Evidence-based HRM
A Global Forum for Empirical Scholarship

Number 1
Demographic Challenges for Management
Guest Editors: Eleanna Galanaki, Emma Parry, Ilona Bučiūnienė and Leda Panayotopoulou

1 Editorial advisory board
2 Guest editorial
8 Attracting millennial talent: a signal theory perspective
   Anishya Obhrai Madan and Srishti Madan
24 Changes in Chinese work values: a comparison between the one-child, social
   reform and cultural revolution generations
   Sachiko Takeda, Marta Disegna and Yumei Yang
42 Post-migration labor market: prejudice and the role of host country education
   Olga Stangej, Inga Minelgaite, Kari Kristinsson and Margret Sigurardottir
56 The moderating effects of status and trust on the performance of age-diverse
   work groups
   Cara-Lynn Scheuer and Catherine Loughlin
75 Investigating the links between resilience, perceived HRM practices, and retirement
   intentions
   Hanna Salminen, Mikaela von Bonsdorff and Monika von Bonsdorff
93 Staffing practices and employee performance: the role of age
   Nikolaos Pahos and Eleanna Galanaki

ISBN 978-1-83867-357-4
www.emeraldinsight.com/loi/ebhrm
EDITORIAL ADVISORY BOARD

Dorothea Alewell
Universität Hamburg, Germany

Greg Bamber
Monash University, Australia

Emilio Castilla
MIT Sloan School of Management, USA

Andrew Clark
Paris School of Economics, France

Yannis Georgellis
Kent Business School, UK

Paul Jansen
VU University Amsterdam, The Netherlands

Edward Lazear
Stanford University, USA

Martin McCracken
Ulster University, UK

Nancy Napier
Boise State University, USA

Gail Pacheco
AUT University, New Zealand

Mariano Rojas
FLACSO & UPAEP, Mexico

Richard M. Ryan
Australian Catholic University, Australia and University of Rochester, USA

Karin Sanders
ASB, UNSW, Australia/University of Twente, Netherlands

Jie Shen
University of South Australia, Australia

Sununta Siengthai
Asian Institute of Technology, Thailand

Lynda Jiwen Song
Renmin University of China, People's Republic of China

Pauline Stanton
RMIT University, Australia

Norihiko Takeuchi
Waseda University, Japan

Neharika Vohra
Indian Institute of Management (IIM) Ahmedabad, India

Chay Yue Wah
SIM University, Singapore

Niels Westergaard-Nielsen
Copenhagen Business School, Denmark

Stefan Wolter
University of Bern, Switzerland

Geoffrey Wood
Essex Business School, University of Essex, UK

Shuming Zhao
Nanjing University, People's Republic of China
Guest editorial

Demographic challenges for management: fad or reality?

Introduction

Theory and practice in human resource management (HRM) generally focusses on two levels of analysis: the individual and the organization. However, there is a growing recognition that HRM is manifested within larger environmental settings and several HRM researchers have approached the field with a more macro perspective. For example, some HRM researchers have focussed on the effects of the macroeconomic environment (e.g. Gunnigle et al., 2013; Bordogna and Pedersini, 2013); others have focussed on the advancement of technology (e.g. Stone et al., 2015); while yet others have focussed on the social or institutional setting (e.g. Ashley and Empson, 2013; Brewster et al., 2008; Farndale et al., 2008).

More recently, the macro-level variable of demographics has caught the academic interest of several HRM researchers. According to the New Palgrave Dictionary of Economics:

Demography is the analysis of population, including both techniques and substance. It is applied most often to human populations, and includes the gathering of data, the construction of models, interpretation of population changes, policy recommendations. (Keyfitz, 2016)

The recent interest of HRM in demographics is based on the multiple dimensions of significant change in workforce composition and labour supply. For example, the workforce has been affected by: the higher number of women entering the labour market; a range of new professions that are emerging (OECD, 2013); and increasing average educational attainment levels (OECD, 2014b). In addition, working life and careers are extending (Armstrong-Stassen, 2008) as the result of longer life expectancy and better health levels (OECD, 2014a). This has led to the cohabitation of multiple age cohorts (generations) in the workplace arena. Concurrently, geographical shifts of populations (e.g. refugees and immigrants) have seen a sharp rise recently, affecting both labour supply and demand (Newman et al., 2016). These changes in workforce composition are affecting the way in which businesses operate and are managed in multiple ways.

In this special issue of EBHRM, our aim was to gather noteworthy empirical works that focus on the demographic challenges for HRM, in order to advance the dialogue over the topicality and importance of the topic for practitioners and researchers. Our focus is broadly on three types of demographic challenges: ageing, generational diversity and migration.

Ageing. In relation to ageing, never in human history has the population included such a large proportion of those in their old age. For most countries, regardless of their geographic location or developmental stage, the group of people, aged 60 or more, is growing fast (Kinsella and He, 2009). Declining mortality and fertility rates together with increased life expectancy are reversing most countries’ age pyramids (Boehm et al., 2014; Schröder et al., 2014) and leading to a significant growth of retirees. This is an issue for pension systems globally, leading governments and employers to either extend, or completely remove, the default retirement age; and to encourage extended working lives either forcefully (via later state pension ages) or through incentives. As a result, employers in most regions of the world are facing larger numbers of older employees.

Having become aware of the need to adapt to an ageing workforce, employers take actions to enhance employability and performance of mature workers through active ageing HRM practices (Armstrong-Stassen, 2008) and terms such as resourceful ageing, positive ageing, healthy ageing and successful ageing are now being used more often (Angus and Reeve, 2006). However, research on the effectiveness and application of HRM...
practices to address the productivity issues that an ageing workforce poses at the micro level is scant.

**Generational diversity.** In recent years, the popular media and practitioner media has focussed significant attention on the idea that an increasingly multi-generational workforce has a potentially significant impact on organizations. It is argued for instance that, in the past, generations were more similar to each other in their work attitudes, values and life experiences (Burke, 2015). Despite this attention, rigorous evidence for generational differences is mixed and somewhat flawed (Parry and Urwin, 2011, 2017; Costanza et al., 2012). In an attempt to look at generational differences, one can distinguish between “actual” and “perceived” differences, or stereotypes. Generational stereotypes exist and in a similar way to other stereotypes can lead to biases, influence judgements, values and work behaviours, and are generally different from actual generational differences (Perry et al., 2013). The academic literature has focussed more on attempting to establish actual differences, measuring aspects such as values, attitudes, work outcomes and expectations. The results are inconsistent, with studies reporting significant, small, or no differences between generations (e.g. Cennamo and Gardner, 2008; Davis et al., 2006; Dries et al., 2008; Kowske et al., 2010).

Since generational differences can influence organizational performance, managing four generations at work has become a key topic for HRM practitioners. The challenges involved are multiple: transferring tacit knowledge from older to younger employees; reducing generational stereotypes in selection and performance management; attracting, retaining and developing talent in each generation; and adjusting the rewards to the needs of various generations (Lieber, 2010). These require a better understanding of the generational similarities, differences, characteristics, beliefs and values, but to achieve that we should also take context into consideration. For example, Benson et al. (2013) suggest that a model for clearer understanding of generational effects should include not only chronological age, but also the role played by location, culture, childhood socialization and technology.

**Migration.** Due to the dramatic growth of international population flows moving in search of better opportunities, lifestyles, jobs and incomes, the last decades have been characterised as a migration explosion (Bodvarsson and Van den Berg, 2013). People’s relocation on their own volition (or self-initiated expatriation) for work from less to more developed countries has become a widespread phenomenon (Al Ariss and Crowley-Henry, 2013).

The international migration of the workforce raises opportunities and challenges for societies, organizations and individuals. Destination countries and organisations benefit from immigration as immigrants may be valuable human resource for different reasons: they cover the lack of a local workforce; save time and resources relating to the education of required employees; increase cultural diversity; and bring knowledge about international markets and cultures (Ridolfi, 2000; Glinos, 2015; Goštautaité et al., 2018). Therefore, hiring immigrant workers may be a strategic option for countries and companies to overcome the shortage of specific skills or professionals (Ridolfi, 2000; West and Bogumil, 2000). However, organizations employing immigrants are facing specific challenges as the integration of foreign employees into the workforce demands more time, human and financial resources (e.g. language, induction courses). Moreover, immigrants are inclined to onward mobility and repatriation (Glinos, 2015).

Migration opens new opportunities for individuals as well, e.g., better economic possibilities, education and health care and religious freedom (Bodvarsson and Van den Berg, 2013), though emigration is associated with risks and challenges. At the beginning of the twentieth century, Robert Park (1928) noted that human migration leads to a situation in which the immigrant becomes the “marginal man” (p. 881) who has to live and behave in two different cultural groups. Nowadays, social and cultural issues such as language and
cultural barriers, recognition of home country education, loss of social and professional networks, lower social status and discrimination hinder immigrants’ skill utilization and integration in a host country labour market (Reitz, 2001; Eggenhofer-Rehart et al., 2018; Janisch, 2018; Bodvarsson and Van den Berg, 2013). Scholars have studied the acquisition and transfer of migrants’ social, economic and cultural capital in order to improve their careers in a foreign country (Al Ariss and Syed, 2011; Al Ariss et al., 2012; Crowley-Henry et al., 2016; Eggenhofer-Rehart et al., 2018). However, research about immigrant workers’ careers is still undertheorized and needs further investigation in different temporal and spatial contexts (Al Ariss et al., 2012).

This special issue

This special issue brings together the above three themes relating to demographic challenges in HRM, via the presentation of six papers on these topics.

Our first two papers look at generational diversity. First, Madan and Madan in “Attracting millennial talent: a signal theory perspective”, use signalling theory to investigate the criteria millennials use when they apply for a job. They focus at the early recruitment phase, looking at the value this generational cohort places on different parameters advertised by the potential employers in a job posting. This has extensive practical implications for the Indian context, where the study takes place, as it points at the decisive factors leading millennials – a significantly high proportion of the country’s population – to job application intent.

Our second paper “Changes in Chinese work values: a comparison between the one-child, social reform and cultural revolution generations” introduces the concept of childhood socialization to the generational discussion. Takeda, Disegna and Yang examine the unprecedented one-child generation, which has special characteristics when it comes to up-bringing, in relation to the previous generations in China, since “it has grown up being the center of attention of four grandparents and two parents”, as the authors say. Their findings are discussed under the prism of the socioeconomic and political conditions of the Chinese society.

Third, the paper of Stangej, Minelgaite, Kristinsson and Sigurdardottir “Post-migration labour market: prejudice and the role of host country education” addresses the role of host and foreign country education within the hiring decisions related to skilled immigrants. Using an online experimental research design, foreign- and host-country education was manipulated in order to evaluate Icelanders’ attitudes towards Polish and Icelandic job applicants’ education, experience and suitability for the job. The research findings revealed that Icelanders’ were prejudiced against Polish immigrants’ education acquired in a foreign country. The study suggests that education in a host country may reduce barriers to equal employment opportunities and facilitate immigrants’ integration in a host country’s labour market.

Our fourth paper, by Scheuer and Loughlin, “The moderating effects of status and trust on the performance of age-diverse work groups” uses a study of 59 work groups (56 supervisors and 197 employees) to test for the moderating effects of status congruity and cognition-based trust on the relationship of age diversity with work group performance. They find that both status congruity and trust positively moderate the link between age diversity and performance in groups. They propose that in organizations with high age diversity, group performance can be improved through status congruity and trust in practice with training, shadowing and skills’ open communication, with adjustments to the physical environment (open spaces) and by fostering a climate of distributive and procedural justice, as well as a collective identity of the group.

Fifth, Salminen, von Bonsdorff and von Bonsdorff in “Investigating the links between resilience, perceived HRM, practices, and retirement intentions” conduct a study on Finnish nursing professionals to explore their resilience levels and how these are connected with perceived HRM and their early retirement intentions, as well as their intention to continue
working after retirement age. They find that resilience partly mediates the relationship between perceived HRM and early retirement intention, while it fully mediates the relationship between perceived HRM and intention to work after retirement. They pinpoint the importance of practices that nurture resilience for older employees, such as fostering a strong culture, providing room for open communication and support during stressful situations.

Finally, Pahos and Galanaki in “Staffing practices and employee performance: the role of age” use cross-sectional data from a large-scale survey in Greece to explore how employee staffing effectiveness evolves according to employees’ age. They find significant positive effects of staffing and age on employee performance and a negative moderating effect of age on the relationship between selective staffing and employee performance and propose that the current practices of staffing are more effective in sustaining higher levels of employee performance for younger employees. They attribute this moderation to information asymmetry mechanisms, which older candidates are more able to manipulate, as a result of their longer experience.

We thank all authors and the many more anonymous reviewers for making this endeavour a reality and our Editor-in-Chief, Professor Thomas Lange and the editorial team at EBHRM for their trust in the proposed theme and constant support.

Eleanna Galanaki  
Department of Marketing and Communication,  
Athens University of Economics and Business, Athens, Greece

Emma Parry  
Cranfield University, Cranfield, UK

Ilona Bučiūnienė  
ISM University of Management and Economics, Kaunas, Lithuania, and

Leda Panayotopoulou  
Department of Marketing and Business Communication,  
Athens University of Economics and Business, Athens, Greece

References


Further reading

Attracting millennial talent: a signal theory perspective

Anishya Obhrai Madan
Training and Placement Unit, Indian Institute of Technology Delhi, New Delhi, India and HRM/OB Area, Management Development Institute, Gurugram, India, and Srishti Madan
Department of Electrical Engineering, Delhi Technological University, Delhi, India

Abstract

Purpose – On the basis of an exploratory research, the purpose of this paper is to identify the criteria used by new entrants to the workforce (specifically premium millennial talent) while making job choices.

Design/methodology/approach – Using signal theory, the study attempts to explore what drives prospective millennial candidates to apply to a particular job role by identifying the components that form the initial anticipatory psychological contract (iAPC) of millennial talent from a tier-1 technological school in India and the factors that drive their job application intent. It is an exploratory study which uses survey data from 335 respondents.

Findings – The study identifies the critical components of the iAPC of this set of talent. It highlights the transactional approach of this cohort to evaluate prospective job roles.

Research limitations/implications – This research is based on an exploratory study which was carried out in a single school in India and may be used as a concept for designing and implementing more generalized studies using standardized tools of measurement in the future. The study highlights the fact that this cohort attends to the transactional components of the signals sent out by recruiters to a larger extent than to other kinds of signals which may be communicated by employers. HR communication strategies for connecting with this set may emphasize the unique employment proposition to potential recruits using the findings from this study to better engage with this cohort.

Practical implications – The current research gives indications on the components of the iAPC for this cohort and would help HR form appropriate strategies to attract this set of talent.

Originality/value – This research takes a fresh line of reasoning to explain what parameters would drive fresher millennial talent to apply for a job at an organization. It views the group through a generational theory paradigm and signaling theory forms the backdrop for this study. Further, since the study is based on an Indian sample, it contributes to literature from a non-western context.

Keywords Gen Y, Signal theory, Job choice, Initial anticipatory psychological contract (iAPC), Job preferences, Millennial talent

Paper type Research paper

1. Introduction

With over 1.21bn people and more than a sixth of the world’s population, India is the second most populous country in the world after China. With 17.5 percent of the world’s population, India is projected to be the world’s most populous country by 2025 surpassing China, its population reaching 1.6bn by 2050 at present projected growth rates. India has more than 50 percent of its population below the age of 25 and more than 65 percent below the age of 35 (Registrar General, India, 2011; PTI, 2017; United Nations, 2017). It is expected that in 2020 the average age of an Indian will be 29 years, compared to 37 for China and 48 for Japan (Basu, 2007). India is thus a country with a predominantly young population compared to many developed nations which have aging populations.

Thus, managing this young workforce to unleash their productive potential gains importance. To this end, it becomes imperative to understand their motivations, ambitions and driving forces in the workplace and to design policies and processes to attract this talent pool and keep them engaged in the workplace.
A gap exists in literature on how HR engages with this generation from the pre-recruitment phase to keeping them engaged during their life cycle within the company. This led the researchers to explore this phenomenon in an Indian context. The sample frame consisted of high-potential graduates (from a premier technological school in India). The following general research question was explored in this study:

**RQ1.** What are the criteria used by this cohort while applying for jobs? What criteria affect their job application intent?

Specific research questions included:

**RQ2.** What factors make up the initial psychological contract of high-potential graduates?

**RQ3.** What factors are prioritized over others and influence the initial anticipatory psychological contract (iAPC) of this set while applying for jobs?

This study views the group through a generational theory paradigm and signaling theory forms the backdrop for this study. It corroborates many previous studies while also pointing to some surprising trends.

## 2. Theoretical framework

### 2.1 Generational theory and millennials

The generational hypothesis states that a generation’s (including millennials’) expectations from work and life are determined by the characteristics of their generational cohort. A generational cohort can be defined as an “identifiable group that shares birth years, age, location and significant life events at critical developmental stages” (Kupperschmidt, 2000, p. 66). Each generation is purported to develop characteristics that differentiate it from those that precede and follow it; characteristics that are reflected in personality traits, work values, attitudes and motivations to work in ways presumed to be important to managers (Macky et al., 2008). Young adulthood is a particularly impressionable developmental stage (Mannheim, 1952; Ryder, 1965). From adulthood onward, these personalities, values and expectations remain stable (Smola and Sutton, 2002).

The millennial generation/Generation Y (born between 1980 and 2000, the newest to enter the workforce) has been entering the workforce in large numbers, which has given them the power to reshape the rules of play at work (Smola and Sutton, 2002; Thompson and Gregory, 2012; Twenge and Campbell, 2008). As a result, practitioners have become increasingly interested in this new generation. They are interested in how organizations can successfully manage their (future) employment relationship with millennials by focusing on their work values, motivational drivers and career expectations (Cennamo and Gardner, 2008; Dries et al., 2008; Smola and Sutton, 2002; Thompson and Gregory, 2012; Wong et al., 2008). This led the researchers to investigate the driving factors affecting the job application intent of millennial talent at the stage of pre-entry to the workforce.

### 2.2 Signal-based context and job application intent

Signaling theory is fundamentally concerned with reducing information asymmetry between two parties (Spence, 2002). For example, Spence’s (1973) seminal work on labor markets demonstrated how a job applicant might engage in behaviors to reduce information asymmetry that hampers the selection ability of prospective employers. Spence illustrated how high-quality prospective employees distinguish themselves from low-quality prospects via the costly signal of rigorous higher education. Potential employers lack information about the quality of job candidates. The candidates, therefore, obtain education to signal their quality and reduce information asymmetries, i.e., he de-emphasizes the role of education for increasing worker productivity and focuses instead on education as a means to
communicate otherwise unobservable characteristics of the job candidate (Drover et al., 2018; Weiss, 1995).

Rynes (1991) describes how job applicants use signals from recruiters to draw conclusions about facets of organizational quality. Recruitment researchers have argued that job seekers often have little information about recruiting organizations, so they rely on signals that they receive from whatever information they do have to make inferences about working conditions and other organizational characteristics (Drover et al., 2018; Rynes, 1991; Rynes and Miller, 1983). Research shows that recruitment experiences do indeed provide signals that affect job seekers’ attitudes and choices (e.g. Cable and Turban, 2003; Jaidi et al., 2011; Rynes et al., 1991).

Different applicants may not have the same concerns about their potential employers as they attend to different signals or interpret the same signal differently (Highhouse et al., 2007). Receivers may apply weights to signals in accordance with preconceived notions about importance or cognitively distort signals so that their meanings diverge from the original intent of the signaler (Branzei et al., 2004; Drover et al., 2018; Ehrhart and Ziegert, 2005). Stiglitz (2002, p. 473) observed that some individuals wish to convey information and others wish not to have information conveyed, but “in either case, the fact that actions convey information leads people to alter their behavior, and […] this is why information imperfections have such profound effects.” Signaling theory provides a unique, practical and empirically testable perspective on problems of social selection under conditions of imperfect information (Connelly et al., 2011; Drover et al., 2018).

Each signal-based context reflects something that job seekers and employees value and desire from their employment experience. Given that people are motivated to pursue favorable outcomes (Vroom, 1964), these signal-based mechanisms help to explain what signals job seekers look for while applying to organizations.

All the above are explored by the researcher in the current study under the variables of employer attractiveness (the signal) and the initial anticipated psychological contract (the receiver’s interpretation of the signal) which leads to the action of exercising choice by applying for a particular job profile (Figure 1). Since the study is carried out in a premier technological school in India, the quality of applicants based on education achieved has been taken as a control variable.

3. The model detailed
3.1 Employer attractiveness as the signal
Job search is a dynamic decision-making process where job and organizational attributes affect final choice (Boswell et al., 2003; Madan and Bhatnagar, 2014; Madan, 2017; Montgomery and Ramus, 2011; Rynes and Barber, 1990). These attributes are dominant because they have a direct positive effect on applicants’ attraction to the firm and influence the decision to accept or reject a job offer (Turban et al., 1998).

Among the various signals sent by an organization are signals about the organization’s prestige, specific values and prosocial orientation. Further, a tight labor market gives highly competent employees many choices (Clarke, 2001; Jaidi et al., 2011) especially in professional, information/knowledge based, technical and service-driven organizations (Ewing et al., 2002; Inkson and King, 2011; Ployhart, 2006). Further, highly educated graduates are often

Figure 1.
Proposed conceptual model
exposed to recruitment practices of many different organizations and have multiple job pursuit options (Barber, 1998) and can choose their preferred employer (da Motta Veiga and Turban, 2018; Jaidi et al., 2011). This underlines the requirement that an organization has to proceed by finding out what differentiates it from the competitors and then market the unique employment proposition it can offer (Breau, 2017; Drover et al., 2018; Ewing et al., 2002; Keefe, 2007).

There is an asymmetry of information regarding the actual work experience at an organization as well as the skills and competencies of the prospective candidate. Any information that job seekers examine builds their impressions of the hiring organization and can become important cues for what it would be like to work for that organization, including individuals’ attraction to join the organization (Drover et al., 2018; Rynes et al., 1991; Turban, 2001). Hence, HR strategists are employing various strategies to ensure their job profiles appear in the preference lists of potential employees by highlighting the sum of benefits and culture of working with the organization while conveying the unique value proposition of the organization as an employer in an attempt to increase employer attractiveness to potential recruits.

3.2 Anticipatory psychological contract (APC) as a frame for signal interpretation

Individual career expectations can be understood from the prism of APC (Rousseau, 1995). The APC is defined as individuals’ pre-employment beliefs about their future employment, including promises they want to make to their future employers and inducements they expect to receive in return (Anderson and Thomas, 1996; De Vos et al., 2009). This contract is thus an overall set of expectations that an applicant holds with respect to his/her potential contributions to the organization and the organization’s potential response to these contributions (Rousseau, 1990).

Nelson and Quick (1994) suggest that individuals expect to receive salary, status, advancement opportunities and challenging work to meet their needs while organizations expect to receive time, energy, skills, competences, talents and loyalty from the graduate. Inkson and King (2011) contend that individuals look at their careers through the lens of personal advantage, and consider how their careers may provide opportunities to optimize earnings, status, personal development and family life, both immediately and in the long term, while organizations consider those careers through the lens of organizational advantage, and as a means of maintaining or enhancing expertise, corporate culture and institutional memory as sources of long-term competitive advantage. The point at which these converge would form the backdrop for successful individuals’ careers in specific organizations.

The APC is thus formed during the anticipatory socialization stage, i.e., the period which precedes organizational entry during which future employees develop expectations about what their new role will be (Feldman, 1976; Louis, 1980; Tomprou and Nikolaou, 2011). The APC is an imperfect schema about the future employment deal that enumerates the promises employees want to make to their future employer and the inducements they expect in return (Anderson and Thomas, 1996). It develops independently from the specific context of an employment relationship (Eilam-Shamir and Yaakobi, 2014). The APC is the lens through which employees view their future employment relationship and evolves with each new piece of information about the organization (Tomprou and Nikolaou, 2011). Individuals approach their future organization with career motives that will affect the saliency of the obligations that form part of their psychological contract (Rousseau, 1995; Shore and Tetrick, 1994; Sparrow, 1996).

This would impact the way an individual evaluates, prioritizes and applies to job profiles. Millennials’ expectations regarding employer inducements are extremely high (Smola and Sutton, 2002; Twenge and Campbell, 2008). A discernment of this understanding of the iAPC can thus serve as a foundation to manage the employee–employer relationship over time (Sherman and Morley, 2015).
This study is an attempt to research, enumerate and identify the critical components of the iAPC for millennials at the cusp of deciding which job profiles advertised by employers during campus placement season they wish to consider while applying for jobs (job application intent) at the pre-entry stage to an employment relationship when expectations from career and work are still in the formation stage. This is still a greenfield area of research within APC literature.

Let us examine the various factors influencing job choice and hence the components of the iAPC in millennials as enumerated in literature.

3.2.1 Components of APC in millennials. The empirical research of Jurgensen (1978) has been conducted on job seekers’ preferred job attributes. Millennials have been brought up in the era of globalization, employment outsourcing, foreign investments and a proliferation of information and communication technologies (Krywulak and Roberts, 2009). They are more globally educated, view themselves with confidence, assertiveness and entitlement, are highly optimistic, goal-oriented and idealistic (Chen and Choi, 2008). They like to voice their opinions and are work-oriented. They are connected 24×7 on social networking sites and are technologically adept. They are perceived to be healthier and more economically secure than any earlier generation (Raines, 2003; Deloitte, 2017). They have high expectations of self and employers (Armor, 2005) and believe in work-life balance. They have thus been brought up in an environment of changing family structures and rapidly evolving socioeconomic and technological times. They are used to a fast pace of change.

Studies reveal that Generation Y/the millennial generation prefers a positive work environment and stimulating work that offers opportunities for advancement and long-term career progression, invested in training and development and allowed variety in their daily work (Eisner, 2005; Broadbridge et al., 2007; Terjesen et al., 2007). Millennials highly value mentoring and training within organizations because it will allow them to continuously develop new skills and remain attractive on the labor market (Loughlin and Barling, 2001; Sturges et al., 2002).

Millennials have low expectations regarding job security, although they still highly value it (Dries et al., 2008). Millennials realize that lifelong employment and organizational security are rare in today’s workplace. Therefore, millennials take a more proactive approach toward their own security by enhancing their employability in the labor market (Tomlinson, 2007). Gen Y has an unorthodox approach to career management that does not parallel traditional paths. Job jumping every two years in search of greater compensation or purposeful work is the norm due to a boundaryless view of career and an awareness of their sought-after technological expertise (Zemke et al., 2000). Security is valued by younger workers, but is defined as career security whereby they build portfolios of transferable skills permitting them to change jobs (Lancaster and Stillman, 2002). Millennials increasingly expect meaningful and challenging jobs that yield learning opportunities and help them advance their careers (Dries et al., 2008; Deloitte, 2017; Inkson and King, 2011; Rawlins et al., 2008).

Millennials show a preference for intellectual challenge before geographic area and financial package (Montgomery and Ramus, 2011). They also have a strong need for independence and autonomy (Bush et al., 2004; Cennamo and Gardner, 2008). Used to taking part in family decisions, they are ready to provide inputs in the workplace, thus encouraging a collective management style and a supportive culture (Eisner, 2005; Broadbridge et al., 2007).

Millennials have high expectations regarding work-life balance, particularly young graduates preparing to enter the job market (Eisner, 2005; Cennamo and Gardner, 2008; Smola and Sutton, 2002), and look for personal enjoyment (Broadbridge et al., 2007). The millennial generation attaches more importance to freedom-related work values – i.e., work-life balance and autonomy – than did previous generational cohorts. Millennials have high expectations regarding their social connections at work and prefer a psychological contract that stresses social involvement (Cennamo and Gardner, 2008). Millennials score
higher on the affiliative trait than does any other generational cohort and that they are strongly motivated by a cooperative workplace (Wong et al., 2008).

The literature gives mixed results when we examine Generation Y's salary expectations. Some researchers suggest that they consider salary less important than other attributes, such as a fulfilling private life (Eisner, 2005; Matuson, 2013), while others suggest that it is a major concern (Lowe et al., 2008; Qenani-Petrela et al., 2007). Although meaningful work and career satisfaction are rated more important than financial rewards, studies show that salary is still an important work value that helps to determine career success for all generations (Dries et al., 2008).

With Gen Y declared “the most entrepreneurial generation in history”; characterized as entrepreneurial and independent; digitally savvy; rejecting micromanagement; and valuing empowerment, challenge and excitement (Izzo, 2002), organizations are confronted with the added weight of convincing young workers that working for a corporation has greater appeal than self-employment. Gen Y brings an impressive, portfolio of academic credentials and requisite skills in technology to the workplace along with lofty expectations for fast-track promotion, raises, perks, independence, flexible work arrangements, a need for fun (Zemke, 2001) and meaningful work that adds value to the organization’s strategic direction (Rekar-Munro, 2009). They expect continuous recognition and daily feedback. They also call for managerial support as well as clear and comprehensive instructions, yet seek autonomy to chart the path and pace for achieving goals (Yeaton, 2008). Given their pressing sense of immediacy and impatience, Gen Y is unlikely to be enticed by promises of distant pay raises and promotions (Lancaster and Stillman, 2002).

Longitudinal studies reveal that millennials’ expectations related to job content, career development, training, financial rewards and job security are affected by generational influences, while their expectations related to work-life balance and social atmosphere are affected by contextual influences (Deal, 2007; Macky et al., 2008; Smola and Sutton, 2002). Furthermore, results indicate a positive relationship between millennials’ level of optimism about their opportunities on the labor market and their expectations regarding job content, career development, training, financial rewards and social atmosphere especially in emerging markets (Deloitte, 2017) like India.

