of basic principles* (pp. 649-677). New York: The Guilford Press.

Shiramizu, V. K. M., Natividade, J. C., & Lopes, F. A. (2013). Evidências de validade do Experience in Close Relationships (ECR) Inventory para o Brasil. *Estudos de Psicologia (Natal), 18*(3), 457-465. doi: 10.1590/S1413-294X2013000300006

Sumer, H. C., & Knight, P. A. (2001). How do people with different attachment styles balance work and family? A personality perspective on work–family linkage. *Journal of Applied Psychology, 86*(4), 653-663. doi: 10.1037/0021-9010.86.4.653

Super, D. E., & Knasel, E. G. (1981). Career development in adulthood: Some theoretical problems and a possible solution. *British Journal of Guidance & Counselling, 9*, 194-201. doi: 10.1080/03069888108258214

Super, D. E., Thompson, A. S., & Lindeman, R. H. (1988). *Adult Career Concerns Inventory: Manual for research and exploratory use in counseling*. Consulting Psychologists Press.
Tokar, D. M., Withrow, J. R., Hall, R. J., & Moradi, B. (2003). Psychological separation, attachment security, vocational self-concept crystallization, and career indecision: A structural equation analysis. *Journal of Counseling Psychology, 50*, 3-19. doi: 10.1037/0022-0167.50.1.3

Voydanoff, P. (2005). Consequences of boundary-spanning demands and resources for work-to-family conflict and perceived stress. *Journal of occupational health psychology, 10*(4), 491-503. doi: 10.1037/1076-8998.10.4.491

Wachelke, J., Natividade, J., De Andrade, A., Wolter, R., & Camargo, B. (2014). Caracterização e Avaliação de um Procedimento de Coleta de Dados Online (CORP). *Avaliação Psicológica, 13*(1), 143-146. Retrieved Jan 25, 2019, from http://pepsic.bvsalud.org/pdf/apv/v13n1/v13n1a17.pdf

Westring, A. F., & Ryan, A. M. (2011). Anticipated work-family conflict: A construct investigation. *Journal of Vocational Behavior, 79*(2), 596-610. doi: 10.1016/j.jvb.2011.02.004

Wolfe, J. B., & Betz, N. E. (2004). The relationship of attachment variables to career decisionmaking self-efficacy and fear of commitment. *Career Development Quarterly, 52*, 363-369. doi: 10.1002/j.2161-0045.2004.tb00952.x

Wright, S. L., & Perrone, K. M. (2008). The impact of attachment on career-related variables: A review of the literature and proposed theoretical framework to guide future research. *Journal of Career Development, 35*, 87-106. doi: 10.1177/0894845308325643

Zacher, H. (2014). Career adaptability predicts subjective career success above and beyond personality traits and core self-evaluations. *Journal of Vocational Behavior 84*, 21-30. doi: 10.1016/j.jvb.2013.10.002

Zanotti, M. S. (2016). *Pensamentos Negativos de Carreira e Aspectos Psicológicos Relacionados à Satisfação Com os Resultados Alcançados na Vida e na Carreira*. (Master dissertation). Universidade Federal do Espírito Santo, Vitória, Brazil.