

Put my skills to use? Understanding the joint effect of job security and skill utilization on job satisfaction between skilled migrants and Australia-born workers in Australia

Abstract

The topic of skilled migrants has gained importance in the past decade as they are increasingly becoming one of the main drivers for labor supply in developed countries like Australia. Although there is research on skilled migrants, most have been studied from the perspectives of (un)employment, wage and over-education. Although some evidence suggests that skilled migrants are often less satisfied with their job compared to their local counterparts, little is known about why these differences exist. Using a nationally representative sample of Australian workers, we examine how two important job characteristics, job security and skill utilization, exert their differential interaction effect on job satisfaction for skilled migrants and Australian-born workers. We found a differential moderation effect between job security and skill utilization for skilled migrants and Australian born workers. For skilled migrants, high job security did not lead to positive reaction (i.e., job satisfaction), as this effect was dependent on their skill utilization; while such moderation effect was not present for Australian-born workers. This study highlights the need to take a more fine-tuned approach by understanding target sample groups (e.g. skilled migrants) when study the relationship between key job characteristics and job satisfaction. Furthermore, it highlights the importance for organizations to revisit their human resource management strategies and policies to recognize the needs for enhancing skill utilization for skilled migrants.

Keywords: Job security, Skill utilization, Job satisfaction, Skilled migrants

Introduction

Over the past few decades, attracting migrants, especially highly skilled migrants workers, has become a priority across many developed countries due to factors such as demographic change, skilled labor shortage, and a more integrated global economy and labor market (Guo and Ariss 2015). At the international level, the United Nations (2013) estimates that there are currently 232 million migrant workers worldwide. At the national level, in countries like Australia, the proportion of residents who were born overseas has hit its highest point in 120 years, with almost 28 per cent of Australians being born outside of Australia and 25 per cent of the workforce born outside of Australia (Australia Bureau of Statistics 2013). In particular, skilled immigration is especially interesting because it has been one of the main drivers for labor supply, and will continue to be used as a key labor market strategy in developed countries including Australia. Despite the importance of skilled migrants to their host countries and organizations, studies of skilled migrants within management literature remain scarce (Guo and Al Ariss 2015). The importance of a growing need to better understand the nature and consequences of skilled migration is particularly highlighted in a recent special issue featured on “*Human resource management of international migrants: current theories and future research*”, in the *International Journal of Human Resource Management* in 2015 (volume 26, issue 10).

Differing views on the influence of skilled migrants also make them a particularly interesting group within the workforce (Dietz et al. 2015). Given the increasing concerns about skill shortages globally, skilled migrants could be employed in jobs that are commensurate with their skills, qualifications and experience gained in their countries of origin, yet the contrary is the case. According to Dietz et al. (2015), employment discrimination against skilled migrants has been addressed extensively in the literature (e.g., Dietz 2010; Turchick Hakak and Al Ariss 2013). For example, focusing on the Canadian labor market, Dietz et al. (2015) suggest that two

basic facets of discrimination exist: “either migrants’ skills, such as their academic and professional degrees as well as their work experience, are unfairly devalued ... or their skills are valued but viewed as a threat to locals ...” (p. 1319).

Similarly in the Australia context, research has also started to address the issue of employment discrimination against skill migrants, highlighting concerns including (un)employment, low wage and over-education (e.g., Kifle and Kler, 2008; Mavromaras et al. 2015). For example, research shows that migrants receive, on average, substantially lower wages, and experience a higher likelihood of unemployment and job-mismatch than Australian-born workers (hereafter called ABWs) with similar observable characteristics (Kilfe et al. 2016; Wagner and Childs 2006). Noticeably underrepresented in the discussion of skilled migrant employment are jobs, skilled migrant’s perception of the quality of these jobs, and how it impacts on their work-related attitudinal and behavioral outcomes. Recently, a few researchers have started to investigate some non-economic outcomes of skilled migration, such as workers’ job satisfaction (e.g., Kifle et al. 2016; Ong and Shah 2012). Job satisfaction is a self-reported positive emotional state resulting from the appraisal of a person’s job or work experience (Locke 1976). This line of research seems to be pointing to the direction that skilled migrants (especially those from non-English speaking countries) are less satisfied with their jobs compared to ABWs (e.g., Kifel et al. 2016), or with aspects of their jobs, such as job security (e.g., Ong and Shah 2012). However, we know very little about why these differences in job satisfaction may exist.