3.2.1.1 The case of Indian millennials. Various authors have described Indian millennials as ambitious, emphasizing financial reward, entrepreneurial, having business savvy, technologically capable and adept. Ghosh and Chaudhuri (2009) call them the Y2K generation. They find that chief among Gen Y’s intrinsic motivators are equitable pay, responsibility and independence and achievement. Leading extrinsic motivators are considerate and sympathetic supervisor, restricted hours of work and sound company policies and practices. Gen Y looks for a company that invests in them by providing them with challenging learning opportunities on the job, training programs and the latest technology, an informal organizational culture with a “fun” working environment, supportive and approachable leaders, quick promotions and recognition of efforts and early exposure to all that the job has to offer. In return, the career-oriented Gen Yer is ready to work hard, longer hours, but is committed to the work rather than the organization.

Saxena and Jain (2012) found “Millennial don’t live to work, they work to live.” The Generation Y professionals generally aspire for brand identity, competence and a sense of service. They are motivated when they have an empathetic supervisor, good work-life balance, sound company policies and equitable pay. The Indian Generation Y places a high value on achievement in both the work and the social environment. They love to ask questions and despise unnecessary procedure and processes. A generation with a strong sense of social concise and purpose, it never loses an opportunity to create their own identity and space. The strong work ethic and an ability to learn rapidly and adapt are some of the attributes that make Generation Y employees highly valuable assets for an organization.
Singh et al. (2012) found that Indian millennials value personal growth, self-fulfillment, progressive orientation and community development in that order. On the other hand, HR professionals perceive millennials as energetic and enthusiastic, techno-savvy, curious, open to learning, creative but also as ambitious, over-confident, with a low respect for authority, materialistic, “Me” generation and entitlement centric.

Another study attempted to identify the critical factors being considered by millennials while making job choices and identified the interplay of critical organizational factors, job characteristics and the psychographic profile of the applicant (Madan and Bhatnagar, 2014). Thus, many of the drivers for Indian millennials appear to be similar to those found in other contexts. This also underlines the need for HR to understand and manage the career aspirations of Generation Y at the workplace.

The current study led the researchers to explore this phenomenon in an Indian context.

4. Methodology

4.1 Research design

An exploratory study was carried out in a leading technological school in India to investigate job preferences of millennials in a pre-placement situation. A questionnaire on work preferences was administered to a population of 1,000 under-graduate and post-graduate students at a premier technological school at the time they were applying for campus placement jobs. Voluntary sampling method was used for data collection.

The study used a mix of survey and open-ended questions for gathering data to identify the critical components going into the decision of whether or not to apply to a job available.

The current study was exploratory in nature with a non-experimental research design. It followed a descriptive mode of data gathering. Content analysis was used for analysis of the open-ended part of the questionnaire, while a weighted frequency analysis was used for the inventory scale. The individual respondent was the unit of analysis.

Validation of the inferences made on the basis of data from one analytic approach demands the use of multiple sources of information. If at all possible, the researcher should try to have some sort of validation study built into the design. In research, validation takes the form of triangulation. Triangulation lends credibility to the findings by incorporating multiple sources of data, methods, investigators or theories (Erlandson et al., 1993). The use of different kinds of data (from open-ended survey responses as well as the inventory) was done to triangulate the findings of the research.

4.2 Sample

To fulfill validity requirements, the same group answered both kinds of questions. This is supported by the study of Diamantopoulos and Inglis (1998) which highlights that this helps in controlling specification and in balancing the familiarity of the respondents with specific issues. For reliability and consistency, similar study protocol as desired by Ashill et al. (2003) was used.

An online survey questionnaire was sent out (via e-mail) to 1,000 final year students (both under-graduate and graduate) of a leading technological school in India who would be appearing for campus placement interviews. These students had no prior full-time work experience. For the purposes of the current study, the entire set of respondents is treated as homogeneous. The questionnaire was administered about a month prior to the start of campus interview processes around the same time as the start of application processes to companies visiting the campus. Participation was completely voluntary. In total, 335 completed, valid responses were received. Thus, the response rate was 33.5 percent.
4.3 Analytic construct and measurement

This study attempts to capture impressions of the millennial generation in a pre-placement scenario to capture the job application intent of millennials while evaluating and applying for jobs advertised by employers during campus placement season.

To this end, a questionnaire containing a mix of open-ended questions to capture the critical components going into the decision of applying for a particular job profile at a particular organization as well as an inventory of 25 items culled out from the literature review above; of which the respondents were asked to pick the top 5 in their order of priority was administered.

There are two approaches to coding data that operate with slightly different rules. With emergent coding, categories are established following some preliminary examination of the data. When dealing with a priori coding, the categories are established prior to the analysis based upon some theory. Professional colleagues agree on the categories, and the coding is applied to the data. Revisions are made as necessary, and the categories are tightened up to the point that maximizes mutual exclusivity and exhaustiveness (Weber, 1990). For purposes of the present study, we used both thematic a priori and emergent coding using conceptual analysis as the basis for content analysis.

The inventory was based on respondents picking out the top 5 criteria from the 25 listed (thematic a priori coding). This corresponds with an ordinal system of measurement. The content analysis of the open-ended questions yielded nominal data corresponding to the themes already identified in the inventory (thematic a priori coding) as well as a few new ones (emergent coding) (see Table I).

Content analysis was carried out on the open-ended part of the questionnaire and dominant themes were identified. These were then collated for all the respondents to arrive at loadings for each factor as culled out from the content analysis. Content analysis has been defined as a systematic, replicable technique for compressing many words of text into fewer content categories based on explicit rules of coding (Berelson, 1952; GAO, US, 1996; Krippendorff, 1980; Weber, 1990). It also allows inferences to be made which can then be corroborated using other methods of data collection. Content analysis extends far beyond simple word counts. Table I lists the 25 inventory items as well as the constructs which emerged from content analysis of the open-ended questions. In total, 15 new codes emerged making a total of 40 codes after the content analysis.

To triangulate the data, the responses from the open-ended part of the questionnaire and the inventory were analyzed. The responses received to the 25-item inventory were collated using a weighted frequency analysis paradigm. Preference 1 (highest preference) was given a value of 5, 2 a value of 4, 3 a value of 3, 4 a value of 2 and 5 (lowest preference) a value of 1. All values for each preference were aggregated to arrive at the loading of each factor for the group. The responses of the open-ended part of the questionnaire were collated with each factor identified through content analysis being given a weight of 1, i.e., simple frequency analysis was done. The loadings from each set of responses were collated and are presented in Table I.

5. Statistical analysis and results

To test the concordance of the rankings within sample, the statistic of Kendall’s test of concordance was used. This is a measure of agreement among raters. The value for Kendall’s $W$ on the inventory scale was 0.0089 while that for the open-ended questions was 0.0002. This shows that the respondents form a random sample with virtually no inter-respondent concordance.

A simple correlation analysis between the simple frequency count of responses between the inventory and the open-ended questions as well as the weighted frequency of the inventory and responses to open-ended questions both yielded a value of 0.88. This suggests the existence of a significant relationship between the responses from the inventory and open-ended questions suggesting that respondents are giving similar responses to both sets of questions.
Table I shows that top 5 ratings were given to compensation, career progression, location, role and fun at work based on the inventory responses (both weighted and simple frequency). In the open-ended part of the questionnaire, the top 5 rated criterion included compensation, career progression, location, role and work culture.

Optimal scaling of the respondent data from both the inventory data as well as the open-ended questions was done for dimensional reduction using SPSS. In optimal scaling/multi-dimensional scaling, a set of proximities between objects is approximated by a set of distances in a low dimensional space. These methods help reduce the observed variables to a smaller set of principal components/dimensions which explain most of the variance in the data. Another advantage of these methods is that they can handle nominal and ordinal data and discover non-linear relationships between variables and are apt for exploratory research.
Principal components analysis (PCA) for categorical data, an optimal scaling method, was carried out on the inventory data (ordinal data set) using the CATPCA function of SPSS. PCA focuses on the joint representation of respondents and variables in a low dimensional space (Linting et al., 2007; Meulman et al., 2004). From the output matrix of 25 variables, we found that compensation, career progression and location seem to be the critical components of the iAPC (with a component score greater than 0.5). Based on the output from the PCA and the Cronbach’s α scores (Table II), the total variance accounted for by these three variables is 28.816.

The response matrix from the open-ended questions was analyzed using multiple correspondence analysis (MCA), another optimal scaling method. This is analogous to PCA above and is suitable to analyze nominal data with more than two categorical variables (Hair et al., 2010; Husson and Josse, 2014). This was also done using SPSS. From the output matrix of 40 variables, we can infer that compensation, career progression, location, role and work culture seem to be the critical components of the iAPC (with a component score greater than 0.5). Based on the output from the MCA and the Cronbach’s α scores (Table III), these five dimensions account for 28.04 percent variance in the data.

A frequentist analysis of the responses on each of the critical dimensions identified above from the inventory data is presented in Table IV. This highlights the progression orientation...
of this set of respondents since 97 of them chose progression as their highest preference. This is followed by compensation and then location.

6. Discussion

6.1 Research findings

Based on the above analysis of the top criteria being considered by premium millennial talent in India while deciding on which jobs to apply to leads us to see that they possess a strong progression orientation (Petrucelli, 2017). This is closely followed by compensation as a top criteria in the application decision followed by location. This points to the transactional component of the iAPC being more critical for this set (Eddy, 2016; Zupan et al., 2017).

A systematic literature review reveals sparse and inconsistent literature on the millennial generations’ expectations vis-à-vis a future employer especially in the Indian context. This study attempts to fill this gap. Thus, this study supports findings of many previous authors that compensation and financial reward is a major criterion in job preferences (Ghosh and Chaudhuri, 2009; Lowe et al., 2008; Qenani-Petrela et al., 2007; Saxena and Jain, 2012). It also endorses the view that this generation has a strong progression orientation and growth in the career is important to them (Broadbridge et al., 2007; Eisner, 2005; Petrucelli, 2017; Singh et al., 2012; Terjesen et al., 2007).

This study also brings out the criticality of transactional components of the APC to this cohort at this stage of their career. This has also been found to be the case in another study on what millennials look for in recruitment advertisements (Eddy, 2016), as well as one on millennials from transition vs developed economies (Zupan et al., 2017) and can be extrapolated to economies like India.

A new component, i.e., location, has been highlighted in this study. Thus, this cohort looks for progression with a good compensation and benefits structure at a convenient location while deciding on which job profiles to apply to.

6.2 Theoretical contributions

This study adds to theory by identifying the critical components of the iAPC of premium millennial talent from an emerging market like India at the stage of entry into the workplace. No similar study known to the authors has been carried out and thus, this is a contribution to literature on attracting millennial talent and the literature on APC. Literature on APC and how it evolves based on feedback of people already in a work environment is available but the APC of individuals at a pre-entry stage to the world of work is a greenfield area of research. This is a stage when the schema of what the work environment would be and what to expect is still being formed and thus, it is increasingly important to study this both from a theoretical and practitioner perspectives. The current study attempts to enumerate the critical components of the APC of this cohort. Since the individual applicant is the unit of analysis in this study, it is unique in that it attempts to bring out the critical components of this equation from the perspective of applicants. This would help extend understanding of how premium talent within this generation views signals from organizations and which are prioritized over others by them while attempting to make career choices.

The interdisciplinary approach of the study attempts to draw on economic theory as well as psychological theory to extend our comprehension of individual career decisions. It is a modest contribution to the interdisciplinary field of “career studies.”

6.3 Practical implications

HR strategies which address the key criteria identified in this study would be more effective in attracting this talent pool. As HR practitioners look at innovative ways to engage with and attract this cohort into the workforce of their organizations, this study attempts to serve
as a modest contribution to fill the need to understand the psychographics of this generation. Understanding the psychographics of this generation would help HR frame policies to engage with this cohort more effectively.

In this age of hyper-competition, as organizations compete for talent – especially premium talent, the signals they send out to potential recruits needs to be customized to the cohort it is addressed to. Since “One Size” may not “Fit All,” this study attempts to extend the understanding on millennial talent by documenting the bases of job application intent of premium talent within this generational cohort. The study highlights the fact that this cohort attends to the transactional components of the signals sent out by recruiters to a larger extent than to other kinds of signals which may be communicated by employers. HR communication strategies for connecting with this set may emphasize the unique employment proposition to potential recruits using the findings from this study to better engage with this cohort. By targeting HR strategies and communication geared to this cohort, HR may be better positioned to attract, engage with, deploy and utilize this critical talent pool for enhancing the long-term competitive advantage of their organizations.

6.4 Limitations and scope for future research
This study indicates the need for further research on the Millennial Talent pool especially one seen as “Premium Talent” at the cusp of entry to the world of work from academia. This research is based on an exploratory study which was carried out in a single school in India and may be used as a concept for designing and implementing more generalized studies using standardized tools of measurement in the future. It is a modest contribution to the existing literature in career theory from a non-western, emerging economy context.

References


Berelson, B. (1952), *Content Analysis in Communication Research*, Free Press, Glencoe, IL.


**Corresponding author**
Anishya Obhrai Madan can be contacted at: anishya.madan@gmail.com

---

For instructions on how to order reprints of this article, please visit our website: [www.emeraldgrouppublishing.com/licensing/reprints.htm](http://www.emeraldgrouppublishing.com/licensing/reprints.htm)

Or contact us for further details: permissions@emeraldsight.com
Changes in Chinese work values
A comparison between the one-child, social reform and cultural revolution generations

Sachiko Takeda
Department of Leadership, Strategy and Organisations,
Bournemouth University Business School, Bournemouth, UK

Marta Disegna
Department of Accounting, Finance and Economics,
Bournemouth University Business School, Bournemouth, UK, and

Yumei Yang
Department of Leadership, Strategy and Organisations,
Bournemouth University Business School, Bournemouth, UK

Abstract
Purpose – The purpose of this paper is to investigate the changes in Chinese workers’ values by comparing the work-related values of the One-Child Generation (OCG), the Social Reform Generation and the Cultural Revolution Generation.

Design/methodology/approach – A survey was conducted with 918 Chinese employees, the vast majority of them working for Chinese domestic firms in Guangzhou, Shaoguan, and Harbin. The collected data were analysed mainly using ANOVA, Tukey’s pairwise comparison and Kruskall–Wallis tests.

Findings – The OCG was found to place less importance on income and job security, while possessing higher tolerance towards the practice of nepotism, than the older two generations. The authors found no significant differences in the levels of intrinsic values and altruism among the three generations. Additionally, the results indicate overall low altruistic values and high extrinsic values across all three generations of Chinese workers.

Originality/value – China’s unprecedented generation of only-children as workers is an unknown factor. It is only now, over a decade after the OCG first entered the job market, that a comparative study between their work values and those of previous generations has become possible. This study exploits the momentum and is one of the first studies to include the OCG in the investigation of work value changes in Chinese society.

Keywords China, Pay, Work values, Nepotism, Guanxi, Altruism, Generation, Job security, Aging, Intrinsic values

Paper type Research paper

Introduction
As many industrialised countries face aging populations (Galanaki and Papalexandris, 2017), researchers point to the importance of investigating the effects of aging on work values (Twenge et al., 2010). This has been reflected in studies of aging (or generational effects) on work values and attitudes (for literature and meta-analytic reviews, see Ng and Feldman, 2010; Twenge, 2010; Kooij et al., 2011). However, the majority of these works are based on western samples (Cennamo and Gardner, 2008).

Despite the country’s increasingly important position in the global market, studies that empirically investigate Chinese work values are limited in number (e.g. Chiu et al., 2002; Ralston et al., 2008; Wang et al., 2010; Yang, 2011), and very little research has been conducted on the aging or generational effects on Chinese work value changes (for exceptions, see Ralston et al., 1999; Egri and Ralston, 2004; Yi et al., 2010).

China ended its one-child policy at the beginning of 2016. However, the policy, which lasted over three and a half decades since 1979, has created an artificially aging society – as the society consequently has fewer younger persons and is, therefore, aging fast – with a generation of so-called “little emperors” (Mcloughlin, 2005). Although research has been...
conducted on the characteristics of these only-children, very few, if any, studies have investigated the work values of the One-Child Generation (OCG) and examined how they differ from previous generations. It is only now, over a decade after they first entered the job market, that a comparative study on their work values is possible. This study exploits this momentum and investigates generational differences in Chinese employees’ work values.

Background discussions

Work values

Work values refer to “the outcomes people desire and feel they should attain through work” and “shape employees’ perceptions of preferences in the workplace” (Twenge et al., 2010, p. 1121). Various work values, such as intrinsic, extrinsic, social, affiliative, growth, security and leisure, are discussed in the literature (Twenge et al., 2010; Kooij et al., 2011). This study predominantly focuses on intrinsic and extrinsic values as the difference between these has been identified as one of the most basic and persistent work value distinctions (Ryan and Deci, 2000; Twenge et al., 2010).

Extrinsic work values are connected to tangible rewards external to the individual. One takes action in expectation that it leads to a distinct outcome, such as income, promotion or security (Ryan and Deci, 2000). In contrast, intrinsic work values satisfy needs directly and stem from the intangible rewards internal to the individual. One takes action because an activity is inherently interesting and enjoyable, and is connected to, for example, growth, autonomy and creativity (Schwartz, 1999; Ryan and Deci, 2000).

Besides the intrinsic/extrinsic dichotomy, Kooij et al. (2011) present another set of value measurement categories, which include social and security values. Schwartz (1999) links social values with the wider core values of contribution to society. These relate to altruistic work values, which include the desire to “help others and society through work” (Twenge et al., 2010, p. 1124). Social values (or altruism) can also be understood as one component of intrinsic values (Twenge et al., 2010) while security values are more associated with extrinsic values.

From extrinsic values, the current study focuses on income and job security, examined separately. This study will not include promotion in the hypothesised investigation. This is because one of the three generations examined in the study is much closer to the retirement age and for them promotion, therefore, would not have the same significance as for the other two generations. This study also examines intrinsic values (interesting work) and altruism separately. Although altruism could be understood as one component of intrinsic values, it may have different significance for Chinese workers as will be discussed later. Additionally, the values related to guanxi and favouritism will be examined, as such values play a key role in governing human behaviour in Chinese business and society at large (Kim et al., 2013).

Life-span approach

The life-span approach “advances the possibility for behavioural change at any point in the life cycle” (Sterns and Miklos, 1995, p. 259). Life-span theories posit that person-environment transactions “help shape the person-situation context in which motivation takes place” (Kanfer and Ackerman, 2004, p. 441). Schooling experience, for example, may contribute to the formation of work values whereas value differences may condition job choices and career paths. Kanfer and Ackerman (2004) identify intraindividual change trajectories based on the nature of change across the life-span. They propose that older workers’ work values are impacted by age-related changes on the effort-utility function, which is determined by the predicted amount of effort required for the requisite performance. This may point towards a reduced effect of extrinsic values on older adults. To motivate older adults,
reducing the amount of effort demanded from them may be more effective than offering large incentives for increased effort (Kanfer and Ackerman, 2004).

Within the life-span theory, socioemotional selectivity theory (Carstensen et al., 1999) posits that when people age and increasingly perceive time as limited, their value-related goals shift from those linked to knowledge acquisition and consequent horizon expansion to those related to the regulation of emotional states. Older people are, therefore, more likely to attach greater importance to experiencing meaningful social ties and finding meaning from life (Carstensen, 2006). This phenomenon has also been studied using generativity theory (Erikson, 1995). The latter proposes that persons in middle age begin to develop the feeling of care for others which relates closely to altruistic and prosocial values.

Generational differences
A cohort shares certain experiences at different life stages, and the events occurring at younger developmental stages strongly influence work values. This adds to the work value differences between older and younger workers, which derive from life-span effects. Such differences signify generational (or cohort) characteristics. A “cohort” is defined as “the total population of organisms born at the same point or interval in time” (Schaie, 1965, p. 93). “Generation” is used to refer to cohorts who share not only birth years but also “significant life events at critical developmental stages” (Kupperschmidt, 2000, p. 66). Although these two terms are at times used interchangeably, the current study uses “generation” as a term that connotes the influences of life events. The latter include changes in policies, economies and social movements, which all may have an impact on generational characteristics (Kupperschmidt, 2000).

Generations in China
Over the last half century alone, people in China have experienced a series of critical life events including economic and policy changes. Based on the generally agreed values formation framework that most of one’s values are fixed by the late teens (e.g. Inglehart, 1997), Ralston et al. (1999) identify a logical segmentation of three generations, with consideration of China’s political history. The first one comprises those individuals who grew up in the era of Social Reform (1977–present). The second one is formed by those individuals who experienced the Great Cultural Revolution (1966–1976) in their adolescence. The third one consists of those individuals who experienced the Communist Consolidation (1949–1965).

Building on this segmentation, we reviewed the economic situation as well as political orientation of China in the last half century and have identified three generations. The first generation is formed by individuals who experienced the Great Cultural Revolution (1966–1976) in their adolescence. In their youth, many of them were sent to the countryside to take up farming instead of going to school, and the lack of education has caused hardship in their working lives (Chen, 1999). In this study, we call this cohort the “Cultural Revolution Generation” (CRG). The subjects in this group are born between 1950 and 1964.

The second generation is formed by individuals who spent their youth during the era of Social Reform, being born between 1965 and 1981. We refer to this group as the “Social Reform Generation” (SRG). This is the generation who experienced significant economic, social and labour policy changes in their youth as the country joined the global economy in the 1980s. Under the leadership of Deng Xiaoping, the socialistic egalitarian approach was taken over by the new, pragmatic approach to economic modernisation. “Special economic zones” were designated, and those who could were encouraged to gain wealth first, consequently tolerating income disparity and polarisation for the sake of rapid economic growth (Kwong, 1994). As this generation started to enter their working lives, an
individual’s freedom to select a job became granted (Zhu and Dowling, 2002), and all firms were required to base their employment on labour contracts (Ding et al., 2000).

The third generation are those born under the Fundamental National Policy of 1979, which restricted every family in urban areas to only one child (Yi et al., 2010). As it was not until 1982 that the policy was instituted with systematic incentives and penalties (Mcloughlin, 2005), we take the beginning of this generation as 1982 and call this cohort the One-Child Generation (OCG). This generation has grown up being the centre of attention of four grandparents and two parents – the perilous 4-2-1 indulgence (Shao and Herbig, 1994) – and are often considered to be self-centred and materialistic (Mcloughlin, 2005). At the same time, they bear all the expectations of their families and are under acute pressure to be successful in school and in life (Belk, 2002). The OCG is new and unique to China. Thus, observing the development and values of this “Spoiled, One-Child” generation as they enter the business world is of particular interest (Ralston et al., 1999, p. 425).

These generation cut-off points differentiate the current study from others, enabling it to focus on the OCG as a new cohort. The study by Chen and Lian (2015), for example, examines the work value differences in generations of Chinese employees of the transitional generation (born between 1967 and 1978) and the millennial generation (born between 1979 and 1990). However, in order to focus on the OCG, the cut-off point of 1982, which the current study uses, is more suitable. This is because, as previously mentioned, although the one-child policy was introduced in 1979, it was not until 1982 that the policy was applied evenly across the country (Mcloughlin, 2005). Therefore, some millennials may not be only children, making the cut-off point of 1982 more appropriate for a more accurate study of the OCG’s work values.

**Hypotheses development**

**Intrinsic values – interesting/enjoyable work**

The aforementioned socioemotional selectivity theory posits that older people are more likely to attach greater importance to inner significance and meaning (Carstensen, 2006). The meta-analysis by Kooij et al. (2011) demonstrates that intrinsic work-related values become stronger with age, supported by the study results of Inceoglu et al. (2012) and Ng and Feldman (2010). However, these studies are predominantly based on western context, and the unique circumstances surrounding Chinese workers may have differentiated their pattern of age-related work value change from those observed in the west.

Intrinsically motivated employees find their work genuinely interesting and enjoyable (Ryan and Deci, 2000). However, the concept of interesting work may have been rather alien to the majority of, and especially older, Chinese workers (Fisher and Yuan, 1998). Until the early 1990s, Chinese workers were not given choices of occupations. Jobs were assigned to the new graduates by the government (Yi et al., 2010). Unlike the western samples of previously mentioned studies who further increased their intrinsic work-related values with their age, Chinese workers of older generations may have had little basis on which to nurture an inherent interest in their work.

Consequently, intrinsic values in the older generations of Chinese workers may not have developed to be any higher than younger generations. The situation is different for today’s younger generation of Chinese. In comparison to the workers of previous generations, younger contemporary Chinese workers have more freedom to choose their occupations, similarly to their western counterparts. They, therefore, may have the foundation to increase their intrinsic values with age in the future. However, socioemotional selectivity theory (Carstensen, 2006), supported by aforementioned studies (e.g. Kooij et al., 2011; Inceoglu et al., 2012), suggests that intrinsic work-related values are yet to develop in younger workers. We, therefore, hypothesise that:

**H1.** There is no significant difference in the levels of intrinsic values amongst the three Chinese generations.
Altruistic values

Theories of socioemotional selectivity and generativity suggest that altruistic values strengthen with age. Unlike the concept of interesting work, Chinese workers of previous generations historically have received active encouragements to develop the notion of benefiting others through work. Unlike the case of intrinsic values of interesting work, they therefore may have had foundation to strengthen altruistic work values with age.

Under the socialist ideology, the Chinese Government emphasised moral encouragement as almost synonymous with internalised work values (Tung, 1981). Every worker was encouraged to self-sacrifice for the general welfare and the state, and expected to do his best “according to his ability”, regardless of the monetary rewards (Tung, 1981, p. 486). This focus on benefiting the group – a feature of collectivistic cultures (Triandis, 1995) – contrasts with the individualism dominant in capitalist market economies (Ralston et al., 2008). An empirical study (Hartung et al., 2010) found positive relationships between collectivism and altruism, while suggesting zero to negative correlations between altruism and individualism. In a comparative study of eight countries by Elizur et al. (1991), Chinese respondents ranked “contribution to society” considerably higher than participants from other countries did.

Nevertheless, in contemporary China, those who grew up in the era of social reform are considered to be more individualistic and materialistic. They are more inclined to give priority to their personal interests over those of the collective (Kwong, 1994). According to Lin and Ho (2009), older Chinese are more likely to care about others. Linking the industrialisation process with global value homogenisation, Ralston et al. (1999) find that the younger Chinese generation displays more individualistic tendencies. This is reflected in being less committed to traditional Chinese values such as collectivism and Confucianism. From these observations, we derive the following hypotheses:

\[ H2a. \text{ The OCG values the notion of benefiting others through work (altruism) less than the SRG does.} \]

\[ H2b. \text{ The SRG values the notion of benefiting others through work (altruism) less than the CRG does.} \]

Extrinsic values – good income

The intraindividual change trajectories of Kanfer and Ackerman (2004) predict that extrinsic values will have diminished effect on older adults. This is rooted in the increased reluctance of older people to exert the additional effort required to achieve the offered incentive. Several studies’ findings support this prediction. The meta-analysis by Kooij et al. (2011) found a significant negative relationship between age and strength of extrinsic values, and the empirical study by Inceoglu et al. (2012) found older employees to value less extrinsically rewarding job features. The question then is how these may apply to Chinese workers.

In comparison to workers in the west, Chinese workers are considered to place less value in extrinsic rewards, such as pay and other material rewards (Humphreys, 2007). The study of Elizur et al. (1991) demonstrated the relative unimportance of work values of pay and other material rewards for Chinese workers in a comparative study with samples from eight countries. As the Taiwan sample scored high on these instrumental values, Jackson and Bak (1998) suggest this phenomenon is the result of several decades of socialist influence, rather than cultural characteristics. Traditionally, in China, wide wage disparity between workers was discouraged by the government (Tung, 1981). In state-owned enterprises, where the majority of the Chinese urban workforce were employed for decades preceding the Social Reform (Chiu et al., 2002), the wage differentials
between workers were kept low (Ding et al., 2000). Being seniority-based, promotions were beyond one’s control and accompanied by only a small salary rise (Warner, 2008). Under the Social Reform, the equality-based, fixed-wage system was gradually replaced by equity-based, differentiation rewards systems, such as performance-based pay (Du and Choi, 2010). Although the wage disparity between workers is still kept relatively low in China compared to countries such as the USA, this has led to the vast income and wealth inequalities of contemporary Chinese society (Warner, 2010). Alongside this, Chinese employees’ preferences shifted away from the age-based egalitarian approach of socialism towards a reform model with pay differentiation (Bozionelos and Wang, 2007). Such a shift, however, did not occur evenly across different generations. In the latter half of the 1990s, Chen et al. (1997) reported a study finding that older Chinese employees were more supportive of the egalitarian reward system than their younger counterparts. On the other hand, Chinese youths in the late 1980s began choosing jobs based on income (Kwong, 1994), and young Chinese managers in 1990s were found to be more likely to act independently in the pursuit of profits (Ralston et al., 1999). We, therefore, hypothesise:

H3a. The OCG values good income more than the SRG does.

H3b. The SRG values good income more than the CRG does.

Job security
Job security is closely associated with extrinsic work values. However, the Chinese context may render distinct patterns of age-related changes to job security values, independent from other extrinsic values such as income. Under the practice known as the “iron rice-bowl” (Warner, 2001; Chiu et al., 2002; Qiao et al., 2009), employees of state-owned enterprises had no need to worry about their performance and could rely on the security of their jobs through lifetime employment. However, state-owned enterprises proportionally fell into a minority after the Social Reform both in number and in terms of their contributions to national productivity output (Warner, 2008). With this decrease in number and downsizing, a significant number of jobs were lost (Warner, 2010). The security of lifetime employment disappeared rapidly (Warner, 2008), signalling “the breaking of the iron rice-bowl” (Zhu and Dowling, 2002, p. 573).

