

UNIVERSIDADE DE LISBOA
FACULDADE DE PSICOLOGIA



**Towards a broader understanding
of generational diversity at work:**
Methodological and empirical contributions
from a multi-cultural study

João André Ferreira Gonçalves

MESTRADO INTEGRADO EM PSICOLOGIA
(Secção de Psicologia dos Recursos Humanos, do Trabalho e das Organizações)

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João André Ferreira Gonçalves

Dissertação orientada pela Professora Doutora Maria João Afonso

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Para si, avô Augusto

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ABSTRACT

Despite a disarray of popular literature concerning generational diversity in the workplace, the scientific research in this domain is still scarce and seeks stronger theoretical grounding. Regarding this problematic, the present work aims to contribute to a broader understanding of generational diversity in the workplace, by providing solid methodological and empirical contributions to this research domain. Horta and Afonso's (2010) Inter-Generational Differences in Work Attitudes, Values and Preferences Scale (IGD-WAVPS) was translated and tested in a sample of 1257 workers in three languages and four countries – Portugal (n=506), Spain (n=411), Brazil (n=225) and The USA (n=115). Inter-Generational Work Conflict Scale (IGD-WCS) was developed and tested using the same sample. Exploratory and confirmatory factor analysis were performed and the measures' convergent and discriminant validity were analyzed. Results suggest that IGD-WAVPS share the same invariant structure across subsamples from three countries – Portugal, Spain and Brazil -, and IGD-WCS across four – Portugal, Spain, Brazil and The USA. The unique contributions of an accurate measurement of generational differences and inter-generational conflict in the workplace were examined and discussed in detail. Therefore, the two scales were used to empirically explore generational differences in work attitudes, values and preferences of Baby Boomers, Generation X and Generation Y in Portugal, Spain and Brazil, as well as the relationship between generational perceptions and inter-generational dysfunctional conflict. Significant empirical findings were found in both analyses, highlighting the utility of these two measures.

Keywords: Baby Boomers, Generation X, Generation Y, generational differences, generational perceptions, inter-generational conflict.

RESUMO

O estudo das diferenças intergeracionais em contexto de trabalho tem despertado um interesse crescente entre especialistas, gestores e investigadores, ao longo dos últimos anos. Alguns autores chamam a atenção para que, pela primeira vez na história, o mercado de trabalho é composto de forma expressiva por indivíduos pertencentes ao que se entende serem quatro gerações distintas (Meriac, Woehr, & Banister, 2010). Por consequência, acredita-se que ao diferenciarem-se significativamente, num conjunto vasto de variáveis (tais como traços de personalidade, atitudes, valores, expectativas, preferências e necessidades), estas gerações introduzem diversidade no contexto de trabalho e parecem impor a necessidade de segmentar práticas e políticas de GRH face às suas idiosincrasias (Arsenault, 2003). Esta preocupação por parte das organizações, em descobrir como atrair e reter eficazmente os colaboradores de diferentes gerações (Horta, 2010), tem conduzido à emergência de um manancial de evidências não empíricas, mas com expressivo impacto em meios não científicos, dando conta da existência de um conjunto vasto de diferenças intergeracionais. Na literatura popular, estas diferenças têm sido postuladas como incontornáveis, desde o planeamento de estratégias de atratividade e recrutamento, à gestão da reforma, passando pela formação e desenvolvimento (e.g., Rice, 2014; Miller, 2014; Glass, 2007).

Ao contrário das evidências de base não empírica, que vão surgindo de modo exponencial, ao nível da literatura científica, encontramos ainda um domínio investigacional fragmentado, no qual se multiplicam evidências opostas, não solidamente baseadas numa teoria eclética e integradora, que esteja também ela apetrechada por um conjunto de metodologias rigorosas (Lyons & Kuron, 2014). Dado o cenário de desorganização empírica deste domínio de investigação, alguns autores têm mesmo sugerido uma não legitimidade do mesmo, categorizando as diferenças intergeracionais mais como “mito” do que como “realidade” (e.g., Giancola, 2006).

Procurando responder ao repto científico de preencher as lacunas que se identificam ao nível da investigação empírica sobre a diversidade geracional e o seu impacto no âmbito das organizações, no presente estudo são enquadrados alguns dos temas e problemas que têm contribuído para a crescente preocupação de *managers* e profissionais de RH relativamente a esta matéria. Por exemplo, dado o aumento da idade legal ou média de reforma, decorrente da contração económica que se tem vindo a verificar nas economias ocidentais e do crescimento da esperança média de vida, cada vez mais a amplitude etária da força de trabalho dentro das empresas tem aumentado. Desta forma, é cada vez mais provável que numa mesma organização trabalhem colaboradores com faixas etárias muito distintas e que se verifiquem novos padrões organizacionais, como por exemplo cada vez haver um maior número de colaboradores mais velhos que reportam a colegas significativamente mais novos.

Esta investigação surge, assim, com o objectivo de contribuir para a consolidação do conhecimento empírico sobre as diferenças intergeracionais e ao mesmo tempo endereçar alguns dos atuais desafios

diagnosticados na literatura deste domínio científico. Tomou-se, então, como um dos objetivos principais do presente projeto, o desenvolvimento e aperfeiçoamento metrológico de dois instrumentos de medida: (1) uma escala de diferenças intergeracionais relativamente aos valores, atitudes e preferências no trabalho e (2) uma escala de conflito intergeracional no trabalho, esta criada de raiz no âmbito deste estudo. Pretendeu-se, também, analisar a forma como as hétero-percepções de uma determinada geração, relativamente aos valores, atitudes e preferências de outra geração, se relacionam com o nível de conflito que a primeira percebe ter com a segunda.

De forma a alcançar os objetivos propostos e tratar os problemas formulados, foram contempladas no estudo três gerações diferentes – i.e., *Baby Boomers* (trabalhadores nascidos entre 1944 e 1964), Geração X (trabalhadores nascidos entre 1965 e 1979) e Geração Y (trabalhadores nascidos entre 1980 e 2000) na organização de uma amostra total de 1257 participantes. Esta abrangeu colaboradores nativos e que exercem a sua função em Portugal (n=506), Espanha (n=411), Brasil (n=225) e Estados Unidos da América (n=115), numa mesma empresa multinacional. Mais precisamente, os dados foram analisados recorrendo a Análise Factorial Exploratória (AFE), Análise Factorial Confirmatória (AFC) e a procedimentos de validação convergente e discriminante, além de estudos do ponto de vista da fiabilidade dos instrumentos. Adicionalmente, com recurso a regressões lineares, também se testaram as relações entre as hétero-percepções de uma determinada geração relativamente aos valores, atitudes e preferências de outra geração e o nível de conflito que a primeira percebe existir na interação com a segunda.

De uma forma geral, os resultados deste estudo forneceram suporte à validade dos instrumentos desenvolvidos e demonstraram a invariância das suas estruturas fatoriais entre os países envolvidos.

A escala de diferenças intergeracionais nos valores, atitudes e preferências no trabalho decompõe-se fatorialmente em cinco dimensões – desenvolvimento pessoal, compromisso organizacional, equilíbrio trabalho-família, preferência por recompensas imediatas e preferência por flexibilidade de horário – , cuja invariância se verificou nas subamostras de Portugal, Espanha e Brasil. Ao utilizar-se esta medida, o presente estudo contribuiu adicionalmente para consolidar o conhecimento empírico no âmbito das diferenças intergeracionais. Foram encontradas diferenças estatisticamente significativas entre gerações em todos os países. Em Portugal, encontraram-se diferenças na valorização dada pelos trabalhadores ao desenvolvimento pessoal e ao equilíbrio trabalho-família. Em Espanha, foram encontradas diferenças na valorização do desenvolvimento pessoal, no compromisso organizacional, na valorização do equilíbrio trabalho-família e na preferência por flexibilidade de horário. E no Brasil foram encontradas diferenças quanto à valorização do desenvolvimento pessoal e ao compromisso organizacional.

Contudo, dado que o conflito interpessoal no trabalho tem vindo a ser considerado um possível *outcome* da existência de diferenças intergeracionais, admitiu-se que considerar este processo dinâmico poderia proporcionar um bom ponto de partida para uma investigação mais ampla e articulada no âmbito da

diversidade geracional, a qual permita apreender parte do real impacto das diferenças intergeracionais no dia-a-dia da organização. Para o efeito, tornou-se necessário criar a escala de conflito intergeracional no trabalho, instrumento desenvolvido para permitir ir além da mera comparação de valores médios entre gerações em variáveis relacionadas com o trabalho. A estrutura fatorial desta escala resume-se a apenas um fator, o que sugere unidimensionalidade do constructo de conflito interpessoal no trabalho. De notar que se verificou invariância nesta estrutura unidimensional, nas amostras de Portugal, Espanha, Brasil e Estados Unidos da América. Através da aplicação desta medida na amostra total, foi de seguida possível descobrir que as percepções que membros de uma geração específica têm sobre as atitudes, valores e preferências de membros de outras gerações (medidos através da escala de diferenças intergeracionais), podem ajudar a explicar, pelo menos em parte, o conflito que os primeiros se apercebem de ter na interação com os segundos. Este efeito verificou-se para a perceção da Geração *Baby Boomer* sobre a preferência da Geração X por ter flexibilidade de horário, para a perceção da Geração X sobre a valorização e preferência dos *Baby Boomers* pelo desenvolvimento pessoal e a flexibilidade do horário de trabalho, e para a perceção da Geração X sobre a valorização que a Geração Y atribui ao desenvolvimento pessoal, bem como os seus níveis de compromisso organizacional.

Estes resultados parecem antecipar possíveis sinergias entre a teoria geracional e a teoria da identidade geracional (Urlick, 2012), uma vez que as percepções que os membros de uma geração específica formam relativamente aos valores, atitudes e preferências de outra geração parecem ter um contributo significativo para o nível de conflito que os primeiros reportam sentir na interação com os segundos.

Globalmente, o conjunto das evidências recolhidas neste projecto de dissertação chama à atenção para a urgência de a investigação no âmbito da teoria geracional ir além do estudo das diferenças entre gerações num conjunto de variáveis relacionadas com o trabalho. Outros aspectos da diversidade geracional nas organizações deverão ser tidos em conta, de modo a imprimir ao constructo geração um carácter mais dinâmico, que permita perspectivar estes elementos organizacionais enquanto organismos sociais activos, responsivos e desencadeadores de mudança. Neste sentido, este domínio de investigação deverá contemplar variáveis que considerem as dinâmicas das diferenças entre as gerações, o impacto que as mesmas exercem em vários aspectos da vida organizacional e da relação entre gerações (e.g., conflito), bem como conceitos como a identidade geracional, e as percepções e estereótipos intergeracionais.

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1. INTRODUCTION

It is safe to say that workforce demographics have taken us to a unique place in time. For the first time in history, the labor force in western economies is composed by individuals who are believed to belong to four different generations (Meriac, Woehr, & Banister, 2010). Each one of these generations brings different attitudes, values, and preferences to the workplace, as well as differences in numerous other work-related variables. Therefore, managers and HRM practitioners have been expressing a growing concern over generational diversity in the workplace. This has inspired an exponential number of consulting reports, HRM management solutions, popular press books, and magazine articles which aim to explain how to best recruit, manage and retain individuals from different generations, based on non empirical evidence.

Despite this disarray of popular literature, the scientific research in this domain is still scarce, as it demands a stronger theoretical grounding, lacks methodological rigor and overlooks the dynamics of interaction within these generational differences in the workplace (Lyons & Kuron, 2014). As a first purpose, this study aims to address some of these challenges by providing two psychometric measures as a methodological contribution to the field. Therefore, with these two measures, we want to provide solid empirical evidence on generational differences across a set of work related variables in different countries, as well as for how generational perceptions account for intergenerational dysfunctional conflict.

2. REVIEW OF THE LITERATURE

2.1. Seeking the theoretical foundation of generational differences

Regardless the recent explosion of research on generational differences in work-related variables, this research has not proceeded from an explicit theoretical framework (Joshi, Dencker, & Franz, 2011). Although we can date the foundations of generational theory back to 1952, sixty-three years after scholars and practitioners are still being faced with a confusing disarray of evidence generated in a variety of contexts, with different theoretical and methodological perspectives on the nature of generations (Lyons & Kuron, 2014).

Throughout time, some scholars have interestingly been presenting critical reviews of the theoretical basis and empirical evidence on this field (see Rhodes, 1983; Twenge, 2010; Parry & Urwin, 2011; Cugin, 2012; Lyons & Kuron, 2014), aiming to find a common path for research which grounds in solid theory. However, a considerable volume of research still does not link its research plan to an explicit theoretical framework, which means that there is still work to do towards the edification of an integrated generational theory, and more scholars should contribute to this demand.

Even without explicitly referring to generational differences, Rhodes' (1983) work is occasionally and rightfully referred in the literature as the starting point in which the academic research on generational differences at work has been built upon (see Macky, Gardner, & Forsyth, 2008; Parry & Urwin, 2011; Waldman, & Avolio, 1986). Rhodes (1983) suggested that age differences' influencing work attitudes and behavior could

be constituted as cohort effects (the birth years that delimit each group), age effects (the maturation that results from the aging process) and period effects (events and experiences that are characteristic and significant of a determined measurement time) and by doing so, she proposed a theoretical framework for understanding age-related differences in work attitudes and behavior.

However, if we want derive the theoretical framework of generational differences at work from a broader generational theory, which validates and nourishes this subset of theory that focus specifically on work related variables, we need to start from the origins of the generational theory itself. For this purpose, we need to travel back in time and revisit Karl Mannheim's (1893-1947) work, especially his essay on "the sociological problem of generations", where he presented generations to the literature, emphasizing them as "one of the indispensable guides to an understanding of the structure of social and intellectual movements" (Mannheim, 1952, p. 163).

Mannheim (1952) bases his theory on the assumption that generations are different from groups, stating that while a group formation is based upon the consciousness of belonging to a specific collectivity, what forms a generation has not resulted in a concrete group and its consciousness, even though "members of a generation are undoubtedly bound together in certain ways" (Mannheim, 1952, p. 166). What truly connects individuals of a generation and explains it as a social phenomenon is the fact that their members share a social location and a distinct consciousness of that location, which does not necessarily resemble membership, and is shaped by the events and experiences of that time (Mannheim, 1952).

Mannheim (1952) defines social location as a common location in the economic and power structure of a given society, and operationalizes it as the events and environment a generation experiences in its critical development years. This social location serves as a potential basis for the emergence of a shared "inborn way of experiencing life and the world" (Mannheim, 1952, p. 283), which translates into a generational consciousness. This consciousness limit individuals to a specific range of potential experience, predisposing them for a certain characteristic mode of thought, coping with the environment, and a characteristic type of historically relevant action.

Under the scope of his theory, Mannheim (1952) claims that a new generational consciousness develops when the contingencies of a specific historical, social, political or economic shift occurs and demand new skills, social organization rearrangements and new impactful changes in life styles (Eyerman & Turner, 1998; Bengtson, Furlong, & Laufer, 1974; Lyons & Kuron, 2014). However, according to the author, we can understand the nature of generations not only by viewing progression through history, but also throughout the course of life. In fact, for this author, these two processes are not separable, as the nature of generations lies within the complex dynamism of effects of the biological process of aging and effects of social and historical contexts (Gilleard, 2004; Pilcher, 1994). This gestalt look into the generational phenomenon was visionary and way ahead of Mannheim's time. However, even though his focus was the understanding of generations as agents of social change, and not particularly the impacts of generation on individual attitudes and behaviors

(Joshi, Dencker, & Franz, 2011), Mannheim's legacy might be the core of the integrative framework that the research in generational differences at work lacks nowadays (Parry & Urwin, 2011).

In the subsequent decades after Mannheim's (1952) take on generations as a sociological phenomenon, the theoretical and empirical contributions to the understanding of generations were scarce (Rhodes, 1983; Waldman & Avolio, 1986). However, if we cross over to a field that is not commonly linked to generational theory, we might find a not so obvious complementary contribution to the conceptualization of generations, which was the growing pressure towards the reformulation of the traditional concept of development, which started to emerge in development psychology, in the 50s onwards. This pressure was materialized in the famous work of authors such as Neugarten (1973), Reichard, Livson and Peterson (1962), Baltes and Nesselroade (1973); Buss (1973), Wohlwill (1970), Schaie (1965), Erikson (1950), and Havighurst and Glasser (1972), which claimed a broader understanding of the human ontogenetic development and consisted in the roots of the life span development psychology (Goulet & Baltes, 1970).

Life span psychology (Goulet & Baltes, 1970) opened the spectrum of the understanding of human development from a strong focus on development as growth, in the sense of maturation and advancement, to the consideration that adaptive changes across life can be more open and multidirectional than it was predicted in traditional development psychology (Baltes, 1987). Under the scope of the life span development theory, and taking on Schaie's (1965) proposal, Baltes (1987) found that age development can change among cohorts, and leveraged awareness for the fact that ontogenesis extends across the entire life course, incorporating adaptive processes as a response to factors such as cultural change. It is worth noting that whatever life span researchers expect each age period of a person's life to have its own developmental agenda and to contribute in a unique way to the organization of the past, present, and future in ontogenetic development (Baltes, Lindenberger & Staudinger, 1998), sequencing in the life span still gives temporal priority to earlier stages and events in life.

If the human ontogenetic development involves a myriad of effects associated with age and context, from which the events experienced in early stages of development hold special importance, then the psychology of development, having occupied a very important place in the scientific community, might had opened the way to generational theory in the scientific forums. Such enablement effect can be postulated as it was made plausible to consider that people born in a given period of time (birth cohort), who experienced the same significant and contingent cultural and social events, while in their critical developmental stages, might share a common memory of those events which influences their attitudes and behaviors through life (Schuman & Scott 1989; Cogin, 2012).

Regardless of this important complementarity between theories, we should understand that, at the end of the day, their main focus is different. While the generational theory has focused on the influence of this generational imprinting as the basis for distinguishing from generations (e.g., Arsenault, 2004; Meriac, Woehr, & Banister, 2010), life span psychology has focused on ontogenetic change through life course (e.g., Baltes, 1987), rather than the relative constancy from the critical developmental stages onwards, which has been the bread and

better for research in generational differences. For generational theory, despite the fact that a generation is subject to the developmental processes of the human life course, each generation experiences an exclusive historical framework that “shapes the unfolding of that life course” (Lyons & Kuron, 2014, p. 140).

Central to various research contributions to generational differences that have been produced across time is this Durkheimian’s notion of collective consciousness, first mentioned in this research domain by Mannheim (1952) as “generational consciousness” and also referred in the literature as generational imprinting (Schuman & Scott, 1989). According to this body of literature, collective memories of significant events serve as a basis for future attitudes and behaviors, and predispose members of a generation to a certain “habitus” of action and lifestyle (see Bourdieu, 1977), limiting them to a specific range of potential experience. In a study that is considered the most influential empirical contribution for the generational differences’ literature (Joshi, Dencker, & Franz, 2011), Schuman and Scott (1989) asked adult Americans to report the national/world events or changes over the previous 50 years that seemed to them especially important, and then to explain the reasons for their choices. They found that different cohorts recalled different events or changes, and those memories came especially from their adolescence and early adulthood (Schuman & Scott, 1989).

The body of literature that has been revisited until this point consists, according to Lyons and Kuron’s (2014) review of the literature, in one of the two distinct perspectives that the research and theory of generations in the social sciences has proceeded from – the social forces perspective. This perspective finds its gravitational center in Mannheim’s (1952) work, which was leveraged by Rhodes (1983) and has inspired the more recent contributions of authors such as Turner and colleagues (Edmunds & Turner, 2005; Eyerman & Turner, 1998; Turner, 1998), who have defined generations as “a cohort of persons passing through time who come to share a common habitus and lifestyle...[and] has a strategic temporal location to a set of resources as a consequence of historical accident and the exclusionary practices of social closure” (Turner, 1998, p. 302). In this vein, generations are seen as inter-related and multi-dimensional social groups that take shape within the flow of history, and their nature is only understood taking into consideration cohort effects, age effects and period effects (Gilleard, 2004; Laufer & Bengtson, 1974).

