

Relational models and work-family conflict: a study with samples from Brazil and the United States of America

Modelos relacionais e conflito trabalho-família: um estudo com amostras do Brasil e Estados Unidos da América

Modelos relacionales y conflicto trabajo-familia: un estudio con muestras de Brasil y los Estados Unidos de América

Alexsandro Luiz de Andrade ¹

Manoela Ziebell de Oliveira ²

Cari M.M.H. Knowles ³

Haroldo de Carvalho Bonifácio Neto ⁴

Elaine Hatfield ⁵

^{1,4} Departamento de Psicologia, Universidade Federal do Espírito Santo, Brasil

² Escola de Ciências da Saúde, Pontifícia Universidade Católica do Rio Grande do Sul, Brasil

^{3,5} Department of Psychology, University of Hawaii, United States of America

Abstract: Attachment theory seeks to understand how emotional bonds can affect different aspects of people's lives across the continuum of life. This study aimed at comprehending how patterns of anxious and avoidant attachment explain two dimensions of the work-family conflict construct, work interference with family (WIF) and family interference with work (FIW). To achieve this, data were collected through a survey with samples from Brazil and the United States of America. The sample included 676 people older than 18 years old - 369 participants were from Brazil and 307 were from the USA. Results demonstrated that the anxious pattern of attachment relates to and predicts both dimensions of the work-family conflict. On the other hand, avoidant attachment was an explanatory variable only for participants from the United States. These results accentuate scientific investigation of attachments constructs' importance and its interactions within work and family demands.

Keywords: work-family conflict, attachment theory, transcultural study, attachment style, brief attachment questionnaire

Resumo: A teoria do apego procura compreender como os vínculos emocionais podem afetar os diferentes aspectos da vida das pessoas ao longo do ciclo de vida. Este estudo teve como objetivo compreender como os padrões de estilos de apego ansioso e evitativo explicam as duas dimensões do construto conflito trabalho-família, isto é, como o trabalho interfere na família (TIF) e como a família interfere no trabalho (FIT). Para a realização do estudo foram recolhidas informações através de um questionário com amostras de respondentes do Brasil e Estados Unidos da América. A amostra contou com 676 pessoas com idade superior a 18 anos, 369 delas do Brasil e 307 dos EUA. Os resultados demonstraram que o estilo de apego ansioso se relaciona e previne ambas as dimensões do conflito trabalho-família. Por outro lado, o apego evitativo foi uma variável explicativa somente nos participantes dos EUA. Os resultados realçam a importância da investigação acerca dos estilos de apego e das suas relações com processos de interação família-trabalho.

Palavras-chave: conflito trabalho-família, teoria do apego, estudo transcultural, estilos de apego, questionário breve de apego

Resumen: La teoría del apego busca entender cómo los lazos emocionales pueden afectar diferentes aspectos de la vida de las personas a través del continuo de la vida. Este estudio tiene como objetivo comprender cómo los patrones de estilos de apego ansiosos y evasivos explican las dimensiones de conflictos trabajo-familia: interferencia de trabajo con la familia (ITF) e interferencia familiar con el trabajo (IFT). Para lograr esto, los datos fueron recolectados a través de dos cuestionarios con muestras de Brasil y de los Estados Unidos de América. La muestra incluyó a 676 personas mayores de 18 años, 369 de Brasil y 307 de EUA. Los resultados demostraron que el estilo de ansioso se relaciona y predice ambas dimensiones del conflicto trabajo-familia. Por su parte, el estilo evitativo fue predictivo solo para participantes de los EUA. Estos resultados acentúan la importancia de la investigación de los estilos de apego y sus interacciones con las demandas de trabajo y familia.

Palabras clave: conflicto trabajo-familia, teoría del apego, estudio transcultural, estilos de apego, cuestionario breve de apego

Received: 08/11/2017

Revised: 05/17/2018

Accepted: 06/11/2018

How to cite this article:

de Andrade, A. L., de Oliveira, M.Z., Knowles, C.M.M.H., de Carvalho Bonifácio Neto, H., & Hatfield E. (2018). Relational models and work-family conflict: a study with samples from Brazil and the United States of America. *Ciencias Psicológicas*, 12(2), 167-176. doi: <https://doi.org/10.22235/cp.v12i2.1679>.

Recent changes in work dynamics and job configurations exceed boundaries imposed by organizations and manifest their effects in family life. The overall expansion of globalization, advances in human rights policy, and breakthroughs in healthcare, have resulted in consequences such as: increase of life expectancy, increase in the number of women in the workspace, development of dual-career couples, emergence of new family settings and child rearing practices, and new investments in education and career (De Hauw & Greenhaus, 2015; Lyness & Erkovan, 2016).