Endorsed by the legislation change of 1987, China in the 1990s saw the emergence of a labour market alongside the enhancement of labour mobility (Zhu and Dowling, 2002). For the younger generation in China after the Social Reform, job security was no longer the norm. Younger Chinese managers in the 1990s were ready to move in pursuit of the best opportunities (Ralston et al., 1999). A survey in 2005 found a further increase in turnover, especially among young employees (Warner, 2008). Reflecting this trend, Yang (2011) found job security to be a stronger work value for older Chinese employees than for younger ones. The study by Qiao et al. (2009) also found that older Chinese employees exhibited greater organisational commitment than younger employees. Based on these findings, we hypothesise:

H4a. Job security is less important for the OCG than for the SRG.

H4b. Job security is less important for the SRG than for the CRG.

Guanxi and favouritism
Guanxi plays a key role in governing human behaviour in Chinese business and society at large (Wong et al., 2010; Kim et al., 2013). Guanxi is defined as the existence of particularistic ties, which exclusively exist between particular individuals, including the ties between relatives, friends, co-workers and supervisors–subordinates (Jacobs, 1979).
Traditionally, through guanxi, a person is expected to make things “a little more convenient” for those of his/her particularistic ties (Jacobs, 1979, p. 238). This leads to favouritism or nepotism – unequal treatment of individuals within Chinese organisations based on their personal relationships (Kim et al., 2013). It is also a feature of guanxi that the weaker partner of the tie can expect special favours from the other partner, who has a stronger, higher rank (Alston, 1989) and is capable of providing the “convenience”.

Collectivism and Confucianism, which form the foundation of Chinese culture, also emphasise harmonious human relations and had an impact on the development of guanxi (Wong et al., 2010). While previous studies found the characteristics of collectivism and Confucianism weakening among younger Chinese (e.g. Kwong, 1994; Ralston et al., 1999; Lin and Ho, 2009), some studies suggest that the significant role guanxi plays in society and business survived the Social Reform and subsequent radical economic and societal change in China (Wong et al., 2010; Kim et al., 2013). Further, according to Nolan’s (2011) literature review, some scholars favour the view that the significance of guanxi has increased in the period of economic reform. Since the Social Reform, Chinese youth have been deeply affected by and have indulged in the practice of nepotism (Kwong, 1994).

Based on the above-mentioned view that guanxi works more favourably for those in weaker positions and lower ranks of the tie and also on the above review of guanxi studies, we derive our last hypothesis:

\[ H_{5a}. \] Nepotism in the work place is more accepted by the OCG than by the SRG.

\[ H_{5b}. \] Nepotism in the work place is more accepted by the SRG than by the CRG.

**Data and method**

Data collection took place over the summer in 2012. The questionnaire was prepared in English and translated into Chinese by a bilingual scholar. The translation was then verified by two academics of UK universities who were native Chinese. The majority of the survey was conducted on the pencil-paper basis, because many older Chinese workers would not use computers and the internet daily. In such cases, one researcher went into the company sites with permission and distributed/collected the questionnaires. Additionally, some of the survey was conducted online, via instant messaging software. Altogether 918 usable questionnaires were collected from Chinese employees.

The vast majority (96.1 per cent) of respondents are employees of three large state-owned enterprises in Guangzhou, Shaoguan and Harbin as well as other Chinese domestic companies. These three cities belong to different tiers according to the Chinese city tier system, which reflects differences in income level, population size and infrastructure, among other factors. One of the three enterprises is a medium-sized (with over 100 employees) comprehensive trade company located in Guangzhou (tier 1 city). Another is a large (with over 500 employees) transportation company located in Shaoguan (tier 4), and the other is a large (over 4,500 employees) manufacturing company in Harbin (tier 3). Other domestic companies belong to various industries, including communication, finance, public administration, IT and services. Only a small proportion (3.9 per cent) of the respondents work for foreign joint ventures or foreign-owned enterprises.

The sample is almost equally distributed between the OCG (40.6 per cent) and the SRG (36.8 per cent), while the CRG is a smaller group (22.5 per cent). Table I summarises the socio-demographic and economic characteristics of the sample along with the results of: the ANOVA test, conducted to evaluate differences among means computed in the three generational groups; the Tukey’s pairwise comparison test, to evaluate the differences between any pair of means on which the ANOVA test has been computed; and the \( \chi^2 \) test, to check for independence between two qualitative variables.
About 56 per cent of the overall respondents are male, and there are no significant differences in the gender distribution among generational clusters. Significant differences are detectable in regard to the marital status (please refer to both the ANOVA and the $\chi^2$ results). In particular, the respondents of the OCG are mainly single while very small proportions of the other two generations are single. This relationship is confirmed by the post-hoc tests (i.e. Tukey's pairwise comparisons), which highlight the significant differences between OCG-SRG and OCG-CRG. The $\chi^2$ test has confirmed that both education and monthly income levels are significantly different among the generational clusters. In particular, the OCG overall has higher levels of education than the other two older generations.

**Measures**

The questionnaire was designed to collect information on the following five measurements: intrinsic values, altruism, income-related extrinsic values, job security values and nepotism tolerance. Intrinsic values were measured with two items adapted from Kuvaa and Dysvik (2009): “The tasks that I do at work are enjoyable” and “Sometimes I become so inspired in my job that I almost forget everything else around me”. Altruism was measured with a question adapted from Grant and Berry (2011): “I care about benefiting others through my work”. Income-related extrinsic values were measured through an item asking: “My main reason to show up every day at work is my salary”. To assess job security values, we used an item modified from the Meaning of Work Survey C (England et al., 1995): “I work hard in order to keep my job”. All the above four measures used five-point Likert scales (1 = strongly disagree, 5 = strongly agree).

Tolerance towards the practice of nepotism was measured with an item adopted from Rawwas et al. (2006), asking “Do you feel that getting promotion through the influence of a
family or personal connection is acceptable?” This item was measured with five-point Likert scales (1 = totally unacceptable, 5 = totally acceptable). As all these measures used either single or two items, no reliability tests were conducted.

Participants were also asked to rank ten items that describe the work values in order of importance. The items included good personal relations with co-workers, good personal relations with supervisors, good job security, good pay, a lot of autonomy and contributing to society through one’s work. The question was a modification of the Meaning of Work Survey C by England et al. (1995). We used this for the provision of supplementary information for the measurements of work-related values.

Results

Figure 1 presents the distribution of the above described five measurements for the whole sample and per each generation.

To further analyse differences among generations, the following three tests have been conducted: the ANOVA test to evaluate differences among proportions (i.e. means) of respondents, belonging to the three generational groups, who strongly agree (and either strongly agree or agree) with each statement; the Tukey’s pairwise comparison test to evaluate which pairs of proportions (i.e. means), previously tested through the ANOVA test, are different; and the Kruskall–Wallis test to evaluate differences among the medians calculated on the original five-point Likert-type scale variables for each generational group. The results are summarised in Table II. As we can observe, significant differences, in both means (ANOVA test) and medians (Kruskall–Wallis), are detected for income, job security and nepotism tolerance items supporting our hypotheses.

H1 assumed no significant differences in the intrinsic value levels among the three generations, which is supported by our results where no significant differences, either in means or in medians, are detected (Table II, 1a and 1b).

H2 attributed lower levels of altruism to the OCG in comparison to the SRG (H2a) and to the SRG in comparison to the CRG (H2b). However, we did not find any significant difference in either means or median levels of altruism among generational clusters. H2a and H2b are, therefore, rejected.

H3 focused on income and stipulated that good income was valued more by the OCG than by the SRG (H3a) and by the SRG than by the CRG(H3b). The ANOVA test and the Kruskall–Wallis test reveal significant differences in general. Further, Tukey’s pairwise comparison test suggests that each of the two older generations respectively value good income significantly more than the OCG does, while there is no significant difference between the two older generations. Therefore, H3a and H3b are rejected.

H4 assumed lower job security importance for the OCG than for the SRG (H4a) and for the SRG than for the CRG (H4b). The ANOVA test and the Kruskall–Wallis test reveal significant differences in general. More precisely, the Tukey’s pairwise comparison test shows that the OCG value job security significantly less than the other two generations, while there is no significant difference between the older two generations. Thus, we accept H4a but reject H4b.

H5 stipulated a higher level of nepotism acceptance by the OCG than by the SRG (H5a), and by the SRG than by the CRG (H5b). H5a was supported, as through Tukey’s pairwise comparison test, the OCG demonstrated significantly higher tolerance of nepotism in comparison to the other two generations. H5b was rejected as we found no significant difference in the levels of nepotism acceptance of the two older generations.

Providing information supplementary to the above hypotheses testing results, Table III presents the results summary of the work values rank order, where ranks are reported for the whole sample and per each generation. The ranks have been created according to the frequency by which each item has been selected as first, second, or third most important value by the respondents.
In the rank order, all three generations ranked good pay as the most important work value, job security as the second and good personal relations with co-workers as the third. The older two generations ranked good personal relations with supervisors as the fourth most important work value whereas the OCG ranked this value as the eighth. The fourth most important value for the OCG was convenient work hours. Ranked as the two least important values by all three generations were job autonomy and contributing to society through work.

Discussion
As hypothesised, this study found no one contemporary Chinese generation had higher intrinsic values than another. This result contradicts what socioemotional selectivity theory posits and may indicate the unique conditions and experiences that distinguish the three Chinese generations from the western experiences. To begin with, as previously mentioned,
the concept of interesting work was historically alien to Chinese workers. In line with this observation, Chinese samples rated the importance of job interest considerably lower in comparison to other countries’ sample groups in studies by Elizur et al. (1991) and Fisher and Yuan (1998).

Intrinsically motivated individuals take action also because an activity is connected to autonomy (Ryan and Deci, 2000). Yet, our work value rank order results indicate that the contemporary Chinese workers value work autonomy low across generations (9th, 9th and 10th out of 10 values, see Table III). Such low importance placed on intrinsic values by Chinese workers may also reflect the country’s economic development stage. Inglehart (1997) observes that in the emergence of industrial society, maximisation of economic gains is the individual’s top priority, and that as the society shifts into a postmodern stage, an individual’s focus shifts towards the quality of work experience and meaningful work. As Fisher and Yuan (1998, p. 520) posit, seeking the satisfaction of “higher-level” needs such as
interesting work is “more of a prerogative” of “workers in highly developed countries”. This, at the same time, implies Chinese workers may find increasing importance in meaningful work and intrinsic values as the society passes through modernisation and shifts into a postmodern stage.

Our findings suggest that the OCG values income less than the other two generations. This result may be attributable to the family life cycle stage (Kalleberg and Loscocco, 1983). While the majority (72 per cent) of our OCG respondents are single, the majority of the SRG (89 per cent) and the CRG (91 per cent) respondents are married. Economic conditions such as house prices soaring at a faster pace than workers’ income levels (Zhang et al., 2012) may have further affected the importance of financial rewards for married workers. In contrast, the majority of the OCG is likely to be still living under the protection of their parents (Yi et al., 2010).

This, however, does not necessarily mean that the OCG consider income less important than other work values. In fact, our work value rank order results indicate that all three generations consider income as most important. This contradicts previous studies, which suggested the relative insignificance of pay and other material rewards as a motivator for Chinese workers both conceptually (e.g. Jackson and Bak, 1998; Humphreys, 2007) and empirically (pay 20th, and material rewards 19th, out of 24 work values; for details see Elizur et al., 1991). Until the early 1980s, the amount of consumer goods available in China was still limited (Tung, 1981), which in turn limited people’s desire for more money. However, after a few decades of economic development, our sample of Chinese workers across all generations chose good pay as the most important work value.

A decade preceding the current study, some studies (Fisher and Yuan, 1998; Chiu et al., 2002) found that good wages and other material rewards had already become the most important factors for Chinese workers. However, these studies drew samples from Hong Kong-owned and foreign-owned companies or western joint ventures, and therefore may not have reflected the overall trend in the society. Instead, respondents of the survey used in the current study are mainly employees of Chinese domestic and state-owned enterprises. Within such settings the egalitarian approach to the reward system dominated, and wage used to have little power as a motivator. Our finding indicates that money has become an important incentive also for Chinese workers of state-owned and other domestic enterprises for both younger and older workers.

The current study found that the OCG values job security less than older generations do. This is in line with the findings of previous studies analysing predominantly western samples, as investigated in the meta-analysis by Kooij et al. (2011), as well as those with Chinese workers (Qiao et al., 2009; Yang, 2011). Both sets of studies found that older age groups had stronger job security motives compared with younger age groups. However, the contexts of such findings are different. In the former case, Kooij et al. (2011) attribute the lower security motives among the younger generation to improved job conditions in the last five decades. In the case of China, the last five decades represented hardship for many belonging to the CRG (Chen, 1999). Many of them had their education interrupted by the Cultural Revolution, and when state-owned enterprises restructured in the 1990s (Zhu and Dowling, 2002), they were among the first to lose their jobs (Chen, 1999). Qiao et al. (2009) found that less-educated employees had higher organisational commitment. With lower education, workers have fewer opportunities for finding other jobs and, hence, tend to value job security more. As Warner (2001) argues, the emergence of the Chinese labour market in the 1990s mainly benefited younger workers, leaving out the older ones.

Similar explanations apply to the SRG. As illustrated in Table I, the SRG received less education than the OCG did. This is an overall trend in China. The family expenditure is concentrated on the education of the only child of the family (Belk, 2002), and consequently, a larger proportion of the OCG are more highly educated than any of the previous
generations (Elegant, 2007). With better qualifications, the OCG has more options and freedom to change jobs for higher incomes, whereas the lower education level for older generations makes it difficult to find a new job after losing one. Thus, the emphasis on job security of Chinese older generations may come from their disadvantage in the competitive labour market.

Many members of the CRG received the pre-Cultural Revolution education emphasising idealistic values, including patriotism, altruism, commitment internalisation and heroism through role models who sacrificed themselves for others (Chen, 1999). While Confucianism was strongly denied by the Party during the Cultural Revolution in pursuit of Maoism and ideological purity (Egri and Ralston, 2004), the socialist doctrine continued to prevail (Ralston et al., 1999), under which self-sacrifice for the general welfare was strongly encouraged (Tung, 1981). Notwithstanding this, contrary to our predication, we found no difference in the levels of altruism among the three generations and further found that Chinese workers ranked the importance of contributing to society through work as very low (10th, 10th and 9th out of ten values) across all generations (as shown in Table III).

This is a stark change from a previous study (Elizur et al., 1991) that found a Chinese sample ranked contribution to society considerably higher (4th out of 24 items) than the other seven sample groups (who ranked the item 20th to 24th). Elizur et al. (1991) suggest the result to be a reflection of the collectivistic culture. Our findings may then suggest an overall decline of collectivist and Confucian values in the Chinese society. Further, the study by Du and Choi (2010) found that Chinese employees in domestic firms possessed more altruistic behaviour than those in foreign firms. However, our findings indicate the penetration of decline in altruistic values among employees of Chinese domestic and state-owned enterprises.

Not all traditions, however, seem to be diminishing. Despite the reported decline in Confucian values, guanxi, albeit having its philosophical basis in Confucianism (Bedford, 2011), seems to hold a special value among Chinese younger workers. Our findings suggest the OCG is enjoying the benefits of guanxi and networking. Boisot and Child (1996) posit that the economic transformation of China has given rise to network capitalism, suggesting the persistent importance of relationships based on the long-term network in Chinese business. More recently, Tung et al. (2008) support this view. Our findings further suggest that the Chinese younger generation is more inclined to tolerate nepotism or favouritism. The latter two are considered to reflect the negative side of guanxi (Fan, 2002). While guanxi is likely to lose its importance when dealing with the government as China moves towards an open market system (Fan, 2002), our findings indicate that the practices of favour exchanges based on human networks – guanxi – are still widely accepted among young Chinese workers.

We considered life-span theories developed with western samples in our hypothesis-building, and our findings indicate certain limitations in the applicability of these theories to the current socioeconomic and political conditions of Chinese society. Intraindividual change trajectories identified by Kanfer and Ackerman (2004) propose a diminished effect of extrinsic motivators on older adults as a result of age-related changes in personal preferences. Our results did not support this assertion for Chinese workers. To the contrary, the current study found that, while all generations have come to ascribe higher importance to financial rewards over the last three decades, the older Chinese generations have grown to place stronger importance on income than the youngest generation has.

Our results also did not support the socioemotional selectivity theory of Carstensen et al. (1999). The theory indicates that older people increasingly seek for inner meaning. However, our results found no difference in the levels of intrinsic values among the three generations of Chinese workers. Further, the generativity theory of Erikson (1995), together with socioemotional selectivity theory, propose an increase of altruistic values with age.
However, in our sample, the older Chinese generations’ altruistic values were not stronger than those of younger generations, and they too ranked the altruistic values very low among various work values. As altruism used to be valued higher among Chinese workers, this suggests that older Chinese workers’ altruistic values have possibly declined with age. Thus, economic and social changes seem to have intervened in the process of intraindividual change in Chinese workers.

Future research, limitations and managerial implications
From the above discussions, we posit that the economic developmental stage and other societal conditions affect the applicability of the life-span theories, especially to non-western societies like China. Future research could try to investigate this further.

The current study is cross-sectional, as are most studies on generational differences in work values (Twenge, 2010). The results, therefore, cannot be understood in terms of causality. If one wishes to investigate the effect of cultural change upon the behaviours of individuals of similar age, a time-lag study would be more suitable. Such studies would conduct cohort examinations at different points in time to separate generational differences from age differences (Twenge et al., 2010). Instead, this study investigated age/cohort characteristics at the time of the survey, and as such, any difference we find could be due to the inextricably confounded effects of age – career stage or life-span – and cohort/generation differences (Schaie, 1965; Kalleberg and Loscocco, 1983; Twenge, 2010). The hypotheses were formed accordingly, asking “whether there are differences in a given characteristic for samples drawn from different cohorts” measured at the same time (Schaie, 1965, p. 95).

Other limitations of this study rest on the nature of the sample. First, the vast majority of our sample work at Chinese state-owned enterprises, and as such may have different values from those working for privately owned domestic and multinational companies (e.g. Wang, 2004). Employees in state-owned enterprises tend to hold higher levels of Chinese cultural values. In particular, guanxi is believed to play a more important role in state-owned enterprises (Wong, 2018), not least because these are particularly difficult to enter without help from others. The difference may also affect other work values including those related to altruism, job security and rewards. Examination of such differences was beyond the scope of the current study. Future studies may address this limitation and compare our results with the work values of Chinese employees working in private and foreign-invested companies.

Second, our sample is not representative of the whole Chinese population, since no random sampling technique has been adopted to select either the enterprises or the cities. Instead, the vast majority of our sample works in three cities taken from three different tiers of the Chinese city tier system. As previously mentioned, the system consists of four tiers, reflecting differences in income level, population size, infrastructure and other factors. Thus, although not representing the whole nation, our sample is sufficiently vast and heterogeneous to represent a good fraction of the Chinese population.

Despite the noted limitations, this study offers some insights into improving management practice in China. First, our findings suggest intrinsic values, such as work autonomy, have not taken up an important position among Chinese workers. Good pay remains the most important work value for all generations. This means that offering a competitive salary and compensation package is crucial when organisations want to recruit and retain talented workers in the Chinese labour market. However, focusing on good pay alone may not continue to attract talent in the Chinese labour market for very long. Extrinsic values are found to be of lower importance among the youngest generation in comparison to the previous generations. As Chinese society passes through the stage of modernisation, an increasing number of Chinese workers may start focusing on intrinsic values and meaningful work sooner than we expect.
Our findings also suggest that the young generation of China value job security significantly less than the older generations do. High turnover rates already pose problems to many foreign companies in China (Froese and Xiao, 2012). Paying attention to Chinese workers’ work value changes may, therefore, be crucial, especially for retaining talents belonging to the OCG. They are in general better qualified, therefore with more options, and less hesitant to change jobs.

Furthermore, our study found the OCG to have less hesitation in accepting the benefits of guanxi, which traditionally has had strong influence on the way rewards and resources are allocated (Bozionelos and Wang, 2007). The current study investigated tolerance towards one aspect of nepotism – getting promotion through the influence of family or personal connections. This exchange of favour among close guanxi parties within an organisation leads to negative consequences for organisations, by creating a sense of injustice among employees and lowering trust (Chen and Chen, 2009). In order to reduce the guanxi-related conflict of interests, the establishment of organisational ethical standards and more transparent decision making are recommended (Chen and Chen, 2009). Foreign, as well as Chinese organisations, may thus benefit from enhanced standards and transparency in relation to human resource practices and performance management, such as selection, appraisal and promotion decision making.

Conclusion
While China continues its economic development and increases its market competitiveness, the development of its unprecedented generation of only-children as workers is an unknown factor. This study contributes to its understanding through a comparative study between the work values of the OCG and those of the previous generations. Such comparison became possible only recently – a decade since the generation entered the job market. Within the fast-changing work values of Chinese workers, we found that while the OCG place lower importance on income and job security in comparison to the previous generations, they demonstrate higher acceptance of the negative manifestations of guanxi in the form of nepotism. The one-child policy has already ended. However, the proportion of the OCG in the Chinese labour market will continue to increase for the next decade or so. This implies the need for continuous studies on their values and organisational behaviours for effective human resource management.

References


Corresponding author
Sachiko Takeda can be contacted at: stakeda@bournemouth.ac.uk
Post-migration labor market: prejudice and the role of host country education

Olga Stangej
Department of Management, ISM Vadybos ir Ekonomikos Universitetas, Vilnius, Lithuania, and
Inga Minelgaite, Kari Kristinsson and Margret Sigrun Sigurdardottir
School of Business, University of Iceland, Reykjavik, Iceland

Abstract
Purpose – The purpose of this paper is to examine how prejudice in a post-migration labor market can be mitigated, specifically, whether education received in the host country can serve as a signal of social integration for immigrant workers in employment settings.

Design/methodology/approach – The authors conducted an audit discrimination study, using an experimental setup to examine the interplay between prejudice and education as a signal of the social integration of immigrants in employment settings.

Findings – The results of the study indicate that signals of social integration, such as, qualifications acquired in the host country through education, counter prejudice against Polish immigrants in Iceland.

Research limitations/implications – The study provides evidence that immigrants are subjected to prejudice that can restrain their employment opportunities. The acquisition of education in the host country can mitigate this effect, but also diminishes the line between social integration and assimilation. However, the study is limited by a relatively small sample size and a single-country context.

Practical implications – The study offers insights for both countries and organizations worldwide that are facing the need to successfully embrace a mobile workforce and the challenge of a diverse workforce composition.

Originality/value – The study addresses the under-researched effects of education on human capital transferability in the host labor market. More specifically, it uncovers that the differentiation between education acquired in the home country and education acquired in the host country is a signal that can mitigate prejudice and its effects on the employment of immigrants in the host countries.

Keywords Education, Acculturation, Integration, Iceland, Immigrants, Labor market, Prejudice

Paper type Research paper

Introduction
Since the middle of the twentieth century, mass migration has become a worldwide phenomenon, thereby increasing the national, cultural, ethnic, religious and linguistic diversity in numerous countries and regions (Donitsa-Schmidt, 2017). Currently, there is an estimated 258m people living in a country other than their country of birth – an increase of 49 percent since the year 2000 (United Nations, 2017). These geographical shifts of population have risen sharply recently, affecting both the supply and demand of labor (Newman and Winston, 2016). The projections point at a growing influx of immigrants in the upcoming years, and regardless of the type of migration – voluntary (e.g. labor migration) or non-voluntary (e.g. refugees) the outcome is inevitably increasing diversity within society (Donitsa-Schmidt, 2017). While migration can be driven by different motives, including involuntary movement as a result of war and natural disasters, most often migration is voluntary (Ruback et al., 2004), characterized by the search for economic improvement. As a result, immigration significantly contributes to the workforce in many countries, primarily in developed countries where migrants are increasingly concentrated (Tharmaseelan et al., 2010). If migration is managed successfully, it can yield favorable outcomes for both the host countries and the migrants themselves (Gurría, 2017). A mobile workforce with a more diverse composition, for example, enables organizations and nations to take advantage of the variety of talents for their
competitive advantage and address locally arising skill gaps (OECD, 2012) that are increasing in advanced economies (Özbilgin et al., 2011). Furthermore, diversity contributes to idea generation, the implementation of new ideas into new products and services and innovation performance that drive competitiveness nowadays (Kristinsson et al., 2016).

Nevertheless, “the skills of migrants are not being tapped to their full potential, even though competition between destination countries to attract and retain talent is gathering pace” (OECD, 2012, p. 22). This is a tendency that is also observed outside of the OECD countries (for examples, Tharmaseelan et al., 2010; Coates, and Carr, 2005). The general tendency points toward immigrants from lower-income economies experiencing discrimination that poses barriers to full-time employment (Coates and Carr, 2005). Furthermore, as the amount of low-skilled jobs will be shrinking, including routine tasks covered by automation, greater integration of migrants is required to control unemployment (Gurría, 2017). Taken together, these shifts call for the promotion of equality and non-discrimination, which in Europe heavily relies on access to education, as reflected in policies and measures of integration (OECD, 2003). Indeed, social integration, along with human capital and career self-management play a critical role in immigrant career success (Tharmaseelan et al., 2010; Rajendran et al., 2017).

Therefore, disentangling the value of education and its transferability to host countries is an essential research topic in light of the continuously transforming labor market landscape. While a significant portion of previous research has tapped into the status of immigrants in the labor market at the post-migration stage (Smith and Bailey, 2004), the existing knowledge is focused on the outcomes, rather than their interrelation with antecedents of migration processes. Furthermore, a lack of contextualization is observed in research on international mobility (Al Ariss et al., 2012).

The study presented in this paper is based on the assumption that the transferability of human capital is associated with employment potential, which, in turn, leads to different degrees of immigrant integration in the host country. While the overall concept of the integration of immigrants and refugees is non-unified and remains to be “individualized, contested and contextual” (Robinson, 1999, p. 118), this paper distinguishes between socioeconomic and social (cultural) integration. In line with extant literature, the concept of socioeconomic integration used in this paper refers to the social position of immigrants in the labor market, while the social (cultural) integration refers to aspects such as interethnic relations, cultural adjustment and shared norms (Snel et al., 2006). The paper is also conceptually built on the assumption of a circular relationship between socioeconomic and cultural (also referred to as social) integration, with one process facilitating the other (Vollebergh et al., 2017). Socioeconomic integration is a focal point of this paper, including the primary emphasis on the social position of immigrants in the labor market. Social (or cultural) integration is considered as an important condition to post-migration labor market participation (Tharmaseelan et al., 2010; Pio, 2005) that facilitates socioeconomic integration.

In this vein, this study focuses on the interplay of human capital held by the immigrants before migration and the factors fostering or hindering the transferability of human capital elements. In particular, this study is driven by the purpose to examine whether prejudice can hinder the post-migration labor market participation and the role of education as a signal of social integration of immigrants in employment settings. The study contributes to the growing literature on the globally-changing workforce and addresses the challenges of the post-migration labor market. More specifically, it extends the current understanding of the factors that can trigger or mitigate prejudice and its effects on employment of immigrants in the host countries.

The paper is organized as follows. First, the theoretical background and extant findings in the field are outlined. Next, the experimental design of the empirical study is presented, followed by a discussion on the key findings. Finally, a set of theoretical and practical implications is discussed.
Theory and hypotheses

Acculturation and social integration

The post-migration labor market participation of immigrants has often been considered as employment or an occupational status (Smith and Bailey, 2004) and is related to a number of antecedents. Foremost, migration is inseparable from cultural transitions and, hence, the acculturation that “comprehends those phenomena which result when groups of individuals having different cultures come into continuous first-hand contact with subsequent changes in the original culture patterns of either or both groups” (Redfield et al., 1936, p. 149). The acculturation of immigrants to the host society has become an increasingly important topic, referring to the changes that occur in immigrants (as a group) as a result of continuous contact with the majority community (Donitsa-Schmidt, 2017). As part of the deliberation of how to acculturate, integration becomes a viable strategy when the group seeks to maintain a certain degree of cultural integrity and at the same time aims to participate as “an integral part of the larger social network” (Berry, 1997, p. 9). Furthermore, the OECD (2012) characterizes integration as everyone having “the opportunity to achieve his or her potential” (p. 14). From this perspective, social integration, as part of acculturation in the new environment or network, emerges as the primary prerequisite for career success.

Other perspectives on post-migration, such as the self-management perspective, including career planning and work experience accumulation in the host country, come into play after social integration (King, 2004; Tharmaseelan et al., 2010). In this respect, models are being developed and proposed concerning the most effective ways of immigrant incorporation and socialization into the host society (Donitsa-Schmidt, 2017). Importantly, integrative models, pronounced through national policies and societal expectations, acknowledge and embrace the distinctiveness of immigrants and differ from assimilative models that require the immigrants to move away from their previous identities (Donitsa-Schmidt, 2017).

Given the social integration concerns in the period immediately after migration, the quality of social integration is an important determinant of the value of human capital provided by the immigrants (Tharmaseelan et al., 2010; Pio, 2005). Overall, human capital encompasses the education, personal and professional experience held by an individual and predicts career success (Ng et al., 2005). The career paths of immigrants in the host country are based on their human capital during pre-migration, including qualifications and career success achieved in the home country and their level of motivation (Tharmaseelan et al., 2010). Tharmaseelan et al. (2010) found that human capital attained in the pre-migration stage has the most significant effect on the career success of relatively recent immigrants. At the same time, in the post-migration stage, they face multiple contextual constraints which pose challenges, including legislative, such as the accreditation of qualifications, societal, such as racial discrimination and organizational, such as hiring policies (Tharmaseelan et al., 2010). Social integration, active career planning, the acquisition of further qualifications and the pursuit of achievement can enable immigrants to address these challenges (Tharmaseelan et al., 2010). Therefore, education is likely to serve as an indicator of the quality of human capital and social integration for potential employers, who play a decisive role in the post-migration labor market participation of immigrants.