According to Lyons and Kuron (2014) the other perspective is the cohort perspective, which flows from Ryder’s (1965) work and conceptualizes generations as cohorts based on birth year intervals. Ryder (1965) defines cohorts as temporal units that result from the aggregation of “individuals (within a specific population definition) who experienced the same event within the same interval” (Ryder, 1965, p. 845). For Ryder (1965), cohort data is assembled chronologically from observations of the time of occurrence of the behavior being analyzed, and the interval since the occurrence of the cohort-defining event, with the birth year being the most used event. The changing content of formal education, peer-group socialization, and idiosyncratic historical experiences differentiates cohorts and grouping birth years accurately represents this differentiation (Ryder, 1965). Therefore, viewing generations as cohorts involves accepting that they can be defined by grouping individuals who were born in a same birth year interval, that this generational categorization is homogeneous

enough to be considered isomorphic and have observable commonalities which can be objectively measurable by mean scores on attitudinal or behavioral variables (Ryder, 1965; Lyons & Kuron, 2014). As this perspective seeks to deal with the ambiguousness of the generation construct, it has inspired a broad set of inter-cohort temporal differentiation studies along the last decades (e.g., Wong, Gardiner, Lang, & Coulon, 2008; Haeger & Lingham, 2014; Mencl & Lester, 2014), in which generational identity is considered as an imbued intra-psychic construct (Foster, 2013). In doing so, this perspective has been criticized in the literature, as it suggests that generations are simply collections of people born in a given time period (Gilleard, 2004), neglecting potential maturation and period effects (Lyons & Kuron, 2014). The solution for this limitation could be, as many authors suggest (e.g., Parry & Urwin, 2011), to control the effects of age and period. However, some scholars (e.g., Blossfeld, Hamerle, & Mayer, 1989) have been considering that an individual's age, the cohort in which he or she is located, and the historical period can be easily confounded and cannot be separated in many types of extant data (Joshi, Dencker, & Franz, 2011).

The extent of the existing research on generational differences to date, reflects the dichotomy of the two perspectives presented, across the different disciplines in which generational differences consist in a research problem (e.g., psychology, sociology, marketing, demography, gerontology) (Parry & Urwin, 2011). The social forces and the cohort perspective might share the same goal of understanding the nature and the existent differences between generations, but their epistemological differences are notorious and echo the need for a more integrated and unified theory.

2.2. Generational differences in the workplace

Generational differences in the workplace have received extensive media coverage in the last decades, which can be attested by the non-empirical research boom that we have been witnessing through practitioner literature. Managers and HRM practitioners are realizing that what they generally name as generational differences have much to do with employees' values, attitudes, ambitions, mind-sets (e.g., Zemke et al, 2000), motivations, needs (e.g., Glass, 2007), learning styles and expectations (e.g., Gursoy, Maier, & Chi, 2008) as gender, culture, and other forms of workforce diversity do. The impact of generational differences has already been postulated for major aspects of people management in the practitioner literature - from hire (Rice, 2014; Zemke, Raines, & Flipczak, 2000) to retire (Miller, 2014), passing through training and development (Glass, 2007, Knight, 2014), rewards (WorldatWork, 2008; Biro, 2014), retention (McCrinkle, 2014), preferred leadership styles (Warner & Sandberg, 2010, Salahuddin, 2011), and work conflict (Notter, 2013). Throughout these last decades, generational differences have been progressively addressed in organizations as a legitimate diversity issue (Arsenault, 2003), as it has been suggested that by understanding generational differences and giving employees of different generations what they need to thrive, organizations can promote the creation of greater employee productivity and retention (Kogan, 2007; Kupperschmidt, 2000; Lancaster & Stillman, 2002).

The standard approach in both practitioner and academic research in western economies has been to

consider the current existence of four generations in the global workplace – Veterans (born prior to 1944), Generation Baby Boomer (born between 1944–1964), Generation X (born between 1965–1979), Generation Y (born between 1980–1999) (Meriac, Woehr, & Banister, 2010). This study will focus on the last three, as they represent the biggest share of the current global workforce.

Contrary to what happens in the press and practitioner literature, empirical evidence for generational differences in the scientific literature seems to be relatively limited. Evidence remains mixed, as some studies have found differences in work related variables across generations (e.g., Arsenault, 2003; Wils, Saba, Waxin, & Labelle, 2011; Lester, Standifer, Schultz, & Windsor, 2012; Hansen & Leuty, 2012; Gursoy, Mayer, & Chi, 2008; Schullery, 2013) and others not so much (e.g., Murphy, Gordon, & Anderson, 2004; Lub, Bijvank, Bal, Blomme, & Schalk, 2012; Roongrengsuke & Liefoghe, 2013). Some of the studies that have found differences have produced significant findings of only a small magnitude, while others have found differences in the opposite direction from that predicted by the commonly held generational stereotypes (Parry & Urwin, 2011; Joshi, Dencker, & Franz, 2011; Twenge, Campbell, Hoffman, & Lance, 2010; Twenge, 2010, Lyons & Kuron, 2014). Some authors, like Giancola (2006) have been more drastic, suggesting that the famous generational gap of the beginning of the new millennium is, in fact, more a myth than reality. Despite this disarray of evidence, this area of research is still of great importance for a variety of reasons, some of which will be presented below.

First, several demographic and economic variables have brought the current workplaces to a unique place and time, mainly in western economies, where workers' age range spans 60 years in time (Crumpacker and Crumpacker, 2007). The growing life longevity and progressive improvements in the quality of life are making people live longer and more active lives, and consequently working until an older age (Natixis, 2015). This tendency has also been leveraged by the economic wane, which more or less markedly has impacted western economies during the last decade (Pleau & Shauman, 2013) as well as increasing their average or legal retirement age. These features have turned today's workplaces quite age diverse and have boosted new work dynamics, such as the growing incidence of older workers reporting to younger managers (Cogin, 2012).

Second, as Baby Boomer Generation is retiring from organizations, Generation Y workers are replacing them, which have led practitioners to consider that workforces are currently facing a critical generational renewal moment (Agarwal & Helfat, 2009). Although it is arguable to consider that this generation renewal is more critical than in the past, as this older worker retirement-younger worker recruitment flux has always happened in the world of work, the fact is that literature has been considering that this younger generation that is replacing Baby Boomers in organizations have an entirely different view on work (Glass, 2007; Hewlett, Sherbin, & Sumberg, 2009). For example, a study of Martin (2005) showed that Generation Y employees are as prepared as Baby Boomers to make long term commitments to organizations, however, for them that can mean one year, while for Baby Boomer Generation it means a way longer period.

Third, studies under the scope of the Self-Determined Theory (Deci & Ryan, 2000) have been indicating

that autonomous motivations (i.e., intrinsic motivation and integrated extrinsic motivation) maximize a bunch of positive work-related outcomes, such as heuristic performance, organizational citizenship, trust, commitment, satisfaction, and well being (Ryan & Deci, 2000; Gagné & Deci, 2005). On the other side, the literature has been suggesting that autonomous work motivation is facilitated by environments in which jobs are interesting, challenging and allow choice, and in which the work climate is autonomy supportive (Gagné & Deci, 2005; Lam & Gurland, 2008). To make the work experience interesting, challenging and intrinsically motivating, Deci and Ryan (1985) emphasize the importance of aligning work tasks with the employees' values and understand what their interests are. In the other hand, to facilitate the internalization of extrinsic motivations (i.e., to make external motivations become autonomous), it is essential to understand what employees value as important in the workplace (Gagné & Deci, 2005). This is particularly relevant to the generational theory, because it means that if generations are really different among their work values, interests and preferences, it is of critical importance to fully understand them, in order to boost self-determination in their members' work experience.

Fourth, the fact that managers, HR professionals and consultants have been sharing the belief that generational differences in work values and attitudes have an impact on the workplace, has led them to the common assumption that different generations should be managed differently (Gursoy et al. 2008; Twenge, 2010). This is on the basis of the emergence of a mini-industry around how to best manage employees of different generations, and more importantly, reflects a practical need from the real world concerning this workplace problematic. The spectrum of work-related variables that are of interest for practitioners to understand, whether generational differences exist or not, is vast, and popular press and non-empirical research are responding to it much quicker than empirical research.

Fifth, on top of the already referred disarray of evidence and the inexistence of a solid and integrated generational theory where to ground generational diversity on, the study of generations in a work context is also challenged by the fact that the methodologies that have been applied to empirical literature are different and generally perceived as uncomplimentary. Scholars who share a cohort perspective of the phenomenon of generations at work have adopted cross-sectional research designs, collecting data on workers from different generations at one point in time (e.g., Wong, Gardiner, Lang, & Coulon, 2008; Haeger & Lingham, 2014; Mencl & Lester, 2014). Although this has undoubtedly been the most adopted methodology, some authors have been raising concerns over it, as it does not control age (i.e., maturation) nor cohort effects (Twenge, 2010; Lyons & Kuron, 2014). Taking into consideration Rhode's (1983) proposal from the triad of "age-period-cohort," effects needed to understand age difference influences' on work attitudes and behavior, only period effects are controlled in a cross-sectional methodology applied to the study of generations, and additionally, considering the stability of attitudes and beliefs over time (Twenge, 2010), these sort of effects appear to be the weakest of the three (Lyons & Kuron, 2014). While according to Glenn (1976), there isn't a single methodology capable of separating these three effects, some authors have been suggesting that in order to accurately test cohort differences, time lag data (i.e., comparing different respondents from two or more cohorts in two times)

and longitudinal sequential data (i.e., data from the same respondents over time in a panel design) can be used (Parry & Urwin, 2011). Thus, efforts to treat this variety of methodologies as complementary, rather than competing, are needed in the literature in this domain (Lyons & Kuron, 2014).

Sixth, practitioners all around the world have been assimilating evidence on generational differences in work related variables mainly based in the American literature. This is problematic considering that according to some authors (e.g., Deal et al., 2012), each country and culture has its own generational configurations. In fact, if most of the applied definitions of generations take as an argument the fact that members of each generation share “historical or social life experiences, the effects of which are relatively stable over the course of their lives” (Smola & Sutton, 2002, p. 364), than it is plausible to consider that the idiosyncratic historical and social events of a country might shape the generational configurations in that country. Although some scholars have been claiming the emergence of a “global generation”, due to the influence of technology, communications and the globalization of the economy (Edmunds & Turner, 2005), even global influences are assimilated by each country in a different way, as they play against unique historical and cultural backgrounds. It seems to be accepted in the literature that as the pressure towards a broader understanding of the generational phenomenon in the workplace grows, and exclusively cohort based definitions start to be strongly criticized (Twenge, 2010; Parry & Urwin, 2011; Lyons & Kuron, 2014), taking the American birth cohorts definitions and using it in different countries it is not the most isomorphic way of approaching generations in each country.

2.3. Generational differences in work values, attitudes and preferences

Most of the empirical literature on generational diversity in work-related variables falls within one of these categories – work values and attitudes (e.g., Twenge, Campbell, Hoffman, & Lance, 2010; Meriac et al., 2010; Chen & Choi, 2008; Krahn & Galambos, 2014; Benson & Brown, 2011), work motivators and preferences (e.g., Gursoy, Maier, & Chi, 2008; Sullivan & Baruch, 2009; Yrle et al., 2005; Wils et al., 2011), personality differences (e.g., Stewart & Bernhardt, 2010; Twenge et al., 2012; Konrath et al., 2011), career experiences (e.g., Dris et al., 2008; Lyons et al., 2012; Chudzikowski, 2012), and leadership preferences or behaviors (e.g., Yu & Miller, 2005; Sessa et al., 2007; Gentry, Griggs, Deal, Mondore, & Cox, 2011). In the present work we will focus on generational differences in work values, attitudes and preferences.

Work values

As the meaning of work has been considerably evolving through the times, the conceptualization of work values has been following it. If in the past it would be reasonable to consider that replicating an overall definition of values, such as “what people believe to be fundamentally right or wrong” (Smola & Sutton, 2002, p. 365) to the workplace - and consequently define work values as “a worker’s attitudes about what one should expect from the workplace and how he should go about reaching those expectations” (George & Jones, 1999, p. 198) -, it does not completely fit the workplace anymore. It is now relatively agreed in the literature that work plays a fundamental role in human life, by providing opportunities to satisfy different needs and aspirations (Jin

& Rounds, 2012). Additionally, because the modern worker's job demands decision-making, problem-solving, trouble-shooting and managing, a much more comprehensive definition of work values is needed. Aligning with this need, work values have recently been considered as salient, basic and influential in one's life (Ester, Braun, & Mohler, 2006; Jin & Rounds, 2012), occupying a central position in the overall pattern of values, and sharing dynamics with other personal values (Ros, Schwartz, & Surkiss, 1999).

Work values have been one of the most studied variables within generational differences in work literature, mainly over three reasons. First, if values are enduring, resistant to change (Jin & Rounds, 2012), and learned in the formative years (Twenge et al., 2010), then the cohort perspective of generations might be legitimate; second, if values shape employee perceptions or preferences in a congruent and consistent way in the workplace (Twenge et al., 2010) and exerts a casual influence on employee attitudes and behaviors (Cogin, 2012), then they potentially have an influence in all aspects of the employee experience; third, work values lie in the very center of the practitioners concerns, and if it is known that value congruence between employees and organizations is related to positive outcomes in the workplace (e.g., Kristof-Brown, Zimmerman, & Johnson, 2005; Meglino & Ravlin, 1998; Verquer, Beehr, & Wagner, 2003), then on managers' and HRM practitioners' vision, it is complex to align each generation's presumed different values with the values of the organization.

A broadly used distinction in work values is made between extrinsic and intrinsic values (Deci & Ryan, 1985; Porter & Lawler, 1968; Ryan & Deci, 2000; Twenge, 2010). While the first ones share a strong focus in work as a process, comprising of intangible rewards that reflect the inherent interest in the work, the second ones share a strong focus in the consequences and outcomes of work, comprising of tangible rewards for the individual such as status, respect, and salary (Ryan & Deci, 2000; Twenge et al., 2010; Twenge, 2010). A review of the empirical evidence on generational differences, Twenge (2010) indicates that, in the existing time lag studies, intrinsic values appear to be relatively consistent across generations, with no differences between the Baby Boomer Generation and Generation X, and a small decline from Generation Baby Boomer to Generation Y. Even in cross-sectional studies, few differences were found. Interestingly, this established tendency does not confirm the popular belief that younger generations stand out as seeking for more meaningful work experience than the previous generations (Twenge, 2010).

On the other side, more differences have been found across generations in extrinsic values. For example, the *Monitoring the Future* study, performed in the USA, found that Generation X was more likely to value money, status, and prestige than the Baby Boomer Generation and Generation Y, while Generation Baby Boomer the one who is less likely to value these extrinsic rewards among the three generations. This sequential generational increase in the valorization of external rewards can find an explanation in the fact that generations suffering economic hardships may place greater valorization on extrinsic rewards, as distinct life events may affect each generation's emphasis on these rewards (Twenge, 2010).

Other work values have been addressed in the literature, such as work centrality and leisure. Different evidence has been suggesting that as work centrality seems to decrease across generations (Twenge et al., 2010),

the valorization of leisure tends to increase (Cogin, 2012; Takase, Oba, Yamashita, 2009; Twenge et al., 2010).

Work attitudes

Work attitudes reflect employees' relatively stable evaluative (cognitive) or emotional (affective) disposition towards various aspects of work (Hulin & Judge, 2003). In the literature, generational differences have been studied across a variety of work attitudes, such as organizational commitment (e.g., D'Amato & Herzfeldt, 2008; Davis et al., 2006), job satisfaction (e.g., Benson & Brown, 2011; Kowske et al., 2010), employee engagement (Park & Gursoy, 2012) and intention to quit (ITQ) (e.g., Benson & Brown, 2011; Lub, Bijvank, Bal, Blomme, & Schalk, 2012). The evidence of generational differences in work attitudes have been mixed across different studies, with some studies finding distinctions in some attitudes (e.g., Davis, Pawlowski, & Houston, 2006; Jurkiewicz, 2000), and others not so much (e.g., Cennamo & Gardner, 2008; Davis, Pawlowski, & Houston, 2006). Furthermore, some studies differ in the direction of these differences. For example, while Benson and Brown (2011) and Beutell and Wittig-Berman (2008) cross sectional studies found a declination on job satisfaction in successive generations, Kowske, Rasch and Wiley (2010) used a hierarchical age-period-cohort regression model and found Generation Y to report higher levels of job satisfaction, when compared to the older generations.

Organizational commitment is one of the most referred work attitudes in the popular press, where several authors have labeled Generation Y as less committed to the organization (Gratton, 2013). In the empirical research, the study of this attitude is still limited and the existence of differences is scarce across generations. In fact, when measuring the relationship between generations and organizational commitment, Benson & Brown (2011) found only a weak relationship. Nevertheless, some authors have found generational differences in organizational commitment, which again does not mean that the direction of these differences is the same across empirical evidences. Exemplifying this, while D'Amato and Herzfeldt (2008) found that Generation X have lower levels of organizational commitment than Baby Boomers, Davis and colleagues (2006) found the right opposite. Still, the tendency seems to be more about a decrease in overall organizational commitment across generations, as more evidence suggest this direction (e.g., D'Amato & Herzfeldt, 2008; Horta, 2010; Costanza, Badger, Fraser, Severt, & Gade, 2012).

One of the work attitudes to which the literature on generation differences has placed great importance is work-life balance attitudes. The majority of the evidence that is of our knowledge has demonstrated an increase in the valorization of work-life balance in successive generations (e.g., Twenge et al., 2010; Wray-Lake, Syvertsen, Briddell, Osgood, & Flanagan, 2011; Beutell, 2013; Sullivan, Forret, Carraher, Mainiero, 2009; Beutell & Wittig-Berman, 2008; Brown, 2012). Nevertheless, from Generation X to Generation Y, the valorization of work-life balance may stabilize (Beutell, 2013), or even decrease (Lub et al., 2012).

Work preferences

Work preferences are the outcomes individuals desire from their engagement in a work experience (Konrad, Corrigan, Lieb, & Ritchie, 2000; Gilbert, Sohi, & McEachern, 2008), which contributes to the understanding of what they want from their work and how they want their work settings to be like (Barker & Kellen, 1998). They are also referred in the literature as “motivational factors of work characteristics” (Woodward, Vongswasdi, & More, 2015, p. 24), and although distinguishing them from other work-related variables is not easy, they have been considered a legitimate work construct, as they influence shorter-term career choice decisions and have been important to explain job satisfaction (Rounds, Dawis, & Lofquist, 1987; Mueser, Becker, & Wolfe, 2001).

The literature on generational differences has been assessing differences in work preferences such as job security, competitive compensation, stimulating job, immediate rewards and timetable flexibility (e.g., Yu & Miller, 2003; Leschinsky & Michael, 2004; Hansen & Leuty, 2011; Lamm & Meeks, 2009). In this study we will focus on the last two.

From our knowledge, contrary to what happens in the non-empirical literature, there is no study that assesses generational differences in the preference for immediate rewards or recognition, which simultaneously compares Baby Boomer, X and Y generations. However, putting together the few existent empirical research, it tells us that when compared to Generation Baby Boomer, Generation X wants to be promoted more quickly (Smola & Sutton, 2002; Leschinsky & Michael, 2004), and that there are no significant differences between Generation X and Generation Y in the preference for immediate rewards (Horta, 2010).

Timetable flexibility or flexible work schedule has been one of the most cited idiosyncratic and distinctive characteristics of Generation Y among the press literature (e.g., Schawbel, 2011). However, from our knowledge there is no empirical evidence regarding this work preference. In the academic literature, the closest we get from generational differences in preference for flexible scheduling is in the study of generational differences in leisure, previously conceptualized as a work attitude in this section. For example, it is known that Generation Y reported significantly higher levels than Baby Boomers and Generation X, on the valorization of a job with more vacation time, and in wanting a job that allows one to work slowly (Twenge et al., 2010). According to Twenge’s (2010) review of the empirical evidence on generational differences in work attitudes, the best data available shows that younger generations are more likely to value time off and less likely to “value work for work’s sake” (Twengue, 2010, p. 204).

2.4. Generational diversity: the overlooked side of the story

As the empirical research on generational differences in work values, attitudes and preferences exemplifies, the foremost focus of generational theory and its application to the organizational behavior, has been understanding how generations differ among work related variables. However, practitioners are beginning to raise concern over a broader understanding of generations in organizations, starting to consider the co-

existence of different generations in the workplace as a legitimate corporate diversity issue, and equating it along other categories, such as culture, gender and disabilities (Arsenault, 2004).

The main premise underlying all these different diversity categories is the fact that managing a successful diverse set of employees can become a source of competitive advantage for organizations in the ever-growing global economy (Subeliani & Tsogas 2005). Nevertheless, the fact that belonging to a generation is an experience that all employees have, which has a temporal element as employees move through their lifespan, sets generations apart from other workforce diversity categories in the academic literature. This temporal element is considered by some authors (e.g., Twenge, 2010; Joshi et al., 2011) a challenge for research in this field and explains the reason why generational theory is still mainly focused in inter-cohort comparisons, rather than taking on the generational problem in organizations as a more dynamic phenomenon. In fact, contrary to research in other workforce diversity categories (e.g., cultural diversity, see Jansen, Otten, & Zee, 2015), a review of the literature in generational differences in the workplace tells us that the evidence regarding the dynamics of generational differences and the mechanisms through which they happen to influence behavior is still scarce, if not nonexistent (Lyons & Kuron, 2014; Woodward et al., 2015).