There has been an increase in publications on the relation between work and family constructs. Greenhaus and Beutel (1985) are considered pioneers investigating the interaction between the two constructs. Their research on the matter steers inquiry in this field of study. According to them, people can experience conflict in two directions and in multidimensional aspects (time, family role, and tension). The first dimension is work interference with family (WIF), which is conflict that occurs when work roles, time investment, and tension interfere with the performance of family activities (e.g. working on weekends makes it difficult to participate in family events). The second dimension is family interference with work (FIW), which is conflict that arises when the family role, time invested, and the tensions generated in this domain affect responsibilities related to work (e.g. when a member of the family gets sick, the individual cannot focus on their work responsibilities).

Studies on work-family conflicts generally deal with the association of this construct with different kinds of phenomena, such as: Quality of life, Well-being, Health (Colichi, Bocchi, Lima, & Popim, 2017; Greenhaus, Collins, & Shaw, 2003; Moen et al., 2015), and Marital quality (De Andrade, Oliveira, & Hatfield, 2017; Fellows, Chiu, Hill, & Hawkins, 2016). It is also associated with organizational behavior phenomena, like Performance, Commitment, Engagement and Work satisfaction (Casper, Harris, Taylor-Bianco, & Wayne, 2011; Iskra-Golec, Barnes-Farrell, & Bohle, 2016).

Recent research about this subject attempt to understand work-family conflict through scientific investigation of individual characteristics. According to this approach individuals have finite resources, i.e., they have a limited capability to deal with the challenges and setbacks presented to them by life's adversities, which requires a continuous effort to balance and manage work and family roles (Ten Brummelhuis & Bakker, 2012). According to Carly and Tammy (2003), aspects of personality can influence work-family conflicts. Pleasantness traits, for instance, are associated with conflict because of imbalances in time investment. Conscientiousness, on the other hand, is a trait associated with the understanding that family can interfere with work life.

The range of research seeking to explain several affective, social and behavioral phenomena through attachment theory grows (Byrne, Albert, Manning, & Desir, 2017; Hart, Nailling, Bizer, & Collins, 2015). Nevertheless, few scientific publications that consider individual variables related to work-family conflict investigate the roles that types of attachment have regulating work and family demands (Harms, 2011; Sumer & Knight, 2001; Vieira, Ávila, & Matos, 2012).

Attachment theory in career, work and Family studies

Attachment theory provides a template that help us understand how individual patterns of relationship influence interpersonal behavior (Byrne et al., 2017). Theory posits that attachment is a psychological construct that refers to an affective-emotional bond established between individuals. Regarding human studies, the subject was first investigated through scientific attempts to comprehend interaction and bonding behavior patterns among infants and caregivers. They also aimed at understanding these types of demeanor and their consequences to human development (Bowlby, 1973).

Attachment theory states that people form, modulate and give reinforcement to cognitive schemes since infancy. Individuals set up internal models about themselves, and their relationships with external events and people (Wright & Perrone, 2008). This affects different aspects of life, in particular, work, family and intimate relationships (Blustein, Prezioso, & Schultheiss, 1995; Hazan & Shaver, 1990).

According to Hazan and Shaver (1990), there are three main types of attachment: secure, anxious/ambivalent, and avoidant. The unpredictability of care or of the presence of a caregiving figure characterizes the ambivalent pattern, which leads to apprehension and resistance when in direct contact with the environment (Hazan & Shaver, 1987). This pattern commonly represents people with fear of rejection and that exhibit insecure and dependent behavior (Agishtein & Brumbaugh, 2013; Brennan, Clark, & Shaver, 1998).

In the same line of thought of these authors, avoidant attachment refers to the feeling of comfort or discomfort regarding close interpersonal relationships during adulthood. It is typical for people displaying this pattern to refrain from close relationship interactions, employing cognitive and emotional deactivation strategies to suppress bonding feelings that may come about in specific.

The secure pattern of attachment behavior derives from the situation in which an individual feels confident that the caregiver will be available and able to meet their needs whenever they may need something. These circumstances outline types of behavior that can promote higher levels of: self-esteem, health and satisfaction in romantic relationships as well as confidence (Brennan et al., 1998; Kim, 2005; Shaver & Mikulincer, 2007; Simpson, Rholes, & Nelligan, 1992).

Initial studies on the theme aimed to measure different levels and sequences of attachment using psychometric measures divided into three dimensions: one that addresses security; another that assesses avoidant behaviors, and the last which gauges patterns of anxiety (ambivalence) (Hazan & Shaver, 1987). Criticism on the forced-choice items that compose this measure, led to the simplification of its metrics, resulting in only two dimensions (Fraley, 2002). It figures amongst the most accepted methods in contemporary attachment theory's research field (Feeney, 2008).