However, additional factors may hamper the inclusion of immigrants in the labor market. As Berry (1997) noted, “Integration can only be ‘freely’ chosen and successfully pursued by non-dominant groups when the dominant society is open and inclusive in its orientation toward cultural diversity” (p. 10). Hence, a range of factors associated with the dominant society can hinder social integration, including structural barriers outside of the organization, workplace factors, such as racism and cultural barriers, and individual factors, which are centered on the migrants (Rajendran et al., 2017). In summary, the interplay between the human capital developed in the pre-migration stage and the factors
that foster or hinder its transferability can largely determine the career success and further social and socioeconomic integration of immigrants and their contribution to the economy and society of the host countries.

Education and its role in social integration
The relationship between education and social integration has been documented across different cultures. Education as part of social integration has played an essential role across economies, regardless of their degree of experience, in line with the human capital theory which highlights education among the critical determinants of labor-force activity. When it translates into specific examples, such as in France where the children of immigrants (in contrast to their parents), could benefit from greater upward social mobility due to a high level of education attained in public schools. However, their upward social mobility was very low in the cases of dropping-out without graduation (Barou, 2014). A higher level of education is associated with higher social integration, as a result of the greater willingness of immigrants to invest in and make stronger their social ties with the native population (Mazza and Punzo, 2017; de Souza Briggs, 2003). As evidence from Sweden shows, education is essential, and along with language skills and local work experience, influences the immigrants’ potential for employment acquisition (Rooth and Åslund, 2006; Dahlstedt and Bevelander, 2010; Aycan and Berry, 1996). Similarly, Tharmaseelan et al. (2010) found that language ability and useful skills and knowledge had the largest effect on success during both pre- and post-migration. Although language ability is, in many cases, important for social integration, research on Polish immigrants in Iceland also found that increased language proficiency led to feelings of being discriminated against by the media discourse (Ólafs and Zielińska, 2010). Hence, many OECD countries offer vocational training as part of social integration efforts, such as vocation-specific language courses, including internships and site visits in Germany or additional courses for tertiary-educated new arrivals in Sweden (Gurría, 2017).

The value of the transferred skills from the origin to the destination country is subject to how general the education acquired is and the skills acquired in the home country (Chiswick and DebBurman, 2003). However, existing evidence suggests that if the levels of the formal education of immigrants are equal, differentiation between the home country and host country-acquired education takes place. When the transferability of immigrants’ skills is considered, the difference between home country and host country-acquired education becomes significant (Chiswick and Miller, 2007). The home country-acquired formal education is subject to acknowledgment by the potential employer and there may be uncertainty about the level and type of education obtained there (Dahlstedt and Bevelander, 2010; Aycan and Berry, 1996). For example in New Zealand, while human capital variables were affected by pre-migration success, post-migration success was determined by the acculturation and education in the host country (Tharmaseelan et al., 2010). In Sweden, the locally acquired education provides immigrants with an advantage in the labor market, as confirmed in the study by Bevelander (2000) and supported by similar findings in the study by Dahlstedt and Bevelander (2010). In Canada, a study involving 110 immigrants confirmed that two-thirds of the sample is either unemployed or underemployed despite high educational attainments (Aycan and Berry, 1996). All these findings suggest that prejudice, which refers to the “tendency of an individual to think about other groups in negative ways, to attach negative emotions to those groups, and to prejudge individuals on the basis of their group memberships” (Healey, 2006, p. 26), may hinder social integration and employment opportunities.

The role of prejudice
As Dahlstedt and Bevelander (2010) denote, asymmetric information behind the hiring process (potential employers possessing less information about the potential employee) affects the labor market signaling. As a result, the potential employee must signal
information about eligibility for inclusion in the labor market to a potential employer, for example, through education. However, while education can directly affect blatant prejudice (Wagner et al., 2008), the potential uncertainties that are held by employers, concerning the credibility of education outside the host country, can be problematic (Dahlstedt and Bevelander, 2010).

Furthermore, the difficulty faced by skilled immigrants in acquiring employment that matches their qualifications uncovers the existence of selection biases against some specific home countries of immigrants, in accord with the principles of similarity-attraction, social dominance and inverse resonance (Coates and Carr, 2005). The negative relationship between the level of education attained in the host country and post-migration career success suggests the existence of negative stereotypes about immigrants from lower-income countries (Tharmaseelan et al., 2010). The immigrant groups, also depending on their country of origin can therefore be subjected to categorization, when in-group members are favored while out-group members are discriminated against (Stephan et al., 1999).

The education in the host country can be conceptualized as relating both to career self-management and culture-assimilation since immigrants can undertake re-training or re-qualification for nationally recognized certificates (Tharmaseelan et al., 2010). However, while education acquired in the host country may precede satisfactory employment opportunities, it may also impose the pressure for assimilation to the local compliance systems (Tharmaseelan et al., 2010).

Post-migration labor market in Iceland
Until the late 1990s, Iceland was a homogenous country where only 2 percent of the population were foreigners. At the close of the 1990s and especially after 2004, Iceland has become a destination host country for a new wave of immigrants. In Iceland, foreign citizens number 30,275 or 8.9 percent of the total population (Statistics Iceland, 2018), although the exact number of inhabitants with foreign origin is higher, since upon acquiring Icelandic citizenship, the citizens are registered as native Icelanders (Jónsdóttir and Ragnarsdóttir, 2010). The previous experience of a country plays a vital role in managing social integration, with ample differences among the countries with nascent immigration experience (such as Denmark, Finland, Spain, Italy and Greece) and substantial history of immigration (such as France, the UK and Germany) (EUMC, 2004). Iceland has engaged in international immigration patterns only since the 1990s with an influx of foreign workers who were mainly replacing female workers in the fishing industry who had emigrated in pursuit of advanced education and employment opportunities (Júlíusdóttir et al., 2013). Before the 1990s, most immigrant citizens were from the Nordic countries, and the level of immigration was generally low (Júlíusdóttir et al., 2013). Júlíusdóttir et al. (2013) identify three main periods in the extant migrations and immigration patterns of Iceland (p. 268):

(1) Icelandic women’s departure from the fishing industry in the 1990s and their replacement by foreign women, and diversification in agriculture with increasing recruitment of seasonal and long-term workers;

(2) the growth of foreign laborers in construction and service industries in the economic boom in the period 2005–2008; and

(3) the employment-related emigration of Icelandic citizens in the post-2008 recession.

Perhaps as a result of the previous experience and the discourse in public policy, immigrants in Iceland are often referred to as necessary labor migrants (Júlíusdóttir, 2010; Skaptadóttir and Olafsdottir, 2010; Júlíusdóttir et al., 2013). Even though Iceland shows the
highest rates of foreign-born employment in the OECD countries, with 86.6 percent of all foreign-born persons being employed (OECD, 2018), a closer look at immigrant employment reflects equivocal settings in the Icelandic labor market. In line with observations by Schrover et al. (2007) in the western countries and Tharmaseelan et al. (2010) in New Zealand, Júlíusdóttir et al. (2013) denote that immigrants in Iceland are facing lesser career opportunities and exposure to low-skilled jobs. These insights are congruent with general observations by OECD confirming that 47 percent of foreign-born workers in European OECD countries are often are employed in jobs that involve routine tasks.

In Iceland particularly, this situation is well illustrated through the case of the Polish immigrants. The second wave of immigration, in the period 2005–2008, was associated with the booming economy, a rapidly growing construction industry and the respective demand for construction workers (Júlíusdóttir et al., 2013). The jobs in the construction industry would often be associated with less favorable working, housing and commuting conditions and thus the local workers were replaced by guest workers from Poland, Portugal and China (Júlíusdóttir et al., 2013). In 2010, Polish natives constituted about 44 percent of total immigrants in Iceland, representing the largest group (Statistics Iceland, n.d.). Today, Iceland is a host country for both new immigrants and the second generation of Polish immigrants, with Poles still representing the largest group of foreign citizens (13,811 or about 4 percent of the total population) (Statistics Iceland, 2018). Poles residing in Iceland could continue to substantially contribute to value creation in Iceland, especially in light of several additional conditions.

Firstly, the crisis of 2008 was followed by the emigration of Icelanders to the Nordic countries, leading to vacant positions and talent gaps. Second, the economy of Iceland recovered and the unemployment rate today is 1 percent (Statistics Iceland, 2017). According to different estimates, about half of the vacant positions will need to be filled by foreign citizens in 2017–2019, especially in the healthcare, construction, tourism and ICT sectors (European Commission, 2014). Third, the majority of construction workers, often associated with lower-skill jobs, had left Iceland once the projects were completed and temporary employment contracts ended (Garðarsdóttir and Bjarnason, 2010). Finally, more than a half of the remaining Polish immigrants had a university degree (Jónsdóttir et al., 2009), with Polish education being recognized in Europe. Still, in a study by Jónsdóttir et al. (2009), 67 percent of respondents who are immigrants from Poland stated that their education is undervalued in their current workplace, and just a fraction was employed in positions that match their education.

Last year, 703 individuals received Icelandic citizenship, which is a decrease from last year (801 individuals) (Pressan, 2018). Out of the 703 Icelandic citizenship holders, the majority of the citizens – 224 individuals – were from Poland (Statistics Iceland, 2017), indicating a motivation to establish themselves in Iceland that reaches beyond economic reasons (Wojtyńska and Zielińska, 2010; Dobson et al., 2009). Hence, the social integration of Poles, along with their inclusion in the labor market, is critical for the development of a sustainable economy. Therefore, a preconception toward guest workers being less skilled and competent than they are, as suggested by Tharmaseelan et al. (2010), may take place. In spite of Icelandic discourse on guest workers being centered around immigrants as a needed human capital, and Polish immigrants not having been highlighted for negative behavior, prejudice, including the out-group effect, can still take place, in line with the minimal group paradigm (Rothbart and John, 1993). This may take place without groups having essential differences or a history of conflict, animosity and competition (Banks and Banks, 2010). Building on the history of Polish workers as primarily associated with the construction industry, the information asymmetry and the prejudice toward home- and host-country education, it is assumed that the hiring process may be interrupted by misleading signals that hinder social integration and equal employment opportunities.
Based on foreign- and host-country education as a signal, the evaluation of Polish and Icelandic immigrants with the same educational background is further tested:

1. If educated abroad, Icelandic candidates are considered having a better-suited education for the job than Polish candidates with the same education.

2. If educated abroad, Icelandic candidates are considered being better suited for the job than Polish candidates with the same education.

3. If educated abroad, Icelandic candidates are considered having better-suited experience for the job than Polish candidates with the same education.

In line with the literature on education as a signal of social integration (Dahlstedt and Bevelander, 2010; Mazza and Punzo, 2017; de Souza Briggs, 2003), we expect that Polish individuals who are educated in Iceland will have provided a signal of social integration which will negate prejudice against them:

4. If educated in Iceland, there is no difference between how Polish and Icelandic candidates’ education is evaluated.

5. If educated in Iceland, there is no difference between how Polish and Icelandic candidates are evaluated for job suitability.

6. If educated in Iceland, there is no difference between salary offers for Polish and Icelandic candidates.

Methodology
To test the hypotheses, an audit discrimination study was selected (Booth et al., 2012; Pager and Western, 2012). The idea behind audit discrimination studies is to provide an unbiased estimate of discrimination if possible. For that purpose, fictional CVs carrying ethnically identifiable names are used. These CVs are then paired with identical CVs without ethnically identifiable names. Using an experimental setup, the CVs are then randomly evaluated by a population or sent to employers. As our goal was to investigate overall prejudice against Polish immigrants in Iceland, we did not use employers to evaluate CVs but instead a representative sample of Icelandic people (see sample and experimental intervention below). By using this method, we can estimate the degree of prejudice in a given population by comparing responses to almost identical CVs, with the only difference being ethnically identifiable names. Audit discrimination studies have been used by sociology, economics and psychology to measure a wide variety of discrimination and prejudices, including those based on gender, ethnicity, age, obesity and sexual orientation (e.g. Strabac et al., 2016; Fix et al., 1993; Ayres and Siegelman, 1995; Riach and Rich, 2002). In a similar vein, some studies have also used an alternative methodology by having trained actors show up for job interviews or apply for rental housing (Henry and Ginzberg, 1985; Pager, 2007).

Sample and experimental intervention
As a part of a larger research project on discrimination and prejudice in Iceland, the Social Science Research Institute at the University of Iceland sent out a survey to a representative sample of the Icelandic population aged 18 and older. The survey was carried out online using a self-rated questionnaire in February 2018, with a response rate of 61 percent. In an effort to estimate prejudice toward Polish immigrants, a part of the participants (n = 106) read a job advertisement and evaluated a single CV on several measures. The CV contained basic information on name, age, education, contact information, job experience and hobbies. Each CV was identical except for the experimentally manipulated variables (name and education). Thus each participant was randomly assigned to evaluate a single candidate in
one of the experimental Groups 2 (Icelandic vs Polish candidate) × 2 (Icelandic education vs foreign educated candidate).

Measures. Each participant received a short job description as well as an accompanying CV. To test the hypotheses, the participants were asked to rate their CV on three separate measures. Together these measures indicated how the participants evaluated the candidate on job-related characteristics. The three measures were the following: how well suited is the candidate for this job? How well suited is the candidate’s education for this particular job? How well suited is the candidate’s experience for this job?

Findings
To test the hypotheses, a 2 (Icelandic vs Polish candidate) × 2 (Icelandic education vs foreign education) between-subjects experiment was conducted. The presented hypotheses indicated that prejudice would be found toward Polish immigrants if they were educated abroad. However, if they were educated in Iceland, this prejudice would vanish as it would be considered a valid signal of social integration into Icelandic society.

To better understand the perception of social integration signals and whether the results were consistent with $H1$ and $H4$, first, the differences between how Polish and Icelandic candidates are evaluated on how suitable their education is for the job, were examined. The participants perceived the Icelandic candidate educated in the UK as significantly less suitable ($M = 6.48, SD = 0.89$) than the Polish candidate with the same education ($M = 5.81, SD = 2.05$), ($t_{(42.95)} = 1.71, p < 0.05, r = 0.25$) supporting $H1$, that Polish candidates without a social integration signal will be less favorably viewed compared to an Icelandic candidate. As can be seen in Figure 2 the same can be said for $H4$, as no difference was found between Polish and Icelandic candidates with an Icelandic education ($t_{(41)} = −0.79, p > 0.05, r = 0.12$). On average, Polish candidates ($M = 6.26, SD = 1.00$) did not face a negative impact for their nationality when compared to the Icelandic candidates ($M = 6.01, SD = 1.28$) (Figure 1).

Next, the perceived suitability of the candidate for the job was examined. As can be seen in Figure 2, there is no statistical difference between Polish ($M = 6.01, SD = 1.00$) and Icelandic ($M = 6.43, SD = 1.37$) candidates that are educated in Iceland ($t_{(40)} = −1.13, p > 0.05, r = 0.17$). However, if the candidate’s education credentials are obtained outside of the host country (Iceland), the picture changes, with the Polish candidate being less favorably evaluated ($M = 6.24, SD = 1.65$) than the Icelandic candidate ($M = 5.93, SD = 0.83$). Although not significant, the effect size indicates this might be due to the small sample size ($t_{(61)} = −0.92, p > 0.05, r = 0.12$). As can be seen in Figure 2 the participant’s evaluations of the Polish candidate changes from favorable to unfavorable when their education background does not signal social integration. Therefore, this result supports $H2$ and $H5$.

![Figure 1](image-url)
H3 and H6 were aimed at examining how the Polish and Icelandic candidates’ experience was evaluated. According to these hypotheses, there should not be any difference present between the candidates educated in Iceland. However, when comparing the candidates in the educated in the UK, a difference should be found in favor of the Icelandic candidate. As Figure 3 illustrates, the participants did not evaluate the Icelandic candidates’ experience better (\( M = 5.79, SD = 1.14 \)) than the Polish candidate (\( M = 6.13, SD = 1.19 \)), (\( t_{(39)} = -0.937, p > 0.05, r = 0.15 \)) who was educated in Iceland. The same result was observed for the UK education, with the Polish candidate (\( M = 5.94, SD = 1.59 \)) not being perceived differently than the Icelandic candidate (\( M = 5.95, SD = 0.99 \)), (\( t_{(59)} = -0.29, p > 0.05, r = 0.03 \)). This result is not in line with H3 but confirms H6.

Overall, the results of the study indicate that signals of social integration, such as local educational credentials, counter prejudice against the Polish immigrants in Iceland. The majority of the tested hypotheses was supported, while admittedly being limited by relatively small sample size.

**Discussion**

In line with earlier research, the present study stems from the general tendency of immigrant workers to attain employment that does not match their qualifications, knowledge, skills or work experience, which is associated with biases affecting the selection process (Coates and Carr, 2005). The study suggests there is evidence of prejudice as a barrier to equal employment opportunities and human capital transferability. In this respect, it echoes the
observation by the OECD (2012) on the non-approval of qualifications or the non-recognition of equivalent education resulting in low occupational status, which may be related to discrimination in the hiring process. While this phenomenon is found in virtually all countries, albeit to varying degrees (OECD, 2012), the understanding of the interplay between specific elements of prejudice and career success is essential for reaching effective social integration.

As the results of an experimental intervention indicate, education can signal the social integration of an immigrant candidate and thereby decrease prejudice. At the same time, similarly to Dahlstedt and Bevelander (2010), the findings highlight that individuals differentiate between the education acquired in the home and host countries. In particular, credentials of education acquired in the host country counter prejudice against the Polish immigrants in Iceland.

In accord with Tharmaseelan et al. (2010), this study points at education in the host country as a valuable ally in reducing prejudice, raising the possibility of potential pressure for assimilation to the local compliance systems—a pattern already observed in the context of Iceland (Olafsson, 2008). The prevalence of such patterns related to prejudice contradicts the integrative models that acknowledge and embrace the distinctiveness of immigrants (Donitsa-Schmidt, 2017), based on the promotion of equal opportunities, anticipated in the global context (OECD, 2012). In the case of Iceland, the role of such prejudice can be especially significant as the country is experiencing a considerable shortage of labor and talent, which employers must cover over a relatively short period of time.

The interplay of prejudice and the differentiation between the types (host- and home-country) of education can be especially threatening when considered together with the dubious effect of the language skills held by the Polish immigrants in Iceland that are vital for employment acquisition (Rooth and Åslund, 2006; Dahlstedt and Bevelander, 2010; Aycan and Berry, 1996). In sum, both the language skills and the relatively high level of education held by the Polish immigrants in Iceland do not generally translate into positive outcomes that would promote social integration and higher occupational status. All these findings lead to implications concerning the role of education in social integration, the hiring process and their compound effects for human capital transferability.

The forms of prejudice in employment settings are likely to affect the efficacy of social policies and educational policies that are crucial in addressing the threats of labor and skill shortages and involve the social integration of immigrant students (OECD, 2012). Since social class is related to the individual’s opportunities to learn (Banks and Banks, 2010), prejudice can potentially form a vicious circle where immigrants stay in low-skilled positions not matching their current education, which typically require long working hours and limit the opportunities to re-qualify or newly acquire the education in the host country. Long term, this pattern, including low-status occupations and lower incomes, can become intergenerational as immigrant children of highly educated parents often attend disadvantaged schools (OECD, 2012). This effect can be especially hampering if the existing social integration policies are young or underdeveloped. In Iceland, the social integration policy was approved only in 2007, when foreign citizens already constituted about 10 percent of the whole workforce (Ministry of Social Affairs, 2007). Therefore, a systematic analysis and management of the hiring process with special attention given to acknowledgment of the education acquired in the home country, can be essential in the transferability of human capital, which is so needed by economies worldwide (OECD, 2012). The need for transferability is increasing in advanced economies (Özbilgin et al., 2011) and Iceland in particular (Statistics Iceland, 2017). Intergroup prejudice can be mitigated through social policies facilitating intergroup contact and easing intergroup threat (Pettigrew et al., 2010). Therefore, the development of sustainable social integration models with a stronger emphasis on efficient frameworks for re-qualification or accreditation of the education acquired in the home country would likely promote the transferability of human capital.
Conclusion
The research presented in this paper covers a specific group of immigrants in a single-country context, namely, Polish immigrants in Iceland. The study is limited to a relatively small sample and further studies are needed to test and extend these findings. This could contribute to existing knowledge on immigrant career management as part of the social integration. Despite its limitations, the study untangles the interplay between the prejudice and education credentials that can be associated with discriminatory behavioral intentions (Wagner et al., 2008), hindering inclusive employment. More specifically, the present study alters the understanding of barriers for attainment of an occupational status that would correspond with the immigrant candidates’ qualifications. The differentiation between the sources of education (home and host countries) highlighted by our results indicate some of the constraints of human capital transferability. Hence, it further underscores the need for sustainable social integration models in the global and regional labor markets, all characterized by continuously transforming workforce composition.

References


Garðarsdóttir, Ó. and Bjarnason, Þ. (2010), “Áhrif efnahagsþrenginga á fólksflutninga til og frá landinu”, available at: https://skemman.is/bitstream/1946/6774/3/205-215__l%C3%B6fGar_arsd%C3%B3ttir__oroddurBjarna_FELMAN.pdf


Robinson, V. (1999), Migration and Public Policy, Edward Elgar, New York, NY.


**Further reading**

**Corresponding author**
Inga Minelgaite can be contacted at: inga.minelgaite@gmail.com

For instructions on how to order reprints of this article, please visit our website: www.emeraldgrouppublishing.com/licensing/reprints.htm
Or contact us for further details: permissions@emeraldinsight.com
Abstract

Purpose – The purpose of this paper is to help organizations capitalize on the potential advantages of age diversity by offering insight into two new moderators in the age diversity, work group performance relationship – status congruity and cognition-based trust.

Design/methodology/approach – The authors surveyed 197 employees and 56 supervisors across 59 work groups to test for the moderating effects of status congruity and cognition-based trust on the age diversity, work group performance relationship.

Findings – The results demonstrated, on the one hand, that under conditions of status congruity (i.e. when there were high levels of perceived status legitimacy and veridicality) and/or when perceptions of cognition-based trust were high within the group, the relationship between age diversity and work group performance was positive. On the other hand, under conditions of status incongruity and/or low levels of cognition-based trust, this relationship was negative.

Research limitations/implications – The findings contribute to the literature by being the first to provide empirical evidence for the theorized effects of status on the performance of age-diverse work groups and also by demonstrating the effects of cognition-based trust in a new context – age-diverse work groups.

Practical implications – Arising from the study’s findings are several strategies, which are expected to help organizations enhance perceptions of status congruity and/or trust and ultimately the performance of their age-diverse work groups.

Originality/value – The paper is the first to empirically demonstrate the moderating effects of status congruity and cognition-based trust on the age diversity, work group performance relationship. The study also establishes important distinctions between the effects of objective status differences vs status perceptions.

Keywords Aging, Teamwork, Organizational behaviour

1. Introduction

In recent years, there has been a great deal of debate surrounding the potential benefits that could arise from today’s increasingly age-diverse workforce (Ng and Parry, 2016). Advantages can include enhanced creativity, innovation, service quality, and overall performance (van Knippenberg et al., 2004; van Dijk et al., 2012). While some organizations have been able to reap those benefits, for many this potential is never fully realized (AARP, 2016). Diversity researchers claim that these missed opportunities are largely due to the scarcity of research focused on understanding the conditions under which diversity is likely to be positively or negatively associated with performance (i.e. on the moderators of the age diversity, work group performance relationship;
Van Knippenberg and Schippers, 2007). Nishii and Mayer (2009) and Guillaume et al. (2017) argued that in order to increase this understanding and, more importantly, help organizations capitalize on age diversity in their workplaces, more research needs to be devoted to identifying and understanding new moderators in this context. The present study addresses this need by examining two moderators that have been overlooked in work group age diversity research, yet they are likely to play an important role in the performance of these groups, status, and trust. The selection of these moderators was informed by the results of prior exploratory research conducted by the authors of this paper (Scheuer and Loughlin, 2017). This involved conducting in-depth interviews with older/younger workers regarding the factors that they felt contributed to the success or failure of work projects assigned to their age-diverse teams. Through an inductive analysis of the interview data, status and trust surfaced as two of the most critical success factors for these teams, thereby prompting further investigation in the present study. In the literature review that follows further detail is provided on these two factors as well as on their hypothesized effects on the performance of age-diverse work groups.

2. Literature review

2.1 Status congruity as a moderator

The notion of status dates back to Max Weber’s (1922) seminal work on social stratification. In his three-component theory of stratification, Weber argued that “power can take a variety of forms; it can be shown in the economic order through their class, in the political order through their party, and in the social order through their status” (Hurst, 2007, p. 202). In general, people may be said to occupy “high status positions when they are able to control, by order or by influence, other people’s conduct; when they derive prestige from holding important offices; or when their conduct is esteemed by others” (Alexander, 2016, pp. 31-32). There are many different determinants or indicators of status. For example, status can be ascribed (i.e. assigned to individuals at birth without reference to any innate abilities), such as the case with an individual’s sex, race, or family relationships. Status can also be achieved or gained through individual merit or competition (Alexander, 2016) such as through educational pursuits, advancements up the organizational hierarchy, with increasing years of service/tenure, and/or other earned credentials.

Regardless of whether status is ascribed or achieved, status must be attributed by other group members, i.e., it arises from the perceptions or subjective assessments of others rather than being claimed by any one individual (van Dijk and van Engen, 2013). Status can also vary according to the social context (Alexander, 2016). In a North American context, high status is typically ascribed to individuals in the workplace who are more tenured, older, who are male and/or that occupy masculine qualities, who have achieved higher levels of education or a more prestigious degree, and who are higher up in the organizational hierarchy (e.g. a manager or director as opposed to a frontline employee; Hirschfeld and Thomas, 2011). High levels of status can also be ascribed to individuals if they occupy a special skill or have expertise in a high-demand area or even due to their association with powerful others, e.g., from being the boss’s “pet.” In a work group context, “status is in a large part attributed based on the extent to which group members’ characteristics are perceived to resemble the characteristics that are considered to be important” to the success of the group (van Dijk and van Engen, 2013, p. 226).

Although status has been entrenched within society for quite some time (Weber 1922), this topic has become more relevant in recent years due to the growing prevalence of status-based differences within work groups (Triana et al., 2017). With the changing demographics in a global society, today’s organizations are becoming more diverse with respect to a variety of demographically oriented status attributes, such as race, gender, nationality, and age (Guillaume et al., 2017; van Dijk et al., 2012), thereby increasing the
likelihood of status differentials occurring. Age-related status dimensions, such as chronological age and tenure, have become especially salient in workplaces due to the fact that employees are remaining in the workplace longer (Armstrong-Stassen, 2008) due to factors such as longer life expectancy, improved health care, financial necessity, or personal interest (Gandossy et al., 2006; OECD, 2015). At the same time, the trend toward higher average education levels and the attainment of tech-savvy skills among younger generations (OECD, 2016) has also provided younger workers with new avenues for achieving high levels of status in the workplace.

Understanding the effects of status in the workplace is critical for organizations because of its potential effects on the mindsets and behaviors of workers and subsequently on work group performance (Alexander, 2016). Due to the power, prominence, and influence that are embedded within social status (van Dijk, and van Engen, 2013), tension and conflicts often arise among individuals over their relative status, particularly when status incongruities exist (Lenski, 1956). Status incongruence occurs when there is a perceived dissimilarity of ranks on multiple status dimensions (Bacharach et al., 1993; Malewski, 1963). For example, generally speaking, one would expect a younger and less-tenured employee (both low-status attributes) to similarly rank low in job rank and pay grade, while someone at the supervisory level (a higher status position) should rank higher on these dimensions (i.e. have higher income, more tenure, and be older). In this circumstance, there is “status congruence” across each of the status dimensions. However, when there is inconsistency in the status dimensions, such as the case with a younger and less-tenured employee being promoted to a higher paying management position or even being placed into a comparable role to an older and more tenured employee, a status incongruence occurs.

Perceptions of status incongruence may create cognitive dissonance by introducing conflicting expectations into the situation, which may, in turn, negatively influence a number of work-related processes and outcomes, including job satisfaction, commitment, and performance (Deephouse, 2016). From a group dynamics perspective, status incongruence “prevents the attainment of social certitude, thereby decreasing the ease with which interpersonal harmony may be reached” (Brandon, 1965, p. 272). In fact, a number of studies have demonstrated that status incongruence is detrimental to positive interpersonal exchanges (e.g. Stryker and Macke, 1978; Goffman, 1957). Status incongruence can also result in individuals questioning the fairness of the situation (Deephouse, 2016). Equity theory (Adams, 1965) and social comparison theory (Festinger, 1954) predict that individuals will alter their behavior and attitudes in status incongruent situations in an attempt to alleviate the inequity they are experiencing. This could lead to negative outcomes such as backlashes against the perceived status norm violator (e.g. a younger worker), incidences of counterproductive work behaviors (Perry et al., 1999), hampered interpersonal relations, reduced confidence, and/or a reduction in performance.

In the work group diversity literature, the notion of status incongruence could be captured by ascertaining the veridicality and legitimacy of groups’ relative status rankings (van Dijk and van Engen, 2013). van Dijk and van Engen (2013) defined status veridicality as “the extent to which group members’ status rank is congruent with their respective levels of expertise or competence” (p. 228). van Dijk and van Engen (2013) theorized that high (low) levels of status veridicality would have a positive (negative) impact on group performance.