But as managers strive to discover how to best manage a generational diverse workplace and start to get concerned about knowledge transfer across generations (Joshi et al., 2011), some academic research is beginning to address topics that go beyond the strict consideration of generational diversity by independently studying inter-generational differences in work related variables. On one hand, some of this research has focused on the interactions among different generations as a way to foster creativity and innovation in the workplace (Twenge, 2010; Woodward et al., 2015), while, on the other hand, another share of this research has suggested that generational differences can lead to more negative organizational outcomes, such as dysfunctional intergenerational conflict (Glass, 2007; Kupperschmidt, 2006; Lyons & Kuron, 2014).

Regarding dysfunctional intergenerational conflict, this generational phenomenon has been lately considered a legitimate variable within the scope of generations in organizations. Its legitimacy is mainly influenced by Bourdieu's (1993) work, in which generations are conceptualized as being a result of conflict over economic and cultural resources, having each a strategic access to collective resources. These can be specific skills and knowledge, and each generation maintains its own generational identity by excluding itself from other generations (Eyerman & Turner, 1998). In this scope, Joshi and colleagues (2011) hint a rivalry hypothesis when referring to Bourdieu's work (1993), suggesting that the relationships between generations are inherently conflictual, and broadly influenced by the younger generation's need to occupy the positions of power within organizations, and by the older generation's intrinsic instinct to retain such positions (Joshi et al., 2011). This argument is especially important if we note that authority and power in organizations tend to coincide with age, which links generations to succession and power dynamics (Lyons & Kuron, 2014).

As a contribution to complement and refine this rivalry hypothesis, and flowing from social identity theory (Tajfel, 2010), some scholars have more recently considered generational identity as a potential basis for

the emergence of dysfunctional intergenerational conflict (e.g., Urick, Hollensbe, & Masterson, 2012). Generational identity is defined by Joshi, Dencker, Franz and Martocchio (2010) as an individual's awareness of his or her membership in a generational group and the significance of this group to the individual. This definition suggests that if one's generational identity is salient, individuals might embrace those values considered characteristically of their generation, which, according to Urick (2013) can contribute to the creation of in-groups and out-groups and an "us versus them" mentality in the workplace. It has been suggested that the extent to which these values conflict to those of other generations, can foster confrontation and conflicts (Lyons & Kuron, 2014; Joshi et al., 2011). Thus, it suggests that generational conflict can be driven not only by the simple existence of generational differences, like postulated in the press, but also by one's level of generational identity and the perceptions he or she holds about individuals of other generations.

This last argument can be understood in light of self-categorization theory (Turner, 1987), which proposes groups are represented as stereotypical prototypes for the purpose of self-enhancement and uncertainty reduction (Hogg & Terry, 2000). If generations may be a form of categorization individuals use to define themselves (Urick, 2013), the extent to which they classify another generation as an out-group can boost negative outcomes, as it is known from the literature that out-group categorization may lead to lower trust, less interaction, decreased respect, and limited support among intergenerational groups (Tsui, Xin, & Egan, 1995). Thus, the perceptions generations hold towards other generations is another piece to add to this puzzle, which looks especially important since some authors have suggested that perceptions of generational differences exist, even if those differences among generations are not yet supported by empirical data (Foster, 2013; Lester, Standifer, Schultz, & Windsor, 2012; Lyons & Kuron, 2014; Horta, 2010). As an example, Horta (2010) found that Generation X members perceive their Generation Y colleagues as less committed than they really are, and as having greater preference for immediate rewards. Moreover, from our knowledge, the only empirical evidence that scholars link to dysfunctional intergenerational conflict is related to an important output of this problem - teamwork and orientation (Lyons & Kuron, 2014). In this scope, Karp and Sirias (2001) found in a cross-sectional study that Generation X is more team-oriented than Baby Boomer Generation, although still significantly more individualist than them. In an opposite direction, Jurkiewicz (2000) and Jurkiewicz and Brown (1998) have not found differences between these two generations in the valorisation of teamwork.

Although scholars have highlighted the importance of understanding how inter-generational dynamics reflect and produce conflict within organizations, there is still a vast unexplored field waiting for research. For example, there is scarce evidence on how generational identity affects decision making and attributions of others' behaviors and the impact of generational stereotypes on the attitudes and behaviors of groups and individuals (Lyons & Kuron, 2014), as a way to understand the nature of intergenerational conflict in the workplace.

2.5. This study: research problems and hypothesis

The present dissertation results from a match between a specific request from a multinational organization within the utilities sector and my personal research curiosity and interests. On one side, the request from the organization emerges from the fact that generational diversity has lately been a special concern for the board and corporate HR, mainly due to the fact that 50% of the its actual workforce will retire in the next ten years. On the other side, my personal interest for this area flourished from the fact that I believe with this work I can add value to this research domain, since there is clearly a gap between an organizations' perceived need and the response science has given to this problem so far. As the reader had the opportunity to realize by going through point 2.3, the coexistence of three generations in the actual workforce is a major challenge for today's managers and HRM practitioners. Empirical evidence in this domain still remains largely overlooked, and the variation in methodologies and reporting of findings make it difficult to draw definitive conclusions. Thus, this study aims to contribute to a broader understanding of generational diversity in the workplace, by providing some important methodological and empirical contributions. In this sense, two major research problems were postulated.

1st research problem. Do Baby Boomer Generation, Generation X and Generation Y differ in personal development valorization, organizational commitment, work life balance, preference for immediate rewards and preference for timetable flexibility? To answer this problem, the following hypotheses were formulated:

Table 1. Hypotheses H1 to H5

There are generational differences between the three generations (Baby Boomer Generation, Generation X and Generation Y) regarding...	... in the following countries		
	Portugal	Spain	Brazil
H1 – ...the valorization of personal development	H1 a)	H1 b)	H1 c)
H2 – ...organizational commitment	H2 a)	H2 b)	H2 c)
H3 – ...work life balance	H3 a)	H3 b)	H3 c)
H4 - ...preference for immediate rewarding	H4 a)	H4 b)	H4 c)
H5 – ...preference for timetable flexibility	H5 a)	H5 b)	H5 c)

2nd research problem. Does the perception members of a generation hold on the values, attitudes and preferences of other generation contribute to the intergenerational dysfunctional conflict they have with them? To answer this problem, the following hypotheses were formulated:

Table 2. Hypotheses H6 to H8

The perception members of a generation hold towards the members of other generation explain the conflict they have with them, in the case of:			
	...Baby Boomer Generation members	...Generation X members	...Generation Y members
H6 - The perception and conflict of Baby Boomers towards...	-	H6 a)	H6 b)
H7 - The perception and conflict of Generation Xs towards...	H7 a)	-	H7 b)
H8 - The perception and conflict of Generation Ys towards...	H8 a)	H8 b)	-

1. METHOD

3.1. Sample and Procedure

This study comprised 1257 employees of a multinational company within the utilities sector. Data was collected across four different countries – Portugal (n=506), Spain (n=411), Brazil (n=225) and the USA (n=115)¹. Of the 1257 participants, 34.6% were members of Baby Boomer Generation, 38.60% were members of Generation X and 26.80% were members of Generation Y. 69.70% were males, and the average work tenure was 16.87 years ($SD=12.61$). Regarding professional category, 28.40% were managers, 37.50% were high-skilled/middle skilled workers and 34.10% were operational and administrative technicians. Demographic data across countries (see Table A1 in Appendix) is relatively homogeneous in gender and professional category, but not in generational distribution and employee tenure, due to the fact that the multinational company created and acquired its subsidiaries in these four countries in different times of its history.

The development of this study was approved by the Deontological Commission of the Faculty of Psychology (November 20th 2015) and formally agreed with the company's Chief Human Resources Officer, after explaining its purpose and requirements. E-mails with a web-based questionnaire were sent to 2000 workers, at one point in time. Of these, 1257 completed the questionnaire, giving a response rate of 62.90%. All respondents completed the survey anonymously and were informed that their responses were confidential.

Given the nature of the current study, several different procedures that concerned the translation and testing of one measure in three different countries and languages, and the development and testing of another measure across four countries and three languages. These procedures will be sequentially presented in the next section (4. Results), from these measures' translation/creation to their application on the empirical testing of the formulated research hypothesis.

¹ Due to considerable levels of international mobility within the company, we have only sent emails to participants who were natives of each country (e.g., employees who have answered the questionnaire in the USA were Americans).

3.2. Measures

Inter-Generational Differences Work Attitudes, Values and Preferences Scale (IGD-WAVPS)

Inter-generational differences at work attitudes, values and preferences were measured using Horta and Afonso's (2010) scale, already used in a Portuguese sample of 139 employees. On the basis of the preliminary analysis described in the following section, we used a version of IGD-WAVPS which includes five dimensions, namely: personal development (8 items with a Cronbach alpha of .84; e.g., "*It is important for me that work allows my personal development*"), organizational commitment (5 items with a Cronbach alpha of .72; e.g., "*I care about the organization's future*"), work-life balance (3 items with a Cronbach alpha of .74; e.g., "*It is very important for me to be able to balance my work and personal life*"), preference for immediate rewards (3 items with a Cronbach alpha of .80; e.g., "*I am only interested to work in an organization that appreciates my work immediately*"), and preference for timetable flexibility (3 items with a Cronbach alpha of .65; e.g., "*I prefer to be rewarded in the form of free time rather than financial incentives*"). The participants answered the questionnaire items using a seven-point Likert scale, ranging from 0 ("*completely disagree*") to 6 ("*completely agree*"). Higher scores on each particular dimension of IGD-WAVPS indicated that participants attribute a higher importance and valorization or have a higher preference to the work construct being measured in each specific dimension. Additionally, for each item, participants were also asked to evaluate what they perceived to be their colleagues' degree of agreement. These colleagues were conceptually assembled in two different groups, that represented the two other generations existent besides the individual's generation.²

Inter-Generational Work Conflict Scale (IGD-WCS)

Intergenerational work conflict was measured using a 12-item scale (e.g., "*How often do you feel harmed by your colleagues' attitudes and behaviors?*"), which was specially developed for the present study, on the basis of Barki and Hartwick's (2004)³ framework proposal. The *IGD-WCS* was used targeting conflict towards three generations – conflict with Generation Baby Boomer (Cronbach alpha of .93), Generation X (Cronbach alpha of .94) and Generation Y (Cronbach alpha of .94). Participants answered the questionnaire's items using a seven-point Likert scale, ranging from 0 ("*never*") to 6 ("*every day*"). Higher scores in this scale indicated that employees have higher levels of conflict with the particular targeted generation.

Generations. In the present study we operationalized generations as the following generational cohorts: participants who were born between 1944 and 1964 were categorized as "Baby Boomer Generation", participants who were born between 1965 and 1979 were categorized as "Generation X", and participants who

² Three parallel versions of IGD-WAVPS were distributed (one per generation). The one being distributed for Baby Boomer participants would ask them for their perspective on their colleagues' agreement with the items - 1) colleagues between the ages 18 and 35 and 2) colleagues between the ages 36 and 50. Data was collected in early 2015.

³ Barki and Hartwick (2004) suggested a general definition of the construct of interpersonal conflict and, subsequently developed a two dimensions conceptual framework, in which one is the components of conflict – *i*) cognition/disagreement, *ii*) behavior/interference, *iii*) affect/negative emotion. Barki and Hartwick's (2004) proposal aimed to facilitate the development of reliable and valid measures of interpersonal conflict in different contexts.

were born between 1980 and 1994 were categorized as “Generation Y”.

Control Variables. We controlled for gender (0 = Women; 1 = Men) and worker tenure (in years) because the literature suggests that these variables can influence work values and attitudes (e.g., Scandura & Lankau, 1997; Bartel, Freeman, Ichniowski, & Kleiner, 2011).

4. RESULTS

4.1. Preliminary analysis

Inter-Generational Differences Work Attitudes, Values and Preferences Scale (IGD-WAVPS)

Briefly, the 38 items from Horta and Afonso’s (2010) scale were translated into English, Spanish and Brazilian Portuguese, following a forward-translations and back-translations approach with independent judges, recommended by the International Test Commission (ITC, 2005), and used by authors such as Duarte and Rossier (2008), Hambleton, Merenda and Spielberger (2005), Harkness, Pennell and Schoua-Glusberg (2004), and Van de Vijver and Hambleton (1996). The three versions of these items were then tested separately with three convenience samples - Brazil (n = 72), Spain (n = 47) and USA (n = 35) -, similar to the target population. A Principle Component Analysis (PCA) was run independently in each of the culture-based groups, in order to verify the factorial structure of the *IGD-WAVPS*. In each version, items were retained that (1) adequately loaded on their respective factor across the three languages (loadings >.50) and (2) did not cross-load on other subscales (loadings <.20). Beyond this preliminary step, conducted with three convenience samples, we performed a new PCA with our target population (n = 1257). Since only 22 of the 38 items had loadings above .50 on their designated factor and had no cross-loadings below .35, we retained only this set of 22 items to compose the *IGD-WAVPS*. To confirm this structure, another PCA was conducted only with these 22 items, justifying their retention: The items organized identically in the five factors, with eigenvalues of 5.63, 2.42, 1.96, 1.61 and 1.27 respectively, explaining 58.61% of the variance.

Inter-Generational Work Conflict Scale (IGD-WCS)

Due to the fact that *IGD-WCS* was specially developed for the present study, a set of 21 items were simultaneously created in three different languages (i.e., Portuguese, Spanish and English) and adapted to the specificities of four different countries (i.e. Portugal, Brazil, Spain and USA), considering their linguistic and cultural idiosyncrasies. We asked native judges in each country to verify the clarity of items. Moreover, the *IGD-WCS* was initially reviewed by professionals with experience from four different countries (i.e., Portugal, Brazil, Spain and USA), who agreed to read and verify the adequacy of the items and reduce the ambiguity of some terms. This initial pool of 21 items, simultaneously created for Portugal, Brazil, Spain and USA, to measure interpersonal conflict at work, were then tested with four convenience samples (Portugal – n = 91; Brazil – n = 72, Spain– n = 47, and USA– n = 35), similar to the target population. Through this preliminary step, which

consisted in performing one PCA per country, we observed that some items did not load in their intended factor and we decided to perform the subsequent analysis with a lower number of items. In light of these results, we performed another PCA with our target population ($n = 1257$), where we only retained 12 items ($n = 1257$), which were found to load in their intended factor. These 12 items load in only one factor, with an eigenvalue of 7.37, which explains 61.45% of the variance. To gather more consistency in our decision, we inspected the internal consistency of IGD-WCS composed by 12 items and obtained a Cronbach's alpha of .94. Furthermore, Cronbach's alpha does not change significantly if one of the 12 items was deleted (Cronbach's alpha if item deleted varies between .93 and .94).

4.2. Exploratory Factor Analysis

Following Gerbing and Hamilton's (1996) suggestion, we used exploratory factor analysis in one sample as a precursor to the confirmatory factor analysis in another sample. In that sense, the following exploratory factor analyses were conducted with a sample of 629 participants, corresponding to half of the total sample of 1257 participants. The other step, which corresponds to the confirmatory factor analysis by performing Structural Equation Modeling (SEM), was conducted with a sample of 628 participants. In order to conduct these analyses we randomly split the data in SPSS. Thus, we applied an exploratory factor analysis with data from 50% of the total sample, and a confirmatory analysis with the other 50%.

Inter-Generational Differences in Work Attitudes, Values and Preferences Scale (IGD-WAVPS)

The Exploratory Factor Analysis showed a five-factor solution that explained 58.61% of the variance (see Table A2 in Appendix). All items had factor loadings that ranged from .56 to .87.

Inter-Generational Work Conflict Scale (IGD-WCS)

We reproduced the exact procedure for this measure, as the one mentioned above. We observed a one-factor solution that explained 60.92%, 60.24% and 63.41% of the variance (see Table A3 in Appendix), regarding the targeting of Baby Boomer Generation, Generation X and Generation Y, respectively. All factor loadings were above .50 on their designated factor and had no cross-loadings below .35.

4.3. Confirmatory Factor Analyses

As previously noted, the following analyses were performed with a subsample of 628 participants, corresponding to half of the total sample of 1257 participants.

Building on the validation of both the IGD-WAVPS and IGD-WCS, the five factors CFA and the one-factor CFA were conducted. Considering IGD-WAVPS, to confirm the dimensionality, other eleven possible alternative models were examined for comparison purposes. The models were compared based on Chi square difference tests and on other fit indices: the Standardized Root Mean Square (SRMR), the Bentler Comparative

Fit Index (CFI), the Incremental Fit Index (IFI), and the Root Mean Square Error of Approximation (RMSEA). Levels of .90 or higher for CFI and IFI indicate good fit (Byrne, 2010), while values for RMSEA and SRMR lower or equal to .08 indicate that the models fit the data reasonably well (Arbuckle, 2003; Byrne, 2010; MacCallum, Browne, & Sugawara, 1996).

Inter-Generational Differences Work Attitudes, Values and Preferences Scale (IGD-WAVPS)

The model with five latent factors (i.e., personal development, organizational commitment, work-life balance, preference for immediate rewards, and preference for timetable flexibility), corresponding to our theoretical model (see Table A4 in Appendix), showed an acceptable fit [Model 1 – χ^2 (191) = 494.79, $p < .01$, SRMR = .05, CFI = .93, IFI = .93, RMSEA = .05]. In comparison with the other tested alternative models, our theoretical model showed a better fit to the data [M2 compared to M1 – $\Delta\chi^2$ (10) = 1377.29, $p < .01$; M3 compared to M1 – $\Delta\chi^2$ (4) = 162.41, $p < .01$; M4 compared to M1 – $\Delta\chi^2$ (4) = 315.11, $p < .01$; M5 compared to M1 – $\Delta\chi^2$ (4) = 571.72, $p < .01$; M6 compared to M1 – $\Delta\chi^2$ (4) = 410.32, $p < .01$; M7 compared to M1 – $\Delta\chi^2$ (4) = 292.47, $p < .01$; M8 compared to M1 – $\Delta\chi^2$ (4) = 589.12, $p < .01$; M9 compared to M1 – $\Delta\chi^2$ (4) = 420.43, $p < .01$; M10 compared to M1 – $\Delta\chi^2$ (4) = 514.42, $p < .01$; M11 compared to M1 – $\Delta\chi^2$ (4) = 296.55, $p < .01$; M12 compared to M1 – $\Delta\chi^2$ (4) = 378.48, $p < .01$]. Thus, the model with five latent factors (i.e., personal development, organizational commitment, work-life balance, preference for immediate rewards, and preference for timetable flexibility) is the one with the strongest empirical support.

Inter-Generational Work Conflict Scale (IGD-WCS)

A model with only one latent construct, where all the 12 items that compose the IGD-WCS load, was tested separately regarding the targeting of Baby Boomer Generation [Model 1], Generation X [Model 2], and Generation Y [Model 3]. This model corresponds to our theoretical model (see Table A5 in Appendix) and showed an acceptable fit to the data [Model 1 – CFA for the measure of conflict with Baby Boomer Generation: χ^2 (46) = 245.22, $p < .01$, SRMR = .05, CFI = .96, IFI = .96, RMSEA = .08; Model 2 – CFA for the measure of conflict with Generation X: χ^2 (46) = 225.15, $p < .01$, SRMR = .04, CFI = .96, IFI = .96, RMSEA = .08; Model 3 – CFA for the measure of conflict with Generation Y: χ^2 (46) = 242.14, $p < .01$, SRMR = .04, CFI = .97, IFI = .97, RMSEA = .08], which suggests that all the 12 items that compose the IGD-WCS contribute to explain the same underlying construct. Moreover, all items had factor loadings that ranged from .42 to .87 [Model 1], from .43 to .87 [Model 2] and from .44 to .90. [Model 3].

4.4. Convergent and Discriminant Validity

To analyze the convergent and discriminant validity of the theoretical model, we performed three different procedures. First, we used a stringent procedure outlined by Fornell and Larcker (1981) and

recommended by Podsakoff et al. (2003)^{4,5}, which was already performed in previous studies (e.g., Lopes & Chambel, 2014; Lopes, Chambel, Castanheira, & Oliveira-Cruz, 2015). Second, we performed multiple-group analysis to observe whether or not the measurement model is invariant across different countries (i.e., Portugal, Spain, Brazil and the USA). As recommended by Byrne (2010), we first tested the structural models separately for each country (Portuguese subsample – n = 506, Brazilian subsample – n = 225, Spanish subsample – n = 411, and USA subsample – n = 115). The model that best fits the data for all subsamples was then tested in a multiple-group analysis that included two subsamples analyzed at the same time (Baseline Model). The fit of this model was then compared to an alternative model (Full constrained model), in which all the coefficient paths were constrained, in order to be equal in the two countries. Finally, we tested the measurement model's invariance by controlling the factor loadings as invariant across countries. We compared two alternative models (i.e., the full constrained model and the invariant measurement model) with the baseline model considering ΔCFI (Cheung & Rensvold, 2002). We considered that a ΔCFI value higher than .01 indicated a significant drop in fit (Cheung & Rensvold, 2002), suggesting the existence of variance across the subsamples (i.e., the two subsamples are non-equivalent in the parameters under analysis).