Based on this perspective, the "*Experience in Close Relationship Scale – ECR*" (Brennan et

al., 1998) was used to measure attachment. The ECR was adapted for use in different countries, including Italy (Piccardi, Bitetti, Puddu, & Pasquini 2000), China (Mallinckrodt & Wang, 2004), Spain (Alonso-Arbiol, Balluerka, & Shaver, 2007), Portugal (Paiva & Figueiredo, 2010) and Brazil (Shiramizu, Natividade, & Lopes, 2013). This instrument is based on a bi-dimensional model composed of two main scales: one of avoidance and the other of insecure attachment. Elevated scores in either one of the scales characterize individuals that have an insecure type of attachment pattern, while low scores in both dimensions represent the secure type of attachment pattern.

Although attachment theory is well established enough to provide explanations to aspects of personality and individual differences (Goldberg, Muir, & Kerr, 2013), its use in the field of work and organizational studies is still very recent (Richards & Schat, 2011). The application of this theory to work dynamics shows that attachment is an essential element that has lasting effects on personal development throughout professional life (Wright & Perrone, 2008), explaining both interpersonal and intrapersonal components of work (Albert & Horowitz, 2009; Albert, Allen, Biggane, & Ma, 2015; Byrne et al., 2017). Evidence from research points that people with a secure type of attachment tend to: explore more fully their environment, have a higher perception of self-efficacy, and furthermore, have expectations of favorable outcomes in professional ventures (Hazan & Shaver, 1990; Wright & Perrone, 2008).

In the field of career studies, patterns of secure attachment were associated with low levels of career indecision (Tokar, Withrow, Hall, & Moradi, 2003) and were correlated with greater levels of satisfaction and adjustment to work aspects (Krausz, Bizman, & Braslavsky, 2001). By contrast, insecure attachment was related to negative evaluations about efficacy in career decisions (Wolfe & Betz, 2004). Attachment patterns were related to various organizational aspects. The anxious type being associated with: low cooperation between coworkers, lack of confidence in work, psychological insecurity and burnout syndrome. On the other hand, avoidant attachment was related to: lack of effectiveness at work and interpersonal problems with colleagues and supervisors (Byrne et al., 2017; Leiter, Day, & Price, 2015).

Contextualization and Hypotheses

This study was conducted with two main samples with different cultural contexts, namely participants from Brazil and the United States of America (US). It is believed that comparing residents from these locations can contribute to a better understanding of attachment patterns in the workplace and, more specifically, explain how the aforementioned patterns influence work-family conflicts. This study's methodological structure and objective result from an international and interinstitutional project. Beyond that, these countries were chosen to be compared because of the apparent differences presented by their work forces, and the economic scenario they face. These aspects justify the contrast made between the two different cultures.

Brazil, at its own pace, finds itself in full economic growth and development. Having a population of approximately 200 million people, the country can be characterized as a "melting pot" of different cultures and ethnicities in which they all combine together. This fact stems all the way back to Brazilian historical and demographic aspects (Malaquias & Hwang, 2016). Considering the country's large territory and highly diverse culture, identifying and characterizing patterns of behavior is no small task. This challenge becomes even more difficult when recent social and economic variations are considered, such as with the steady increase in female presence in the workplace over the last 20 years (Brazilian Institute of Geography and Statistics [IBGE], 2015).

In turn, the United States is considered the world's largest economy. A country marked by great populational diversity, related to high immigration rates in its territory (Tindall & Shi, 2016). Womens' presence in work environments has been an established phenomenon for many years (Allen, Johnson, Kiburz, & Shockley, 2013).

The only study encountered by the authors investigating attachment patterns and work-family conflict, demonstrated that the anxious pattern of attachment presented negative effects of the impact of family interfering with work – e.g. family occurrences alter states of humor to the point of disturbing relationships with work colleagues. However, the secure pattern of attachment presented positive effects in work and in family life – e.g., the quality of family life helps expand work satisfaction (Sumer & Knight, 2001).

Based on the existing relationship between work and non-work aspects (Hazan & Shaver, 1990; Sumer & Knight, 2001), this study has hypothesized that: (H1) insecure attachment (anxious and avoidant dimensions) will relate to the perceptions of work interfering with family (WIF) and family interfering with work (FIW). Also, considering the premise of universality of attachment patterns (Byrne et al., 2017; Shiramizu, Natividade, & Lopes, 2013), we will test the hypothesis that: (H2) there will be similarity in the relation and predictability of the variables of this study in both contexts of the sample.