The rationale being that, as noted earlier, a person’s status determines his/her level of power and influence in the group. This means that under high levels of status veridicality the most competent group members are the most influential.

On the other hand, when there are low levels of status veridicality, work group members are influenced by less competent group members who are wrongly regarded as the experts in the group due to certain status-based attributes (e.g. their age or tenure). In the context of age-diverse work groups, this could involve an older worker lacking task-specific expertise,
but is still treated as being the most knowledgeable in the group when completing the task because of the status afforded to him/her as a result of his/her older age and/or longer tenure. In this situation, the low-status veridicality is likely to inhibit the performance of the group due to its members following the advice and guidance of non-expert, yet high-status, group members. Under low levels of status veridicality work groups may also suffer from underperformance because expert group members are regarded as “low-status group members and therefore are not as influential as they ought to or need to be” (van Dijk and van Engen, 2013, p. 229). In the context of age-diverse work groups, this could involve the task-specific expertise of younger workers being prematurely disregarded due to the lower status they are ascribed as a result of their lesser tenure or younger age in the group. Although status veridicality has not been empirically tested in the context of age-diverse work groups, there is some evidence arising from the team’s literature that demonstrates these effects. Most notably were the findings from the Harvard Group Brain studies (Hackman, 2011), which similarly found that teams with the right mix of abilities and whose members performed the roles best matched to their abilities outperformed those whose members were assigned to roles incongruent with their abilities and strengths.

Related to the concept of status veridicality is status legitimacy. van Dijk and van Engen (2013) defined “status legitimacy as the extent to which group members agree with each group member’s status rank and thus accept the status” (p. 229). According to van Dijk and van Engen’s (2013) under conditions of status legitimacy, there is a “shared and accepted mental model of who is more and who is less competent with respect to a specific task” (p. 229). When group members perceive there to be status legitimacy within their group the negative consequences associated with status differentials are also diminished since work group members are in agreement of their relative status rankings.

On the other hand, when a work group’s status configuration is perceived as illegitimate “high and low-status group members hold conflicting beliefs on who is the right person for the job” (van Dijk and van Engen, 2013, pp. 229-230). This can evoke perceptions of unfairness and injustice among low-status group members, which could lead to them challenging the existing status configuration and those in the high-status roles. Or, it could spur “various forms of resigning behavior among low-status group members that ranges from lower levels of commitment to apathy” (van Dijk and van Engen, 2013, p. 230). In both situations, status illegitimacy is likely to result in hampered cooperation among age-diverse work group members and subsequently negatively impact the overall success of the group. Under conditions of status illegitimacy, high-status group members may also engage in overt discrimination against the low-status group members to “show whose boss,” and/or to maintain their positive social identity (van Dijk and van Engen, 2013, p. 230), which also likely hinders group processes and subsequently negatively impacts work group performance. Similar to status veridicality, the theorized effects of status legitimacy on the outcomes of age-diverse work groups have yet to be tested empirically. By investigating these effects in the present study, this research gap can be addressed.

Although there has not been prior empirical support regarding the effects of status on the performance of age-diverse groups, the findings from the exploratory interviews conducted prior to this study, in which status incongruity surfaced as a key inhibitor to the success of age-diverse work groups, corroborate the assertions made by van Dijk and van Engen (2013). For example, one interview participant (younger worker) described himself as being in a status illegitimate situation when he explained how his older colleague possessed more power and influence over work-related decisions than she ought too, due to the status she was afforded from her long tenure with the company. Another participant (older worker) alluded to there being low levels of status veridicality in her work group when she described her younger colleague as being placed in a role that she was not “equipped to handle.” In both examples, the unfavorable status conditions led to strained relationships among the
older and younger workers and/or contributed to non-expert, yet high-status, individuals having too much power and influence in their work groups, which ultimately inhibited the success of these age-diverse work groups. Conversely, when status congruity existed within the group, the work group experienced positive performance-based outcomes. For example, in yet another interview, an older worker was in a situation of high status veridicality and legitimacy when he described himself relying on the task-specific expertise of his younger colleague, which he attributed to this younger colleague's advanced degree. The older worker went on to explain how drawing upon the expertise of his younger colleague enabled them to produce a higher quality product for their customer. Based on these arguments, the following is hypothesized:

H1. Status congruity will positively moderate the relationship between age diversity and work group performance, such that this relationship will be positive under conditions of status congruity (i.e. when there are high levels of status veridicality and legitimacy) but negative or nonsignificant under conditions of status incongruity (i.e. when there are low levels of status veridicality and legitimacy).

2.2 Cognition-based trust as a moderator

Along with status congruity, trust is also expected to play a critical role in the age diversity, work group performance relationship. Trust has been defined in a number of different ways in the literature (Ford, 2004). A few of the commonly held definitions are as follows: “a willingness of a party to be vulnerable to the actions of another party based on the expectation that the other will perform a particular action important to the trustor, irrespective of the ability to monitor or control the other party” (Mayer et al., 1995, p. 712); “the expectation of regular, honest, and cooperative behavior based on commonly shared norms and values (Doney et al., 1998, p. 603); “the degree to which the trustor holds a positive attitude toward the trustee’s goodwill and reliability in a risky exchange situation” (Das and Teng, 1998, p. 494); “one’s expectations, assumptions, or beliefs about the likelihood that another’s future actions will be beneficial, favorable, or at least not detrimental to one’s interest” (Robinson, 1996, p. 576); and both the expectation or belief that one can rely on the actions, words, and decisions of another party and the willingness to use that knowledge as the basis for action (McAllister, 1995).

Distinctions have also been drawn in the literature among the different forms of trust (Ford, 2004). Most notably, McAllister (1995) distinguished between two principal forms of trust, cognition-based trust and affect-based trust. Cognition-based trust is derived through cognitive cues pertaining to the competence, responsibility, reliability, and/or dependability of the other party, while affect-based trust is derived from the emotional bonds or ties between individuals (McAllister, 1995). Since cognition-based trust was found to be a more critical success factor for age-diverse work groups than did affect-based trust in the exploratory (Scheuer and Loughlin, 2017), this former form of trust became the focus of the current study.

Prior research examining the role of trust within a work group has argued that greater trust between group members enhances group performance (De Jong et al., 2016; Dirks, 1999, 2000; Klimoski and Karol, 1976). According to Dirks (2000), such a proposition is premised on the logic that trust increases the ability of group members to work together, which, in turn, increases their overall performance. Although steadily increasing in number, the amount of empirical studies that have actually tested the role of trust on work group performance is still quite limited (Braun et al., 2013). Instead, most research has focused on either interpersonal trust (i.e. trust between two individuals, especially between leaders and their followers), or organizational trust (i.e. an individual’s trust in his/her employer; Ford, 2004). Furthermore, in the studies that have investigated trust in work groups, the results have been mixed (De Jong and Dirks, 2012; Dirks, 2000), suggesting that there may be
additional contextual factors influencing these effects. While recent research has begun to shed light on what these contextual conditions might be (De Jong et al., 2016), the context of age diversity has yet to be considered. The present study addresses this gap by investigating the moderating effects of cognition-based trust on the age diversity, work group performance relationship.

The authors of the present study maintain that in the context of age-diverse work groups, cognition-based trust will have a positive impact on work group performance. The rationale for this is as follows: when there are low levels of cognition-based trust within a work group, older and more tenured workers will likely be reluctant to integrate the new ideas and perspectives of younger workers due to a lack of confidence in the younger group members’ skills and abilities. Such feelings might arise from the negative stereotypes and societal beliefs surrounding younger workers as lacking in experience, trustworthiness, expertise, and work ethic (de Janasz et al., 2015; Hertel et al., 2013; Ng and Parry, 2016; Scheuer and Loughlin, 2015; Scheuer and Mills, 2016, 2017; van der Heijden, 2001; Walter and Scheibe, 2013). When there are low levels of trust within a group, older workers might also fear that listening to the ideas of a “younger” worker might make them appear less knowledgeable and competent in front of their peers and/or supervisors thereby putting them in a more vulnerable or risky position (Gabarro, 1978).

The resulting exclusion of younger group members from group decision-making activities may, in turn, create feelings of frustration in the part of these individuals, and might lead to their detachment or separation from the “group” and subsequently a disengagement in group activities (Levi, 2017), especially discretionary and/or citizenship behaviors (e.g. knowledge sharing; Ford et al., 2015). At the same time, under low levels of trust, younger workers might be hesitant to display confidence in the capabilities of their older colleagues, especially when engaging in technology-based tasks or in projects that are new and unfamiliar to the company. These feelings may again be triggered by the negative stereotypes surrounding older workers as being slower at completing tasks, technologically illiterate, less motivated, less trusting, and/or resistant to change (Ng and Feldman, 2012; Thomas et al., 2014; Scheuer and Mills, 2016).

Under high levels of trust, the negative perceptions among older and younger workers that the other party is incompetent or that they pose a threat will likely dissipate. Instead, as the various definitions of trust provided earlier suggest, when trust is high within a group, work group members display positivity toward one another, exhibit a willingness to cooperate and to share and adopt, or are at least open to, each other’s ideas and perspectives. All of this is argued to positively impact work group performance (van Knippenberg et al., 2004). Based on this rationale, the following is hypothesized:

\[ H2. \] Cognition-based trust will positively moderate the relationship between age diversity and work group performance, such that this relationship will be positive under high levels of cognition-based trust, but negative or nonsignificant under low levels of cognition-based trust.

3. Method

3.1 Sample and data collection

To test these hypotheses, data were gathered from three mid-sized marketing and print services organizations operating in various locations in Midwestern and Eastern USA and Eastern Canada. The final sample for this study consisted of 59 work groups (197 employees, and 56 supervisors). The specific line of work that the participating work groups were involved in was quite diverse, including IT, production, graphic design, sales, marketing, marketing services, research, planning and development, customer service, training and development, accounting, project management, account management, distribution, public relations, social media marketing, data analytics, web design, and media production.
Data were collected from three sources: data on demographic variables and work group membership and sizes were provided by the business owners and/or human resource departments; the direct supervisors provided the data on the work group performance through an electronic survey approximately two weeks after the employees made their ratings; the employees provided data in all other variables through an electronic survey. In a few instances, a higher-level manager was asked to make the performance ratings on behalf of the direct supervisor due to the direct supervisor being unavailable during the time of data collection and/or opting out of the study. However, in each of these cases, the person that completed the survey indicated that he/she also worked closely with the work group and therefore felt confident in making the ratings on the direct supervisor’s behalf.

With the permission of the business owners, employees and their direct supervisors were recruited to participate in the study. Only employees belonging to an interdependent work group with a single supervisor (initially reported by the business owners and later verified by the employees) were invited to participate. This was purposely done to align the study sample with prior work group diversity research (van Knippenberg et al., 2004). Information on the study was sent to eligible participants via their company e-mail addresses, which were provided to us by their business owners. The business owners also helped in informing their employees of the study, but made it clear that they were not obligated to participate and that their responses would be strictly confidential. Upon consenting to the study, participants were e-mailed a link to an electronic survey, which was developed using a survey software program called Qualtrics. All participants were compensated with a $15 gift card.

The response rate for the employee surveys was 56 percent (216 people completed the survey out of 385 total recruited); 19 of these participants were the sole respondents in their work groups. To ensure adequate data quality, these participants were excluded from the final data set (Kelloway, 2014), bringing the total number of employee participants to 197. The response rate for the supervisor surveys was 100 percent. Three supervisors were responsible for managing multiple work groups and so were asked to make separate ratings on each of their groups. The mean age of the employee participants was 41 years with a range of 20-79 years of age. The mean age of the supervisors was 49 years with a range of 24-74 years of age. In total, 25 percent of the employee participants were older than their direct supervisors, an additional 4 percent were the same age, and the remainder were younger than their direct supervisors. In total, 61 percent of the employee participants were female, while 31 percent of the supervisors were female. Group sizes ranged from 2 to 18 members.

3.2 Measures
Age diversity diversity was measured with a one item measure adapted from Harrison et al. (1998) and also used by Gerpott et al. (2015): “How similar in age are the members of your work group.” The respondents were asked to indicate their answers on a four-point Likert-type scale (1 = completely dissimilar, 4 = completely similar; reverse coded for interpretability). A perceptual age diversity measure, rather than an objective diversity measure, was used because in order for diversity to have an effect it needs to be salient to the individual’s involved (Thatcher and Patel, 2012; van Dijk et al., 2012). Thus, by measuring group members’ perceptions of age diversity, the authors were better able to capture how participants view and experience age diversity within their respective groups[1].

Since there is no established scale for status congruity, a three-item seven-point scale was constructed based on the extant literature, drawing primarily upon the theoretical definitions of status veridicality and status legitimacy presented in van Dijk and van Engen (2013). The three items used were as follows: “The status afforded to the members of your work group, including yourself, matches their/your respective levels of expertise or competence”; “the status afforded to the members of your work group, including yourself, is appropriate, proper, and just”; and “the status afforded to the members of your work group, including
yourself, reflects the way things ought to be.” High (low) values on this scale correspond to conditions of status congruity (incongruity). Cronbach’s $\alpha$ for this scale was 0.91.

An additional item (separate from the status congruity measure) was also gathered from the participants, which were intended to ascertain the existence of status differences in the group. The language for this item was as follows: “There are one or more member(s) of my work group that are afforded noticeably higher levels of status (i.e. more prominence and influence) compared to the rest of the group.”

Cognition-based trust was measured with a five-item seven-point scale adapted from McAllister (1995). A sample item for this measure was: “Given their prior track record, I see no reason to doubt the members of my work group’s competence and preparation for the job.” Cronbach’s $\alpha$ for this measure was 0.91.

Work group performance was measured with a five-item seven-point scale adapted from measures of team effectiveness developed by Pearce and Sims (2002) and Small and Rentsch (2010). The specific performance criteria assessed in this study were work quality (accuracy and consistency), decision making, dealing with new problems, relationship maintenance, and overall effectiveness. The criteria for this measure were also chosen based on feedback provided by the participating business owners as to which performance criteria were most pertinent to the success of their businesses. The Cronbach’s $\alpha$ for this scale was 0.85.

In addition to the main study variables, an additional control variable, work group size, was also included due to the potential effects it might have on team cohesiveness and communication and, in turn, performance (Kearney et al., 2009). Work group size was measured as the number of persons in a work group and was provided by the business owners and/or human resource departments and later verified by the employees. Employees were also asked to report on the degree of task interdependence in their respective groups using the three items in Morgeson and Humphrey’s (2006) job characteristics scale. A sample item was: “My work involves tasks that are greatly affected by the work of other people.” Cronbach’s $\alpha$ for this measure was 0.76.

The participant’s high ratings on this scale affirmed that these work groups did indeed embody this characteristic. Unless otherwise noted, study variables were measured on a seven-point Likert-type scale (1 = strongly disagree, 7 = strongly agree).

### 3.3 Confirmatory factor analysis

Prior to testing the hypotheses, confirmatory factor analysis was conducted for status congruity, cognition-based trust, and work group performance using Mplus Version 7.4 (Muthén and Muthén, 2014). This was done to ensure adequate discriminate validity and to assess for possible common method bias, since the data concerning all of the predictor variables were collected from the same individuals (Podsakoff et al., 2003). Age diversity was not included in this analysis, since it was a single-item measure. The expected three factor model fit the data reasonably well, $\chi^2(75) = 146.22, p < 0.01$; root-mean-square error of approximation (RMSEA) = 0.07; standardized root mean residual (SRMR) = 0.06; comparative fit index (CFI) = 0.95; Tucker-Lewis index = 0.94, whereas conceivable alternative models with fewer factors did not fit the data as well. For example, a single factor model that combined all variables into a single factor exhibited a poorer fit, $\chi^2(78) = 883.25, p < 0.01$; RMSEA = 0.23; SRMR = 0.18; CFI = 0.48; TLI = 0.40. A $\chi^2$ difference test showed that the four factor model fit the data significantly better than did the one factor model ($\Delta\chi^2 = 737.03, df = 3, p < 0.01$). All items in the four factor model also loaded significantly on their hypothesized factors ($p < 0.01$).

### 3.4 Interrater agreement and intraclass correlation coefficients

Since the focus of this study is on group-level phenomenon, three different measures, $r_{wg(j)}$, ICC(1), and ICC(2) (Bliese, 2000), were calculated for each predictor variable to justify testing the effects of individual-level data (i.e. ratings made by employees) on group-level outcomes (i.e. group performance) (Woehr et al., 2015). These calculations were made with the aid of a
tool developed by Biemann et al. (2012). The first measure, $r_{wg(j)}$, is the most widely adopted index for assessing within-group agreement (Bliese, 2000; Woehr et al., 2015). Higher $r_{wg(j)}$ values suggest greater degree of agreement in the ratings made by group members within groups for a given variable. It is generally accepted among researchers that adequate agreement has been demonstrated if average $r_{wg(j)}$ values are above 0.70 (Woehr et al., 2015). The $r_{wg(j)}$ values for the three predictor variables in our study, age diversity, status congruity, and cognition-based trust were 0.84, 0.86, and 0.83, respectively, and therefore exceeded the recommended threshold for this index.

The second set of calculations that were made were ICC(1) values for each of the variables. ICC(1) represents the amount of variance in a given variable that can be attributed to belonging to the higher-level unit (e.g. membership in a work group; Woehr et al., 2015). It is also considered to be an estimate of effect size at the group level (Biemann et al., 2012). The common cut-off for ICC(1) values within the literature are values above 0.05 (Bliese, 2000). Additionally, if the ICC(1) is statistically significant, there is “evidence to justify making the group the focal level of analysis” (Biemann et al., 2012, p. 75). The ICC(1) values for the study variables, age diversity, status congruity, and cognition-based trust were 0.39, 0.21, and 0.15, respectively. The test statistics ($F$ ratios) associated with the ICC(1) values of all variables were also statistically significant ($p < 0.05$).

The third set of calculations that were made were ICC(2) values for each variable. ICC(2) “assesses the reliability of group-level means, indicating how reliably the aggregate mean rating (across group members) distinguishes between groups” (Biemann et al., 2012, p. 75). The traditional threshold for ICC(2) values have been between 0.70 and 0.85 (LeBreton and Senter, 2008). However, values above 0.3 have also been deemed acceptable (see Schaeffner et al., 2015) particularly for studies that have groups with small sizes in their sample like the present study does since ICC(2) values are constrained by group sizes (Bliese, 2000). The ICC (2) values for the study variables, age diversity, status congruity, and cognition-based trust were 0.68, 0.47, and 0.37, respectively. Collectively, the $r_{wg(j)}$, ICC(1), and ICC(2) values justified focusing the analysis at the group level.

4. Results

Table I presents the means, standard deviations, and correlations among the study variables at the group level. With the nested nature of the data, multilevel modeling (Level 1: individual employee level; Level 2: work group level) was used in Mplus Version 7.4 (Muthén and Muthén, 2014) to test the hypotheses. Significance levels were relaxed to $p < 0.10$ for findings involving interactions because the statistical power for detecting moderators in field studies such as this one is inherently low (McClelland and Judd, 1993). This decision is consistent with prior group diversity research (e.g. Harrison et al., 1998; Kearney and Gebert, 2009).

4.1 Hypotheses testing

To test for the moderating effects of status congruity ($H1$) and cognition-based trust ($H2$) on the relationship of age diversity with work group performance, two separate multilevel

<table>
<thead>
<tr>
<th>Variable</th>
<th>$M$</th>
<th>SD</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
</tr>
</thead>
<tbody>
<tr>
<td>Work group size</td>
<td>5.63</td>
<td>3.20</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Age diversity</td>
<td>2.89</td>
<td>0.45</td>
<td>0.14</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Status congruity</td>
<td>4.81</td>
<td>0.60</td>
<td>-0.09</td>
<td>-0.04</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Cognition-based trust</td>
<td>5.73</td>
<td>0.59</td>
<td>-0.82***</td>
<td>-0.04</td>
<td>0.28***</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Work group performance</td>
<td>6.00</td>
<td>0.70</td>
<td>0.12</td>
<td>0.05</td>
<td>0.01</td>
<td>0.13</td>
<td></td>
</tr>
</tbody>
</table>

Table I. Means, standard deviations, and correlations

Notes: $N = 59$ work groups. All variables were measured on a seven-point scale except for age diversity which were measured on a four-point scale. ***$p < 0.10$ (two-tailed test)
Moderation models were constructed (Kelloway, 2014). Model 1 specified a Level 2 (between group) effect of age diversity and the control variable (work group size) on work group performance, a Level 2 (between group) effect of status congruity on work group performance, and a Level 2 (between group) effect of the interaction term between age diversity and status congruity on work group performance while controlling for these effects at the individual level (Level 1). Model 2 specified a Level 2 (between group) effect of age diversity and the control variable (work group size) on work group performance, a Level 2 (between group) effect of cognition-based trust on work group performance, and a Level 2 (between group) effect of the interaction term between age diversity and cognition-based trust on work group performance while controlling for these effects at the individual level (Level 1). All exogenous variables were grand-mean centered prior to computing interaction terms in order to reduce possible multicollinearity (Aiken and West, 1991).

In support of H1, the interaction between age diversity and status congruity on work group performance was significant ($\gamma = 3.88, p = 0.04$; see Table II). In accordance with Aiken and West’s (1991) recommendations, this interaction was subsequently tested at conditional values one standard deviation above and below the mean of status congruence (see Figure 1). Simple slope analyses (Aiken and West, 1991) revealed that under conditions of status congruity (i.e. when perceptions of status veridicality and legitimacy were high), age diversity was significantly positively related to work group performance ($\gamma = 1.50, p = 0.007$). By contrast, under conditions of status incongruity (i.e. when perceptions of status veridicality and legitimacy were low), age diversity was significantly negatively related to work group performance ($\gamma = -2.80, p = 0.08$). To determine whether these effects were being prompted

<table>
<thead>
<tr>
<th>Variable</th>
<th>Model 1 (status congruity)</th>
<th>Model 2 (cognition-based trust)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Control</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Work group size</td>
<td>0.08 (0.05)</td>
<td>0.04 (0.04)</td>
</tr>
<tr>
<td><strong>Main effects</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Age diversity (AD)</td>
<td>$-0.76$ (0.65)</td>
<td>$-0.40$ (0.44)</td>
</tr>
<tr>
<td>Status congruity (SC)</td>
<td>1.00*** (0.55)</td>
<td></td>
</tr>
<tr>
<td>Cognition-based trust (CT)</td>
<td>$-0.27$ (0.53)</td>
<td></td>
</tr>
<tr>
<td><strong>Interactions</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>AD by SC</td>
<td>3.88* (1.89)</td>
<td>4.63*** (2.45)</td>
</tr>
<tr>
<td>AD by CT</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Notes:** $N = 59$ work groups. Entries are unstandardized estimates of group-level effects. Estimations of the standard errors are in parentheses. *$p < 0.05$; ***$p < 0.10$ (two-tailed test)

Table II. Regression results (dependent variable: work group performance)

![Figure 1. Plot of interaction between age diversity with status congruity on work group performance](image-url)
by the existence of status differences (as opposed to perceptions of status congruity), the analyses were re-run with the status differences item collected from the participants. This item was not found to moderate the relationship between age diversity and performance, suggesting that perceptions of status congruity were indeed driving the effects.

In support of H2, the interaction between age diversity and cognition-based trust on work group performance was also significant ($\gamma = 4.63, p = 0.06$; see Table II). Subsequently, this interaction was tested at conditional values one standard deviation above and below the mean of cognition-based trust (Aiken and West, 1991) (see Figure 2). Simple slope analyses (Aiken and West, 1991) revealed that when cognition-based trust was high, age diversity was significantly positively related to work group performance ($\gamma = 2.09, p = 0.04$). By contrast, when cognition-based trust was low, age diversity was significantly negatively related to work group performance ($\gamma = -2.62, p = 0.09$).

5. Research contributions and practical implications

The present research increases our understanding of the conditions under which age diversity enhances work group performance by examining the effects of two new moderators, status congruity and cognition-based trust, in the age diversity-work group performance relationship. Specifically, it was found that under conditions of status congruity, i.e., when work group members perceived the relative status rankings within their group to be legitimate and/or congruent with the group members’ respective skills and abilities, and/or when cognition-based trust was perceived to be high within the group, the relationship between age diversity and work group performance was positive, whereas under conditions of status incongruity and/or low levels of trust this relationship was negative.

The study contributes to the literature by being the first (to our knowledge) to provide empirical support for the theorized effects of status (van Dijk and van Engen, 2013) on the performance of age-diverse work groups. Interestingly, the results demonstrate that the mere existence of status differences within a work group is not the key driver of the effects on work group performance. Rather, what seemed to be triggering the effects was the extent to which these status-based differences were perceived to be legitimate and congruent with the group members’ respective skills and abilities (i.e. status legitimacy and veridicality). This finding is informative, as it highlights the importance of understanding perceptions of status incongruities rather than objective status differences, which have been the focus of most prior research (e.g. Haesebrouck et al., 2017; Guillaume et al., 2017; Kearney, 2008; Triana et al., 2017).

When it comes to the findings regarding trust, the study replicates prior research, which has documented the positive effects of trust on performance-based outcomes (e.g. Abrams et al., 2003; Costa and Anderson, 2011; Costa et al., 2001; Ford, 2004). However, the present study also
extends this literature by providing evidence for the positive effects of trust at the work group (rather than interpersonal or organizational) level and in an entirely new context – age-diverse work groups. As Braun et al. (2013) noted, “trust is not only relevant for leader-follower relationships, but also for interaction among team members. Yet, studies of the antecedents and consequences of team members’ trust in each other are relatively scarce” (p. 273). The present study demonstrates another potential consequence of trust – the performance of age-diverse work groups. The findings also point to another contextual factor to consider when studying the effects of trust, the amount of age diversity in the work group.

From a practical standpoint, the results of this study suggest that if organizations want to realize the benefits of age diversity in their workplaces it would be wise for them to devote time and resources toward positively influencing perceptions of status congruity and cognition-based trust in their work groups. There are several strategies organizations can take in order to influence these processes. For example, when it comes to status congruity, one way in which perceptions of status veridicality can be positively influenced is by organizations ensuring work group members and managers are educated about each other’s skills and abilities so that decision-making power can be allocated most appropriately (Hackman, 2011). This can be achieved by giving new employees the opportunity to describe their skills to their teams and by providing opportunities for work group members to update their teams on newly acquired expertise or sharing annual reports of skills developed. Support for this suggestion can be found in the literature on transactive memory systems (Hollingshead, 2000; Hollingshead and Fraidin, 2003; Mell et al., 2014; Pearsall and Ellis, 2006). These studies similarly found that teams, who have a more accurate “mental map” of their team members’ skills and competencies, are better able to utilize and elaborate upon these resources and subsequently to experience more team success. Another way that a more accurate understanding of work group members’ respective skills might be achieved is by encouraging job shadowing (Deyoe and Fox, 2012) as a way of fostering a greater appreciation of work group members’ skills and abilities.

Strategies can also be enacted to positively influence perceptions of status legitimacy within age-diverse work groups. For example, managers can improve upon status legitimacy through fostering a “just” work climate (Colquitt et al., 2002; Roberson, 2006). This can be accomplished by ensuring that there is a fair allocation of resources and other outcomes among work group members (cf. the distributive component of organizational justice; Colquitt, 2001). Organizations can also foster a sense of justice by its managers utilizing fair procedures and processes when allocating these outcomes (cf. the procedural component of organizational justice; Colquitt, 2001). This involves managers treating all work group members in a fair, respectful and professional manner, including refraining from exhibiting favoritism to their “pet employees” (cf. the interactional component of organizational justice; Colquitt, 2001) and/or providing clear and adequate explanations to work group members about why procedures were used in a certain way or why outcomes were distributed in a certain fashion (cf. the informational component of organizational justice; Colquitt, 2001). In implementing these strategies and thus creating a more just work climate, the likelihood of work group members questioning the fairness or legitimacy of their status arrangements will likely be reduced, and consequently so will the tensions that typically arise from status incongruent conditions. There has been a great deal of research in the justice literature that has found the positive effects of positive justice climates on individual, group/team, and organizational level outcomes (Colquitt et al., 2001; Colquitt et al., 2002). Although to knowledge there are no studies that have tested these effects in the context of age-diverse work groups, there was one study that established a relationship between justice perceptions and faultline strength arising from the combined effects of several demographic attributes (e.g. education, gender, tenure, and age). In this study, Bezrukova et al. (2010) found that perceived interpersonal injustice moderated the effect of the faultline strength of these demographic attributes on anxiety and depression in work groups.
A final strategy that organizations might want to adopt in order to positively influence perceptions of status congruity is to establish a collective identity in their work groups through team building efforts and/or the enactment of group incentives. This latter strategy was found to be beneficial by Haesebrouck et al. (2017) when these authors demonstrated through a series of experiments that group incentives mitigate the negative effects of status differences and, in turn, induce cooperative team behavior especially knowledge sharing.

When it comes to the findings regarding trust, organizations are likely to be able to enhance perceptions of trust within their age-diverse work groups through offering more training and development opportunities for their work group members. By increasing and recognizing the skills and capabilities of the work group members, the perceptions of incompetence among older/younger workers, as well as other negative age-based stereotypes, are likely to be reduced, which will, in turn, increase the trust among these individuals. In the context of age-diverse work groups, sufficiently training younger employees on existing work processes upon first entering the company, and developing older employees on newer technologies and/or supporting them through change initiatives, might be particularly impactful to the trust levels of these groups. Another way in which trust might be able to be enhanced in age-diverse work groups is by managers encouraging teamwork in their groups and by intervening when problems arise. This can be accomplished through enacting different forms of empowering leadership, especially coaching behaviors. This could also be accomplished by adjusting the physical layout of the interior work space to allow for more interactions to take place among work group members (e.g. creating an open office floor plan). This recommendation is premised on the intergroup contact theory (Pettigrew, 2008), which posits that age-diverse groups that have the opportunity for more frequent contact, as long as it is positive contact, are likely to develop stronger, trusting bonds (Rudolph and Zacher, 2015). Each of these recommendations was also reflected in the interview responses from the exploratory research.