Additionally and also to test convergent and discriminant validity, we performed a third procedure through a Multivariate Analysis of Variance (MANOVA), using a sample of 1144 participants. This sample was obtained by deleting the cases of participants who were born in generational cusps (1944, 1964, 1965, 1979, 1980 and 2000), from the initial sample of 1257 participants. By performing a MANOVA we aimed to test whether the three generations under analysis (i.e., Baby Boomer Generation, Generation X and Generation Y) differ significantly in the attitudes, values and preferences, as well in terms of the work conflict experience they perceive in their relationship with different generations.

Inter-Generational Differences Work Attitudes, Values and Preferences Scale (IGD-WAVPS)

In terms of convergent validity, we computed the $pvc(\eta)$ index which denotes the proportion of variance in the items that is explained by the underlying factor. The $pvc(\eta)$ values of personal development ($pvc(\eta)=21\%$), organizational commitment ($pvc(\eta)=12\%$), work-life balance ($pvc(\eta)=40\%$), preference for immediate rewards ($pvc(\eta)=36\%$), and preference for timetable flexibility ($pvc(\eta)=33\%$) were below the 50% criterion defined by Fornell and Larcker (1981). In terms of discriminant validity, the five latent factors did not share a substantial amount of variance and in this study these factors shared on average 30% of variance. In addition, the variance shared among other studied alternative models was always less than the variance shared in our theoretical model, satisfying Fornell and Larcker's (1981) discriminant validity criterion.

Continuing on with the testing of convergent and discriminant validity, the previously step of multiple-group analysis showed that the theoretical model fits the data acceptably in all countries [Portugal – $\chi^2(191) =$

⁴This procedure was conducted with a sample of 628 participants, already used to perform the confirmatory factor analysis of the IGD-WAVPS.

⁵This procedure was not performed to the IGD-WCS, since this measure has only one latent factor.

518.05, $p < .01$, CFI = .92, RMSEA = .06; Spain – $\chi^2(191) = 478.23$, $p < .01$, CFI = .90, RMSEA = .06; Brazil – $\chi^2(191) = 337.06$, $p < .01$, CFI = .90, RMSEA = .06], with the exception of the USA [$\chi^2(191) = 315.01$, $p < .01$, CFI = .80, RMSEA = .08], which showed a poor fit to the data. Since the USA subsample was the only one that showed a poor fit to the data, we decided to exclude it in the subsequent analyzes because this result may provide a first sign of variance between this subsample and the other subsamples analyzed. This initial result suggests that the factor structure of IGD-WAVPS may be similar among the Portuguese, Spanish and Brazilian subsamples. Nevertheless, this initial result does not show us if significant differences among these three samples exist and, if so, where are they located in the measurement model. Thus, we progressively compared two samples by establishing first, as previously noted, a baseline model that served as the baseline value against which the two subsequently specified models (i.e., the full constrained model and the invariant measurement model) were compared. Through these model comparisons (see Table A6 in Appendix), we observed that the full constrained models compared with the established baseline models represent a significant drop in fit [Portugal vs. Spain comparison: $\Delta CFI = .07$; Portugal vs. Brazil comparison: $\Delta CFI = .06$; Spain vs. Brazil comparison: $\Delta CFI = .06$], which means that some paths are different across the analyzed groups. However, the three groups seem to be identical in terms of the factor loadings of the measurement model (i.e., the extent to which each of the observed variables contributes to the meaning of each of the latent factors), because in the comparison between the baseline model and the invariant measurement model a significant drop in fit was not observed [Portugal vs. Spain comparison: $\Delta CFI = .00$; Portugal vs. Brazil comparison: $\Delta CFI = .00$; Spain vs. Brazil comparison: $\Delta CFI = .00$].

Beyond the statistical procedures above described, we also tested whether the three generations in analysis (i.e. Baby Boomer Generation, Generation X and Generation Y) differ significantly from each other in terms of the empirically hypothesized work attitudes, values and preferences. In order to do so, in a first step we conducted a one-way MANOVA per country⁶, where we looked for a significant multivariate effect of generation in the work values, attitudes and preferences ($p < .05$). In a second step, if a significant multivariate effect was found in the overall test, the univariate main effects were examined for each dimension. In a third step, if this univariate main effects were significant ($p < .05$), Post Hoc tests were conducted, to discover which generations significantly differ in each dependent variable.^{7 8} This procedure allows us to empirical test the research hypothesis previously formulated.

In the three subsamples, significant multivariate effect for generation was found between factors - Portuguese subsample - Wilks' $\lambda = .859$, $F(10,976) = 7.71$, $p < .01$; Spanish subsample - Wilks' $\lambda = .746$, F

⁶ All DVs were normally distributed across the three subsamples ($p < .05$).

⁷ Because Levene's test accounted for no between group homogeneity of variance in few of the DVs in different countries, we decided to use Games-Howell test in all Post Hoc comparisons, since it is considered effective even when equal variances are not assumed (Field, 2009).

⁸ The effect sizes (Cohen's d) of the results found in the examination of the univariate effects were measured using G*Power software.

(10,696) = 11.01, $p < .01$; Brazilian subsample - Wilks' $\Lambda = .876$, $F(10,360) = 2.46$, $p < .01$. Given the significance of the overall test, the univariate main effects were then examined.

Personal development

We found statistically significant differences between generations in Portugal [$F(2, 492) = 11.392$, $p < 0.05$, $d = .22$], Spain [$F(2, 352) = 28.210$, $p < 0.05$, $d = .40$] and Brazil [$F(2, 184) = 4.665$, $p < 0.05$, $d = .23$], which supports H1a), H1b) e H1c). For the Portuguese and Spanish subsample, we found that Baby Boomers [Portuguese sample – $M = 4.93$, $SD = .69$; Spanish sample – $M = 4.32$, $SD = .75$] revealed significantly less valorization of personal development than Generation X [Portuguese subsample – $M = 5.21$, $SD = .56$; Spanish subsample – $M = 4.93$, $SD = .67$] (see Table 2 for detailed statistics). In the Brazilian subsample, we observed an opposite pattern - in average, Baby Boomers [$M = 5.19$, $SD = .64$] scored higher than Generation X [$M = 4.89$, $SD = .77$] (although these differences were not statistically significant,) and statistically significant differences were found in the comparison of Generation X [$M = 4.89$, $SD = .77$] with Generation Y [$M = 5.25$, $SD = .66$].

Organizational commitment

Generational differences were found in the Spanish [$F(2, 184) = 4.376$, $p < 0.05$, $d = .18$] and Brazilian [$F(2, 184) = 4.376$, $p < 0.05$, $d = .22$] subsamples, but not in the Portuguese one [$F(2, 492) = 2.501$, $p > 0.05$], which gives empirical support to H2b) and H2c) but does not support H2a). In Brazil, we found significant differences between Generation Baby Boomer and Generation X - the first compared to the latter, scored significantly higher in organizational commitment [Brazilian subsample – Baby Boomers: $M = 5.29$, $SD = .64$; Generation X: $M = 4.96$, $SD = .78$]. In Spain, we observed that Generation X [$M = 5.00$, $SD = .76$] reports significantly higher organizational commitment than Generation Y [$M = 4.70$, $SD = .97$]. In the two countries, Baby Boomers [Spanish subsample – $M = 5.05$, $SD = .77$] report higher levels of organizational commitment than Generation Y [Brazilian subsample – $M = 4.94$, $SD = .84$].

Work-life balance

Generational differences were found in the Portuguese [$F(2, 492) = 12.978$, $p < 0.05$, $d = .23$] and Spanish [$F(2, 352) = 15.925$, $p < 0.05$, $d = .30$] subsamples, supporting H3a) and H3b). In both subsamples, Generation Baby Boomer [Portuguese subsample - $M = 4.68$, $SD = .96$; Spanish subsample – $M = 4.30$, $SD = 1.06$] revealed a significantly lower importance of work-life balance than Generation X [Portuguese subsample - $M = 5.03$, $SD = .73$; Spanish subsample – $M = 4.96$, $SD = .86$], and Generation Y [Portuguese subsample - $M = 5.15$, $SD = .90$; Spanish subsample – $M = 5.08$, $SD = .95$]. No differences were found in the Brazilian subsample [$F(2, 184) = 1.060$, $p > 0.05$], which does not provide support to H3c).

Preference for immediate rewards

No statistically significant differences were found among the three generations, in all of the samples [see Table 1 and Table 2]. Thus, H4a) [$F(2, 492) = .564, p > 0.05$], H4b) [$F(2, 352) = 1.555, p > 0.05$] and H4c) [$F(2, 184) = 1.003, p > 0.05$] were not supported by the data. Regardless the country, preference for immediate rewards seems to be the least important dimension of IGD-WAVPS to explain possible differences among generations in terms of differences in their work attitudes, values and preferences.

Preference for timetable flexibility

Statistical significant differences were found in the Spanish subsample [$F(2, 352) = 3.356, p < 0.05, d = .14$], where Baby Boomers [$M = 2.89, SD = 1.30$] report significantly less preference for timetable flexibility than Generation X [$M = 3.02, SD = 1.12$]. Therefore, these results give empirical support to H5b) but, since no differences were found in the Portuguese [$F(2, 492) = .091, p > 0.05$] and Brazilian [$F(2, 184) = 2.487, p > 0.05$] subsamples, H5a) and H5c) were not supported by the data.

Table 3. Means and standard deviations for *IGD-WAVS* ($n = 1144$).

Mean (<i>SD</i>)	Portugal ($n = 498$)	Spain ($n = 358$)	Brazil ($n = 192$)
Personal Development Opportunities			
Baby Boomers	4.93 ($SD = .69$)	4.32 ($SD = .75$)	5.19 ($SD = .64$)
Generation X	5.21 ($SD = .56$)	4.93 ($SD = .67$)	4.89 ($SD = .77$)
Generation Y	5.20 ($SD = .65$)	5.09 ($SD = .67$)	5.25 ($SD = .66$)
Total	5.07 ($SD = .66$)	4.87 ($SD = .74$)	5.12 ($SD = .70$)
Organizational Commitment			
Baby Boomers	5.25 ($SD = .64$)	5.05 ($SD = .77$)	5.29 ($SD = .64$)
Generation X	5.18 ($SD = .64$)	5.00 ($SD = .76$)	4.96 ($SD = .78$)
Generation Y	5.07 ($SD = .71$)	4.70 ($SD = .97$)	4.94 ($SD = .84$)
Total	5.20 ($SD = .65$)	4.91 ($SD = .85$)	5.07 ($SD = .77$)
Work-life balance			
Baby Boomers	4.68 ($SD = .96$)	4.30 ($SD = 1.06$)	5.07 ($SD = .78$)
Generation X	5.03 ($SD = .73$)	4.96 ($SD = .86$)	4.86 ($SD = 1.17$)
Generation Y	5.15 ($SD = .90$)	5.08 ($SD = .95$)	5.06 ($SD = .78$)
Total	4.87 ($SD = .90$)	4.88 ($SD = .97$)	5.00 ($SD = .92$)
Preference for immediate rewards			
Baby Boomers	3.45 ($SD = 1.24$)	2.89 ($SD = 1.30$)	3.36 ($SD = 1.33$)
Generation X	3.54 ($SD = 1.14$)	3.02 ($SD = 1.12$)	3.03 ($SD = 1.34$)
Generation Y	3.60 ($SD = 1.15$)	3.20 ($SD = 1.26$)	3.31 ($SD = 1.45$)
Total	3.51 ($SD = 1.19$)	3.06 ($SD = 1.20$)	3.24 ($SD = 1.38$)
Preference for timetable flexibility			
Baby Boomers	2.76 ($SD = 1.40$)	3.06 ($SD = 1.25$)	3.81 ($SD = 1.18$)
Generation X	2.71 ($SD = 1.36$)	3.58 ($SD = 1.38$)	3.54 ($SD = 1.55$)
Generation Y	2.74 ($SD = 1.24$)	3.39 ($SD = 1.44$)	3.27 ($SD = 1.37$)
Total	2.74 ($SD = 1.36$)	3.43 ($SD = 1.39$)	3.55 ($SD = 1.38$)

Notes: *SD* – Standard deviation; Likert scale ranging from 0 (“completely disagree”) to 6 (“completely agree”).

Table 4. Mean differences across generations for the 5 factors of *IGD-WAVPS* ($n = 1144$), with each country separately analyzed.

Mean differences (Std. Error)	Portugal ($n = 498$)	Spain ($n = 358$)	Brazil ($n = 192$)
Personal Development Opportunities			
Univariate main effects	$F(2, 492) = 11.392$, $p < 0.05$	$F(2, 352) = 28.210$, $p < 0.05$	$F(2, 184) = 4.665$, $p < 0.05$
BB vs. Gen. X	-.28 (.06)**	-.63 (.11)**	.30 (.13), n.s.
BB vs. Gen. Y	-.27 (.08)**	-.79 (.11)**	-.07 (.12), n.s.
Gen. X vs. Gen. Y	.013 (.08), n.s.	-1.16 (.08), n.s.	-.36 (.13)*
Organizational Commitment			
Univariate main effects	$F(2, 492) = 2.501$, $p > 0.05$	$F(2, 352) = 5.545$, $p < 0.05$	$F(2, 184) = 4.376$, $p < 0.05$
BB vs. Gen. X	.07 (.06), n.s.	.05 (.11), n.s.	.33 (.13)*
BB vs. Gen. Y	.18 (.09), n.s.	.35 (.13)*	.35 (.13)*
Gen. X vs. Gen. Y	.11 (.09), n.s.	.30 (.11)*	-.33 (.13), n.s.
Work-life balance			
Univariate main effects	$F(2, 492) = 12.978$, $p < 0.05$	$F(2, 352) = 15.925$, $p < 0.05$	$F(2, 184) = 1.060$, $p > 0.05$
BB vs. Gen. X	-.36 (.08)**	-.66 (.15)**	.21 (.17), n.s.
BB vs. Gen. Y	-.48 (.12)**	-.79 (.16)**	.01 (.14), n.s.
Gen. X vs. Gen. Y	-.12 (.11), n.s.	-.12 (.11), n.s.	-.21 (.18), n.s.
Preference for immediate rewards			
Univariate main effects	$F(2, 492) = .564$, $p > 0.05$	$F(2, 352) = 1.555$, $p > 0.05$	$F(2, 184) = 1.003$, $p > 0.05$
BB vs. Gen. X	-.09 (.12), n.s.	-.14 (.18), n.s.	.33 (.24), n.s.
BB vs. Gen. Y	-.14 (.14), n.s.	-.32 (.20), n.s.	.05 (.25), n.s.
Gen. X vs. Gen. Y	-.05 (.16), n.s.	-.18 (.14), n.s.	-.28 (.26), n.s.
Preference for timetable flexibility			
Univariate main effects	$F(2, 492) = .091$, $p > 0.05$	$F(2, 352) = 3.356$, $p < 0.05$	$F(2, 184) = 2.487$, $p > 0.05$
BB vs. Gen. X	.06 (.14), n.s.	-.52 (.19)*	.28 (.25), n.s.
BB vs. Gen. Y	.03 (.16), n.s.	-.33 (.21), n.s.	.54 (.23), n.s.
Gen. X vs. Gen. Y	-.03 (.17), n.s.	.19 (.17), n.s.	.27 (.27), n.s.

Notes: **: $p < .01$, *: $p < .05$; n.s. – non-significant; Baby Boomer compared to Generation X [BB vs. Gen. X] – Dummy variable (1 = Baby Boomer, 0 = Generation X); Baby Boomer compared to Generation Y [BB vs. Gen. Y] – Dummy variable (1 = Baby Boomer, 0 = Generation Y); Generation X compared to Generation Y [Gen. X vs. Gen. Y] – Dummy variable (1 = Generation Y, 0 = Generation X).

Inter-Generational Work Conflict Scale (IGD-WCS)

We reproduced the multiple-group analysis for *IGD-WCS* following the same steps we had done for the *IGD-WAVS*. Thus, we started by testing the theoretical model separately for each country and, afterwards we started the multiple-group analyzes by computing a baseline model, which includes two different groups analyzed at the same time and without constrained paths. This unconstrained model served as a basis for comparison with two alternative models (i.e., the full constrained model and the invariant measurement model), which have constrained paths or parameters. Given the fact that levels of conflict may be different regarding the target of one's perception, we decided to perform all these steps three times. In this way, we performed multiple-group analysis regarding the perception of one's conflict with Generation Baby Boomer; the

perception of one's conflict with Generation X; and the perception of one's conflict with Generation Y (see Table A7, A8 and A9 in Appendix).

In general, we observed that, regardless the generational target, when we compute the previous step for the multiple group analysis - i.e. testing the structural models separately for each country - the results showed that RMSEA exceeds the recommended value. Nonetheless, we used other fit indices, such as CFI, which showed an acceptable fit⁹. This result may suggest that some adjustments are needed in the future in order to improve the goodness-of-fit. Despite this result, it should be noted that from the comparisons between the baseline models and the invariant measurement models, we observed a non-significant drop in fit (i.e., $\Delta CFI \leq .01$) in all analysis carried out to IGD-WCS. Thus, although in the future it may be necessary to make some adjustments in the IGD-WCS, the present result seems to suggest that the factor loadings may be invariant across the four analyzed countries.

To gather more information about the convergent and discriminant validity of IGD-WCS, we examined whether the level of one's conflict with a specific generation varies considering his or her generation. A MANOVA was run, in line with the procedures above mentioned for IGD-WAVPS, and showed a significant multivariate effect for generation on each type of conflict [Wilks' $\lambda = .931$, $F(6,1974) = 11.91$, $p < .01$]. Then, we looked for univariate main effects for each type of conflict, and we concluded that: *i*) there are significant differences between Generation Baby Boomer [$M = 1.38$, $SD = 1.12$] and Generation X [$M = 1.58$, $SD = 1.02$] in the perceived conflict with their Baby Boomer colleagues [$F(2, 989) = 5.97$, $p < 0.05$, $d = .11$]; *ii*) Generation Y and Generation Baby Boomer differ in the conflict they perceive with their Baby Boomer [Generation Y – $M = 1.65$, $SD = 1.05$; Generation Baby Boomer – $M = 1.37$, $SD = 1.12$; $F(2, 989) = 5.97$, $p < 0.05$, $d = .11$]; and Generation X colleagues [Generation Y – $M = 1.61$, $SD = 1.06$; Generation Baby Boomer – $M = 1.35$, $SD = 1.10$; $F(2, 989) = 5.69$, $p < 0.05$, $d = .11$]; and *iii*) Generation Y [$M = 1.61$, $SD = 1.06$] and Generation X [$M = 1.37$, $SD = 0.95$] perceived significantly different levels of conflict with their Generation X colleagues [$F(2, 989) = 5.69$, $p < 0.05$, $d = .11$].

4.5. Relating the inter-generational differences in work attitudes, values and preferences with the inter-generational work conflict

To examine the nature of the association between variables and to infer the values of the impact of independent variables (i.e. work attitudes, values and preferences) on the dependent variables (i.e. generational work conflict with Baby Boomers, Generation X and Generation Y), we run multiple hierarchical regressions using a Portuguese sample of 498 participants (see from the Table A10.1 to the Table A10.6 in Appendix). This sample size was obtained by deleting the cases of participants who were born in the generational cusps, from an initial sample of 506 participants. In the first stage, we introduced gender and tenure as control variables. Furthermore, we obtained values greater than .90 for the collinearity tolerance.

⁹ The only exception was for the USA sample, with a CFI of .89 (see Table A7 in Appendix).

According to Table A10.1, Baby Boomers' perception about Generation X's attitudes, values and preferences contributes 7% to explain the conflict they perceive with their Generation X's colleagues. However, by analyzing the standard regression coefficients, we verified that it is only the Baby Boomers' perception about Generation X's preference for timetable flexibility that is positively related to the conflict Baby Boomers perceive ($\beta = .19, p < .01$), which partially supports our hypothesis 6a).

Contrary to our expectations, hypothesis 6b) was not supported by the data, since Baby Boomers' perception about Generation Y's attitudes, values and preferences was found to be non-significantly related to the conflict Baby Boomers perceive with Generation Y.

Moving to Generation X's perception about other generations, we found that the perceptions of this generation regarding the attitudes and values of Generation Baby Boomer, contributes 22% to explain the conflict they perceive with their Baby Boomer colleagues. However, among the five dimensions of IGD-WAVS, only Generation X's perception about Baby Boomer's valorization of personal development and preference for timetable flexibility have, respectively, a negative and positive significant relationship ($\beta = -.27, p < .01; \beta = .37, p < .01$) with the conflict they perceive with their Baby Boomer colleagues. Thus, results partially support hypothesis 7a).