Method

Participants

The sample of the present study had 676 men and women from two countries: Brazil and the United States of America. The American sample had 307 participants, of which 210 (68.4%) were female and 98, male (31.6%). The mean age of the sample was of 26 years ($SD = 10.2$ years). Among the participants, 130 (42.3%) were college students, 58 (18.9%) had bachelor's degree, 48 (15.6%) high school degree, 43 (14.0%) associates degree and 28 (9.1%) another. No information was collected on the work link of American participants. The Brazilian sample was composed with 369 adults, 213 were women (57.7%) and 156 were men (42.3%). The mean age of participants was 30.3 years ($SD = 9.47$ years). The mean age of Brazilian participants was 30.3 years (57.7%) and 156 men (42.3%). Among the participants, 283 (76.7%) self-declared involved in a stable romantic relationship. About the educational level of the sample, there was a prevalence of people with higher education 347 (93.7%). Regarding the work situation, the sample of study had a prevalence of professionals in the private sector (32.7%), following by public workers (24.1%), and students (20.6%). Just few participants were unemployed (5.4%) or did not specify their employment status (16.5%).

Instruments

The instrument used in this study was a self-report instrument with different psychological scales and sociodemographic questions to characterize the sample. The scales used were: a) Background questions and information from

participants (e.g., educational level and career-related questions); b) Experience with Close Relationship (Short version), a 10-item Brief Attachment Questionnaire comprising two subscales: anxiety (5 items) and avoidance (5 items) (Brazilian version by Natividade & Shiramizu, 2015; USA version by Wei, Russell, Mallinckrodt, & Vogel, 2007). The scale makes specific reference to attachment behaviors in adult relationships. Using a 5-point Likert type scale (1 – not at all like me to 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) and; c) The Work-Family Conflict Scale (Brazilian version by Aguiar & Bastos, 2013; USA version by Netemeyer, Boles, & McMurrian, 1996), the measure consists of 10 items assessed on a Likert scale, ranging from 1 (Strongly disagree) to 5 (Strongly agree) that assesses two dimensions: work interference with family (e.g., The demands of my work interfere in my home family life) and family interference with work (e.g., The demands of my family or spouse/partner interfere with my work-related activities). The psychometric properties (reliability test and latent structure) of all scales were evaluated for both samples in the study.

Data collection and analysis procedures

The present study was submitted and received favorable evaluation (protocol number 248.810) from the Institutional Review Board and Ethics Committee at one federal university. Data collec-

tion was conducted through the online platform Google Forms. The CORP process of personalized invitations was adapted, and the researchers sent e-mails and used personal accounts in social media to recruit participants (Wachelke, Natividade, De Andrade, Wolter, & Camargo, 2014).

Data was analyzed using statistics software's R (R Development Core Team, 2010), SPSS (version 18), and AMOS. First, descriptive and frequencies analyses were conducted. After that, factor analyses and Cronbach alpha reliability tests were used to evaluate validity and precision of all measures of this study. Mean scores were created with the items of each of the scales in the study - the correlation matrix was then generated, and multiple regressions (enter method) were applied to the data with the purpose of testing our hypotheses.

Results

Descriptive statistics and confiability indicators

Table 1 shows the results of Cronbach reliability scales, means, standard deviations and correlations between the variables of interest for both samples. The psychometric properties (Cronbach's alpha coefficient) for all measures in the two samples vary from $\alpha=.73$ to $\alpha=.92$ and, therefore, are considered good to excellent indices (Nunnally, 1978), evidencing the adequacy of the measures for use in the study.

Results indicate that there were correlations among the variables in USA participants, although weak correlations (non-significant), between Work interfering in Family and anxious attachment pattern ($r=.21$) as well as avoidant attachment pattern

Table 1
Descriptive statistic (Cronbach alphas and correlation matrix)

USA sample	<i>M</i>	<i>DP</i>	α	1	2	3	4
1. Work Interfering with Family (WIF)	2.28	1.07	.91	1			
2. Family Interfering with Work (FIW)	1.87	.91	.91	.60**	1		
3. Anxious Attachment Style	1.89	.72	.73	.21**	.24**	1	
4 Avoidant Attachment Style	2.28	1.07	.73	.18**	.32**	.08	1
Brazilian sample	<i>M</i>	<i>DP</i>	α	1	2	3	4
1. Work Interfering with Family (WIF)	2.51	1.14	.92	1			
2. Family Interfering with Work (FIW)	1.68	.77	.86	.41**	1		
3. Anxious Attachment Style	1.70	.62	.73	.14*	.30**	1	
4. Avoidant Attachment Style	2.51	1.14	.73	.12	.09	.00	1

Note. ** $p<.01$; * $p<.05$

($r=.24$). Additionally, Family Interfering with work related to anxious attachment ($r=.18$) and avoidant attachment ($r=.32$).

For Brazilian participants, the avoidant attachment pattern did not obtain a significant level of correlation with any variable. Although, anxious attachment was related to Work Interfering with Family ($r=.14$) and Family Interfering with Work ($r=.30$).