6. Limitations
Admittedly, there are a number of limitations to this study. First, the study was limited in the number of cases at the work group level. Although the sample size was small in a statistical sense, it is important to note that the sample was congruent with other published studies that have investigated similar relationships at the group level (e.g. Harvey, 2015; Kearney and Gebert, 2009). A second limitation was that the sample was drawn from a single industry. However, as mentioned previously, the type of work that the participants performed was quite diverse, ranging from IT to production to graphic design. This allows for the generalizability of the results to a wider array of contexts. A third limitation was the use of a cross-sectional design. However, steps were taken to counter some of the weaknesses that typically arise with such a design such as by collecting data from three different data sources (employees, managers, and owners) and by providing evidence of discriminate validity through the CFA. Additionally, since the relationships among the variables were detected in both the exploratory interviews and in the analysis of the survey data, and because they had a strong theoretical basis (Aguinis and Vandenberg, 2014), it offers further support for the validity of the findings. Despite these efforts, a longitudinal design would allow for greater certainty in the direction of the purported relationships in this study.

7. Directions for future research
Since this research was the first to empirically test the effects of status congruity and cognition-based trust on the performance of age-diverse work groups, this study can provide the initial foundation from which other studies can build. In subsequent studies, it would be advisable to consider gathering data from a larger sample so as to increase the statistical power. This would also allow for an examination of the interdependencies among moderators through the testing of three-way interactions among age diversity, status congruity, and
cognition-based trust, an approach that was recommended by Guillaume et al. (2017). It may also be informative to replicate this study in other industries. One industry that might be interesting to explore are organizations in the retail sector. When compared to employees in other industries, “retail employees are more likely to include those at both ends of the generational spectrum, that is, the youngest and oldest employees” (Sakai et al., 2008); thereby making it an ideal context for studying the dynamics of age-diverse work groups. Another unique challenge faced by the retail industry are its high turnover rates, with employees staying for a short period of time often in a part-time capacity and then moving on to other forms of employment (Gustafson, 2014; The Aspen Institute, 2012). The inflow and outflow of workers makes status (e.g. due to tenure) and trust even more pertinent to this industry.

Another opportunity for future research would be to explore the values and beliefs surrounding the perceptions of status incongruities and resulting behaviors. One area that might be worthwhile investigating is the effects of “power distance” beliefs on these perceptions (Hofstede, 2001). Since younger generations in North America have been found to exhibit a resistance to authority (Ng and Parry, 2016) and to prefer more egalitarian work environments (Gibson et al., 2009), it could be argued that younger workers have a lower power distance than do older workers. It is therefore also possible that these differences in the values/beliefs pertaining to power (and status by extension) might help explain how older/younger workers approach status incongruent situations.

8. Conclusion

The present study offers insight into the age diversity, work group performance relationship by examining two new moderators, status congruity and cognition-based trust, in this context. Based on the findings, it can be argued that the positive effects of age diversity on work group performance are at least partially contingent on work group members’ perceiving there to be status congruity and/or high levels of cognition-based trust within their work groups. It is therefore recommended for organizations to keep a close eye on perceptions of status congruity and trust within their work groups and to take corrective actions as necessary such as by enacting the strategies discussed earlier if they are looking to capitalize on age diversity in their workplaces.

Note

1. A separate measure of objective work group age diversity from company provided demographic data was also calculated using a formula developed by Biemann and Kearney (2010). This modifies Blau’s (1977) index by adjusting for differences in group size. This measure was found to be significantly correlated to perceived age diversity ($p < 0.01$), thereby providing confidence in the accuracy of the employees’ survey responses.

References


EBHRM
7,1


Further reading


About the authors

Dr Cara-Lynn Scheuer is an Assistant Professor of Management in the Wall College of Business, Coastal Carolina University, USA, where she teaches courses in organizational behavior, leadership, global business, and general management. She received the PhD Degree in Business Administration (Management) from Saint Mary’s University, Canada. Her research interests include workplace diversity (age and gender), leadership, and teams with a particular focus on the plight of the young professional. Dr Cara-Lynn Scheuer is the corresponding author and can be contacted at: cscheuer@coastal.edu

Dr Catherine Loughlin is currently an Associate Dean Research and Knowledge Mobilization at the Sobey School of Business, Saint Mary’s University, Canada. She joined the school in 2005 where her Canada Research Chair focused on working with senior leaders to create healthy workplaces. She was at the University of Toronto previously. Dr Loughlin also publishes in the areas of work stress, bullying, and diversity, and she has won several awards for her research. She consults for the Government of Canada and private industry and has coordinated leadership change initiatives across provinces in industries ranging from Medical Services to Shipbuilding.

For instructions on how to order reprints of this article, please visit our website: www.emeraldgrouppublishing.com/licensing/reprints.htm Or contact us for further details: permissions@emeraldinsight.com
Investigating the links between resilience, perceived HRM practices, and retirement intentions

Hanna Salminen
Faculty of Management, Tampereen yliopisto Johtamistieteiden laitos, Tampere, Finland, and
Mikaela von Bonsdorff and Monika von Bonsdorff
Gerontology Research Centre, University of Jyväskylä, Jyväskylä, Finland

Abstract
Purpose – Human resource management (HRM) scholars’ interest in older employees’ resilience has only recently started to emerge. Little is known about how resilience and perceived HRM are linked to different retirement intentions. Drawing on the conservation of resources and social exchange theories, the purpose of this paper is to investigate the links between perceived HRM practices, resilience and retirement intentions. Additionally, the paper examines the possible mediating role of resilience in the relationship between perceived HRM practices and retirement intentions.
Design/methodology/approach – In 2016, a cross-sectional study was conducted among older (50+) nursing professionals working in a Finnish university hospital. Statistical methods, including mean comparisons and linear and logistic regression analyses, were used to analyze the data.
Findings – The results indicated that resilience partly mediated the relationship between perceived HRM practices and early retirement intentions, and fully mediated the association between perceived HRM practices and intentions to continue working after retirement age.
Originality/value – This study produces new knowledge regarding the links between resilience, perceived High involvement work practices and retirement intentions.
Keywords Finland, Resilience, Healthcare, HRM, Older employees, Retirement intentions
Paper type Research paper

Introduction
Dynamic and turbulent working environments require resilience not only from individual employees, but also from groups and organizations (Britt et al., 2016; King et al., 2016). Resilience describes an individual’s ability to recover from life’s hardships (Bardoe et al., 2014, p. 280). In a work context, this can mean an individual’s ability to adapt to changes and bear uncertainties (Shin et al., 2012). Organizations, on the other hand, may encounter environmental challenges, terrorist attacks and financial setbacks (Linnenluecke, 2017, p. 4). One of the current megatrends influencing working life is population aging (Sonnet et al., 2014). In many countries, there is continuing pressure to increase the official retirement age and prevent individuals from exiting working life early (Sonnet et al., 2014). In Finland, the pension reform act enacted at the beginning of 2017 aims to gradually increase the retirement age of employees due to increasing life expectancy (www.tyoelake.fi/en/).

Context of the study
Evidence indicates that older employees continue to work longer in many countries (Pensions at a Glance, 2017). In Finland, more employees than ever are considering working after the official retirement age (Tenhunen, 2017). However, the increasing official retirement age, together with challenges faced in working and private life, can be burdensome (Brandan et al., 2013/2014). In working life, age discrimination can negatively influence older employees’
willingness to continue working, “pushing” them into early retirement (Bayl-Smith and Griffin, 2014, p. 589), as can changing work demands (Sterns and Dawson, 2012). Adversities faced outside working life may include illness or injury (Sterns and Dawson, 2012) or the death of a loved one (Smith and Hayslip, 2012). Resilience is an important attribute that enables individuals to cope with adversities (Britt et al., 2016), including uncertainties related to contemporary careers (Lyons et al., 2015) and the current turbulent working environment (Bardoel et al., 2014; Luthans et al., 2006). Consequently, it can be posited that resilience could enhance older employees’ abilities to cope with the challenges faced in later life (Sterns and Dawson, 2012; Brandan et al., 2013/2014).

Research objectives and expected contribution
The global scarcity of nursing professionals and the growing need for healthcare services because of the greying society highlight the need to retain older nursing professionals in the workforce as long as possible (Armstrong-Stassen et al., 2015). Relying on a resource approach regarding retirement (see Wang, 2007), this study investigates how perceived human resource management (HRM) practices and resilience, as organizational and individual resources, are associated with different retirement intentions among older (50+) nursing professionals. The contribution of this study is threefold. First, it investigates the linkage between perceived HRM practices and employee resilience, thereby contributing to the HRM field, where studies focusing on employees’ resilience have just started to emerge (Bardoel et al., 2014; Cooke et al., 2016). Second, this study investigates the association of resilience with older employees’ retirement intentions. Although several positive issues are associated with employee resilience, such as emotional stability (Bonanno et al., 2007) and performance (see Luthans et al., 2005, 2006), few studies focus on the significance of resilience for older employees’ retirement intentions. Consequently, this study contributes to the growing academic inquiry into the attitudinal and behavioral outcomes of employee resilience (King et al., 2016). Third, this study investigates the possible mediating role of employee resilience in the relationship between perceived HRM practices and retirement intentions. Thus far, only a few HRM studies have investigated this matter (Cooke et al., 2016; Shin et al., 2012).

Concepts of the study
The definitions and operationalizations of resilience vary (Linnenluecke, 2017; Britt et al., 2016). In general, resilience is described as an individual’s ability to “bounce back” under difficult circumstances (Smith and Hayslip, 2012, p. 5). In practice, this may mean an individual’s ability to avoid burnout or depression during an adverse life situation (Chen et al., 2015, p. 96). In other words, resilience describes an individual’s ability to maintain one’s functioning as well as recover from adverse life events (Hardy et al., 2004).

Resilience has two components: psychological and behavioral (Chen et al., 2015). The former refers to mental well-being, whereas the latter relates to how an individual functions in adverse situations (Chen et al., 2015). Similarly, Britt et al. (2016, p. 378) distinguish between the capacity and the demonstration of resilience. The former refers to the ability to adapt to adverse situations positively. As an individual-level ability, resilience is a part of an individual’s psychological capital (PsyCap) and is a resource that can be further developed (Britt et al., 2016). For example, personal, familial, community and organizational factors can provide an individual with resources for resilience (Britt et al., 2016, p. 380). The demonstration of resilience, on the other hand, describes how an individual has been able to adapt to an adverse situation (Britt et al., 2016). The demonstration of resilience has been measured in empirical studies by investigating an individual’s mental health after an adverse event (Britt et al., 2016; Bonanno et al., 2007). Yet, different researchers hold diverse views regarding whether resilience means only the ability to recover from difficult events or if it also
refers to positive growth after those events (Britt et al., 2016; Luthans et al., 2006). It is also unclear how an individual’s current level of resilience indicates his or her ability to cope with future challenges and adversities (Britt et al., 2016). The focus of this study is on individual-level resilience, instead of group- or organization-level resilience. Furthermore, resilience is defined as an individual’s response to adverse life situations in line with Hardy et al.’s (2004, p. 260) study.

Broadly speaking, HRM practices cover all the organizational activities aiming to maintain, develop and strengthen the human capital of the organization (Veth et al., 2017, p. 2). In this study, the focus is on so-called high involvement work practices (HIWPs) which are seen to enhance employees’ abilities, motivation and performance (Kooij et al., 2013), and thereby potentially strengthening individual-level resilience (Cooke et al., 2016) as well as hindering the resource deterioration of older employees (Von Bonsdorff et al., 2018).

In terms of retirement intentions, both intentions for early retirement and intentions to continue working after retirement age are investigated in this study. Older employees’ early and late retirement intentions have been investigated in a similar manner, for example, in the study of Topa and Alcover (2015).

Theoretical framework and hypotheses

The interest toward resilience is related to the Positive Psychology Movement (Smith and Hayslip, 2012), and the theoretical background of studies concerning employees’ resilience have often relied on the conservation of resources (COR) (Bardoel et al., 2014) and PsyCap theories (Luthans et al., 2006). The first wave of resilience research investigated individual traits associated with resilience, whereas the second wave of resilience studies acknowledged that resilience is more “state-like” and can be developed. Furthermore, recent resilience research has paid attention to the resilience process and how different individual and contextual factors contribute to it (King et al., 2016; Hildon et al., 2008; Luthans et al., 2006).

Early resilience research focused primarily on children and adolescents, and how they survived the adversities they encountered during the early years of their lives (Hildon et al., 2008; King et al., 2016). Recently, gerontologists have begun to pay attention to resilience in older age (Hildon et al., 2008). However, surprisingly little attention has been given to resilience in the workplace, especially in the context of retaining employees (King et al., 2016; Luthans et al., 2006). Resilience studies focusing on employees’ resilience have been conducted primarily among military personnel because they are likely to encounter adverse situations in their profession (Britt et al., 2016; King et al., 2016). However, Britt et al. (2016, p. 382) argue that resilience studies should also investigate different occupations, especially those of first responders, such as police officers, firefighters and medical employees. For instance, nursing professionals are likely to face different kinds of adversities due to their occupation, such as patients’ pain and death as well as work overload, role conflicts and aggression (Kossek and Perrigino, 2016, p. 750; Yilmaz, 2017, p. 10).

Recently, resilience has been linked to the discussion of late-career challenges (Brandan et al., 2013/2014). Employees with high work and career resilience are expected to be confident about their future opportunities and their abilities to confront adverse work situations (Hennekam, 2015). For example, Lyons et al.’s (2015) study demonstrated that career resilience was positively related to an individual’s career success. It has been postulated, based on lifespan theories, that an individual’s response to stress factors, such as adverse work situations, may change as individuals age (Mauno et al., 2013, p. 411). Mauno et al.’s (2013) study showed that older employees were more resilient under heavy workloads and during work-family conflicts compared to younger employees. This result indicates that older employees can regulate their feelings better than younger ones (Mauno et al., 2013). It is also possible that older employees learn coping strategies during their careers, allowing
them to get through difficult situations (Mauno et al., 2013). However, Mauno et al.’s (2013) study demonstrated that younger employees coped better with job insecurity compared to older employees, partly because they were more confident about finding new jobs compared to older employees.

When it comes to adverse situations, the severity of the events involved has been defined and measured differently in previous studies (Hildon et al., 2008). For example, Britt et al. (2016, p. 381) argued that common work-related stress factors, such as work overload or job ambiguity, do not necessarily meet the criteria for an adverse situation. Other resilience studies have focused on cumulative adversity (the total number of stressful life events) (e.g. Ezeamama et al., 2016, p. 1007). Ageist practices in the workplace, career plateauing, and uncertainties in the workplace are examples of the adversities older employees may face in working life (Brandan et al., 2013/2014). Similarly, one’s own or a loved one’s sickness or injury and divorce are forms of adversities that older employees may undergo in their private life (Sterns and Dawson, 2012). Hildon et al. (2008) argued that during older age, individuals are likely to face adversities, such as illness, but it does not mean that they cannot maintain a reasonable quality of life. Therefore, they have defined resilience as “flourishing despite adversity” (Hildon et al., 2008, p. 728). This study uses the scale developed by Hardy et al. (2004), focusing on the most stressful forms of adversity (health-related or other) older nursing professionals have encountered during the previous five years.

Resource perspective on retirement intentions
This study takes a resource perspective on retirement in investigating how perceived HRM practices and resilience are associated with different forms of retirement intentions (Wang, 2007; Armstrong-Stassen et al., 2012). The resource perspective on retirement relies on the COR theory (Wang, 2007; Armstrong-Stassen et al., 2012). The COR theory has been widely used in the fields of organizational and occupational psychology to investigate individuals’ work-related attitudes and behaviors, including resilience and retirement intentions (Chen et al., 2015; Gorgievski et al., 2011; Wang, 2007; Armstrong-Stassen et al., 2012). Resources are at the center of the COR theory, and, according to this theory, individuals constantly aim to protect and safeguard their resources (Chen et al., 2015). The COR theory implies that individuals require suitable resources to be resilient (Chen et al., 2015). These resources can be tangible (e.g. a house or car) or other (e.g. marriage, employment, skills and self-esteem) (Chen et al., 2015, p. 97). Loss of resources can cause a “loss spiral” with negative consequences, whereas gaining resources is likely to foster a “gain spiral,” with positive outcomes (Chen et al., 2015, p. 97).

In the present study, HRM practices are considered resources provided by the employer organization, whereas resilience reflects an individual’s personal resources (Cooke et al., 2016). The social exchange theory, which focuses on the exchange of resources in an employee–organization relationship (Gorgievski et al., 2011), has often been applied to explain the association between HRM practices and an individual’s retirement intentions (Kooij et al., 2013; Armstrong-Stassen et al., 2015). According to this view, HRM practices are likely to enhance an employee’s positive work-related attitudes and behaviors since HRM practices reflect the value an employer places on their employees (Kooij et al., 2013; Alfes et al., 2013; Kuvaas, 2008). For example, the study of Veth et al. (2017) showed that perceived availability and use of HRM practices were positively associated with employability among different aged employees. In line with COR theory and social exchange theory, it can be expected that HRM practices such as HIWP practices can safeguard older employees from resource deterioration (Kooij et al., 2013; Von Bonsdorff et al., 2018) and enhance their abilities to continue working until retirement and beyond.

Conversely, poor working arrangements and working environments are considered antecedents of early retirement (Topa et al., 2018; Dal Bianco et al., 2015). It is unclear
whether direct links exist between perceived HRM practices and different forms of withdrawal intentions, such as retirement intentions (Armstrong-Stassen et al., 2015). Some evidence exists indicating that perceived HRM practices are negatively associated with early retirement intentions. For example, Herrbach et al.’s (2009) study demonstrated that training opportunities were negatively related to early retirement intentions among late-career managers. Thus, this study hypothesizes the following:

\[ H1a. \] Perceived HIWPs are negatively associated with early retirement intentions.

\[ H1b. \] Perceived HIWPs are positively associated with intentions to continue working after the official retirement age.

The linkage between HRM and resilience

Recently, academic interest in the relationship between management and resilience (Kossek and Perrigino, 2016) and especially between HRM and resilience has grown (Britt et al., 2016; Cooke et al., 2016; Bardoel et al., 2014; Luthans et al., 2006). In line with the COR theory, a supportive working environment, social networks and HRM practices can be considered work-related resources, which can hinder employees’ work-related strain and reinforce their resilience (Kossek and Perrigino, 2016; Yilmaz, 2017; Cooke et al., 2016). Luthans et al. (2006) argued that, when it comes to improving employee resilience (as well as other forms of positive PsyCap), both proactive and reactive HRM practices should be used. The former refers to resilience training, whereas the latter can mean, for instance, grief counseling (Luthans et al., 2006; see Bardoel et al., 2014, 281). Bardoel et al. (2014, pp. 283-284) identified numerous HRM practices important for strengthening employees’ resilience, including: the development of social supports at work; work-life balance practices; employee assistance programs; employee development programs (including resilience and mindfulness training); flexible work arrangements, rewards, and benefits systems; occupational health and safety systems; risk and crisis management systems; and diversity management. This study follows Cooke et al. (2016), focusing on the importance of HIWPs for employee resilience instead of investigating only a few HRM practices. Thus, this study postulates that HIWPs can enhance an individual’s resources (Cooke et al., 2016) and are, therefore, positively associated with employee resilience. Consequently, this study hypothesizes the following:

\[ H2. \] Perceived HIWPs are positively related to resilience.

The association between resilience and retirement intentions

Several positive, employee-level outcomes are associated with resilience. For example, a positive association between an individual’s resilience and performance has been found (see Luthans et al., 2005, 2006, p. 38). Additionally, good self-rated health is positively related to employee resilience (Ezeamama et al., 2016; Hardy et al., 2004). A positive association between resilience and physical activity was found among healthcare and insurance employees (see Gerber et al., 2014; Thogersen-Ntoumani et al., 2017). Resilience is also positively associated with organizational commitment and negatively with burnout (Meng et al., 2017). Less is known about how resilience relates to employee retention (Luthans et al., 2006, p. 38) and retirement (Hildon et al., 2008). Hildon et al.’s (2008) study showed that resilient individuals were satisfied with their retirement process and possibilities for gradual retirement, indicating that resilient individuals had more control over their retirement process compared to less resilient ones. In line with the COR theory, this study postulates that older employees who are more resilient are likely to continue working until retirement age and beyond. In other words, resilience can prevent loss of
resources or can enable employees to gain more resources (King et al., 2016, p. 784). Thus, this study hypothesizes the following:

H3a. Resilience is negatively associated with early retirement intentions.

H3b. Resilience is positively associated with intentions to continue working after the official retirement age.

Resilience as a mediator

Based on the COR theory, it is likely that HIWPs provided by the organization enhance an individual’s resilience, which, in turn, is positively related to an individual’s intention to continue working until retirement age and beyond (Von Bonsdorff et al., 2018). Shin et al. (2012, p. 730), draw on the COR theory, as they argue that the resources provided by the organization are likely to enable employees to cope with work challenges. Similarly, some HRM studies, relying on the social exchange theory, indicate that perceived HRM practices may not directly influence an individual’s behavior (such as retirement intentions); rather, there are possible mediating (or moderating) factors, such as work-related attitudes (Alfes et al., 2013; Kuvaas, 2008). However, the possible mediating role of resilience in the association between perceived HRM practices and retirement intentions has received little attention. For example, Cooke et al.’s (2016) study showed that resilience mediated the relationship between HIWPs and employee engagement. This study hypothesizes the following:

H4a. Resilience mediates the relationship between perceived HIWPs and early retirement intentions.

H4b. Resilience mediates the relationship between perceived HIWPs and intentions to continue working after the official retirement age.

The hypothesized relationships between perceived HIWPs, resilience, and retirement intentions are presented in Figure 1.

Methodology

The data for this study were collected as part of “Work careers of older workers – continued participation and bridge employment,” a study at the Gerontology Research Centre at the University of Jyväskylä, Finland. Total population sampling was used for this study. Total population sampling is a purposive sampling technique in which the whole population, which meets the specific criteria, is studied (Etikan et al., 2016, p. 3). A survey was targeted to all nursing professionals working at one Finnish university hospital who were 50 years old and older. A total of 962 questionnaires were sent to the relevant nursing professionals via the hospital’s internal post in the spring of 2016. One reminder was sent. In all, 396 questionnaires were returned (41 percent response rate). The Ethical Committee at the University of Jyväskylä and the studied hospital approved this study. We also obtained informed consent from the participants.
Demographic characteristics
The majority of the respondents were female (90 percent) (see Table I), which represents the general distribution of gender in the Finnish healthcare field. In Finland, approximately 87 percent of social and healthcare workers were female in 2015 (Women and Men in Finland, 2016, p. 47). For those in the nursing profession, this percentage was 92 in 2014 (Tilastoraportti, 2018). The mean age of the respondents was 57 (SD 3.7). Most of the respondents had a college level education (78 percent). Approximately three-quarters of the respondents were married or in a non-marital relationship. Over 90 percent of the respondents had a permanent job. Half of the respondents worked in shifts. The majority of the respondents worked overtime only occasionally (67 percent). The average monthly salary was around €2,800. In 2017, the average (mean) wage for Finnish municipal employees in fulltime, regular work was €3,049. For male municipal employees, the mean wage was €3,458 and, for females, €2,943 (www.stat.fi/til/ksp/). Approximately one-third of the respondents (34 percent) had not considered early retirement. Nearly 70 percent of the respondents were not against the idea of continuing working after reaching the official retirement age.

Measures
The questionnaire covered broad areas, such as perceptions about well-being, health, pension reform, retirement intentions, work ability, resilience, job satisfaction,
organizational commitment, perceived HRM practices, managerial and co-worker support and perceived development opportunities.

In the resilience literature, there is no consensus regarding how adversities should be measured (see, e.g. Britt et al., 2016). In the present study, resilience was measured using Hardy et al.’s (2004) scale. A translation-back-translation method was used when translating the resilience scale. Respondents were asked to indicate whether they had encountered a stressful event during the previous five years. A list of stressful events were provided, including: one’s own sickness/injury/accident; a partner’s or child’s sickness/injury/accident; a partner’s or child’s death; close one’s sickness/injury/accident; close one’s death; divorce/separation; maltreatment/a dangerous situation/a psychological or physical threat; financial distress; relocation; other event; and nothing stressful happened. Those who had experienced a stressful event were asked to evaluate the stressfulness of the event on a scale from 0 (not very stressful) to 10 (extremely stressful). After that, the questionnaire asked how the individual had perceived the stressful event, how they had recovered from it, and what the consequences of the stressful event were. The resilience scale varied from 0 (low resilience) to 18 (high resilience) (see Hardy et al., 2004, p. 258). Adversities were measured similarly in Hildon et al.’s (2008) study focusing on older individuals (70+).

The HIWPs scale was based on Harmon et al.’s (2003) scale. The scale included ten Likert-scale items concerning, for example, information sharing, performance-based rewards, teamwork, empowerment, and trust between a supervisor and the employees. The respondents were asked to evaluate the extent to which the items were present in their workplace (see, e.g. Harmon et al., 2003). A sample item is “There is trust between employees and the supervisor.” The scale anchors were: very little; relatively little; neither little or much; relatively much; and very much. The Cronbach’s $\alpha$ value was 0.875.

In this study, retirement intentions are used as an estimate for an individual’s actual retirement behavior, in line with several previous studies (Stynen et al., 2017; Davies and Cartwright, 2011). Older nursing professionals’ early retirement intentions were measured with one question: “Have you thought about retiring before the age of retirement?” A similar question was used in Stynen et al.’s (2017) study. For logistic regression analyses, the scale was divided into those who had no intentions of early retirement (1) and those who had at least sometimes considered early retirement (0). The intention to continue working after retirement age was measured with the statement, “I believe that my health will allow me to continue working in my current profession after the age of 63.” The three-point response scale was divided into yes/maybe (1) and no (0). The same question was used in Vanhala’s (2013) study. The use of health-specific retirement questions can be justified by the notion that health is often seen as a significant factor influencing an employee’s ability to continue working into older age (Beehr and Bennett, 2015).

Statistical analysis

Percentages, means, standard deviations, and correlation analysis (Spearman) were used to describe the data (SPSS 22.0). The four-step procedure suggested by Baron and Kenny (1986) was followed when testing the mediation model. According to Baron and Kenny (1986), to test a mediation, the following steps must be followed. First, there must be an association between the predictor variable (perceived HIWPs) and the outcome variable (retirement intentions) ($H1a$–$H1b$). Second, the predictor variable (perceived HIWPs) must be linked to the mediator variable (resilience) ($H2$). Third, there must be a significant association between the mediator variable (resilience) and the outcome variable (retirement intentions) ($H3a$–$H3b$). Fourth, after controlling for the mediator variable (resilience), the association between the independent variable (perceived HIWPs) and the outcome variable (retirement intentions) should be insignificant (full mediation) or reduced (partial mediation) ($H4a$–$H4b$) (Wood et al., 2008). Logistic regression analyses (Enter method) were used to test
H1a–H1b, H3a–H3b and H4a–H4b because the dependent variables (early retirement intentions and intentions to continue working after the official retirement age) were dichotomous, whereas linear regression analysis (enter method) was used to test H2 because resilience was not a dichotomous variable. The variables were standardized before running the regression analyses. In the logistical regression analyses, Nagelkerke $R^2$ was used, describing the amount the model can explain (Nagelkerke, 1991). Age (continuous), gender (female = 1, male = 0), marital status (1 = married/non-marital relationship, 0 = unmarried/divorced/widowed), and education (1 = bachelor’s degree or higher, 0 = college level or lower) were included in the regression models as control variables, as these are often related to retirement intentions (Beehr and Bennett, 2015). Additionally, there is some evidence that age, gender, and education level are related to individual resilience (Bonanno et al., 2007).

**Results**

The respondents were asked to report the most stressful event that had occurred in their life during the previous five years. A close one’s death (21 percent) and one’s own (17 percent) or partner’s/child’s sickness, injury, or accident (12 percent) were the most commonly reported stressful events (Table II). Divorce (4 percent), maltreatment (4 percent), financial issues (4 percent) and relocation (2 percent) were the events most rarely mentioned. In total, 18 percent of the respondents indicated they had not experienced any stressful events during the previous five years.

The stressful events were further categorized into four categories, in line with Hardy et al.’s (2004) study. These categories included: personal illness (20 percent, $n = 65$); the death of a family member or friend (29 percent, $n = 90$); the illness of a family member or friend (24 percent, $n = 76$); and a nonmedical event (27 percent, $n = 84$). All of these events were perceived as rather stressful (scale 0–10) by the nursing professionals (Table III). No statistically significant differences between the nature of the event and the perceived stressfulness were found. The highest levels of stressfulness were related to one’s own personal illness ($M = 8.17$, $SD = 1.61$), followed by the illness of a family member or friend ($M = 8.07$, $SD = 1.75$).

By using cross-tabulation, a statistically significant relationship between the stressful event and resilience levels was found ($\chi^2 = 35.74$, df = 6, $p < 0.001$). Higher resilience was demonstrated when the stressful event was related to the death or illness of a family member or friend (Table IV).

The relationships between resilience, perceived HIWPs, and different retirement intentions were analyzed by using correlation and regression analyses. The mean values for resilience (Mean = 10.22, $SD = 3.85$) and HIWPs (Mean = 3.32, $SD = 0.62$) were moderate (Table V). Age correlated negatively with early retirement intentions ($r = -0.118$, $p < 0.05$).