According to what was predicted, Generation X's perception about Generation Y's values, attitudes and preferences also contributes (with 19%, see Table A11) to explain the conflict that the first refers to have with the latter. Once again, among the five dimensions of IGD-WAVS, only Generation X's perceptions of Generation Y's valorization of personal development and organizational commitment are negatively and significantly related to the conflict they perceive with their Generation Y colleagues ($\beta = -.34, p < .01; \beta = -.25, p < .01$; respectively). Thus, our data only partially supports hypothesis 7b).

Finally, concerning hypothesis 8a) and 8b), which supposed that Generation Y's perceptions about the attitudes, values and preferences of Baby Boomers and Generation X would be related to their perceived work conflict with these generations, were not empirically supported by the data, since no significant relationships (β) among the variables were observed.

5. DISCUSSION

The present dissertation contributes to the research domain of generational diversity in the workplace by providing some methodological and empirical features that we believe may contribute to the development of a broader understanding of this phenomenon in organizations.

Considering the methodological contributions, Horta and Afonso's (2010) scale of generational differences in work attitudes, values and preferences - the *Inter-Generational Differences in Work Attitudes, Values and Preferences Scale (IGD-WAVPS)* - was tested and adapted across three languages and countries, and a new measure of dysfunctional interpersonal work conflict - the *Inter-Generational Work Conflict Scale (IGD-WCS)* - was simultaneously created in four languages and countries. As the research in generational diversity in the

workplace is on the rise, there is a growing need for scales like these two, which can fill some current gaps in the literature and provide this research domain with valid and robust methodologies, in order to foster future research.

Considering the IGD-WAVPS, we observed in the exploratory factor analysis that from the 38 items originally created by Horta and Afonso (2010), 22 items organized autonomously in five different subscales - personal development, organizational commitment, work life balance, preference for immediate rewards and preference for timetable flexibility. After the confirmatory factor analysis, we observed that our theoretical model with these five factors is the one that represents the best fit to the data, providing support for the importance of studying these five work related variables in the domain of generational differences in the workplace. A multiple-group analyses showed us that the factor structure seems similar among the Portuguese, Spanish and Brazilian subsamples, but not in the North American one. Regarding this last finding, we believe it may be due to the reduced size of the North American subsample, since after splitting the total sample in two, the CFA only accounted for 57 participants in the North American subsample, which according to the criteria suggested by authors such as Jackson (2003) and Kline (2011) is below the recommended. The internal consistency reliabilities for almost all scales are above .70 in the three other versions. By applying IGD-WAVPS we were able to detect differences across generations in the work attitudes, values and preferences being measured, in all of its versions (i.e., Portuguese, Spanish and Brazilian). An exception to this was the subscale of immediate rewards, in which no differences were found between generations across countries. We believe that this result does not play against the legitimacy of the construct validity, because it has a statistically significant correlation with demographic variables such as gender, career segment and work tenure. It might be the case that the three generations analyzed simply do not differ in terms of their preferences for getting immediate rewards. These results suggest confidence in the factorial structure and robustness of IGD-WAVPS between the multi-cultural subsamples of Portugal, Spain and Brazil. As measurement invariance was obtained, it may be assumed that change in the latent mean score reflects the latent variable and not artifacts of the measurement (Barron, Morgan, Towell, Altemeyer & Swami, 2014) allowing for standardized measurement conditions for generational differences in these three countries.

Moving to IGD-WCS, after conducting a previous exploratory factor analysis, we observed in the latter performed exploratory factor analysis, that the 12 items, specifically created for this dissertation, were autonomously organized in one factor, which was then also confirmed in the CFA, since the model with one latent factor showed a good fit to the data. IGD-WCS items were created in light of Barki and Hartwick's (2004) proposal, which sets a framework to understand the nature of interpersonal conflict, in which the authors provide a typology for conceptualizing this construct in organizations, basing it on a two-dimensional approach. Due to the fact that one of these dimensions identifies three properties generally associated with conflict situations - disagreement, negative emotion and interference (Barki & Hartwick, 2004) -, items were designed taking into consideration these different proprieties, and contextualizing them in a work perspective.

10 Since these three properties reflect cognitive, affective and behavioral components of the construct, it would be reasonable to expect that it could reflect on a multidimensional factorial solution in CFA. As we have seen, contrary to this supposition, our results accounted for unidimensionality of the construct. In this sense, it is worth noting that although Barki and Hartwick (2004) suggested that preferably and according to their conceptualization of the construct, an adequate assessment of interpersonal conflict would require an assessment of all three properties in separate scales and different points in time, they also recognize that it might be difficult to separate these properties in a metrological solution due to their inherent subjectivity, and, especially if the main objective is to measure the amount or level of conflict that exists in a given situation at a point in time. The multiple-group analysis suggested that the one factor solution may be invariant across Portugal, Spain, Brazil and the USA, regardless of the defined target (i.e., conflict towards Baby Boomers, Generation X and Generation Y). The internal consistency reliabilities for all scales are above .90 and by applying IGD- WCS we were able to find a significant multivariate effect for generations on each type of conflict, which suggests construct validity. It is worth noting that the benefits of the development of this measure might go beyond this specific research field, as it provided a metrological solution that can be easily used both by researchers and HRM practitioners. From our knowledge, despite Barki & Hartwick's (2004) effort to develop a framework which contributed to overcome the lack of a clear conceptualization and operationalization of interpersonal conflict in the workplace, researchers still rely on checklists (Ilies, Johnson, Judge, & Keeney, 2011) and the existent psychometric measures of this construct still almost exclusively focus on its behavioral component (e.g., Fox, Spector, & Miles, 2001).

Since the present dissertation did not aim to exclusively be a metrological piece, these two measures were not adapted (IGD-WAVPS) and created (IGD-WCS) for their own sake. Our main focus was to place them under the scope of the existent gaps within both the research literature in this domain and the emergent concerns of organizations regarding generational diversity. Broadly speaking, they accounted for two major gaps that were previously identified in the review of the literature, and then used to empirically test research hypotheses that were also postulated regarding the previously identified research problems.

5.1. The connection between IGD-WAVPS and the first research problem¹¹

IGD-WAVPS was translated and adapted for three different languages and countries. This was essentially done in order to contribute to and overcome one of the previously identified issues in the current research and literature on generational diversity in the workplace – the generalization of findings originated in the North American literature. According to Deal and colleagues (2012), each country and culture has its own

¹⁰ The second dimension identifies two targets of interpersonal conflict encountered in organizational settings: task and interpersonal relationship (Barki & Hartwick, 2004). This study focused on the interpersonal relationship of participants with their colleagues from the three different generations studied in this dissertation (following the author's suggestion of specifying as much as possible the target).

¹¹ Do Baby Boomer Generation, Generation X and Generation Y differ in personal development valorization, organizational commitment, work life balance, preference for immediate rewards and preference for timetable flexibility?

generational configurations, that play against the uniqueness of their idiosyncratic social, political and economic background. According to this, assuming the findings originated in the USA or any other nation and generalizing them to other cultures, may not be the most accurate way of generating knowledge about generational diversity in the workplace.

Naturally, the ideal situation would be to understand how generations configure in each country as a complex result of social change, like it was suggested by Mannheim (1952) and the social forces perspective. However, keeping up with the most global and standard way of defining generations (through birth cohort), with IGD-WAVPS we are now able to understand how generations in Portugal, Spain and Brazil differ regarding to personal development valorization, organizational commitment, work life balance, preference for immediate rewards and preference for timetable flexibility.

By conducting the IGD-WAVPS, the results of the present study contribute to the evidence of generational differences in the workplace. More precisely, differences were found across generations in all three countries – Portugal, Spain and Brazil. In Portugal, differences were found in the valorization of personal development and work-life balance. In Spain, differences were found in the valorization of personal development, organizational commitment, work-life balance and preference for timetable flexibility. In Brazil, differences were found in the valorization of personal development and organizational commitment. Although our focus was not to empirically test the differences across generations in the three countries, if we analyze the pattern of differences found between generations in each country separately, we can easily predict that in some cases, differences may be hardly generalized across countries. For example, while in Brazil we have found differences between Baby Boomer's and Generation X's organizational commitment, in Portugal this was not verified.

Broadly speaking, by analyzing the results obtained in each country for each studied variable, one can understand that because they were measured and reported in light of each specific country and culture, they often present different findings, contributing in a unique way to the overall generational theory.

Specifically regarding the valorization of personal development, it was found that in Portugal and Spain, Baby Boomers value this variable less than the other generations under analysis, which denotes an increase in the valorization of personal development across generations. Although there is not much empirical evidence for this specific variable, the literature tells us that intrinsic values are relatively constant across generations (Twenge et al., 2000). Therefore, career stage and age can be potential reasons for the observed increase in the valorization of personal development across generations, as younger workers tend to valorize opportunities for developing their employability (Smith & Comyn, 2003). Nevertheless, no generational differences were found between Generation X and Y, which on one hand is in line with the above mentioned tendency, but on the other, is not consistent with previous findings for the Portuguese culture (see Horta & Afonso, 2010). Adding some complexity to the discussion of these findings, in Brazil generational differences were only found between

Generation Y and Generation X. A generalist conclusion of these findings suggest that, significantly differing from other generations or not, Generation Y reports the highest levels of personal development valorization.

Concerning organizational commitment, we found that in Spain, Generation Y differs from other generations, reporting lower levels of organizational commitment, while in Brazil Generation Baby Boomer stands out from the other two, by showing higher levels of organizational commitment. These results add empirical support to the notion that organizational commitment decreases across generations (e.g., D'Amato & Herzfeldt, 2008; Horta, 2010; Costanza, Badger, Fraser, Servert, & Gale, 2012). Empirical support to the notion of generational differences in organizational commitment was not found for Portugal, which in the case of the relationship between Generation X and Generation Y goes in an opposite direction from what was found by Horta (2010). It is worth noting at this point, that the nature of this specific different direction in the findings reported by the current study and the ones reported by Horta (2010) can be largely driven by the fact that, in both cases, the study was conducted within one specific company, meaning that, potentially, organizational culture can exert its effects in the results.

In Portugal and Spain, we found that Generation Baby Boomer compared to the other two generations reports significantly less valorization of work-life balance. These results add empirical support to previous findings that suggest an increase in the valorization of work-life balance in successive generations (e.g., Twenge et al., 2010; Wray-Lake, Syvertsen, Briddell, Osgood, & Flanagan, 2011; Beutell, 2013; Sullivan, Forret, Carraher, Mainiero, 2009; Beutell & Wittig-Berman, 2008; Brown, 2012), and a stabilization from Generation X to Generation Y (Lub et al., 2012). No differences were found in Brazil, which plays against the suggestions from the literature and may reflect cultural and contextual idiosyncrasies.

In the preference for immediate rewards, no differences were found across generations in the three countries under analyses, which reinforces Horta's (2010) previous findings, and seems to overturn the common assumption that younger generations have a stronger preference for immediate rewards, conveyed in the non-empirical literature.

Regarding preference for timetable flexibility, we did not find empirical support for the fact that in the non-empirical literature this variable is considered one of the most idiosyncratic and distinctive characteristics of Generation Y (e.g., Schawbel, 2011). In fact, the only significant difference found was between the preference of Baby Boomers and Generation X in Spain, in which Generation X reported a significantly higher level of preference. Since the literature characterizes the Spanish culture as strongly family oriented (e.g., Guerrero & Naldini, 1996), this result can be, in some ways, impacted by the fact that employees born between 1965 and 1979 may tackle stronger family responsibilities¹².

¹² Due to the nature of the research agreement with the multinational company, it was not possible to ask participants any information regarding their marital status or parenthood.

5.2. The connection between IGD-WCS and the second research problem¹³

IGD-WCS was created to address the fact that dynamics of generational differences and the mechanisms through which they happen to influence behavior are still an overlooked facet of the generational problem in organizations. Since interpersonal work conflict has been generically considered a possible outcome of the existence of generational differences in the workplace, undertaking this specific dynamic process seemed to be an interesting starting point towards the understanding of the impacts of generational differences in the organizational life.

By using multiple hierarchical regression, we found that the perceptions which members of a specific generation have about the work attitudes, values and preferences of other generations' members (measured by the IGD-WAVPS), can account for the variation of the conflict they perceive with them. This was true for the perceptions Generation Baby Boomer have about Generations X's preference for timetable flexibility, which is particularly interesting since no differences were found between these two generations in their self-reported preference for this variable. Generation X's perception about Baby Boomers' valorization of personal development and preference for timetable flexibility also accounted for the conflict the former perceives with the later, and in this case we had found differences in the self-reported levels of personal development valorization between these two generations, with Generation X valuing it more. Lastly, a regression effect was also found for Generation X's perception of Generation Y's valorization of personal development and organizational commitment, and once again no significant differences were found between these two generations in these work related variables.

In the case of Generation X's perception about Baby Boomers' valorization of personal development, we can postulate that the reason why this specific perception is accounting to Generation X's perceived conflict with Baby Boomers, is connected with the effective generational differences that really exist among these two generations, which can be incompatible in some ways (Lyon & Kuron, 2014; Joshi et al., 2011). However, this inference cannot be done for all the other cases, since no self-reported differences were found between generations. For instance, in these cases, it would be interesting to compare each perception with the target generation's self-perception. If differences were found, it could be postulated that this misalignment between hetero, self perceptions and eventual generational stereotypes, could be on the basis of such effects. This supposition makes clear the possible explanation that generational identity theory can add to this phenomenon, because if a member of a certain generation has a strong awareness of his or her membership to a generation group, it can boost a self-categorization notion of in-group and out-group and an "us vs. them" mentality (Urlick, 2013; Tsui, Xin, & Egan, 1995), even if effective generational differences do not exist.

This last supposition can also potentially explain why the effects reported above involved mainly the effect of Generation X's perception about the other two generations in their perceived conflict with them, as it

¹³ Does the perception members of a generation hold on the values, attitudes and preferences of other generation contribute to the intergenerational dysfunctional conflict they have with them?

can be due to the fact that in the company where the study was conducted, individuals who were born in the birth cohort of 1965-1979 might share a strong significance of belonging to Generation X, thus having a strong generational identity.

From our knowledge, these results were the first to provide empirical evidence on the impact of generational differences in inter-generational interactions in the workplace. They are not easy to understand and require a lot of more information and empirical evidence to be integrated. Nevertheless, they undoubtedly reflect the pertinence of addressing how inter-generational dynamics reflect and produce conflict within organizations and how generational identity affects attributions of other's attitudes, preferences and values and the impact of generational perceptions in the behaviors of groups and individuals.

6. CONCLUSIONS

As previously noted, the research field regarding the generational diversity in the workplace still has a long way to go. As it was already mentioned, this work aimed to enhance methodological rigor and to address other facets of generational diversity in the workplace, which we believe will be the key for the development of this research domain in the near future. However, although the present study has its strengths, it also faces some important limitations, which should be recognized.

First, and foremost (on top of all possible limitations), is the fact that this study adopted a cross-sectional design, with data on participants being collected at one point in time. This limitation means that the previously mentioned age-period-cohort effects confound can be a reality, and results should be interpreted taking this limitation into consideration. As a future direction, more time lag and longitudinal sequential data should be collected, since they are more accurate in separating these three effects (Parry & Urwin, 2011). Additionally, because cross-sectional studies are likely to remain largely applied, due to their simple approach to measure the complex construct of generations, more efforts should be done in order to bridge the contributions from cross-sectional and longitudinal/time lag data, rather than taking them as competing forms of evidence. In fact, they can each provide a unique perspective on the phenomenon of generations in the workplace (Lyons & Kuron, 2014).

Second, it should also be noted that using self-reports to test the hypothesis under the first research problem, could lead to common method variance.

Third, the fact that this study was developed with data prevalent from employees of the same multinational company, can also be considered a limitation, since the effects of organizational culture on the results cannot be discarded. Nevertheless, and interestingly enough, according to Joshi and colleague's (2011) framework proposal, this would not be a limitation. These authors suggest that organizations offer a perfect microcosm for understanding how location in a sequential order can drive to a unique generational imprint that may be the property of an individual or group. This suggests that the future of generational diversity in the

workplace should rely on the understanding of how formative events and institutional factors shape the establishment of generations within organizations (Joshi et al., 2011).

A fourth limitation of this study relates to issues regarding the selected sample. Firstly, the USA sample size was relatively low, which we believe may be a reason why the theoretical model of IGD-WAVPS did not fit the data reasonably well. In addition to that, the CFI was slightly below the recommended value in the multiple group analyses conducted for IGD-WCS. Secondly, some groups in our demographical data were sub-represented (for example, the percentage of women in the Portuguese subsample).

In the future, both the IGD-WAVPS' and IGD-WCS' applicability and validity should be tested in different countries and industries, in order to leverage their potential as a methodological contribution to this research domain. Especially IGD-WCS, in which some adjustments may still be needed to improve its goodness of fit. Putting these instruments into practice can provide strong empirical evidences to the generational theory. Therefore, generational differences in the work attitudes, values and preferences studied in this dissertation should be analyzed in different countries and industries.

Lastly, by finding that a generation's perception of other generation's work values, attitudes and preferences account for the dysfunctional conflict they perceive with them, this study has drawn attention to the fact that the time has come to move from an exclusive approach for generations based on differentiation among birth cohorts. Scholars should start to empirically explore the dynamics of generational diversity in the workplace, considering new variables, such as generational identity and the outcomes of intergenerational interaction.

7. REFERENCES

- Agarwal, R., & Helfat, C. E. (2009). Strategic renewal of organizations. *Organization Science*, 20(2), 281-293. doi: 10.1287/orsc.1090.0423
- Arbuckle, J. L. (2003). *Amos 5.0 update to the amos user's guide*. Chicago, Illinois, USA: SmallWaters.
- Arsenault, P. M. (2003). Leadership assessment and development: Recommendations for a new assessment model. In R. Riggio & S. Smith-Orr (Eds.), *Improving leadership in nonprofit organizations* (pp. 252-256). San Francisco, CA: Jossey-Bass.
- Arsenault, P. M. (2004). Validating generational differences: A legitimate diversity and leadership issue. *Leadership & Organization Development Journal*, 25(2), 124-141. doi: 10.1108/01437730410521813
- Baltes, P. B. (1987). Theoretical propositions of life-span developmental psychology: On the dynamics between growth and decline. *Developmental Psychology*, 23(5), 611-626. doi: 10.1037/0012-1649.23.5.611

- Baltes, P. B., & Nesselroade, J. R. (1973). The developmental analysis of individual differences on multiple measures. In J. R. Nesselroade & H. W. Reese (Eds.), *Life-span developmental psychology: Methodological issues* (pp. 219–251). New York, USA: Academic Press.
- Baltes, P. B., Lindenberger, U., & Staudinger, U. M. (1998). Life-span theory in developmental psychology. In W. Damon (Ed.-in-Chief) & R. M. Lerner (Vol. Ed.), *Handbook of child psychology: Vol. 1. Theoretical models of human development* (5th ed., pp. 1029-1143). New York: Wiley.
- Barker, J., & Kellen, J. (1998). *Career planning: A developmental approach*. Englewood Cliffs, NJ, USA: Prentice-Hall.
- Barki, H., & Hartwick, J. (2004). Conceptualizing the construct of interpersonal conflict. *International Journal of Conflict Management*, 15(3), 216-244. doi: 10.1108/eb022913
- Barron, D., Morgan, K., Towell, T., Altemeyer, B., and Swami, V. (2014). Associations between schizotypy and belief in conspiracist ideation. *Personality and Individual Differences*, 70, 156–159. doi: 10.1016/j.paid.2014.06.040
- Bartel, A. P., Freeman, R. B., Ichniowski, C., & Kleiner, M. M. (2011). Can a workplace have an attitude problem? Workplace effects on employee attitudes and organizational performance. *Labour Economics*, 18(4), 411–423. doi:10.1016/j.labeco.2011.01.008
- Bengtson, V. L., Furlong, M. J., & Laufer, R. S. (1974). Time, aging, and the continuity of social structure: Themes and issues in generational analysis. *Journal of Social Issues*, 30(2), 1–30. doi: 10.1111/j.1540-4560.1974.tb00713.x
- Benson, J., & Brown, M. (2011). Generations at work: Are there differences and do they matter?. *The International Journal of Human Resource Management*, 22(9), 1843-1865. doi: 10.1080/09585192.2011.573966
- Beutell, N. J. (2013). Generational differences in work–family conflict and synergy. *International Journal of Environmental Research and Public Health*, 10(6), 2544-2559. doi: 10.3390/ijerph10062544
- Beutell, N. J., & Wittig-Berman, U. (2008). Work–family conflict and work–family synergy for generation X, baby boomers, and matures. *Journal of Managerial Psychology*, 23(5), 507-523. doi: 10.1108/02683940810884513
- Biro, M. M. (2014). *Recognize, reward and engage your multi-generational workforce*. *Forbes*. Retrieved from <http://www.forbes.com>
- Blossfeld, H. P., Hamerle, A., & Mayer, K. U. (1989) *Event history analysis: Statistical theory and application in the social sciences*. Hillsdale, Michigan, USA: Erlbaum.
- Booker, M. K. (2012). *Blue-collar pop culture: From NASCAR to Jersey shore*. Santa Barbara, California: ABC-CLIO.