Prediction of work and family conflict

To understand how this study’s variables, in particular, patterns of attachment, influence both dimensions of Work-Family conflict (FIW and WIF), four procedures of multiple regression (enter method) were performed. The results are shown on table 2.

Table 2
Prediction of work-family conflict

	WIF		FIW	
	R ²	β	R ²	β
USA Sample				
Anxious Attachment Style	.04	.22**	.06	.24**
Avoidant Attachment Style		.03		.04
Brazilian Sample				
Anxious Attachment Style	.03	.14*	.10	.29**
Avoidant Attachment Style		.11		.08

Note. WIF stands for Work Interfering with Family; FIW stands for Family Interfering with Work. ** $p<.01$; * $p<.05$

Note that the four tested models were significant, a fact that demonstrates the predictability of the attachment model in explaining the dimensions of work-family conflict [In the Brazil sample: $F_{WIF}(2,239) = 5,80, p>0,001$ and $F_{FIW}(2,400) = 7,35, p<0,001$; In the USA sample: $F_{WIF}(2,277) = 4,74, p>0,001$ and $F_{FIW}(2,770) = 7,84, p<0,001$]. The totals of variances that occurred in the four models were inferior to 10%. In the Brazilian and American samples, the Work Interfering with Family and Family Interfering with Work constructs were predicted by the anxious attachment pattern, and the avoidant attachment pattern was not predictive of any of these models. The Brazilian sample presented similar results, showing differences only in regression coefficients and total explained variances, as can be seen in table 2.

Discussion

From the results of this study, evidence is shown regarding the relation between the bi-dimensional Work-Family construct and the anxious and avoidant attachment patterns. The results presented comply with scientific literature about the relation amidst adult attachment, intimate relationships (Brumbaugh, Baren, & Agishtein, 2014; Hazan & Shaver, 1987), and work (Hazan & Shaver, 1990; Michael, Leiter, & Dayb, 2015).

The general hypothesis (H1) tested by the authors, speculated that the patterns of attachment and the dimensions of work-family conflict were related. This premise was partially supported, based on the correlations within work-family conflict and attachment patterns, as well as on the predictive effect of the anxious attachment pattern on the FIW and WIF variables. This conjecture was not completely supported because in the Brazilian sample, avoidant attachment did not relate with FIW or WIF, nor was it a significant predictor in the statistic models tested. However, considering that even in the bidimensional attachment model, a single variable, which presented low scores, was capable of characterizing the insecure attachment pattern (Brennan et al., 1998), it was possible to realize that individual differences, such as the attachment patterns, can predict WIF and FIW (Byrne et al., 2017).

Hypothesis 2 posited that similar results would be obtained for both the American and the Brazilian samples regarding relation between tested variables and their predictive behavior. This hypothesis was partially supported for both cultural contexts, since anxious attachment pattern was correlated to, and it was a significant predictor of WIF and FIW aspects for both samples, even though there were small variations of Pearson’s correlation coefficients, as well as β values between them.

Differently, the avoidant attachment pattern – characterized by discomfort in interpersonal relationships, as well as cognitive and emotional deactivation patterns (Agishtein & Brumbaugh, 2013; Brennan et al., 1998) – and its correlations with both WIF and FIW – were significant exclusively in the American sample. This result suggests that such attachment pattern can bring about patterns of insensitivity to demands from

work and family life, not to mention the fading of emotional responses in stressful life situations. As the insecure pattern of attachment's characteristics are opposite to traits which are present in the secure pattern, the effects of avoidance as those of anxiety can affect aspects of quality of work life and of family life (Sumer & Knight, 2001). Despite the significant correlations, avoidant attachment was not a significant predictor of work-family conflict in neither of the samples.

Regarding the regression analyses, in summary, our results evidenced that: 1) The anxious attachment pattern predicts WIF and FIW in both samples (USA and Brazil); 2) The avoidant pattern did not predict FIW or WIF in any of the samples. According to literature once they reflect fundamental social motivations, attachment patterns might influence individuals' cognitions and behaviors across a range of intrapersonal and interpersonal contexts (Hart et al., 2015).

Literature characterizes the individuals with anxious attachment by their reduced self-efficacy and difficulty in exploring the environment (Agishtein & Brumbaugh, 2013; Wolfe & Betz, 2004). More specifically, individuals with anxious attachment strive to earn others' affection and worry that their close relationship partners will reject them, which lead to compulsive proximity and intimacy-seeking. In addition, they tend to be sensitive to what other people think of them evidencing a tendency of "excessive reassurance seeking". These behaviors might be disruptive, both in the work and in the family environments (Hart et al., 2015). Therefore, evidence produced in this study is in line with literature in this domain, once it demonstrated that individuals who have the anxious attachment pattern tend to show difficulty in establishing limits when it comes to balancing work and family matters, besides the difficulty in coping with stressful situations.