<table>
<thead>
<tr>
<th>The most stressful event</th>
<th>%</th>
<th>(n)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Own sickness, injury or accident</td>
<td>17</td>
<td>(65)</td>
</tr>
<tr>
<td>Partner’s or child’s sickness, injury or accident</td>
<td>12</td>
<td>(48)</td>
</tr>
<tr>
<td>Partner’s or child’s death</td>
<td>2</td>
<td>(8)</td>
</tr>
<tr>
<td>Close one’s sickness, injury or accident</td>
<td>7</td>
<td>(28)</td>
</tr>
<tr>
<td>Close one’s death</td>
<td>21</td>
<td>(82)</td>
</tr>
<tr>
<td>Divorce or separation</td>
<td>4</td>
<td>(15)</td>
</tr>
<tr>
<td>Maltreatment/dangerous situation/psychological or physical treat</td>
<td>4</td>
<td>(17)</td>
</tr>
<tr>
<td>Financial distress</td>
<td>4</td>
<td>(17)</td>
</tr>
<tr>
<td>Relocation</td>
<td>2</td>
<td>(8)</td>
</tr>
<tr>
<td>Other event</td>
<td>7</td>
<td>(27)</td>
</tr>
<tr>
<td>Nothing stressful has happened</td>
<td>18</td>
<td>(71)</td>
</tr>
</tbody>
</table>

Table II. The most stressful event during the last five years (%)
and positively with intentions to continue working after retirement age ($r = 0.320, p < 0.01$). Resilience was positively associated with perceived HIWPs ($r = 0.121, p < 0.05$) and intentions to continue working after retirement age ($r = 0.172, p < 0.01$) and negatively with early retirement intentions ($r = -0.196, p < 0.01$). Similarly, perceived HIWPs were negatively related to early retirement intentions ($r = -0.207, p < 0.01$) and positively with intentions to continue working after retirement age ($r = 0.240, p < 0.01$). There was a strong negative correlation between early retirement intentions and intentions to continue working after retirement age ($r = -0.535, p < 0.01$).

In line with Baron and Kenny (1986), the first logistic regression model tested the relationship between perceived HIWPs and early retirement intentions ($H1a$). In Model I (Table VI), being married or in a non-marital relationship (OR $= 0.544$) decreased the odds of not retiring before retirement age, whereas HIWPs perceived as good (OR $= 1.533$) increased the odds of not retiring before retirement age. Model II tested the relationship between perceived HIWPs and resilience ($H2$), and a statistically significant positive association was

### Table III.
<table>
<thead>
<tr>
<th>Stressful event</th>
<th>$n$</th>
<th>Stressfulness of the event</th>
</tr>
</thead>
<tbody>
<tr>
<td>Personal illness</td>
<td>65</td>
<td>8.17 1.61</td>
</tr>
<tr>
<td>Death of a family member or friend</td>
<td>90</td>
<td>7.52 2.27</td>
</tr>
<tr>
<td>Illness of a family member or friend</td>
<td>74</td>
<td>8.07 1.75</td>
</tr>
<tr>
<td>Nonmedical event</td>
<td>79</td>
<td>7.91 2.14</td>
</tr>
<tr>
<td>Total</td>
<td>308</td>
<td>7.89 2.00</td>
</tr>
</tbody>
</table>

### Table IV.
<table>
<thead>
<tr>
<th>Level of resilience</th>
<th>Personal illness</th>
<th>Death of a family member or friend</th>
<th>Illness of a family member or friend</th>
<th>Nonmedical event</th>
</tr>
</thead>
<tbody>
<tr>
<td>Low (0–6)</td>
<td>21%</td>
<td>11%</td>
<td>10%</td>
<td>34%</td>
</tr>
<tr>
<td></td>
<td>(12)</td>
<td>(9)</td>
<td>(6)</td>
<td>(24)</td>
</tr>
<tr>
<td>Intermediate (7–10)</td>
<td>43%</td>
<td>17%</td>
<td>26%</td>
<td>29%</td>
</tr>
<tr>
<td></td>
<td>(24)</td>
<td>(13)</td>
<td>(16)</td>
<td>(20)</td>
</tr>
<tr>
<td>High (11–18)</td>
<td>36%</td>
<td>72%</td>
<td>64%</td>
<td>37%</td>
</tr>
<tr>
<td></td>
<td>(20)</td>
<td>(57)</td>
<td>(40)</td>
<td>(26)</td>
</tr>
<tr>
<td>Total</td>
<td>100%</td>
<td>100%</td>
<td>100%</td>
<td>100%</td>
</tr>
</tbody>
</table>

### Table V.
<table>
<thead>
<tr>
<th>Mean</th>
<th>SD</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Age</td>
<td>57.01</td>
<td>3.69</td>
<td>1 ($n = 391$)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2. Resilience</td>
<td>10.22</td>
<td>3.85</td>
<td>0.022 ($n = 267$)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3. HIWPs</td>
<td>3.32</td>
<td>0.62</td>
<td>0.145** ($n = 384$)</td>
<td>0.121* ($n = 267$)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>4. Early retirement intentions</td>
<td>1.11</td>
<td>1.09</td>
<td>-0.118* ($n = 384$)</td>
<td>-0.196** ($n = 267$)</td>
<td>-0.207** ($n = 381$)</td>
<td></td>
</tr>
<tr>
<td>5. Intentions to continue working after retirement age</td>
<td>1.04</td>
<td>0.83</td>
<td>0.320** ($n = 340$)</td>
<td>0.172** ($n = 233$)</td>
<td>0.241** ($n = 339$)</td>
<td>-0.535** ($n = 339$)</td>
</tr>
</tbody>
</table>

Notes: *$p < 0.05$; **$p < 0.01$
<table>
<thead>
<tr>
<th>Variables</th>
<th>Model I (Early retirement intentions)</th>
<th>Model II (Resilience)</th>
<th>Model III (Early retirement intentions)</th>
<th>Model IV (Early retirement intentions)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>$B$ (SE) Exp $\beta$ (OR)</td>
<td>$B$ (SE) $\beta$</td>
<td>$B$ (SE) Exp $\beta$ (OR)</td>
<td>$B$ (SE) Exp $\beta$ (OR)</td>
</tr>
<tr>
<td>Age</td>
<td>0.085 (0.119) 1.088</td>
<td>0.126 (0.248) 0.032</td>
<td>0.106 (0.145) 1.112</td>
<td>0.059 (0.149) 1.060</td>
</tr>
<tr>
<td>Gender</td>
<td>−0.363 (0.370) 0.696</td>
<td>−1.989* (0.813) −0.151*</td>
<td>0.130 (0.488) 1.139</td>
<td>0.088 (0.491) 1.092</td>
</tr>
<tr>
<td>Marital status</td>
<td>−0.608* (0.251) 0.544*</td>
<td>1.334* (0.520) 0.158*</td>
<td>−0.762* (0.303) 0.467*</td>
<td>−0.846** (0.310) 0.429**</td>
</tr>
<tr>
<td>Education</td>
<td>0.219 (0.274) 1.245</td>
<td>0.215 (0.558) 0.024</td>
<td>0.467 (0.230) 1.595</td>
<td>0.476 (0.324) 1.609</td>
</tr>
<tr>
<td>Resilience</td>
<td>– – – –</td>
<td>– 0.399** (0.149) 1.490**</td>
<td>– 0.363* (0.152) 1.438*</td>
<td>– 0.311* (0.155) 1.364*</td>
</tr>
<tr>
<td>Perceived HIWPs</td>
<td>0.427** (0.128) 1.533**</td>
<td>0.608* (0.245) 0.154*</td>
<td>– – – –</td>
<td>– – – –</td>
</tr>
<tr>
<td>Adjusted $R^2$</td>
<td>0.077</td>
<td>0.078</td>
<td>0.101</td>
<td>0.101</td>
</tr>
<tr>
<td>$n$</td>
<td>361</td>
<td>252</td>
<td>254</td>
<td>252</td>
</tr>
</tbody>
</table>

**Notes:** $B$, Unstandardized $\beta$; SE, standard error; $\beta$, standardized $\beta$; OR, odds ratio. Model II uses linear regression analysis to test effect of HIWPs on resilience. *$p < 0.05$; **$p < 0.01$
found ($\beta = 0.154$, $p = 0.05$). Additionally, gender ($\beta = -0.151$, $p = 0.05$) and marital status ($\beta = 0.158$, $p = 0.05$) were statistically significantly related to resilience. Compared to the female respondents, the male respondents had higher levels of resilience. Resilience levels were also higher among those who were married or in a non-marital relationship compared to single respondents. Model III shows that resilience increased the odds of not retiring before retirement age (OR = 1.490) ($H3a$). In Model IV, the mediation of resilience was tested ($H4a$). The effect of perceived HIWPs was reduced (OR = 1.364) once resilience (OR = 1.438) was included in the model at the same time, indicating that resilience partially mediates the relationship between perceived HIWPs and early retirement intentions. However, Nagelkerke $R^2$ was relatively low in the tested models.

Table VII indicates the results of testing the relationship between perceived HIWPs and intentions to continue working after retirement age ($H1b$). In Model I, older age (OR = 1.417) and HIWPs perceived as good (OR = 1.373) increased the odds for continuing to work after old age retirement age. Model II is identical to Model II in Table VI. Model III ($H3b$) shows that resilience increased the odds for continuing to work after retirement age (OR = 1.560). In Model IV ($H4b$), the effect of HIWPs became insignificant once resilience (OR = 1.507) was included in the regression, indicating that resilience fully mediates the relationship between perceived HIWPs and intentions to continue working after retirement age. Nagelkerke $R^2$ was rather low in the tested models.

In sum, the results of the regression analyses indicate that the association between perceived HIWPs and early retirement intentions was partly mediated by resilience. Resilience fully mediated the relationship between perceived HIWPs and intentions to continue working after retirement age.

Discussion

This study investigated the links between perceived HIWPs, resilience and retirement intentions. Furthermore, it tested the possible mediating role of resilience in the relationship between perceived HIWPs and retirement intentions. The results indicated that most of the respondents had confronted an adverse life event during the previous five years and that the event was perceived as highly stressful. Most of the stressful events were related to one’s own or a close one’s illness. This finding supports Hildon et al.’s (2008) notion that individuals are likely to face health-related adversities in older age. The results showed that perceived HIWPs were negatively related to early retirement intentions and positively associated with intentions to continue working after retirement age, supporting $H1a$ and $H1b$. The perceived HIWPs were also positively related to resilience, supporting $H2$. This result supports previous studies, which have demonstrated the importance of HRM practices for enhancing employee resilience (Cooke et al., 2016; Bardoel et al., 2014). In line with Bonanno et al.’s (2007) study, this study’s results indicate that males had higher levels of resilience compared to females. Furthermore, the study shows that resilience levels were higher for nursing professionals who were married or in a non-marital relationship. In line with the COR theory, close relationships, such as marriage, can be considered a resource that can have a positive influence on an individual’s resilience (Bonanno et al., 2007). $H3a$ and $H3b$ were also confirmed; resilience was significantly related to both forms of retirement intentions. High resilience decreased the odds for early retirement intentions and increased the odds for continuing to work after reaching retirement age. Consequently, this study illuminates the significance of resilience regarding retaining older employees in working life (Luthans et al., 2006). The results showed that resilience partially mediated the relationship between perceived HIWPs and early retirement intentions and fully mediated the relationship between perceived HIWPs and intentions to continue working after reaching the official retirement age. This finding provides evidence for the mediating role of resilience in the relationship between perceived HRM practices and employee-level outcomes.
## Table VII. (Logistic) regression analyses for testing the relationships between perceived HIWPs, resilience and intentions to continue working after retirement age

<table>
<thead>
<tr>
<th>Variables</th>
<th>Model I (Intentions to continue working after retirement age)</th>
<th>Model II (Resilience)</th>
<th>Model III (Intentions to continue working after retirement age)</th>
<th>Model IV (Intentions to continue working after retirement age)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>B (SE) Exp β (OR)</td>
<td>B (SE) β</td>
<td>B (SE) Exp β (OR)</td>
<td>B (SE) Exp β (OR)</td>
</tr>
<tr>
<td>Age</td>
<td>0.348** (0.125) 1.417**</td>
<td>0.126 (0.248) 0.032</td>
<td>0.475** (0.152) 1.607**</td>
<td>0.431** (0.154) 1.538**</td>
</tr>
<tr>
<td>Gender</td>
<td>0.208 (0.387) 1.231</td>
<td>−1.989* (0.813) −0.151*</td>
<td>0.463 (0.484) 1.590</td>
<td>0.425 (0.489) 1.530</td>
</tr>
<tr>
<td>Marital status</td>
<td>−0.026 (0.273) 0.974</td>
<td>1.334* (0.520) 0.158*</td>
<td>−0.186 (0.332) 0.831</td>
<td>−0.268 (0.336) 0.765</td>
</tr>
<tr>
<td>Education</td>
<td>−0.062 (0.288) 0.940</td>
<td>0.215 (0.558) 0.024</td>
<td>0.151 (0.346) 1.163</td>
<td>0.143 (0.350) 1.154</td>
</tr>
<tr>
<td>Resilience</td>
<td>−                   −</td>
<td>0.445** (0.157) 1.560**</td>
<td>−                   −</td>
<td>0.410** (0.159) 1.507**</td>
</tr>
<tr>
<td>Perceived HIWPs</td>
<td>0.317* (0.125) 1.373*</td>
<td>0.608* (0.245) 0.154*</td>
<td>−                   −</td>
<td>0.296 (0.159) 1.344</td>
</tr>
<tr>
<td>Adjusted $R^2$</td>
<td>0.074</td>
<td></td>
<td>0.120</td>
<td>0.138</td>
</tr>
<tr>
<td>Nagelkerke $R^2$</td>
<td>0.063</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>n</td>
<td>317</td>
<td>252</td>
<td>220</td>
<td>218</td>
</tr>
</tbody>
</table>

**Notes:** $B$, Unstandardized $\beta$; SE, standard error; $\beta$, standardized $\beta$; OR, odds ratio. Model II uses linear regression analysis to test the effect of HIWPs on resilience. *$p < 0.05$; **$p < 0.01$
Current results indicate that HRM practices can be used to some extent to influence older nursing professionals’ early retirement intentions. When addressing intentions to continue working beyond the official retirement age, HRM practices can strengthen the resilience of older employees, contributing to their abilities to continue working after official retirement age. Interestingly, marital status was significantly related to early retirement intentions. Unmarried, divorced or widowed nursing professionals were less likely to retire early compared to those who were married or in a non-marital relationship. Perhaps, single nursing professionals have a stronger financial necessity for continuing to work (Shacklock and Brunetto, 2011; Templer et al., 2010) or their engagement in family responsibilities differs from their married colleagues (Beehr and Bennett, 2015). In line with Davies and Cartwright’s (2011) study, the results of the present study demonstrated that older age increased the odds for continuing to work beyond the official retirement age. In other words, in a sample of nurses aged 50 and over, higher age was found to be associated with intentions to continue working beyond retirement age, compared to younger age.

**Theoretical contribution**

The theoretical contribution of this study is threefold. First, it examined the associations between perceived HRM practices and employee resilience, providing more evidence about the role of HRM in employees’ resilience (Bardoel et al., 2014; Cooke et al., 2016; Britt et al., 2016). Evaluating individual resilience has primarily focused on early life, such as examining when individuals enter into military service or working life (Britt et al., 2016, p. 388). Most of the attention has been focused on resilience training, especially in a military context (Britt et al., 2016). Only limited attention has been given to HRM practices that support employee resilience (Bardoel et al., 2014). Surprisingly little attention has been given to late-career resilience, even though individuals will likely encounter adverse life events when they get older (Ezeamama et al., 2016). This study contributes to this discussion by demonstrating a significant positive association between perceived HIWP’s and the level of resilience in older nursing professionals.

Second, this study investigated the association between resilience and retirement intentions, extending the knowledge concerning the outcomes of individual-level resilience (King et al., 2016). Resilience has been considered an important component of individuals’ PsyCap, indicating that employees with high resilience are more able to cope with and adapt to the changes in their working environment (Luthans et al., 2006). This study’s results provide evidence that older nursing professionals with high levels of resilience are more likely to continue working until and even beyond retirement age than those with lower levels of resilience.

Third, this study investigated the possible mediating role of employee resilience in the relationship between perceived HRM practices and retirement intentions. Only a few HRM studies have investigated the possible mediating role of resilience between HRM practices and employee-level outcomes (Cooke et al., 2016; Shin et al., 2012). In line with the COR and social exchange theories, the current findings indicate that HRM practices provided by the organization can have a positive impact on older employees’ resilience, which in turn can influence their late-career intentions.

**Managerial implications**

Most of the studied older nursing professionals had confronted a stressful event during the previous five years. It is likely that those events at least partly influence their late-career and retirement decisions. Based on these results, it is important for HR professionals and supervisors to be aware of the adversities older employees are likely to face. For example, resilience as a specific topic could be included in late-career discussions among older
employees (Brandan et al., 2013/2014). Furthermore, surveys measuring resilience as a part of well-being at work would help HR professionals to identify the current levels of resilience among employees and help indicate how these levels could be improved. This information could be used when HR professionals design and implement practices aiming to strengthen employee resilience. The results of this study indicate that HRM practices, such as HIWPs, can be used to reinforce older employees’ resilience, improving their abilities to continue working. Furthermore, HR professionals and supervisors could pay more attention to the social networks in the organization, because strengthening the social capital of employees may be one way to support employee resilience (cf. Luthans et al., 2006). Strong organizational culture together with HIWPs may also buffer employees from the adversities and uncertainties taking place inside and outside organizational boundaries. (cf. Luthans et al., 2006). In the future, an increasing number of older employees will be expected to remain working longer. Therefore, managers should focus on HRM practices that aim to enhance employee resilience during the late-career period.

Limitations and suggestions for future research
This study has some limitations. First, the study focused on older nursing professionals working in one organization, thus limiting the generalizability of the results. Because most of the respondents were female, possibilities to generalize the results to male nursing professionals is limited. Future research regarding the role of resilience in the retirement process should include an equal proportion of men and women. Second, resilience has been conceptualized and measured differently across different studies (Linnenluecke, 2017). No universal agreement exists concerning the measurement of adverse life events and adaption to those events (Britt et al., 2016). This study employed the resilience scale developed by Hardy et al. (2004) and analyzed resilience as an individual’s response to adverse life situations rather than as a personality trait. The primary focus of Hardy et al.’s (2004) resilience scale was on adverse events outside the workplace, such as an individual’s own sickness or the sickness of a loved one. In the future, more information is needed about the adverse events experienced in the workplace, such as work overload, problems with one’s supervisor, and harassment (Britt et al., 2016, p. 381). Third, due to this study’s cross-sectional setting, the causality of the studied variables cannot be verified. By using longitudinal data, it would be possible to investigate the process of resilience, as well as the resilience trajectories (Britt et al., 2016; King et al., 2016). This study focused on perceived HRM practices as antecedents of resilience, but there are also factors inside and outside working life, such as social networks, which are likely to influence resilience (see, e.g. Hildon et al., 2008; Luthans et al., 2006). Additionally, it is postulated that specific HR practices, such as mindfulness training, may be useful for enhancing employee resilience (Thogersen-Ntoumani et al., 2017). Future studies could examine the impact of those types of programs. Finally, the focus of this study was on individual-level resilience. The connections between individual-, group-, and organization-level resilience could be an interesting path for future studies (see, e.g. Linnenluecke, 2017, p. 25).

References


Further reading


Corresponding author
Hanna Salminen can be contacted at: hanna.maria.salminen@uta.fi

For instructions on how to order reprints of this article, please visit our website: www.emeraldgrouppublishing.com/licensing/reprints.htm
Or contact us for further details: permissions@emeraldinsight.com
Staffing practices and employee performance: the role of age

Nikolaos Pahos and Eleanna Galanaki
Department of Marketing and Communication, Athens University of Economics and Business, Athens, Greece

Abstract

Purpose – Staffing is a tool that employers use to decrease information asymmetry when hiring employees. However, how staffing effectiveness evolves according to employee demographic characteristics has not been thoroughly elucidated to date. The purpose of this paper is to develop and test a model linking staffing practices, age and employee performance.

Design/methodology/approach – Using a stratified sample of 1,254 employees, the authors hypothesize: the main effects of staffing practices on employee performance, the main effects of age on employee performance and the moderating effects of age on the relationship between staffing practices and employee performance.

Findings – The results show significant positive effects of staffing and age on employee performance and a negative moderating effect of age on the abovementioned relationship.

Practical implications – The organizations are urged to invest in recruitment and selection practices and implement focused practices that appeal to an aging workforce.

Originality/value – The paper is the first to explore the topic of aging workforce and the efficiency of staffing practices on employee performance in the context of the Greek labor force. The authors discuss the results, theoretical contributions, practical implications and future research directions in light of the challenge of managing an aging workforce.

Keywords Aging, Information asymmetry, Human resource management (general), Recruitment and retention, Work performance and productivity, Employee selection

Paper type Research paper

Introduction

The composition of the global workforce has been changing over the last century (Galanaki and Papalexandris, 2017), and age plays a crucial role in this change. Given that never before in human history has such a large portion of our planet’s population been elderly, population aging is a significant feature of global demography. In a competitive environment that changes constantly and requires creativity, innovation and adaptability, mature employees’ performance, experience and potential for further learning (Paloniemi, 2006) will become valuable assets, especially for companies in developed countries. It is clear that this shift in demographics will require new ways of thinking by employers, who will need to update their management practices regarding an aging workforce.

However, awareness on this issue by the management community seems to lag behind in comparison to issues such as generations in the workforce or talent management. Indicative of this are the ratios of internet search results (5,800,000 for “generations workforce,” 8,240,000 for “talent management,” as opposed to 800,000 for “aging workforce management” – March 27, 2018). In Greece, in particular, the HRM professional press (“HR Professional” and “HR Newsletter”) has offered around 80 articles and reviews on the millenial generation’s entrance in the workplace, compared to around 15 articles on the aging workforce. Further, according to the latest CRANET research network (www.cranet.org) data from Greece,
only 4.4 percent of the participating organizations provide action programs for older employees, as opposed to 26.5 percent of organizations that provide action programs for younger employees (these ratios are 13.6 percent and 31 percent accordingly at the international data set with 6,801 organizations from 35 countries around the world: 2015 – own calculations).

Human resource management (HRM) is crucial for increasing organizational performance (Takeuchi et al., 2007; Huselid, 1995) and HRM functions (training and development, employee participation, appraisal, rewards, status and security, staffing) have been linked to organizational performance outcomes in several ways (Datta et al., 2005), as have employee skills, motivation, commitment, work quality, performance and opportunities to contribute (Lepak et al., 2006; Liao et al., 2009).

From all HRM functions, we focus exclusively on employee staffing. Staffing is probably the single most important HRM practice because “if you have an inadequate personnel, all the trainings, incentives and communications in the world will not complete their makeover” (Becker et al., 2001, p. 99). In this paper, we will attempt to improve our understanding of the influence that staffing processes have on employee performance. We will also provide organizations with practical directions for formulating hiring practices that will enhance the performance of the aging workforce.

Literature review

Aging

What appears to be common among the different approaches regarding the mature workforce is the difficulty of age groupings, given the lack of a universally accepted criterion concerning the definition of the “old employee” (Sterns and Miklos, 1995). A generally accepted cut-off point between young and older employees is not set, given that what is considered old varies widely across different countries, cultures, industries and industrial sectors (Taylor, 2006); in certain cases, the definition is not as linked to chronological age as it once was.

Zepelin et al. (1987) observed that those between ages 18 and 35 were considered young, those between 35 and 60 were considered middle-aged and those between 65 and 80 were considered old. In more recent studies, the age of the mature/late career/aging employees varies from 40 to 45 years (McGregor and Gray, 2001; Warr, 1994) to 50 years and over (Ekerdt et al., 1996), whereas the age of 45 years is often used to compare older employees to younger or middle-aged workers (Stroh and Greller, 1995). According to OECD (2006), older employees are in the second half of their working life, have not yet reached retirement age and are still employable.

Employee performance

Employee performance is one of the most important variables in the study of HRM and organizational behavior. Performance is a multidimensional construct that is difficult to define with a universally acceptable definition (Austin and Villanova, 1992; Campbell et al., 1993). According to McConnell (2003), employee or job performance is the achievement and contribution of an individual in practical and quantifiable terms. Viswesvaran and Ones (2000) provided an alternative definition of employee performance stating that it includes “scalable actions, behavior and outcomes that employees engage in or bring about that are linked with and contribute to organizational goals.”

Although employees perform their actions according to the requirements of the job (Borman and Motowidlo, 1997), their performance can be observed and measured in terms of skills and abilities with less emphasis on organizational outcomes (Campbell et al., 1993). Sarmiento et al. (2007) argued that employee performance is often the result of at least two aspects: the abilities and skills (natural or acquired) that an employee possesses, and his/her motivation to use them to perform a job better. Therefore, employee performance can be viewed under the lens of the abilities-motivation-opportunities (AMO) theory. According to
this theory, employees perform better when they have the abilities and the motivation, and when their work environment provides opportunities to participate (Boselie, 2010; Appelbaum et al., 2000). In this sense, employee performance depends on the ability, motivation and opportunity for employees to make their contribution and maintain their well-being (Armstrong, 2009).

**Staffing**

According to Ployhart (2006, p. 868), “staffing is broadly defined as the process of attracting, selecting, and retaining competent individuals to achieve organizational goals.” Parnes (1984, p. 473: cited in Dean and Snell, 1996) states that “one of the most obvious ways firms enhance their stock of human capital is through the individuals they hire.” Dyck and Neubert (2009, p. 360) define staffing as “the HRM process of identifying, attracting, hiring and retaining people with the necessary knowledge, skills and abilities to fulfill the responsibilities of current and future jobs in organization.” Staffing is the means by which firms recruit and select applicants with higher quality and generic human capital (Schmitt and Chan, 1998). In this sense, recruitment and selection can be considered the two phases of the staffing process.

The previous literature has shown that implementing an effective staffing process is positively correlated with organizational performance (Delery and Doty, 1996). A sophisticated selection system tests a candidate’s potential for a position and decreases the organization’s level of uncertainty when faced with an external candidate (Lado and Wilson, 1994). A stringent recruitment and selection system also endows those employees who are selected a sense of elitism, imparts high expectations of performance and conveys a message of the importance of people to the organization (Pfeffer, 1998). Incompatibility between the individual and the organization can impede the achievement of necessary performance levels (Lado and Wilson, 1994), while an advanced staffing process can bring to the organization employees who match the abilities of the present human resources and fit into the existing interpersonal structure at lower training costs.

**Recruitment and selection.** Given that the quality of a firm’s human resources depends heavily on the effectiveness of its staffing process (Henry and Temtime, 2009), recruitment and selection are considered to be crucial factors in affecting organizational success (Jovanovic, 2004) through satisfying the organization’s strategic objectives (Ofori and Aryeetey, 2011). The overall aim of the staffing process is to obtain the right quantity and quality of employees at the right time and with minimal cost. The selection of the right applicant can be a difficult process, but in the end, the reputation of the organization depends on the people it employs (Henry and Temtime, 2009).

According to Costello (2006, p. 48), recruitment is described as “the set of activities and processes used to legally obtain a sufficient number of qualified people at the right place and time so that the people and the organization can select each other in their own best short and long-term interests.” Recruitment is the process of generating a pool of high quality, competent applicants to select the best among them (Jovanovic, 2004; Ofori and Aryeetey, 2011). Most definitions of recruitment emphasize the organization’s collective efforts to identify, attract and influence the job choices of competent applicants. Organizational leaders are painfully aware that recruiting talent is one of their most pressing problems. Tight labor markets provide applicants considerable choice between employers, particularly for those in professional, information/knowledge-based, technical and service occupations. Recruitment is immediately followed by selection, which will only be effective if a sufficient quantity of applicants of a certain quality express interest in employment at the organization. Compounding this challenge is the fact that many organizations struggle with how to attract a diverse workforce. Thus, there is growing recognition that recruitment – by itself and irrespective of selection – is critical
Selection refers at the process by which an organization identifies from a pool of applicants those individuals with the knowledge, skills, abilities and other characteristics that will help it achieve its goals (Ofori and Aryeetey, 2011). As selection rejects a number of applicants, and only a small number of them are selected to fill the vacancy, selection may be seen as a negative, rather than positive, function of the staffing process (Gamage, 2014).

Employee staffing and performance
The empirical studies on employee staffing focus both on applicants’ reactions to recruitment practices and on overall staffing outcomes (Rynes, 1991; Breauh and Starke, 2000; Barber, 1998; Rynes and Cable, 2003). The effectiveness of different employee recruitment and selection processes has primarily been assessed by examining the rates of turnover, job survival and employee performance along with staffing practices, such as referrals by current personnel, in-house job postings and the rehiring of former employees (Zottoli and Wanous, 2001). In general, research indicates a positive and significant relationship between staffing process and firm performance (Katou and Budhwar, 2006; Wright et al., 2005). In multilevel staffing models, staffing enhances productivity and profit growth (Ployhart, 2006; Van Iddekinge et al., 2009; Ployhart et al., 2009). In this context, the increased levels of employee performance lead to enhanced firm productivity, through reducing costs and increasing output (Lepak et al., 2006; Podsakoff et al., 2009).