- Bourdieu, P. (1977). *Outline of a theory of practice*. Cambridge: Cambridge University Press.
- Bourdieu, P. (1993). *Sociology in question*. London: Sage
- Brown, M. (2012). Responses to work intensification: Does generation matter? *The International Journal of Human Resource Management*, 23(17), 3578-3595. doi: 10.1080/09585192.2011.654348
- Buss, A. R. (1973). An extension of developmental models that separate ontogenetic changes and cohort differences. *Psychological Bulletin*, 80(6), 466-479. doi: 10.1037/h0035325
- Byrne, B. M. (2010). *Structural equation modeling with AMOS: Basic concepts, applications, and programming*. New York, USA: Routledge.
- Cennamo, L., & Gardner, D. (2008). Generational differences in work values, outcomes and person-organisation values fit. *Journal of Managerial Psychology*, 23(8), 891-906. doi: 10.1108/02683940810904385
- Chen, P. J., & Choi, Y. (2008). Generational differences in work values: A study of hospitality management. *International Journal of Contemporary Hospitality Management*, 20(6), 595–615. doi: 10.1108/09596110810892182
- Cheung, G. W., & Rensvold, R. B. (2002). Evaluating goodness-of-fit indexes for testing measurement invariance. *Structural Equation Modeling*, 9, 233–255.
- Chudzikowski, K. (2012). Career transitions and career success in the ‘new’ career era. *Journal of Vocational Behavior*, 81(2), 298–306. doi: 10.1016/j.jvb.2011.10.005
- Cogin, J. (2012). Are generational differences in work values fact or fiction? Multi-country evidence and implications. *The International Journal of Human Resource Management*, 23(11), 2268-2294. doi: 10.1080/09585192.2011.610967
- Costanza, D. P., Badger, J. M., Fraser, R. L., Severt, J. B., Gade, P. A. (2012). Generational differences in work-related attitudes: A meta-analysis. *Journal of Business and Psychology*, 27(4), 375-394. doi: 10.1007/s10869-012-9259-4
- Crumpacker, M., & Crumpacker, J. (2007). Succession planning and generational stereotypes: Should HR consider age-based values and attitudes a relevant factor or a passing fad?. *Public Personnel Management*, 36(4), 349-369. doi: 10.1177/009102600703600405
- D’Amato, A., & Herzfeldt, R. (2008). Learning orientation, organizational commitment and talent retention across generations: A study of European managers. *Journal of Managerial Psychology*, 23(8), 929-953. doi: 10.1108/02683940810904402
- Davis, J. B., Pawlowski, S. D., & Houston, A. (2006). Work commitments of Baby Boomers and Gen-Xers in the IT profession: Generational differences or myth? *Journal of Computer Information Systems*, 46(3), 43-49.

- Deal, J. J., Stawiski, S., Graves, L. M., Gentry, W. A., Ruderman, M., & Weber, T. J. (2012). Perceptions of authority and leadership: A cross-national, cross-generational investigation. In E. S. Ng, S. T. Lyons, & L. Schweitzer (Eds.), *Managing the new workforce: International perspectives on the millennial generation* (pp. 281–306). Cheltenham, UK: Edward Elgar.
- Deci, E. L., & Ryan, R. M. (1985). *Intrinsic motivation and self-determination in human behavior*. New York, USA: Plenum.
- Deci, E. L., & Ryan, R. M. (2000). The “what” and “why” of goal pursuits: Human needs and the self-determination of behavior. *Psychological Inquiry*, 11(4), 227-268. doi: 10.1207/S15327965PLI1104_01
- Dries, N., Pepermans, R., & De Kerpel, E. (2008). Exploring four generations’ beliefs about career: Is “satisfied” the new “successful”? *Journal of Managerial Psychology*, 23(8), 907–928. doi: 10.1108/02683940810904394
- Duarte, M. E., & Rossier, J. (2008). Testing and assessment in an international context: Cross and multi-cultural issues. In J. Athanasou & R. Van Esbroeck (Eds.), *International handbook of career guidance* (pp. 489-510). Dordrecht, Netherlands: Springer Science.
- Edmunds, J., & Turner, B. S. (2005). Global generations: Social change in the twentieth century. *The British Journal of Sociology*, 56(4), 559-577. doi: 10.1111/j.1468-4446.2005.00083.x
- Erikson, E. (1950). *Childhood and society*. New York: Norton.
- Ester, P., Braun, M., & Mohler, P. (2006). *Globalization, value change, and generations: A cross-national and intergenerational perspective*. Boston, MA: Brill Academic Pub.
- Eyerman, R., & Turner, B. S. (1998). Outline of a theory of generations. *European Journal of Social Theory*, 1(1), 91-106. doi: 10.1177/136843198001001007
- Field, A. (2009). *Discovering statistics using SPSS*. London: Sage Publications.
- Fornell, C., & Larcker, D. F. (1981). Evaluating structural equation models with unobservable variables and measurement error. *Journal of Marketing Research*, 48, 39–50. doi: 10.2307/3151312
- Foster, K. (2013). Generation and discourse in working life stories. *The British Journal of Sociology*, 64(2), 195-215. doi: 10.1111/1468-4446.12014
- Fox, S., Spector, P. E., & Miles, D. (2001). Counterproductive work behavior (CWB) in response to job stressors and organizational justice: Some mediator and moderator tests for autonomy and emotions. *Journal of Vocational Behavior*, 59(3), 291–309. doi:10.1006/jvbe.2001.1803
- Gagné, M., & Deci, E. L. (2005). Self-determination theory and work motivation. *Journal of Organizational Behavior*, 26(4), 331-362. doi: 10.1002/job.322

- Gentry, W. A., Griggs, T. L., Deal, J. J., Mondore, S. P., & Cox, B. D. (2011). A comparison of generational differences in endorsement of leadership practices with actual leadership skill level. *Consulting Psychology Journal: Practice and Research*, *63*(1), 39-49. doi: 10.1037/a0023015
- George, J. M., & Jones, G. R. (1999). *Understanding and managing organizational behavior*. New York: Addison-Wesley.
- Gerbing, D. W., & Hamilton, J. G. (1996). Viability of exploratory factor analysis as a precursor to confirmatory factor analysis. *Structural Equation Modeling*, *3*, 62–72. doi: 10.1080/10705519609540030
- Giancola, F. (2006). The generation gap: More myth than reality. *Human Resource Planning*, *29*(4), 32–37.
- Gilbert, G., Sohi, R., & McEachern, A. (2008). Measuring work preferences: A multidimensional tool to enhance career self-management. *Career Development International*, *13*(1), 56-78. Doi: 10.1108/13620430810849542
- Gilleard, C. (2004). Cohorts and generations in the study of social change. *Social Theory & Health*, *2*(1), 106-119. doi:10.1057/palgrave.sth.8700023
- Glass, A. (2007). Understanding generational differences for competitive success. *Industrial and Commercial Training*, *39*(2), 98-103. doi: 10.1108/00197850710732424
- Glenn, N. D. (1976). Cohort analysts' futile quest: Statistical attempts to separate age, period and cohort effects. *American Sociological Review*, *41*(5), 900–904.
- Goulet, L. R., & Baltes, P. B. (1970). *Life-span developmental psychology: Research and theory*. New York: Academic Press.
- Gratton, L. (2013). *The three paradoxes of Generation Y*. *Forbes*. Retrieved from <http://www.forbes.com/sites/lyndagrattton/2013/06/06/the-three-paradoxes-of-generation-y/>
- Guerrero, T. J., & Naldini, M. (1996). *Is the south so different? Italian and Spanish families in comparative perspective*. Retrieved from <http://www.mzes.uni-mannheim.de/publications/wp/wp1-12.pdf>
- Gursoy, D., Maier, T. A., & Chi, C. G. (2008). Generational differences: An examination of work values and generational gaps in the hospitality workforce. *International Journal of Hospitality Management*, *27*(3), 448-458. doi:10.1016/j.ijhm.2007.11.002
- Haeger, D. L., & Lingham, T. (2014). A trend toward work–life fusion: A multi-generational shift in technology use at work. *Technological Forecasting & Social Change*, *89*, 316–325. doi: 10.1016/j.techfore.2014.08.009
- Hambleton, R. K., Merenda, P., & Spielberger, C. (2005). *Adapting educational and psychological tests for cross-cultural assessment*. Hillsdale, NJ, USA: Lawrence S. Erlbaum Publishers.

- Hansen, J.-I. C., & Leuty, M. E. (2012). Work values across generations. *Journal of Career Assessment*, 20(1), 34-52. doi: 10.1177/1069072711417163
- Harkness, J., Pennell, B.-E., & Schoua-Glusberg, A. (2004). Survey questionnaire translation and assessment. In S. Presser, J. M. Rothgeb, M. P. Couper, J. T. Lessler, E. Martin, J. Martin, & E. Singer (Eds.), *Methods for testing and evaluating survey questionnaires* (pp. 453-473). Hoboken, NJ, USA: John Wiley & Sons.
- Havighurst, R. J., & Glasser, R. (1972). An exploratory study of reminiscence. *Journal of Gerontology*, 27(2), 245-253. doi: 10.1093/geronj/27.2.245
- Hewlett, S. A., Sherbin, L., & Sumberg, K. (2009). How Gen Y and Boomers will reshape your agenda. *Harvard Business Review*, 87(7-8), 71-76.
- Hogg, M. A., & Terry, D. J. (2000). Social identity and self-categorization processes in organizational contexts. *The Academy of Management Review*, 25(1), 121-140. doi: 10.2307/259266
- Horta, L. S. F., & Afonso, M. J. (2010). *Diferenças inter-geracionais numa empresa de consultoria: Auto e hetero-percepções de atitudes e valores* [Intergenerational differences in a consulting firm: self and hetero-perceptions of attitudes and values] (Unpublished master's thesis). Faculdade de Psicologia da Universidade de Lisboa, Lisboa, Portugal.
- Hulin, C. L., & Judge, T. A. (2003). Job attitudes: A theoretical and empirical review. In W. C. Borman, D. R. Ilgen, & R. J. Klimoski (Eds.), *Industrial & organizational psychology: Vol. 12. Handbook of psychology* (pp. 255-276). Hoboken, NJ: Wiley.
- Ilies, R., Johnson, M. D., Judge, T. A., & Keeney, J. (2011). A within-individual study of interpersonal conflict as a work stressor: Dispositional and situational moderators. *Journal of Organizational Behavior*, 32(1), 44-64. doi: 10.1002/job.677
- International Test Commission (2005). *ITC guidelines for translating and adapting tests*. Retrieved from https://www.intestcom.org/files/guideline_test_adaptation.pdf
- Jackson, D. L. (2003). Revisiting sample size and number of parameter estimates: Some support for the N:q hypothesis. *Structural Equation Modeling: A Multidisciplinary Journal*, 10(1), 128-141. doi: 10.1207/S15328007SEM1001_6
- Jansen, W. S., Otten, S., Zee, K. I. (2015). Being part of diversity. The effects of an all-inclusive multicultural diversity approach on majority members' perceived inclusion and support for organizational diversity efforts. *Group Processes & Intergroup Relations*, 18(6), 817-832. doi: 10.1177/1368430214566892
- Jin, J., & Rounds, J. (2012). Stability and change in work values: A meta-analysis of longitudinal studies. *Journal of Vocational Behavior*, 80(2), 326-339. doi: 10.1016/j.jvb.2011.10.007

- Joshi, A., Dencker, J. C., & Franz, G. (2011). Generations in organizations. *Research in Organizational Behavior*, 31, 177-205. doi: 10.1016/j.riob.2011.10.002
- Joshi, A., Dencker, J. C., Franz, G., & Martocchio, J. J. (2010). Unpacking generational identities in organizations. *Academy of Management Review*, 35(3), 392-414. doi: 10.5465/AMR.2010.51141800
- Jurkiewicz, C. L. (2000). Generation X and the public employee. *Public Personnel Management*, 29(1), 55-74. doi: 10.1177/009102600002900105
- Jurkiewicz, C. L., & Brown, R. (1998). Generational Comparisons of Public Employee Motivation. *Review of Public Personnel Administration*, 18(4), 18-37. doi: 10.1177/0734371X9801800403
- Karp, H. B., & Sirias, D. (2001). Generational conflict: A new paradigm for teams of the 21st century. *Gestalt Review*, 5(2), 71-87.
- Kline, R. B. (2011). Assumptions in structural equation modeling. In R. H. Hoyle (Ed.), *Handbook of structural equation modeling* (pp. 111-125). New York: Guilford Press.
- Knight, R. (2014). *Managing people from 5 generations*. *Harvard Business Review*. Retrieved from <https://hbr.org/2014/09/managing-people-from-5-generations>
- Kogan, M., (2007). *Human resources management: Bridging the gap*. Retrieved from <http://www.govexec.com/magazine/magazine-human-resources-management/2001/09/bridging-the-gap/9752/>
- Konrad, A. M., Corrigan, E., Lieb, P., & Ritchie, J. E. (2000). Sex differences in job attribute preferences among managers and business students. *Group & Organization Management*, 25(2), 108-131. doi: 10.1177/1059601100252002
- Konrath, S. H., O'Brien, E. H., & Hsing, C. (2011). Changes in dispositional empathy in American college students over time: A meta-analysis. *Personality Social Psychology Review*, 15(2), 180-198. doi: 10.1177/1088868310377395
- Kowske, B. J., Rasch, R., & Wiley, J. (2010). Millennials' (lack of) attitude problem: An empirical examination of generational effects on work attitudes. *Journal of Business and Psychology*, 25(2), 265-279. doi: 10.1007/s10869-010-9171-8
- Krahn, H. J., & Galambos, N. L. (2014). Work values and beliefs of 'Generation X' and 'Generation Y'. *Journal of Youth Studies*, 17(1), 92-112. doi: 10.1080/13676261.2013.815701
- Kristof-Brown, A. L., Zimmerman, R. D., & Johnson, E. C. (2005). Consequences of individuals' fit at work: A meta-analysis of person-job, person-organization, person-group, and person-supervisor fit. *Personnel Psychology*, 58(2), 281-342. doi: 10.1111/j.1744-6570.2005.00672.x

- Kupperschmidt, B. R. (2000). Multigeneration employees: Strategies for effective management. *The Health Care Manager, 19*, 65–76.
- Kupperschmidt, B. R. (2006). Addressing multigenerational conflict: Mutual respect and carefronting as strategy. *The Online Journal of Issues in Nursing, 11*(2). doi: 10.3912/OJIN.Vol11No02Man03
- Lam, C. F. & Gurland, S. T. (2008). Self-determined work motivation predicts job outcomes, but what predicts self-determined work motivation? *Journal of Research in Personality, 42*(4), 1109–1115. doi: 10.1016/j.jrp.2008.02.002
- Lamm, E., & Meeks, M. M. (2009). Workplace fun: The moderating effects of generational differences. *Employee Relations, 31*(6), 613-631. doi: 10.1108/01425450910991767
- Lancaster, L. C. & Stillman D. (2002). *When generations collide: Who they are. Why they clash. How to solve the generational puzzle at work*. New York: Harper Collins.
- Laufer, R. S., & Bengtson, V. L. (1974). Generations, aging, and social stratification: On the development of generational units. *Journal of Social Issues, 30*(3), 181-205. doi: 10.1111/j.1540-4560.1974.tb00733.x
- Leschinsky, R. M., & Michael, J. H. (2004). Motivators and desired company values of wood products industry employees: Investigating generational differences. *Forest Products Journal, 54*(1), 34-39.
- Lester, S. W., Standifer, R. L., Schultz, N. J., & Windsor, J. M. (2012). Actual versus perceived generational differences at work: An empirical examination. *Journal of Leadership & Organizational Studies, 19*(3), 341–354. doi: 10.1177/1548051812442747
- Lopes, S., & Chambel, M. J. (2014). Motives for being temporary agency worker: Validity study of one measure according to the self-determination theory. *Social Indicators Research, 116*(1), 137-152. doi: 10.1007/s11205-013-0273-3
- Lopes, S., Chambel, M. J., Castanheira, F., Oliveira-Cruz, F. (2015). Measuring job satisfaction in Portuguese military sergeants and officers: Validation of the Job Descriptive Index and the Job in General scale. *Military Psychology, 27*(1), 52-63. doi: 10.1037/mil0000060
- Lub, X., Bijvank, M. N., Bal, P. M., Blomme, R., & Schalk, R. (2012). Different or alike?: Exploring the psychological contract and commitment of different generations of hospitality workers. *International Journal of Contemporary Hospitality Management, 24*(4), 553-573. doi: 10.1108/09596111211226824
- Lyons, S., & Kuron, L. (2014). Generational differences in the workplace: A review of the evidence and directions for future research. *Journal of Organizational Behavior, 35*(S1), S139-S157. doi: 10.1002/job.1913

- Lyons, S. T., Schweitzer, L., Ng, E. S., & Kuron, L. K. J. (2012). Comparing apples to apples: A qualitative investigation of career mobility patterns across four generations. *Career Development International*, 17(4), 333–357. doi: 10.1108/13620431211255824
- MacCallum, R. C., Browne, M. W., & Sugawara, H. M. (1996). Power analysis and determination of sample size for covariance structure modeling. *Psychological Methods*, 1(2), 130-149. doi: 10.1037/1082-989X.1.2.130
- Macky, K., Gardner, D., & Forsyth, S. (2008). Generational differences at work: Introduction and overview. *Journal of Managerial Psychology*, 23(8), 857-861. doi: 10.1108/02683940810904358
- Martin, C. A. (2005). From high maintenance to high productivity: What managers need to know about Generation Y. *Industrial and Commercial Training*, 37(1), 39-44. doi: 10.1108/00197850510699965
- Mannheim, K. (1952). The sociological problem of generations. In P. Kecskemeti (Ed.), *Essays on the sociology of knowledge* (pp. 276-322). New York: Routledge & Kegan Paul.
- McCrindle, M. (2014). *The ABC of XYZ: Understanding the global generations*. Bella Vista, Australia: McCrindle Research.
- Meglino, B. M., & Ravlin, E. C. (1998). Individual values in organizations: Concepts, controversies, and research. *Journal of Management*, 24(3), 351–389. doi: 10.1016/S0149-2063(99)80065-8
- Mencl, J., & Lester, S. W. (2014). More alike than different: What generations value and how the values affect employee workplace perceptions. *Journal of Leadership & Organizational Studies*, 21(3), 257-272. doi: 10.1177/1548051814529825
- Meriac, J. P., Woehr, D. J., & Banister, C. (2010). Generational differences in work ethic: An examination of measurement equivalence across three cohorts. *Journal of Business and Psychology*, 25(2), 315-324. doi: 10.1007/s10869-010-9164-7
- Miller, S. (2014). *Generations view different retirement paths: Varying expectations among Baby Boomers, Generation X and Millennials*. Society for Human Resource Management. Retrieved from <http://www.shrm.org/hrdisciplines/benefits/articles/pages/retirement-paths.aspx>
- Mueser, K. T., Becker, D. R., & Wolfe, R. (2001). Supported employment, job preferences, job tenure and satisfaction. *Journal of Mental Health*, 10(4), 411-417. doi: 10.1080/09638230123337
- Murphy, E., Gordon, J., & Anderson, T. (2004). An examination of cross-cultural age or generation-based value differences between the United States and Japan. *Journal of Applied Management and Entrepreneurship*, 9(1), 21-48.
- Natixis (2015). *Close Enough isn't good enough: Investor expectations and the need for concrete financial plans*. Retrieved from <https://institutionsfinancieres.natixis.com/>