By contrast, avoidant individuals tend to feel uncomfortable with intimacy, display perceivable patterns of insensibility regarding work and family needs, including emotional emptiness as a response to stressful situations that may be encountered. In addition, they tend to maintain a "safe" distance from relationship partners, and to eschew interactions that might involve dwelling on or discussing emotions (Hart et al., 2015; Sumer & Knight, 2001). According to literature, some effects of the constant avoidance of stimuli, such as anxiety, can have a great influence on the dy-

namics of work and family configurations (Sumer & Knight, 2001). In our study, however, avoidant attachment did not predict any interference from family in work or vice-versa. We believe that the tendency to seek a "safe distance" might result in less conflict between family and work roles because this pattern of relationship is perceived as insensibility to the conflicting demands related to time, tension between roles or behaviors. Therefore, it is possible that individuals with avoidant attachment don't perceive the conflict, in any direction, (even though it might be present) because they avoid been exposed to demands from their relationship partners.

Additionally, as to the non-predictive and relational aspects of avoidant attachment patterns in both samples, these study's findings suggest the need for future research. More specifically, results suggest that the incapability of this variable to predict features of the work-family conflict might result from the use of instruments of self-report, which reflect the individuals' perception of conflict. Therefore, future studies would benefit from assessing the relationship partners' perceptions as well as the individuals' as to provide a fuller comprehension of the impacts of avoidant (and also anxious) attachment on the work-family conflict.

Considering that traditional studies on the conflicted relations between work and family commonly use interactional variables – as in dyadic relations or work-related aspects (Van Steenbergen, Kluwer, & Karney, 2014; Wayne, Casper, Matthews, & Allen, 2013) – this research's most innovative contribution is the investigation of the role of variables related to individual characteristics. Our results advocate in favor of the importance of understanding dimensions related to individual resources (Byrne et al. 2017) when dealing with themes which involve work and family. This kind of orientation serves as a base for the understanding of theoretical dimensions, such as those investigated in the present study, as well as for the comprehension of empirical phenomena observed in the field of career development.

Even with the presentation of promising results, this study has limitations that must be pointed out. Firstly, despite having a sufficient number of participants to conduct the elected data analysis (Hair et al., 2007), the results which were obtained cannot be considered as representative of the American and Brazilian population of workers. Nonetheless, the expressive nature of

the data found in this study can point a direction for future studies. It also indicates the relevance of conducting research with samples from other countries, or even with specific profiles, like age groups, or professionals' field of work. Another limitation was the low predictability of the resulting models that were below 10%, indicating the necessity of further research exploring other Work-Family conflict antecedents, such as socioeconomic and educational levels, number and age of children, and stress. Also, future investigations could advance the models proposed in this study by surveying other measures of the relationship between attachment patterns and work-family conflict to better explain this complex process. Examples could be: employment status (professional is working or is not working; has dual employment); family status (is responsible for caring for infants or elders); type of employment contract (hired or outsourced worker); working hours (fixed or shift, at certain times or in atypical or unpredictable or inflexible hours); if the individual receives support from pairs or from the supervisor to deal with family situations; if the individual receives support from friends and family to deal with work problems; quality of work status (professional has a decent work, have a compensating work or a motivating work).

Despite its limitations, results shown in this research study point to the potential contribution of individual attachment models to a wider understanding of variables relative to the field of work (Byrne et al., 2017), including work-family interactions (Sumer & Knight, 2001). It also points at the necessity to develop supplementary research that investigates these constructs.

Lastly, it is important to highlight that the attachment instrument utilized aims to identify types of attachment patterns based on romantic interaction patterns, a method being recognized as an adequate strategy to evaluate attachment patterns in adults. Therefore, it is believed that future studies that use instruments for assessing psychological attachment to analyze aspects related to work – as the scale proposed by Leiter, Day and Price (2015) – can contribute to a better explanation and understanding of the influence of this phenomenon on the different roles played by individuals in the most diverse contexts.