Furthermore, previous evidence suggests that hiring practices contribute to firm outcomes through the accumulation of generic human capital resources (Ployhart and Moliterno, 2011). More specifically, when firms hire the best applicants, create a rare, valuable and difficult to imitate, generic human capital resource and as a result, develop a competitive advantage (Ployhart et al., 2009). The high quality of this generic human capital resources can lead to increased levels of organizational performance, accumulation and knowledge sharing (Felin et al., 2009), as well as enhanced workforce flexibility and efficiency (Evans and Davis, 2005).

Regarding the effects of staffing practices on employee performance, only a small number of studies have reported positive and significant relationships (Sutanto and Kurniawan, 2016; Rafii and Andri, 2015; Breaugh, 1981), and others have reported that the good application of such practices can lead to increasing individual outcomes, such as employee commitment, work quality and work success (Caldwell and Spivey, 1986; Patimah, 2015).

The relationship between staffing and employee performance can be explained theoretically drawing on AMO (Appelbaum et al., 2000) and social exchange theories and is expected to be positive. According to AMO theory, HRM practices may influence employees’ ability, motivation and opportunity to perform, which leads to an improvement in an individual’s job performance outcome (Boxall and Purcell, 2008). In this sense, during the staffing process, employers hire the most capable and motivated employees (e.g. by using the appropriate selection and hiring tools), and provide them the opportunity to be part of an organization (Gerhart, 2005). Moreover, according to social exchange theory, it is expected that when employees are treated fairly, they perceive this as a positive treatment by the employer, and they will repay the organization through their positive work attitudes (Takeuchi et al., 2007). In this sense, staffing is seen as a positive treatment and it is reciprocated with high levels of performance. Thus, the following hypothesis is formulated:

H1. Staffing will be positively associated with employee performance.
Age and employee performance
In principle, empirical research has failed to establish a clear link between age and employee performance. Numerous studies have shown both positive and negative relationships between age and employee performance (Ng and Feldman, 2008). First, in a meta-analysis based on 18 supervisor assessment samples, Waldman and Avolio (1986) identified 13 empirical studies containing 40 samples. These researchers observed that age was positively related to productivity measures of employee performance. However, age was negatively associated with supervisor ratings of employee performance. Similarly, McEvoy and Cascio (1989) reviewed 96 studies to examine the impact of employees’ age on sales records and supervisors’ assessment and found no clear effect of age on performance. Sturman’s (2003) meta-analysis examined the relationships between chronological age, job experience, organizational tenure and employee performance and observed that the relationship between age and performance was an inverted U-shape. In other words, age was positively related to employee performance when age was low but was negatively related to job performance when age was high.

Many studies on the topic of age and performance indicate negative relationships between the two variables. Avolio and Waldman (1994), utilizing a sample of 20,000 American employees across different industries, identified a negative relationship between age and different types and skills, such as verbal skills, numerical aptitude, spatial aptitude, finger dexterity, manual dexterity and general intelligence. According to the literature, older people also seem to perform poorly in terms of monitoring and controlling attention, utilizing analytical reasoning (Rhodes, 2004) and multitasking (Verhaeghen et al., 2003).

However, several studies indicate that performance does not decline with age (Göbel and Zwick, 2012; Cleveland and Lim, 2007; Allen et al., 2002), while others claim that performance may even improve with age. Older employees may perform equally well as their younger counterparts thanks to the accumulation of specialized knowledge, their experience and to their ability to acquire new skills, which increases their performance (Bosman, 1993; Charness and Bosnian, 1990; Volkoff et al., 2000).

The relationship between employee performance and age can be theoretically grounded in human capital theory. Under the lens of human capital theory, employees are the recipients of HRM practices. According to this theory, the experience and expertise that increase over the life cycle of an individual enrich and increase the value of that individual’s human capital. As a result, the enhancement of an individual employee’s knowledge, skills and expertise over the course of his/her life may positively influence elements of human capital, including employee performance. As employees mature and their own value potential either increases or decreases, the effect of investments in employees also changes. At the individual level, investment in the various aspects of human capital via implemented HRM practices – such as training, incentive-based pay or selective staffing – can increase an employee’s knowledge, skills, abilities, values and social assets; generate value related to individual outcomes; and therefore be considered a key element of improving that employee’s satisfaction, performance and commitment (Robinson and Morrison, 2000; Tekleab and Taylor, 2003). Given that the older an individual is, the more experiences he/she has acquired, the following hypothesis is formulated:

H2. Age is positively associated with employee performance.

Effects of age on staffing and employee outcomes
Recent evidence has demonstrated that individual characteristics such as job satisfaction and commitment change with age (Conway, 2004; Korff et al., 2017) and older employees may react differently to the same HRM practices, in comparison to younger employees (Kooij et al., 2011; Conway, 2004). Kooij et al. (2013) investigated the moderating effects of
The association between staffing, age and employee performance can be established under the lens of signaling theory (Spence, 1973) and information asymmetry between two parties (Connelly et al., 2011). According to Spence (1973), there is an information asymmetry between employers and employees such that employers lack information about the quality of job applicants and applicants lack information about employers. The literature on information asymmetry draws on the idea that situations have “search,” “experience” and “credence” qualities which decision makers can evaluate in different ways to reach decision (Stigler, 1961). According to Stiglitz (2002), “some individuals wish to convey information and others wish not to have information conveyed, but in either case, the fact that actions convey information leads people to alter their behavior, and this is why information imperfections have such profound effects.” Signaling theory provides a “unique, practical, and empirically testable perspective on problems of social selection under conditions of imperfect information” (Connelly et al., 2011).

Information asymmetries will always exist in the hiring process (Desai et al., 2018). When hiring new staff, companies face the problem that potential candidates have more information about themselves than the hiring company, and so candidates may have the opportunity to misrepresent their competencies, leading to less than optimal appointments (Coff, 1997; Zajac, 1990; Zhang, 2008). Staffing is largely a process through which the employer seeks to reduce information asymmetry for both parties, providing information to the candidate about the firm and trying to learn more about him/her.

However, in this exchange, information asymmetry on the part of the employer may be beneficial for the job candidate, if, for example, there are issues that he/she wishes to hide from the prospective employer. Therefore, applicants have an interest in retaining information asymmetry and they get involved in activity that will “play” with the staffing potential of “telling bluffs.” In fact, a large part of the staffing literature focuses on faking and deception by applicants and how staffing can diminish this phenomenon (Bertolino et al., 2013; Griffith and McDaniel, 2006). Several systems have been proposed to address this issue, even if the way in which applicants’ faking affects performance has not been fully understood (Griffith and McDaniel, 2006).

Age and experience have already been linked with favorable outcomes in situations of information asymmetry in settings other than employee staffing, such as success in merger and acquisitions (Cuypers et al., 2017) and financial analysis (Bradley et al., 2017), most notably because older and more experienced individuals are able to develop their own “experience” qualities. We propose that older employees are more able to sustain information asymmetry on the part of the prospective employers because over their career they manage to learn tricks on how to play with the common employee selection practices and how to improve
their own impression management, which is crucial, especially during interviews (Coff, 1997). For example, through extended experience, job applicants develop such skills as how to answer in the “right” way during interviews, how to complete selection tests and how to mobilize their professional networks such that they have access to non-public recruitment processes. Due to their higher levels of experience in job candidacy positions, older candidates can therefore hide their weaknesses and thus increase information asymmetries for the employer better than their younger counterparts. Subsequently, lower performers are able to go around the staffing process and “play the system,” as a result of their own more symmetric information on how the staffing process works.

Based on the above, the following hypothesis is formulated:

$$H3. \text{Age moderates the relationship between staffing and employee performance in a way that staffing increases performance more for younger employees.}$$

Figure 1 represents the conceptual model of the specific study.

**Methodology**

**Sample**
The sample of the study was stratified, with a balanced representation of different segments of Greek society and the Greek economy, most notably in relation to gender, age and work experience. The selection of participants occurred through random interviewer selection and interviewer restrictions; quotas based on the population were used to increase the representativeness of the sample. The survey was held from May 2016 to September 2016, with the participation of 1,254 employees of public and private companies operating in Greece. To facilitate the data collection process, postgraduate students were trained as research assistants as part of a research assignment on employee performance. Each research assistant distributed the questionnaires to employees who had at least one year of working experience with their current employer, thus ensuring that the respondents had sufficient experience to evaluate their own individual performance and the use of staffing practices in their organization. The research assistants informed the respondents about the research, clarified terms and assured them that their responses would only be used for scientific purposes.

For this study, 53.2 percent of the participants were women, and 46.8 percent were men. Moreover, the mean age of the employees was 41.4 years, with the youngest employee being 19 years old and the oldest being 78 years old. The education level of the respondents was high, as the average number of years of education was 14.4. Finally, 63 percent of the employees were working in private organizations, with the rest working in the public or extended public sector. The demographic characteristics of the sample along with those of the Greek economically active population are presented in Table I. As shown in Table I, our sample has an over-representation of mixed and public companies, as well as a higher representation of women and highly educated people in comparison with the total...
Greek population. This is due to the fact that the research was run in Athens, the capital, where employment in the public and mixed sector, employment of women and highly educated people is more common than in the countryside.

Measures

The research instrument was a questionnaire that included questions measuring perceptions regarding employee performance, staffing practices, as well as demographic characteristics (e.g. gender, age, education, company ownership).

For the measurement of employee performance, the study adopted the Role-Based Performance Scale (RBPS) (Welbourne et al., 1998), which measures employee performance on the basis of the roles performed by an individual within the organization. The 20-item questionnaire was developed to assess participants’ self-ratings of their performance at work. The five roles suggested in the RBPS (job holder, career seeker, innovator, team member and organization member) measure components of behavior that go above and beyond what is assessed by a company’s traditional performance appraisal instruments (Welbourne, 1997). Sample questions from the RBPS include the following: “Quality of work output,” “Obtaining personal career goals,” “Coming up with new ideas” and “Working as part of a team or workgroup.” The scoring was done using a Likert-type scale on which the responses ranged from 1 to 5 (needs much improvement = 1, needs some improvement = 2, satisfactory = 3, good = 4 and excellent = 5). A single, second-order factor was computed, consisting of the five roles (job holder, career seeker, innovator, team member and organization member).

For the measurement of staffing, the study adopted the Human Resources Management Policies and Practices Scale (Sun et al., 2007), which measures the following eight practices: selective staffing, extensive training, internal mobility, employment security, clear job description, results-oriented appraisal, incentive rewards and participation. For the purpose of this research, we focused exclusively on the practice staffing, which was measured with a five-point Likert scale, varying from “I totally disagree” to “I totally agree.”

For the translation of the items of both dependent and independent variables into the Greek language, the translation-back translation technique (Brislin et al., 1973) was applied with three researchers. One translated from English to Greek, and the other two translated back to English. The two final English texts agreed with the original (at least 95 percent of the questions were rated as identical to the original by the three experts, and for the two questions, where there was a slight disagreement, the final Greek text was agreed upon through a focus group discussion).

Age was a continuous variable (number of years), and gender was a dichotomous variable, coded as 1 for men and 2 for women. Finally, the level of education was also a

<table>
<thead>
<tr>
<th>Key descriptives of the Sample 1</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Mean</strong></td>
</tr>
<tr>
<td>Age</td>
</tr>
<tr>
<td>Education (in years)</td>
</tr>
<tr>
<td>Gender</td>
</tr>
<tr>
<td>Man</td>
</tr>
<tr>
<td>Woman</td>
</tr>
<tr>
<td>Company ownership</td>
</tr>
<tr>
<td>Private</td>
</tr>
<tr>
<td>Public or mixed</td>
</tr>
</tbody>
</table>

Note: aData on the business and labor demography in the Greek population are calculated from Greek Statistical Authority panel data, as available at: www.statistics.gr/en/statistics/-/publication/SJO03/- for 2017 (accessed March 28, 2018).
continuous variable (number of years spent in education), and company ownership was a
categorical variable (public, private or mixed company). The test of our research hypotheses
was performed with the use of the STATA 14 SEM-GSEM tool and with the techniques of
confirmatory factor analysis (CFA) and structural equation modeling (SEM).

Results

Descriptive statistics
Table II presents the means, standard deviations and Cronbach’s αs for all items comprising
the scales of staffing and employee performance.

All Cronbach’s αs were over 0.60, indicating a high internal reliability (Downing, 2004). “Job holder” had the lowest reliability at 0.75, and “Career seeker” had the highest reliability
at 0.81 in employee performance items. Staffing had a high Cronbach’s α value (0.87)
indicating high internal reliability. Regarding employee performance in the five roles,
“Job holder” had the highest rating (mean = 3.79), whereas “Career seeker” had the lowest
mean (= 2.98). Finally, the second-order factor of employee performance indicated a high
reliability at 0.87 and a mean of 3.4.

Robustness checks
Before performing our analyses, we ran standard robustness checks (for non-normality,
multicollinearity and common method). First, the data indicated skewness and kurtosis

<table>
<thead>
<tr>
<th>Construct</th>
<th>Variable</th>
<th>Mean</th>
<th>SD</th>
<th>Cronbach’s α</th>
</tr>
</thead>
<tbody>
<tr>
<td>Job holder</td>
<td>Quantity of work output</td>
<td>3.69</td>
<td>0.90</td>
<td>0.75</td>
</tr>
<tr>
<td></td>
<td>Quality of work output</td>
<td>3.78</td>
<td>0.85</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Accuracy of work</td>
<td>3.70</td>
<td>0.92</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Customer service provided</td>
<td>3.99</td>
<td>0.89</td>
<td></td>
</tr>
<tr>
<td>Career seeker</td>
<td>Obtaining personal career goals</td>
<td>3.03</td>
<td>1.03</td>
<td>0.81</td>
</tr>
<tr>
<td></td>
<td>Seeking out career opportunities</td>
<td>2.70</td>
<td>1.01</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Developing skills needed for his/her future career</td>
<td>3.14</td>
<td>0.99</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Making progress in his/her career</td>
<td>3.07</td>
<td>1.01</td>
<td></td>
</tr>
<tr>
<td>Innovator</td>
<td>Coming up with new ideas</td>
<td>3.07</td>
<td>1.06</td>
<td>0.77</td>
</tr>
<tr>
<td></td>
<td>Creating better processes and routines</td>
<td>2.98</td>
<td>1.00</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Working to implement new ideas</td>
<td>3.02</td>
<td>1.03</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Finding improved ways to do things</td>
<td>3.25</td>
<td>0.95</td>
<td></td>
</tr>
<tr>
<td>Team member</td>
<td>Responding to the needs of others in his/her work group</td>
<td>3.63</td>
<td>0.97</td>
<td>0.80</td>
</tr>
<tr>
<td></td>
<td>Working as part of a team or work group</td>
<td>3.69</td>
<td>0.95</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Seeking information from others in his/her work group</td>
<td>3.47</td>
<td>0.91</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Making sure his/her work group succeeds</td>
<td>3.74</td>
<td>0.87</td>
<td></td>
</tr>
<tr>
<td>Organization member</td>
<td>Helping so that the company is a good place to work</td>
<td>3.43</td>
<td>1.02</td>
<td>0.77</td>
</tr>
<tr>
<td></td>
<td>Doing things that help others when it is not part of his/her job</td>
<td>3.47</td>
<td>0.94</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Doing things to promote the company</td>
<td>3.36</td>
<td>1.02</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Working for the overall good of the company</td>
<td>3.86</td>
<td>0.93</td>
<td></td>
</tr>
<tr>
<td>Staffing</td>
<td>Great effort is taken to select the right person</td>
<td>3.02</td>
<td>1.26</td>
<td>0.87</td>
</tr>
<tr>
<td></td>
<td>Considerable importance is placed on the staffing process</td>
<td>3.09</td>
<td>1.24</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Long-term employee potential is emphasized</td>
<td>3.27</td>
<td>1.20</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Very extensive efforts are made in selection</td>
<td>2.82</td>
<td>1.27</td>
<td></td>
</tr>
<tr>
<td>Employee performance</td>
<td>Job holder</td>
<td>3.79</td>
<td>0.67</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Career seeker</td>
<td>2.98</td>
<td>0.82</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Innovator</td>
<td>3.08</td>
<td>0.78</td>
<td>0.87</td>
</tr>
<tr>
<td></td>
<td>Team member</td>
<td>3.64</td>
<td>0.73</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Organization member</td>
<td>3.53</td>
<td>0.75</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Employee performance</td>
<td>3.40</td>
<td>0.61</td>
<td></td>
</tr>
</tbody>
</table>

Table II. Key descriptives of the Sample 2
values between $-2$ and $+2$ and thus were normally distributed (George and Mallery, 2010). More specifically, the skewness and kurtosis values range from $-1.15$ to $0.94$.

Regarding the potential multicollinearity of the data, both the VIF and the tolerance values of the current model indicated that multicollinearity did not affect the overall fit or the predictions of the model. More specifically, the values of both the variance inflated factor ($\text{VIF} < 5$) and of tolerance ($1/\text{VIF} > 0.2$) were acceptable (Hair et al., 2011).

Next, we tested for the potential influence of common method bias using the Harman’s one-factor test. The results showed that a single method factor explained less than 50 percent of the variance among variables (Podsakoff and Organ, 1986), with the first factor accounting for 29.26 percent of the total variance explained. Thus, common method bias did not appear to be a pervasive problem in this study.

Structural and measurement model – SEM and CFA

To check the model fit and observe the relationship between staffing and employee performance, we performed SEM and CFA techniques using STATA 14 software. The research model included the second-order factor of employee performance and the first-order factor of staffing, which is presented in Figure A1 (see the Appendix).

The loadings of the variables were estimated with the maximum likelihood test estimation, and the $\chi^2$ test was used to examine the models’ fit. The goodness-of-fit indices were also taken into account, such as the relative $\chi^2$ ($\chi^2/\text{df} = 4.55$), the comparative fit index (CFI = 0.91), the Tucker-Lewis index (TLI = 0.90), the standardized root mean square residual (SRMR = 0.06) and the root-mean-square error of approximation (RMSEA = 0.05). The results showed that the model’s fit statistics fall within recommended standards (Hair et al., 2006; Hu and Bentler, 1999). Tables AI–AIII present the fit indices of the research model, as well as the loadings of the first- and second-order constructs for the dependent and the independent variables. Table III shows the SEM results with employee performance as the dependent variable and staffing, staffing $\times$ age (moderation effect), age, gender, education and public (company ownership) as independent variables.

According to Table III, $H1$ is not rejected, as staffing has a significant positive effect ($b = 0.26$) on employee performance. $H2$ is also not rejected, as age has a positive significant effect ($b = 0.03$) on the employee performance. Similarly, $H3$ is not rejected, as age and selective staffing practices have a negative significant moderating effect ($b = -0.03$) on employee performance. Finally, the coefficient of determination of the model is 0.86, indicating a high predictive value. In other words, the independent variables capture approximately 86 percent of the total variation in the dependent variable.

**Discussion**

The aim of this study was to investigate the relationship between staffing practices and employee performance under the moderating effect of employees’ chronological age. The results confirmed the existence of a relationship among the three variables and added to

<table>
<thead>
<tr>
<th>Coefficient</th>
<th>SE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Staffing ($H1$)</td>
<td>$0.26^{***}$</td>
</tr>
<tr>
<td>Age ($H2$)</td>
<td>$0.03^{**}$</td>
</tr>
<tr>
<td>Staffing $\times$ age ($H3$)</td>
<td>$-0.03^{**}$</td>
</tr>
<tr>
<td>Gender (female)</td>
<td>$0.00$</td>
</tr>
<tr>
<td>Education</td>
<td>$0.03^{**}$</td>
</tr>
<tr>
<td>Company ownership (public)</td>
<td>$-0.09^{***}$</td>
</tr>
</tbody>
</table>

**Table III.**

**SEM results**

**Notes:** $^{**}$, $^{***}$Significant at the 0.05 and 0.01 levels, respectively
previous research by observing a strong positive relationship between staffing and employee performance. The confirmation of $H_1$ shows that when staffing practices are used, employees perform better – a finding that is consistent with both theory and the previous literature (Sutanto and Kurniawan, 2016; Rafii and Andri, 2015).

$H_2$ examined the effect of age on employee performance, suggesting a positive relationship. The results showed that more mature employees present higher performance levels, confirming $H_2$. This finding debunks the stereotype concerning the declining performance of the aging workforce (Bratsberg et al., 2003) and strengthens the proposition that employee performance should increase with age (Cleveland and Lim, 2007; Volkoff et al., 2000).

Finally, the confirmation of $H_3$ indicated that age negatively moderates the relationship between staffing practices and employee performance. Thus, it seems that the application of staffing practices is more efficient for younger employees and improves their performance more than it does for older employees. The negative moderating effect of age on the above relationship is presented in Figure A2 in the Appendix. To create the interaction plot, we examined the moderating effects of age at varying levels (mean: $-1$ SD, mean, mean: $+1$ SD). The implementation of staffing practices was more efficient for younger employees (blue line in the interaction plot) compared to older ones (green line in the interaction plot), indicating a negative and significant moderation effect of age on the relationship between selective staffing practices and employee performance.

Conclusions, limitations and future research

Theoretical implications

This study shows that employee performance can be approached through the lens of the AMO, human capital, social exchange and information asymmetry theories.

The positive relationship between staffing and employee performance indicates that recruitment and selection practices can be an efficient investment for companies as they improve individual performance by introducing individuals of high ability and motivation to the organization and by providing to them the opportunity to perform. Moreover, drawing on social exchange theory, as employees receive positive treatment through the implementation of hiring practices, they repay the organization by being productive in their work (Takeuchi et al., 2007). Furthermore, staffing is effective in reducing information asymmetry for employers, thereby allowing the hiring of employees who achieve higher levels of performance.

In addition to that, staffing increases performance by supporting a performance-oriented organizational culture. Notably, when employees perceive that their organization implements a staffing practice that is fair and does not discriminate in the recruitment and selection process, they will perform better. This phenomenon is the result of a signaling effect: staffing conveys to all, regardless of their participation in the staffing process, that the company values performance and results. This fosters a culture of openness and fair play, which encourages effort and individual performance.

Contradicting some of the traditional research findings on the relationship between age and employee performance, this study confirmed a positive impact of age on employee performance. The positive relation between age and performance is in full accordance with human capital theory given that human capital—over the course of life—improves through on-the-job training and work experience that increase employees’ maturity and add to their productivity, overbalancing the effects of time depreciation. Griffiths (1997) has attempted to explain this phenomenon claiming that older people who remain in the workforce are likely to be positively selected and have higher performance than those who leave. This effect has been repeatedly discussed in studies of the returns of intangible assets (such as human capital), which show lasting positive effects on business outcomes – effects that
are not subject to depreciation in the same way as tangible assets. For example, Phillips and Phillips (2012) propose that tangible assets “have finite depreciation,” while intangible assets “appreciate with purposeful use.”

Unlike the findings of Korff et al. (2017), who did not find a moderating effect of age on the relationship between growth-enhancing HRM practices (including selectivity, among others) and work outcomes, the present study suggests a differentiated and age-contingent impact of staffing practices on employee performance. The results are in line with signaling and asymmetry information theories, which assume that the staffing practice is a process that involves two parties, namely, the employer and employee. The negative moderating effect of age on the relationship between staffing and employee performance sustains our original hypothesis that as an employee grows older, he/she is more experienced and involved in the recruitment and selection process. As a result, a lower performing older applicant may “mislead” the potential employer and be offered the vacancy without necessarily fulfilling all the requirements for the role.

Practical implications
The findings of this study have significant practical implications concerning the important role of staffing practices in the organizations. Considering that the use of such practices seems to enhance employee performance, organizations are urged to invest in recruitment and selection practices as a means of managing human capital. In addition, the positive effect of age on employee performance contributes to the dismissal of the prevailing stereotype regarding older and younger employees (Posthuma and Campion, 2009). HRM professionals need to understand that mature employees are valuable assets and that they are not less productive as they get older. As a result, the attraction, selection and retention of mature employees can influence the organization positively and make a good business sense.

The negative moderating effect of age on the relationship between staffing and employee performance indicates the need for focused practices that appeal to an aging workforce. More specifically, HRM departments must implement specific staffing practices designed to fit the individual characteristics and needs of both young and mature employees. Although both mature and younger employees share many of the same needs and preferences, differentiation is necessary given the differentiated effect of staffing on employee performance for younger and older employees. It is possible that behavioral interviews that focus on past experiences, reference seeking and background checks are more important for more mature candidates as they may have learned how to “play” the selection game and create a fake impression. Furthermore, as Rau and Adams (2005) noted, employers who wish to increase and improve their pool of older applicants must engage in targeted recruitment, such as direct mail, newspapers/internet, posters in places older people frequent, radio and networking and referrals.

However, the fact that companies hire mostly younger employees might mean that younger and older employees have a different perception of their employers’ staffing practices, as older employees’ perception may be based on past experiences. We tested for this effect: a $t$-test revealed that the difference in perceived staffing level between young and older employees was not significant. However, with “talent,” most people conceptualize younger individuals. Therefore, in most organizations, the staffing process is mostly tailored to young candidates. In the most influential papers on employee staffing, the trend is to propose staffing practices that fit the needs of staffing with younger employees. For example, internships, contingent work arrangements and application of virtual technology are proposed as the most effective staffing practices for the modern organization (Cuypers et al., 2017). However, all those practices seem to match a younger applicant profile better.
In summary, this study demonstrates that the effectiveness of staffing practices is apparent for all demographic segments but in practice, it becomes more crucial for the population of younger employees, for whom such practices appear to be more effective at increasing performance in comparison to older employees.

Limitations and future research
This study has some possible limitations that future research should consider. First, employee performance was measured using a subjective, self-rating employee performance research instrument. We consider the use of role-based employee performance to be an asset of the current analysis, as it allows us to measure performance in all the roles that employees adopt in their workplaces. However, coupling subjective ratings with objective or other-based subjective employee performance evaluations (e.g. supervisor appraisal ratings) would increase the reliability of the measurement.

Furthermore, employee staffing was also assessed with a self-reported measure. This kind of measurement was the result of our effort to see how subjective employee perception affects the outcomes of staffing. However, it may pose a limitation, as some employees of an organization may not have any direct staffing experience, since their own initial induction. In future studies, we recommend that perceptual measures be coupled with more objective ones, such as reports by HRM departments.

In addition to that, this study focused on age effects, without taking into account employee tenure. We feel that this may pose a limitation to our conclusions and that future research should incorporate the effects of employee tenure along with chronological employee age.

Moreover, data collection was limited to Greece. Extending the study to other countries would allow the findings to be generalized.

Finally, the study focused on one HRM function and its outcomes on the performance of employees of different ages. It would be most useful to examine how other HRM functions influence employee performance of different age groups. For example, as previously suggested (Wright and Geroy, 2001), training is a critical HRM function, especially for mature employees who experience “skill depreciation” as a result of rapid technological advancements.

References


Further reading

Appendix

Staffing practices and employee performance

Figure A1. SEM-research model

Figure A2. Interaction plot

Table A1. Fit statistics for the measurement model

<table>
<thead>
<tr>
<th></th>
<th>$\chi^2$</th>
<th>$\chi^2$/df</th>
<th>$p$</th>
<th>CFI</th>
<th>TLI</th>
<th>SRMR</th>
<th>RMSEA</th>
<th>CD</th>
</tr>
</thead>
<tbody>
<tr>
<td>Employee performance</td>
<td>1,613.66</td>
<td>4.55</td>
<td>0.00</td>
<td>0.91</td>
<td>0.90</td>
<td>0.06</td>
<td>0.05</td>
<td>0.86</td>
</tr>
</tbody>
</table>
Second-order construct | Loadings | First-order construct | Items | Loadings |
--- | --- | --- | --- | --- |
Employee performance | 0.88 | Job holder | Quantity of work output | 1.00 |
 | | | Quality of work output | 1.10 |
 | | | Accuracy of work | 1.20 |
 | | | Customer service provided | 1.10 |
 | 1.00 | Career seeker | Obtaining personal career goals | 1.00 |
 | | | Seeking out career opportunities | 1.10 |
 | | | Developing skills needed for his/her future career | 1.00 |
 | | | Making progress in his/her career | 1.10 |
 | 1.2 | Innovator | Presenting new ideas | 1.00 |
 | | | Creating better processes and routines | 0.89 |
 | | | Working to implement new ideas | 1.10 |
 | | | Finding improved ways to do things | 1.00 |
 | 1.00 | Team member | Responding to the needs of others in his/her work group | 1.00 |
 | | | Working as part of a team or work group | 1.20 |
 | | | Seeking information from others in his/her work group | 0.93 |
 | | | Making sure his/her work group succeeds | 1.10 |
 | 1.30 | Organization member | Helping ensure that the company is a good place to work | 1.00 |
 | | | Doing things that help others when it is not part of his/her job | 0.81 |
 | | | Doing things to promote the company | 0.94 |
 | | | Working for the overall good of the company | 0.99 |

Table AII.
Measurement model – employee performance

<table>
<thead>
<tr>
<th>Construct</th>
<th>Item</th>
<th>Loadings</th>
</tr>
</thead>
<tbody>
<tr>
<td>Staffing</td>
<td>Great effort is made to select the right person</td>
<td>1.00</td>
</tr>
<tr>
<td></td>
<td>Considerable importance is placed on the staffing process</td>
<td>1.00</td>
</tr>
<tr>
<td></td>
<td>Long-term employee potential is emphasized</td>
<td>0.87</td>
</tr>
<tr>
<td></td>
<td>Very extensive efforts are made in selection</td>
<td>0.97</td>
</tr>
</tbody>
</table>

Table AIII.
Measurement model – staffing

Corresponding author
Nikolaos Pahos can be contacted at: nikospahos@aueb.gr

For instructions on how to order reprints of this article, please visit our website: www.emeraldgrouppublishing.com/licensing/reprints.htm
Or contact us for further details: permissions@emeraldinsight.com