- Neugarten, B. L. (1973). Personality change in late life: A developmental perspective. In C. Eisendorfer & M. P. Lawton (Eds.), *The psychology of adult development and aging* (pp. 311-335). Washington, DC: American Psychological Association.
- Notter, J. (2013). *Conflict and generations in the workplace*. Association for Talent Development. Retrieved from <https://www.td.org>
- Parry, E., & Urwin, P. (2011). Generational differences in work values: A review of theory and evidence. *International Journal of Management Reviews*, 13(1), 79-96. doi: 10.1111/j.1468-2370.2010.00285.x
- Park, J., & Gursoy, D. (2012). Generation effects on work engagement among U.S. hotel employees. *International Journal of Hospitality Management*, 31(4), 1195-1202. doi: 10.1016/j.ijhm.2012.02.007
- Pilcher, J. (1994). Mannheim's sociology of generations: an undervalued legacy. *The British Journal of Sociology*, 45(3), 481-495. doi: 10.2307/591659
- Pleau, R., & Shauman, K. (2013). Trends and correlates of post-retirement employment, 1977–2009. *Human Relations*, 66(1), 113-141. doi: 10.1177/0018726712447003
- Podsakoff, P. M., MacKenzie, S. B., Lee, J.-Y., & Podsakoff, N. P. (2003). Common method biases in behavioral research: A critical review of the literature and recommended remedies. *Journal of Applied Psychology*, 88, 879–903. doi: 10.1037/0021-9010.88.5.879
- Porter, L. W., & Lawler, E. E. (1968). *Managerial attitudes and performance*. Homewood, IL: Richard D. Irwin.
- Reichard, L. S., Livson, F., & Peterson, P. G. (1962). *Aging and personality: A study of eighty-seven older men*. New York, USA: John Wiley and Sons.
- Rhodes, S. R. (1983). Age-related differences in work attitudes and behavior: A review and conceptual analysis. *Psychological Bulletin*, 93(2), 328-367. doi: 10.1037/0033-2909.93.2.328
- Rice, S. (2014). *Developing a multi-generational approach to recruiting*. Retrieved from <http://www.eredia.com>
- Roongrerngsuke, S., & Liefoghe, A. (2013). Attracting gold-collar workers: Comparing organizational attractiveness and work-related values across generations in China, India and Thailand. *Asia Pacific Business Review*, 19(3), 337–355. doi: 10.1080/13602381.2012.747784
- Ros, M., Schwartz, S. H., & Surkiss, S. (1999). Basic individual values, work values, and the meaning of work. *Applied Psychology*, 48(1), 49-71. doi: 10.1111/j.1464-0597.1999.tb00048.x
- Rounds, J. B., Dawis, R. V., & Lofquist, L. H. (1987). Measurement of person-environment fit and prediction of satisfaction in the theory of work adjustment. *Journal of Vocational Behavior*, 31(3), 297-318. doi: 10.1016/0001-8791(87)90045-5

- Ryan, R. M., & Deci, E. L. (2000). Self-determination theory and the facilitation of intrinsic motivation, social development, and well-being. *American Psychologist*, 55(1), 68-78. doi: 10.1037/0003-066X.55.1.68
- Ryder, N. B. (1965). The cohort as a concept in the study of social change. *American Sociological Review*, 30(6), 843-861. doi: 10.2307/2090964
- Salahuddin, M. M. (2011). Generational differences impact on leadership style and organizational success. *Journal of Diversity Management (JDM)*, 5(2). Retrieved from <http://www.cluteinstitute.com/ojs/index.php/JDM/article/view/805/789>
- Scandura, T. A., & Lankau, M. J. (1997). Relationships of gender, family responsibility and flexible work hours to organizational commitment and job satisfaction. *Journal of Organizational Behavior*, 18(4), 377-391. doi: 10.1002/(SICI)1099-1379(199707)18:4<377::AID-JOB807>3.0.CO;2-1
- Schawbel, D. (2011). *5 Reasons why your online presence will replace your resume in 10 years*. *Forbes*. Retrieved from <http://www.forbes.com/sites/danschawbel/2011/02/21/5-reasons-why-your-online-presence-will-replace-your-resume-in-10-years/>
- Schaie, K. W. (1965). A general model for the study of developmental problems. *Psychological Bulletin*, 64(2), 92-107. doi: 10.1037/h0022371
- Schullery, N. M. (2013). Workplace engagement and generational differences in values. *Business and Professional Communication Quarterly*, 76(2), 252-265. doi: 10.1177/1080569913476543
- Schuman, H., & Scott, J. (1989). Generations and collective memories. *American Sociological Review*, 54(3), 359-381. doi: 10.2307/2095611
- Sessa, V. I., Kabacoff, R. I., Deal, J., & Brown, H. (2007). Generational differences in leader values and leadership behaviors. *The Psychologist-Manager Journal*, 10(1), 47-74. doi: 10.1080/10887150709336612
- Smith, E., & Comyn, P. (2003). *The development of employability skills in novice workers*. Retrieved from <http://www.ncver.edu.au/>
- Smola, K. W., & Sutton, C. D. (2002). Generational differences: Revisiting generational work values for the new millennium. *Journal of Organizational Behavior*, 23(4), 363-382. doi: 10.1002/job.147
- Stewart, K. D., & Bernhardt, P. C. (2010). Comparing Millennials to pre-1987 students and with one another. *North American Journal of Psychology*, 12(3), 579-602.
- Strizhakova, Y., Coulter, R. A., & Price, L. L. (2012). The young adult cohort in emerging markets: Assessing their glocal cultural identity in a global marketplace. *International Journal of Research in Marketing*, 29, 43-54. doi: 10.1016/j.ijresmar.2011.08.002

- Subeliani, D., & Tsogas, G. (2005). Managing diversity in the Netherlands: A case study of Rabobank. *The International Journal of Human Resource Management*, 16(5), 831-851. doi: 10.1080/09585190500083392
- Sullivan, S. E., & Baruch, Y. (2009). Advances in career theory and research: A critical review and agenda for future exploration. *Journal of Management*, 35(6), 1542–1571. doi: 10.1177/0149206309350082
- Sullivan, S., Forret, M., Carragher, S., & Mainiero, L. (2009). Using the kaleidoscope career model to examine generational differences in work attitudes. *Career Development International*, 14(3), 284-302. doi: 10.1108/13620430910966442
- Tajfel, H. (2010). *Social identity and intergroup relations*. Cambridge, UK: Cambridge University Press.
- Takase, M., Oba, K. & Yamashita, N. (2009). Generational differences in factors influencing job turnover among Japanese nurses: An exploratory comparative design. *International Journal of Nursing Studies*, 46(7), 957-967. doi: 10.1016/j.ijnurstu.2007.10.013
- Tsui, A. S., Xin, K. R., Egan, T. D. (1995). Relational demography: The missing link in vertical dyad linkage. In S. E. Jackson & M. N. Ruderman (Eds.), *Diversity in work teams: Research paradigms for a changing workplace* (pp. 97-129). Washington, DC, US: American Psychological Association.
- Turner, B. S. (1998). Ageing and generational conflicts: A reply to Sarah Irwin. *The British Journal of Sociology*, 49(2), 299-304. doi: 10.2307/591314
- Turner, J. C. (1987). *Rediscovering the social group: A self-categorization theory*. New York: Blackwell Publishers.
- Twenge, J. M. (2010). A review of the empirical evidence on generational differences in work attitudes. *Journal of Business and Psychology*, 25(2), 201-210. doi: 10.1007/s10869-010-9165-6
- Twenge, J. M., Campbell, S. M., Hoffman, B. J., & Lance, C. E. (2010). Generational differences in work values: Leisure and extrinsic values increasing, social and intrinsic values decreasing. *Journal of Management*, 36(5), 1117–1142. doi: 10.1177/0149206309352246
- Twenge, J. M., Campbell, W. K., & Gentile, B. (2012). Generational increases in agentic self-evaluations among American college students, 1966–2009. *Self and Identity*, 11(4), 409–427. doi: 10.1080/15298868.2011.576820
- Urlick, M. J. (2013). *The presentation of self and generational identity in organizations*. Presented at the Society for Advancement of Management Conference, Arlington, VA.
- Urlick, M. J., Hollensbe, E. C., & Masterson, S. S. (2012). *Understanding and managing intergenerational tensions*. Presented at the National Meeting of the Academy of Management, Boston, MA.
- Van de Vijver, F., & Hambleton, R. (1996). Translating tests: Some practical guidelines. *European Psychologist*, 1(2), 89-99. doi: 10.1027/1016-9040.1.2.89

- Verquer, M. L., Beehr, T. A., & Wagner, S. H. (2003). A meta-analysis of relations between person-organization fit and work attitudes. *Journal of Vocational Behavior*, *63*(3), 473–489. doi: 10.1016/S0001-8791(02)00036-2
- Waldman, D. A., & Avolio, B. J. (1986). A meta-analysis of age differences in job performance. *Journal of Applied Psychology*, *71*(1), 33-38. doi: 10.1037/0021-9010.71.1.33
- Warner, J., & Sandberg, A. (2010). *Generational Leadership*. Retrieved from <http://www.kiwata.com/pdf/Generational-Leadership.pdf>
- Wray-Lake, L., Syvertsen, A. K., Briddell, L., Osgood, D. W., & Flanagan, C. A. (2011). Exploring the changing meaning of work for American high school seniors from 1976 to 2005. *Youth & Society*, *43*(3), 1110–1135. doi: 10.1177/0044118X10381367
- Wils, T., Saba, T., Waxin, M.-F., & Labelle, C. (2011). Intergenerational and intercultural differences in work values in Quebec and the United Arab Emirates. *Relations Industrielles / Industrial Relations*, *66*(3), 445-469. doi: 10.7202/1006347ar
- Woodward, I. C., Vongswasdi, P., & More, E. A. (2015). *Generational diversity at work: A systematic review of the research* (Working Paper Series 2015/48/OB). Retrieved from http://papers.ssrn.com/sol3/papers.cfm?abstract_id=2630650
- Wohlwill, J. F. (1970). The age variable in psychological research. *Psychological Review*, *77*(1), 49-64. doi: 10.1037/h0028600
- Wong, M., Gardiner, E., Lang, W., & Coulon, L. (2008). Generational differences in personality and motivation: Do they exist and what are the implications for the workplace?. *Journal of Managerial Psychology*, *23*(8), 878-890. doi: 10.1108/02683940810904376
- WorldatWork (2008). *Rewarding a multigenerational workforce*. Retrieved from <http://www.worldatwork.org/waw/adimLink?id=28411>
- Zemke, R., Raines, C., & Filipczak, B. (2000). *Generations at work: Managing the clash of Veterans, Boomers, Xers, and Nexters in your workplace*. New York, USA: Amacom.
- Zupan, N., Kaše, R., Raškovic, M., Yao, K., & Wang, C. (2015). Getting ready for the young generation to join the workforce: A comparative analysis of the work values of Chinese and Slovenian business students. *Journal for East European Management Studies*, *20*(2), 174-201.
- Yrle, A. C., Hartman, S. J., & Payne, D. M. (2005). Generation X: Acceptance of others and teamwork implications. *Team Performance Management*, *11*(5/6), 188–199. doi: 10.1108/13527590510617765
- Yu, H. C., & Miller, P. (2003). The generation gap and cultural influence: A Taiwan empirical investigation. *Cross Cultural Management*, *10*(3), 23-41. doi: 10.1108/13527600310797621
- Yu, H. C., & Miller, P. (2005). Leadership style: The X generation and baby boomers compared

in different cultural contexts. *Leadership & Organization Development Journal*, 26(1), 35-50.
doi: 10.1108/01437730510575570

Appendix

Appendix A

Table A1. Descriptive statistics of the used sample

SAMPLE	Total (<i>N</i> = 1257)	Portugal (<i>N</i> = 506)	Spain (<i>N</i> = 411)	Brazil (<i>N</i> = 225)	USA (<i>N</i> = 115)
Generational cohort (%)					
Baby Boomer (born between 1944 and 1964)	34.60%	50.20%	17.30%	35.10%	27.00%
Generation X (born between 1965 and 1979)	38.60%	33.00%	48.20%	32.40%	40.90%
Generation Y (born between 1980 and 2000)	26.80%	16.80%	34.50%	32.40%	32.20%
Gender (% of men)	69.70%	76.80%	65.70%	66.50%	59.10%
Worker Tenure ^a (mean number of years)	16.87 (<i>SD</i> = 12.61)	24.22 (<i>SD</i> = 12.37)	12.32 (<i>SD</i> = 9.02)	14.16 (<i>SD</i> = 12.92)	6.13 (<i>SD</i> = 2.88)
Professional Category (%)					
Management ^b (High-skilled workers)	28.40%	34.20%	22.10%	28.40%	25.50%
Technical (High-skilled and Middle- skilled workers)	37.50%	29.40%	44.00%	40.00%	45.30%
Operational (Low-skilled workers)	34.10%	36.40%	33.80%	31.60%	29.20%

Note: *SD* = Standard deviation; ^a Because all participants are employed by the same multinational company, the workers' tenure depends on the time the company started to operate in each country. ^b This professional category includes all directors or superiors of the categories below, such as the technical or operational professional category.

Appendix A

Table A2. Exploratory factorial analysis with varimax rotation for IGD-WAVS.

	Factor 1	Factor 2	Factor 3	Factor 4	Factor 5	Alpha if item's deleted
<i>Personal development opportunities</i>						
1. It is important for me to have the opportunity to acquire vocational training. (SP8 item)	.62	.24	-.05	.23	.10	.83
2. It is important for me to have a variety range of responsibilities at work. (SP9 item)	.69	.15	-.02	.02	.07	.82
3. It is important for me to be creative when doing my job. (SP16 item)	.66	.10	.12	.12	-.01	.82
4. It is important for me to be challenged in the functions I do. (SP19 item)	.79	.01	.05	.01	-.11	.82
5. It is important for me to develop skills that might apply in other functions. (SP22 item)	.77	.03	.01	.18	.11	.81
6. It is important that the organization I work for provides me opportunities for career progression. (SP27 item)	.66	.06	.08	.31	-.16	.82
7. It is important for me that work allows my personal development. (SP36 item)	.59	.28	.15	.21	.11	.82
8. It is important for me to have autonomy and power of decision at work. (SP31 item)	.56	.15	.21	-.01	.07	.84
<i>Organizational commitment.</i>						
9. I care about the organization's future. (SP4 item)	.31	.59	.02	.07	.02	.70
10. I talk about this organization to others as a great place to work. (SP23 item)	.33	.64	-.04	-.01	.05	.66

11. I would feel quite happy to spend the rest of my career in the organization I work for now. (SP28 item)	.02	.80	.07	.04	-.03	.64
12. Work stability is one of my main priorities. (SP29 item)	-.10	.69	.06	.27	-.00	.69
13. I am loyal to the organization for which I work. (SP34 item)	.33	.65	-.09	.13	.01	.68
<i>Work-life balance</i>						
14. It is important for me to have leisure time. (SP26 item)	.19	.06	.79	.09	.12	.59
15. It is important for me to have time to hang out with my friends. (SP7 item)	.20	.11	.75	.06	.09	.68
16. It is very important for me a balance between work and personal life. (SP12 item)	.16	.21	.75	.04	.14	.70
<i>Preference for immediate rewards</i>						
17. I only care working in an organization that requires a lot of myself if I get a quick payoff in the short term. (SP17 item)	.11	-.08	.09	.76	.12	.79
18. I am only interested to work in an organization that appreciate my work immediately. (SP30 item)	.07	.07	.02	.87	.08	.65
19. I prefer to work in organizations that value the work immediately. (SP38 item)	.11	.05	.07	.84	.09	.72
<i>Preference for timetable flexibility</i>						
20. I would like to be able to work part time in an organization. (SP3 item)	.08	-.05	.09	.16	.62	.76
21. I prefer to be rewarded in the form of free time rather than in financial reward. (SP32 item)	-.01	.01	.01	.03	.86	.46
22. I would be motivating for me to be allowed free time at work as a reward. (SP35 item)	-.02	.08	.22	.09	.80	.44
<hr/>						
% Variance Explained	25.58%	11.01%	7.32%	8.92%	5.78%	
Cronbach's Alpha	.84	.72	.74	.80	.65	
<hr/>						

Appendix A

Table A3. Exploratory Factorial Analysis of *IGD-WCS*.

	Conflict with Baby Boomers		Conflict with Generation X		Conflict with Generation Y		
	Factor 1	Alpha if item's deleted	Factor 1	Alpha if item's deleted	Factor 1	Alpha if item's deleted	
1. How often do you disagree with your colleague's opinions?	.62	.93	.59	.94	.56	.95	
2. How often do you feel inferior by your colleagues?	.73	.93	.69	.93	.75	.94	
3. How often are your colleagues rude to you?	.82	.92	.81	.93	.82	.94	
4. How often do you find yourself thinking that you do not identify with your colleagues' way of working?	.72	.93	.71	.93	.75	.94	
5. How often do you consider performing tasks which are your colleague's responsibility (not yours), but you might tackle in a different way?	.62	.93	.62	.94	.64	.94	
6. How often do you feel misunderstood by your colleagues?	.83	.92	.85	.93	.85	.94	
7. How often do you realize that your colleagues do not try to understand your point of view?	.83	.92	.84	.93	.85	.94	
8. How often do your colleagues' behaviors lack respect for you?	.83	.92	.86	.93	.86	.94	
9. How often do you feel that you are not valued by your colleagues?	.86	.92	.86	.93	.88	.94	
10. How often do your colleagues talk to you with an aggressive tone?	.83	.92	.83	.93	.86	.94	
11. How often do you feel harmed by your colleagues' attitudes and behaviors?	.83	.92	.83	.93	.85	.94	
12. How often do you note that your contributions to the development of a specific project or process counter or oppose the contributions of your colleagues?	.81	.92	.77	.93	.83	.94	
	% Variance Explained	60.92%	–	60.24%	–	63.41%	–
	Cronbach's Alpha	.93	–	.94	–	.94	–

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Table A4. Results of confirmatory factor analysis for IGD-WAVS (n = 628).

Models	χ^2	$\Delta\chi^2$	SRMR	CFI	IFI	RMSEA
Model 1	$\chi^2(191) = 494.79^{**}$	—	.05	.93	.93	.05
Model 2	$\chi^2(201) = 1872.08^{**}$	$\Delta\chi^2(10) = 1377.29^{**}$	.10	.60	.60	.12
Model 3	$\chi^2(195) = 657.20^{**}$	$\Delta\chi^2(4) = 162.41^{**}$	.06	.89	.89	.06
Model 4	$\chi^2(195) = 809.90^{**}$	$\Delta\chi^2(4) = 315.11^{**}$	.07	.85	.85	.07
Model 5	$\chi^2(195) = 1066.51^{**}$	$\Delta\chi^2(4) = 571.72^{**}$	.08	.79	.79	.08
Model 6	$\chi^2(195) = 905.11^{**}$	$\Delta\chi^2(4) = 410.32^{**}$	.07	.83	.83	.08
Model 7	$\chi^2(195) = 787.26^{**}$	$\Delta\chi^2(4) = 292.47^{**}$	.07	.86	.86	.07
Model 8	$\chi^2(195) = 1083.91^{**}$	$\Delta\chi^2(4) = 589.12^{**}$	.08	.79	.79	.09
Model 9	$\chi^2(195) = 915.22^{**}$	$\Delta\chi^2(4) = 420.43^{**}$	.08	.83	.83	.08
Model 10	$\chi^2(195) = 1009.21^{**}$	$\Delta\chi^2(4) = 514.42^{**}$	.07	.80	.81	.08
Model 11	$\chi^2(195) = 791.34^{**}$	$\Delta\chi^2(4) = 296.55^{**}$	.07	.86	.86	.07
Model 12	$\chi^2(195) = 873.27^{**}$	$\Delta\chi^2(4) = 378.48^{**}$	.07	.84	.84	.07

Notes: ** $p < .01$; *Model 1* = Theoretical Model – with five latent factors (i.e., personal development opportunities, organizational commitment, work-life balance, preference for immediate rewards style, and preference for timetable flexibility) as conceptualized; *Model 2* = One latent factor model (with all items of each of the five variables studied grouped in one latent variable); *Model 3* = four latent factors model (personal development opportunities and organizational commitment grouped as one latent factor and the other three dimensions studied represented each as other three latent factors); *Model 4* = four latent factors model (personal development opportunities and work-life balance grouped as one latent factor and the other three dimensions studied represented each as other three latent factors); *Model 5* = four latent factors model (personal development opportunities and preference for immediate rewards grouped as one latent factor and the other three dimensions studied represented each as other three latent factors); *Model 6* = four latent factors model (personal development opportunities and preference for timetable

flexibility grouped as one latent factor and the other three dimensions studied represented each as other three latent factors); *Model 7* = four latent factors model (organizational commitment and work-life balance grouped as one latent factor and the other three dimensions studied represented each as other three latent factors); *Model 8* = four latent factors model (organizational commitment and preference for immediate rewards grouped as one latent factor and the other three dimensions studied represented each as other three latent factors); *Model 9* = four latent factors model (organizational commitment and preference for timetable flexibility grouped as one latent factor and the other three dimensions studied represented each as other three latent factors); *Model 10* = four latent factors model (work-life balance and preference for immediate rewards grouped as one latent factor and the other three dimensions studied represented each as other three latent factors); *Model 11* = four latent factors model (work-life balance and preference for timetable flexibility grouped as one latent factor and the other three dimensions studied represented each as other three latent factors); *Model 12* = four latent factors model (preference for immediate rewards and preference for timetable flexibility grouped as one latent factor and the other three dimensions studied represented each as other three latent factors).

Appendix A

Table A5. Results of Confirmatory Factor Analysis for IGD-WCS (CFA; n = 628).