References

- Agishtein, P., & Brumbaugh, C. (2013). Cultural variation in adult attachment: The impact of ethnicity, collectivism, and country of origin. *Journal of Social, Evolutionary, and Cultural Psychology*, 7(4), 384-405. doi:10.1037/h0099181
- Aguiar, C. V. N., & Bastos, A. V. B. (2013). Tradução, adaptação e evidências de validade para a medida de Conflito trabalho-família. [Translation, adaptation and validity evidence for the measure of Work-Family Conflict] *Avaliação psicológica*, 12(2), 203-212.
- Albert, L. S., & Horowitz, L. M. (2009). Attachment patterns and ethical behavior: Their relationship and significance in the marketplace. *Journal of Business Ethics*, 87(3), 299-316. doi: 10.1007/s10551-008-9918-6
- Albert, L. S., Allen, D. G., Biggane, J. E., & Ma, Q. K. (2015). Attachment and responses to employment dissolution. *Human Resource Management Review*, 25(1), 94-106. doi: 10.1016/j.hrmr.2014.06.004
- Allen, T. D., Johnson, R. C., Kiburz, K. M., & Shockley, K. M. (2013). Work-family conflict and flexible work arrangements: Deconstructing flexibility. *Personnel Psychology*, 66(2), 345-376. doi: 10.1111/peps.12012
- 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
- 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.
- 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.
- Brumbaugh, C. C., Baren, A., & Agishtein, P. (2014). Attraction to attachment insecurity: Flattery, appearance, and status's role in mate preferences. *Personal Relationships*, 21, 288-308. doi: 10.1111/perc.12032
- Bowlby, J. (1973). Attachment and loss: Vol. 2. Separation: Anxiety and anger. New York, NY: Basic Books.
- Byrne, Z., Albert, L., Manning, S., & Desir, R. (2017). Relational models and engagement: an attachment theory perspective. *Journal of Managerial Psychology*, 32(1). doi:10.1108/JMP-01-2016-0006
- Bruck, C. S., & Allen, T. D. (2003). The relationship between big five personality traits, negative affectivity, type A behavior, and work-family conflict. *Journal of Vocational Behavior*, 63(3), 457-472. doi: 10.1016/S0001-8791(02)00040-4
- Casper, W. J., Harris, C., Taylor-Bianco, A., & Wayne, J. H. (2011). Work-family conflict, perceived supervisor support and organizational commitment among Brazilian professionals. *Journal of Vocational Behavior*, 79(3), 640-652. doi: 10.1016/j.jvb.2011.04.011
- Colichi, R. M. B., Bocchi, S. C. M., Lima, S. A. M., & Popim, R. C. (2017). Interactions between Quality of Life at Work and Family: Integrative Review. *International Archives of Medicine*, 9(1). doi: 10.3823/2229
- De Andrade, A. L., Oliveira, M. Z. de, & Hatfield, E. (2017). Conflito trabalho-família: Um estudo com brasileiros e norte-americanos [Work-family conflict: a study with Brazilians and Americans]. *Revista Psicologia, Organizações e Trabalho*, 17(2), 106-113. doi: 10.17652/rpot/2017.2.12738