Models	χ^2	SRMR	CFI	IFI	RMSEA
Model 1 – CFA for the measure of conflict with baby boomers' generation	$\chi^2(46) =$ 245.22**	.05	.96	.96	.08
Model 2 – CFA for the measure of conflict with generation X	$\chi^2(46) =$ 225.15**	.04	.96	.96	.08
Model 3 – CFA for the measure of conflict with generation Y	$\chi^2(46) =$ 242.14**	.04	.97	.97	.08

Notes: ** $p < .01$

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Table A6. Fit statistics for the IGD-WAVS for each country separately, countries combined, and for invariance tests.

Models	N	χ^2	$\Delta\chi^2$	CFI	Δ CFI	RMSEA	90% confidence interval of RMSEA
Model 1 – Portugal Only	506	$\chi^2(191) = 518.05^{**}$	—	.92	—	.06	[.05 – .06]
Model 2 – Spain Only	411	$\chi^2(191) = 478.23^{**}$	—	.90	—	.06	[.05 – .07]
Model 3 – Brazil Only	225	$\chi^2(191) = 337.06^{**}$	—	.90	—	.06	[.05 – .07]
Model 4 – USA Only	115	$\chi^2(191) = 315.01^{**}$	—	.80	—	.08	[.06 – .09]
Portugal vs Spain Comparison							
Model 5 – Baseline Model (Two countries combined)	917	$\chi^2(382) = 996.29^{**}$	—	.91	—	.04	[.04 – .05]
Model 6 – Full Constrained Model	917	$\chi^2(444) = 1499.18^{**}$	Compare to Model 5 $\Delta\chi^2(62) = 502.89^{**}$	.84	.07	.05	[.05 – .05]
Model 7 – Measurement Model Invariant (factor loadings)	917	$\chi^2(399) = 1029.32^{**}$	Compare to Model 5 $\Delta\chi^2(17) = 33.03^{**}$	.91	.00	.04	[.04 – .05]
Portugal vs Brazil Comparison							
Model 8 – Baseline Model (Two countries combined)	731	$\chi^2(382) = 855.11^{**}$	—	.91	—	.04	[.04 – .05]
Model 9 – Full Constrained Model	731	$\chi^2(444) = 1266.67^{**}$	Compare to Model 8 $\Delta\chi^2(62) = 411.56^{**}$	.85	.06	.05	[.05 – .05]
Model 10 – Measurement Model Invariant (factor loadings)	731	$\chi^2(399) = 889.48^{**}$	Compare to Model 8 $\Delta\chi^2(17) = 34.37^{**}$	.91	.00	.04	[.04 – .05]
Spain vs Brazil Comparison							
Model 11 – Baseline Model (Two countries combined)	636	$\chi^2(382) = 815.30^{**}$	—	.90	—	.04	[.04 – .05]
Model 12 – Full Constrained Model	636	$\chi^2(444) = 1143.81^{**}$	Compare to Model 11 $\Delta\chi^2(62) = 328.51^{**}$	.84	.06	.05	[.05 – .05]
Model 13 – Measurement Model Invariant (factor loadings)	636	$\chi^2(399) = 854.15^{**}$	Compare to Model 11 $\Delta\chi^2(17) = 38.85^{**}$.90	.00	.04	[.04 – .05]

Note: $** p < .01$

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Table A7. Fit statistics for the measure of conflict with baby boomers' generation for each country separately, countries combined, and for invariance tests.

Models	N	χ^2	$\Delta\chi^2$	CFI	Δ CFI	RMSEA	90% confidence interval of RMSEA
Model 1 – Portugal Only	506	$\chi^2(46) = 228.48^{**}$	—	.96	—	.09	[.08 – .10]
Model 2 – Spain Only	411	$\chi^2(46) = 259.22^{**}$	—	.93	—	.11	[.09 – .12]
Model 3 – Brazil Only	225	$\chi^2(46) = 124.75^{**}$	—	.95	—	.09	[.07 – .11]
Model 4 – USA Only	115	$\chi^2(46) = 143.13^{**}$	—	.89	—	.14	[.11 – .16]
Portugal vs Spain Comparison							
Model 5 – Baseline Model (Two countries combined)	917	$\chi^2(92) = 487.73^{**}$	—	.94	—	.07	[.06 – .08]
Model 6 – Full Constrained Model	917	$\chi^2(124) = 643.71^{**}$	Compare to Model 5 $\Delta\chi^2(32) = 155.98^{**}$	.93	.01	.07	[.06 – .07]
Model 7 – Measurement Model Invariant (factor loadings)	917	$\chi^2(103) = 521.76^{**}$	Compare to Model 5 $\Delta\chi^2(11) = 34.03^{**}$	.94	.00	.07	[.06 – .07]
Portugal vs Brazil Comparison							
Model 8 – Baseline Model (Two countries combined)	731	$\chi^2(92) = 353.27^{**}$	—	.95	—	.06	[.06 – .07]
Model 9 – Full Constrained Model	731	$\chi^2(124) = 531.02^{**}$	Compare to Model 8 $\Delta\chi^2(32) = 177.75^{**}$	.93	.02	.07	[.06 – .07]
Model 10 – Measurement Model Invariant (factor loadings)	731	$\chi^2(103) = 364.57^{**}$	Compare to Model 8 $\Delta\chi^2(11) = 11.30$, n.s.	.95	.00	.06	[.05 – .07]
Spain vs Brazil Comparison							

Model 11 – Baseline Model (Two countries combined)	636	$\chi^2(92) = 383.95^{**}$	—	.94	—	.07	[.06 – .08]
Model 12 – Full Constrained Model	636	$\chi^2(124) = 527.93^{**}$	Compare to Model 11 $\Delta\chi^2(32) = 143.98^{**}$	.91	.03	.07	[.07 – .08]
Model 13 – Measurement Model Invariant (factor loadings)	636	$\chi^2(103) = 399.39^{**}$	Compare to Model 11 $\Delta\chi^2(11) = 15.44$, n.s.	.94	.00	.07	[.06 – .07]
USA vs Portugal Comparison							
Model 14 – Baseline Model (Two countries combined)	621	$\chi^2(92) = 372.12^{**}$	—	.94	—	.07	[.06 – .08]
Model 15 – Full Constrained Model	621	$\chi^2(124) = 509.09^{**}$	Compare to Model 14 $\Delta\chi^2(32) = 136.97^{**}$	.92	.02	.07	[.06 – .08]
Model 16 – Measurement Model Invariant (factor loadings)	621	$\chi^2(103) = 399.70^{**}$	Compare to Model 14 $\Delta\chi^2(11) = 27.58^{**}$	.94	.00	.07	[.06 – .08]
USA vs Spain Comparison							
Model 17 – Baseline Model (Two countries combined)	526	$\chi^2(92) = 402.70^{**}$	—	.92	—	.08	[.07 – .09]
Model 18 – Full Constrained Model	526	$\chi^2(124) = 484.88^{**}$	Compare to Model 17 $\Delta\chi^2(32) = 82.18^{**}$	.91	.01	.08	[.07 – .08]
Model 19 – Measurement Model Invariant (factor loadings)	526	$\chi^2(103) = 415.35^{**}$	Compare to Model 17 $\Delta\chi^2(11) = 12.65$, n.s.	.92	.00	.08	[.07 – .08]
USA vs Brazil Comparison							
Model 20 – Baseline Model (Two countries combined)	340	$\chi^2(92) = 268.10^{**}$	—	.93	—	.08	[.07 – .09]
Model 21 – Full Constrained Model	340	$\chi^2(124) = 320.33^{**}$	Compare to Model 20 $\Delta\chi^2(32) = 52.23^{**}$	.92	.01	.07	[.06 – .08]
Model 22 – Measurement Model Invariant (factor loadings)	340	$\chi^2(103) = 281.97^{**}$	Compare to Model 20 $\Delta\chi^2(11) = 13.87$, n.s.	.93	.00	.07	[.06 – .08]

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Table A8. Fit statistics for the measure of conflict with generation X for each country separately, countries combined, and for invariance tests.

Models	N	χ^2	$\Delta\chi^2$	CFI	Δ CFI	RMSEA	90% confidence interval of RMSEA
Model 1 – Portugal Only	506	$\chi^2(46) = 186.97^{**}$	—	.97	—	.08	[.07 – .09]
Model 2 – Spain Only	411	$\chi^2(46) = 170.10^{**}$	—	.96	—	.08	[.07 – .09]
Model 3 – Brazil Only	225	$\chi^2(46) = 142.62^{**}$	—	.95	—	.10	[.08 – .12]
Model 4 – USA Only	115	$\chi^2(46) = 103.14^{**}$	—	.92	—	.10	[.08 – .13]
Portugal vs Spain Comparison							
Model 5 – Baseline Model (Two countries combined)	917	$\chi^2(92) = 357.08^{**}$	—	.96	—	.06	[.05 – .06]
Model 6 – Full Constrained Model	917	$\chi^2(124) = 512.86^{**}$	Compare to Model 5 $\Delta\chi^2(32) = 155.78^{**}$	.95	.01	.06	[.05 – .06]
Model 7 – Measurement Model Invariant (factor loadings)	917	$\chi^2(103) = 374.32^{**}$	Compare to Model 5 $\Delta\chi^2(11) = 17.24^{**}$	.96	.00	.05	[.05 – .06]
Portugal vs Brazil Comparison							
Model 8 – Baseline Model (Two countries combined)	731	$\chi^2(92) = 329.69^{**}$	—	.96	—	.06	[.05 – .07]
Model 9 – Full Constrained Model	731	$\chi^2(124) = 460.40^{**}$	Compare to Model 8 $\Delta\chi^2(32) = 130.71^{**}$	.95	.01	.06	[.06 – .07]
Model 10 – Measurement Model Invariant (factor loadings)	731	$\chi^2(103) = 339.70^{**}$	Compare to Model 8 $\Delta\chi^2(11) = 10.01, n.s.$	.96	.00	.06	[.05 – .06]
Spain vs Brazil Comparison							
Model 11 – Baseline Model (Two countries combined)	636	$\chi^2(92) = 312.79^{**}$	—	.96	—	.06	[.05 – .07]

Model 12 – Full Constrained Model	636	$\chi^2(124) = 431.51^{**}$	Compare to Model 11 $\Delta\chi^2(32) = 118.72^{**}$	.94	.02	.06	[.06 – .07]
Model 13 – Measurement Model Invariant (factor loadings)	636	$\chi^2(103) = 327.63^{**}$	Compare to Model 11 $\Delta\chi^2(11) = 14.84, n.s.$	.96	.00	.06	[.05 – .07]
USA vs Portugal Comparison							
Model 14 – Baseline Model (Two countries combined)	621	$\chi^2(92) = 290.45^{**}$	—	.96	—	.06	[.05 – .07]
Model 15 – Full Constrained Model	621	$\chi^2(124) = 563.07^{**}$	Compare to Model 14 $\Delta\chi^2(32) = 272.62^{**}$	.91	.05	.08	[.07 – .08]
Model 16 – Measurement Model Invariant (factor loadings)	621	$\chi^2(103) = 340.30^{**}$	Compare to Model 14 $\Delta\chi^2(11) = 49.85^{**}$	.95	.01	.06	[.05 – .07]
USA vs Spain Comparison							
Model 17 – Baseline Model (Two countries combined)	526	$\chi^2(92) = 273.52^{**}$	—	.95	—	.06	[.05 – .07]
Model 18 – Full Constrained Model	526	$\chi^2(124) = 435.29^{**}$	Compare to Model 17 $\Delta\chi^2(32) = 161.77^{**}$	.92	.03	.07	[.06 – .08]
Model 19 – Measurement Model Invariant (factor loadings)	526	$\chi^2(103) = 309.13^{**}$	Compare to Model 17 $\Delta\chi^2(11) = 35.61^{**}$	.95	.00	.06	[.05 – .07]
USA vs Brazil Comparison							
Model 20 – Baseline Model (Two countries combined)	340	$\chi^2(92) = 245.85^{**}$	—	.94	—	.07	[.06 – .08]
Model 21 – Full Constrained Model	340	$\chi^2(124) = 326.87^{**}$	Compare to Model 20 $\Delta\chi^2(32) = 81.02^{**}$	.92	.02	.07	[.06 – .08]
Model 22 – Measurement Model Invariant (factor loadings)	340	$\chi^2(103) = 275.00^{**}$	Compare to Model 20 $\Delta\chi^2(11) = 29.15^{**}$.93	.01	.07	[.06 – .08]

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Table A9. Fit statistics for the measure of conflict with generation Y for each country separately, countries combined, and for invariance tests.

Models	N	χ^2	$\Delta\chi^2$	CFI	Δ CFI	RMSEA	90% confidence interval of RMSEA
Model 1 – Portugal Only	506	$\chi^2(46) = 254.81^{**}$	—	.96	—	.10	[.08 – .11]
Model 2 – Spain Only	411	$\chi^2(46) = 245.90^{**}$	—	.95	—	.10	[.09 – .12]
Model 3 – Brazil Only	225	$\chi^2(46) = 172.19^{**}$	—	.94	—	.11	[.09 – .13]
Model 4 – USA Only	115	$\chi^2(46) = 94.57^{**}$	—	.94	—	.10	[.07 – .12]
Portugal vs Spain Comparison							
Model 5 – Baseline Model (Two countries combined)	917	$\chi^2(92) = 500.72^{**}$	—	.95	—	.07	[.06 – .08]
Model 6 – Full Constrained Model	917	$\chi^2(124) = 640.62^{**}$	Compare to Model 5 $\Delta\chi^2(32) = 139.90^{**}$	.94	.01	.07	[.06 – .07]
Model 7 – Measurement Model Invariant (factor loadings)	917	$\chi^2(103) = 515.17^{**}$	Compare to Model 5 $\Delta\chi^2(11) = 14.45$, n.s.	.95	.01	.07	[.06 – .07]
Portugal vs Brazil Comparison							
Model 8 – Baseline Model (Two countries combined)	731	$\chi^2(92) = 427.09^{**}$	—	.95	—	.07	[.06 – .08]
Model 9 – Full Constrained Model	731	$\chi^2(124) = 621.89^{**}$	Compare to Model 8 $\Delta\chi^2(32) = 194.80^{**}$	.93	.02	.07	[.07 – .08]
Model 10 – Measurement Model Invariant (factor loadings)	731	$\chi^2(103) = 437.61^{**}$	Compare to Model 8 $\Delta\chi^2(11) = 10.52$, n.s.	.95	.00	.07	[.06 – .07]
Spain vs Brazil Comparison							
Model 11 – Baseline Model (Two countries combined)	636	$\chi^2(92) = 418.14^{**}$	—	.95	—	.08	[.07 – .08]

Model 12 – Full Constrained Model	636	$\chi^2(124) = 633.37^{**}$	Compare to Model 11 $\Delta\chi^2(32) = 215.23^{**}$	.92	.03	.08	[.07 – .09]
Model 13 – Measurement Model Invariant (factor loadings)	636	$\chi^2(103) = 435.09^{**}$	Compare to Model 11 $\Delta\chi^2(11) = 16.95, n.s.$	.94	.01	.07	[.06 – .08]
USA vs Portugal Comparison							
Model 14 – Baseline Model (Two countries combined)	621	$\chi^2(92) = 349.58^{**}$	—	.95	—	.07	[.06 – .08]
Model 15 – Full Constrained Model	621	$\chi^2(124) = 484.24^{**}$	Compare to Model 14 $\Delta\chi^2(32) = 134.66^{**}$	.94	.01	.07	[.06 – .08]
Model 16 – Measurement Model Invariant (factor loadings)	621	$\chi^2(103) = 378.93^{**}$	Compare to Model 14 $\Delta\chi^2(11) = 29.35^{**}$	.95	.00	.07	[.06 – .07]
USA vs Spain Comparison							
Model 17 – Baseline Model (Two countries combined)	526	$\chi^2(92) = 340.60^{**}$	—	.95	—	.07	[.06 – .08]
Model 18 – Full Constrained Model	526	$\chi^2(124) = 506.79^{**}$	Compare to Model 17 $\Delta\chi^2(32) = 166.19^{**}$	.92	.03	.08	[.07 – .08]
Model 19 – Measurement Model Invariant (factor loadings)	526	$\chi^2(103) = 366.47^{**}$	Compare to Model 17 $\Delta\chi^2(11) = 25.87^{**}$	.94	.01	.07	[.06 – .08]
USA vs Brazil Comparison							
Model 20 – Baseline Model (Two countries combined)	340	$\chi^2(92) = 266.77^{**}$	—	.94	—	.08	[.07 – .09]
Model 21 – Full Constrained Model	340	$\chi^2(124) = 339.19^{**}$	Compare to Model 20 $\Delta\chi^2(32) = 72.42^{**}$	.93	.01	.07	[.06 – .08]
Model 22 – Measurement Model Invariant (factor loadings)	340	$\chi^2(103) = 285.58^{**}$	Compare to Model 20 $\Delta\chi^2(11) = 18.81, n.s.$	.94	.00	.07	[.06 – .08]

Note: $**p < .01$

Appendix A

Table A10.1. Hierarchical Regression of hetero-perception towards generation X in conflict with generation X, according the perspective of baby boomers' generation.

Baby boomers' perspective	Conflict with Generation X	
	β	β
Step 1 – Control Variables		
Gender	.05	-.00
Tenure	-.12	-.11
Step 2 – HP Generation X		
Personal development opportunities	–	-.09
Organizational commitment	–	-.15
Work-life balance	–	-.01
Preference for immediate rewards	–	.04
Preference for timetable flexibility	–	.19**
<i>F</i>	1.97	2.77**
Adj. R-Sq.	.01	.06
R-Sq. Change	.02	.07

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

Table A10.2. Hierarchical Regression of hetero-perception towards generation Y in conflict with generation Y, according the perspective of baby boomers' generation.

Baby Boomers' perspective	Conflict with Generation Y	
	β	β
Step 1 – Control Variables		
Gender	.01	-.02
Tenure	-.15*	-.18**
Step 2 – HP Generation Y		
Personal development opportunities	–	-.10
Organizational commitment	–	-.01
Work-life balance	–	-.15
Preference for immediate rewards	–	.07
Preference for timetable flexibility	–	.09
<i>F</i>	2.32	2.07*
Adj. R-Sq.	.01	.04
R-Sq. Change	.02	.05

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

Table A10.3. Hierarchical Regression of hetero-perception towards baby boomers' generation in conflict with baby boomer's generation, according the perspective of generation X.

Generation X perspective	Conflict with Baby Boomers	
	β	β
Step 1 – Control Variables		
Gender	.05	.02
Tenure	-.00	.11
Step 2 – HP Baby Boomers' Generation		
Personal development opportunities	–	-.27**
Organizational commitment	–	-.11
Work-life balance	–	-.03
Preference for immediate rewards	–	-.01
Preference for timetable flexibility	–	.37**
<i>F</i>	.15	5.28**
Adj. R-Sq.	-.01	.00
R-Sq. Change	.18	.22

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

Table A10.4. Hierarchical Regression of hetero-perception towards generation Y in conflict with generation Y, according the perspective of generation X.

Generation X perspective	Conflict with Generation Y	
	β	β
Step 1 – Control Variables		
Gender	.15	.16
Tenure	.00	.04
Step 2 – HP Generation Y		
Personal development opportunities	–	.08
Organizational commitment	–	-.34**
Work-life balance	–	-.25**
Preference for immediate rewards	–	.10
Preference for timetable flexibility	–	.03
<i>F</i>	1.44	4.95**
Adj. R-Sq.	.01	.17
R-Sq. Change	.02	.19

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

Table A10.5. Hierarchical Regression of hetero-perception towards baby boomers' generation in conflict with baby boomers' generation, according the perspective of generation Y.

Generation Y perspective	Conflict with Baby Boomers	
	β	β
Step 1 – Control Variables		
Gender	.04	-.01
Tenure	.01	.03
Step 2 – HP Baby Boomers' Generation		
Personal development opportunities	–	.16
Organizational commitment	–	-.05
Work-life balance	–	-.02
Preference for immediate rewards	–	.23
Preference for timetable flexibility	–	.08
<i>F</i>	.06	.62
Adj. R-Sq.	-.03	-.05
R-Sq. Change	.00	.07

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

Table A10.6. Hierarchical Regression of hetero-perception towards generation X in conflict with generation X, according the perspective of generation Y.

Generation Y perspective	Conflict with Generation X	
	β	β
Step 1 – Control Variables		
Gender	.08	.10
Tenure	.00	.04
Step 2 – HP Generation X		
Personal development opportunities	–	-.04
Organizational commitment	–	.12
Work-life balance	–	-.06
Preference for immediate rewards	–	.24
Preference for timetable flexibility	–	.14
<i>F</i>	.20	.79
Adj. R-Sq.	-.03	-.02
R-Sq. Change	.01	.08

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