- De Hauw, S., & Greenhaus, J. (2015). Building a sustainable career: The role of work-home balance in career decision making. *Handbook of research on sustainable careers*, 13367-13367. doi:10.5465/AMBPP.2014.13367abstract.
- Feeney, J. A. (2008). Adult romantic attachment: Developments in the study of couple relationships. In J. Cassidy, & P. R. Shaver (Eds.), *Handbook of Attachment: Theory, Research, and Clinical Applications* (pp. 456-481). New York, NY: Guilford.
- Fellows, K. J., Chiu, H. Y., Hill, E. J., & Hawkins, A. J. (2016). Work-Family Conflict and Couple Relationship Quality: A Meta-analytic Study. *Journal of Family and Economic Issues*, 37(4), 509-518. doi: 10.1007/s10834-015-9450-7
- Chris Fraley, R. (2002). Attachment Stability from Infancy to Adulthood: Meta-Analysis and Dynamic Modeling of Developmental Mechanisms. *Personality and Social Psychology Review*, 6(2), 123-151. doi: 10.1207/S15327957PSPR0602_03
- Goldberg, S., Muir, R., & Kerr, J. (Eds.). (2013). *Attachment theory: Social, developmental, and clinical perspectives*. New York: Routledge.
- Greenhaus, J. H., & Beutell, N. J. (1985). Sources of conflict between work and family roles. *Academy of Management Review*, 10, 76-88.
- Greenhaus, J. H., Collins, K. M., & Shaw, J. D. (2003). The relation between work-family balance and quality of life. *Journal of vocational behavior*, 63(3), 510-531.
- Harms, P. D. (2011). Adult attachment styles in the workplace. *Human Resource Management Review*, 21(4), 285-296. doi: 10.1016/j.hrmr.2010.10.006
- Hart, J., Nailling, E., Bizer, G. Y., & Collins, C. K. (2015). Attachment theory as a framework for explaining engagement with Facebook. *Personality and Individual Differences*, 77, 33-40. doi: 10.1016/j.paid.2014.12.016
- Hazan, C., & Shaver, P. (1987). Romantic love conceptualized as an attachment process. *Journal of personality and social psychology*, 52(3), 511. 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
- Iskra-Golec, I., Barnes-Farrell, J., & Bohle, P. (Eds.). (2016). *Social and Family Issues in Shift Work and Non-Standard Working Hours*. New York, NY: Springer.
- Brazilian Institute of Geography and Statistics (2015). Censo Demográfico 2010 [Demographic Census 2010]. Retrieved from: <https://ww2.ibge.gov.br/home/estatistica/populacao/censo2010/default.shtm>
- Kim, Y. (2005). Emotional and cognitive consequences of adult attachment: The mediating effect of the self. *Personality and Individual Differences*, 39, 913-923. doi: 10.1016/j.paid.2005.03.010
- 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
- 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
- Lyness, K. S., & Erkovan, H. E. (2016). The changing dynamics of careers and the work-family interface. In T. D. Allen & L. T. Eby (Orgs.), *The Oxford handbook of work and family* (pp. 376-388). New York: Oxford University Press.
- Malaquias, R. F., & Hwang, Y. (2016). An empirical study on trust in mobile banking: A developing country perspective. *Computers in Human Behavior*, 54, 453-461. doi: 10.1016/j.chb.2015.08.039
- 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
- Moen, P., Kaduk, A., Kossek, E. E., Hammer, L., Buxton, O. M., O'Donnell, E., Almeida, D., Fox, K., Tranby, E., Oakes, J. M., & Casper, L. (2015). Is work-family conflict a multilevel stressor linking job conditions to mental health? Evidence from the work, family and health network. *Research in the Sociology of Work*, 26, 177-217. doi: 10.1108/S0277-28332015000026014
- Natividade, J. C., & Shiramizu, V. K. M. (2015). Uma medida de apego: versão brasileira da Experiences in Close Relationship Scale - Reduzida (ECR-R-Brasil). [An attachment measure: Brazilian version of Experiences in Close Relationship Scale - Short Form]. *Psicologia USP*, 26(3), 484-494. doi: 10.1590/0103-656420140086
- 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
- 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
- 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. [Further evidence of the validity of the Italian version of the questionnaire "Experiences in Close Relationships" (ECR), a self-report instrument to assess adult attachment] *Rivista di Psichiatria*, 35(3), 114-120.
- Richards, D. A., & Schat, A. H. (2011). Attachment at (not to) work: An applying attachment theory to explain individual behavior in organizations. *Journal of Applied Psychology*, 96(1), 169-182. doi: 10.1037/a0020372
- 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. [Validate evidences of Experience in Close Relationships (ECR) Inventory to Brazil] *Estudos de Psicologia*, 18(3), 457-465. doi: 10.1590/S1413-294X2013000300006
- Simpson, J. A., Rholes, W. S., & Nelligan, J. S. (1992). Support seeking and support giving within couples in an anxiety-provoking situation: The role of attachment styles. *Journal of Personality and Social Psychology*, 62, 434-446. doi: 10.1037/0022-3514.62.3.434
- 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

- Ten Brummelhuis, L. L., & Bakker, A. B. (2012). A resource perspective on the work-home interface: The work-home resources model. *American Psychologist, 67*(7), 545. doi: 10.1037/a0027974
- Tindall, G. B., & Shi, D. E. (2016). *America: A narrative history*. New York: WW Norton & Company.
- 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
- Van Steenberg, E. F., Kluwer, E. S., & Karney, B. R. (2014). Work-family enrichment, work-family conflict, and marital satisfaction: A dyadic analysis. *Journal of occupational health psychology, 19*(2), 182-194. doi: 10.1037/a0036011
- Wachelke, J., Natividade, J., De Andrade, A., Wolter, R., & Camargo, B. (2014). Caracterização e Avaliação de um Procedimento de Coleta de Dados Online (CORP) [Characterization and Assessment of an Online Data Collection Procedure (CORP)]. *Avaliação Psicológica, 13*(1), 143-146.
- Vieira, J. M., Ávila, M., & Matos, P. M. (2012). Attachment and parenting: The mediating role of work-family balance in Portuguese parents of preschool children. *Family Relations, 61*(1), 31-50. doi: 10.1111/j.1741-3729.2011.00680.x
- Wayne, J. H., Casper, W. J., Matthews, R. A., & Allen, T. D. (2013). Family-supportive organization perceptions and organizational commitment: The mediating role of work-family conflict and enrichment and partner attitudes. *Journal of Applied Psychology, 98*(4), 606. doi: 10.1037/a0032491
- Wei, M., Russell, D. W., Mallinckrodt, B., & Vogel, D. L. (2007). The Experiences in Close Relationship Scale (ECR)-short form: Reliability, validity, and factor structure. *Journal of Personality Assessment, 88*(2), 187-204. doi: 10.1080/00223890701268041
- Wolfe, J. B., & Betz, N. E. (2004). The Relationship of Attachment Variables to Career Decision-Making Self-Efficacy and Fear of Commitment. *The Career Development Quarterly, 52*(4), 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