Addressing this void of knowledge, this study focuses on job satisfaction for skilled migrants. There are three main reasons why studying job satisfaction offers important insight for better understanding the job experiences of skilled migrants. Firstly, job satisfaction has been found as a major cause of other important work-related outcomes such as absenteeism, stress, counterproductive behavior, and employee well-being (Dormann and Zapf 2001). Secondly, job

satisfaction is a key reflective factor of the subjective evaluation of working conditions (Dormann and Zapf 2001). Thirdly, understanding the reasons behind skilled migrants' satisfaction levels can help organizations and policy makers to better understand how they can all play more active roles in helping skilled migrants overcome some of their work-related challenges. As one of the earliest studies to investigate how various job features can actively shape skilled migrants' well-being at work, our study has the potential to contribute to the literature on the impact of workplace issues (i.e., job design quality) on skill migrants' work experiences. Furthermore, the study provides much needed empirical evidence to understand the differential influence of key elements of what constitutes a good job upon employees' well-being among different employee groups (i.e., skill migrants and ABWs).

Informed by the psychological contract theory (Robinson et al 1994) and job characteristics theory (Hackman and Oldham, 1975), we focus on two key features of an individual's employment, job security and skill utilization, to further understand job satisfaction within the skilled migrant workforce. These two components of one's job have consistently been identified as key factors that influence employees' subjective evaluations of their jobs. Drawing from the psychological contract theory, long-term job security has been recognised as a strong indicator of an employee's sense of relational contract, which in turn leads to more desirable work attitudes, behaviors and well-being (Bal et al. 2008; Zhao et al. 2007). The job characteristics theory highlights the critical role of skill utilization to develop and shape employees' positive self-esteem and self-identity (Hackman and Oldham, 1975), which are frequently identified as important predictors of job satisfaction. Given that both job security and skill utilization are considered important predictors of employees' evaluation of their jobs, we expect a positive interaction between these two variables in shaping job satisfaction. Additionally, with consideration of social identity theory (Ashford and Mael 1989; Abrams and Hogg 2010), we predict that this joint effect

will exert a different influence on skilled migrants when compared to ABWs because skilled migrants' have unique needs to (re)construct their social identities in a new society along with the employment challenges they are confronted with from settling in to a new environment.

Literature review and hypotheses development

Job security and job satisfaction

Perceived job security has been recognized as one of the major employment issues during the past two decades (Sverke et al. 2002). It is defined as “a psychological state in which workers vary in their expectations of future job continuity within an organization” (Kraimer et al. 2005, p. 390). In other words, it is a subjective perception such that “two employees holding the same job in the same organization may experience differential levels of job security” (Loi et al. 2010, p. 670). Given that job security reflects a subjective perception about one’s future job continuity within an organization, this subjective experience is likely to have a strong psychological impact on employees’ health-related, attitudinal, and behavioral outcomes (see De Witte 1999 for a review; and Cheng and Chan 2008; Sverke et al. 2002; 2006 for meta-analysis results). In terms of employees’ attitudinal reactions to low levels of job security, the “most commonly researched outcome in this context is job satisfaction” (Sverke et al. 2002, p. 13). The underlying logic of reasoning can be illustrated using the concept of the psychological contract (Robinson et al. 1994). Psychological contract refers to ‘the idiosyncratic set of reciprocal expectations held by employees concerning their obligations and their entitlements’ (McLean et al. 1998, p. 698). Psychological contract research has identified two contract types – transactional and relational – each defined by the nature of the mutual obligations. The relational psychological contract consists of perceived obligations that are long-term oriented and it focuses upon socio-emotional exchange with job security in exchange for loyalty as core elements. The transactional psychological contract consists

of perceived obligations that are short-term oriented and it focuses upon economic exchange of benefits such as competitive wage (Cavanaugh and Noe 1999; Robinson et al. 1994).

Research on psychological contract consistently finds that job security is a key element of relational psychological contracts (Cavanaugh and Noe 1999; De Cuyper and De Witte 2006; Kraimer et al. 2005), where highly-perceived job security provides evidence of a relational contract, and subsequently leads to higher job satisfaction, commitment and organizational citizenship (Bal et al. 2008; Zhao et al. 2007). Similarly, job insecurity indicates a contractual violation for those holding strong relational contract expectations. This is likely to have a profound negative impact on job attitudes such as job satisfaction which is a strong predictor of key behaviors such as turnover intentions (Bal et al. 2008; Zhao et al. 2007). Over the past few decades, numerous studies have shown that employees who feel less secure about their jobs are generally more dissatisfied, compared to those who perceive higher levels of job security (e.g., Ashford et al. 1989; De Cuyper et al. 2009; Okay-Somerville and Scholarios 2013; Witte et al. 2010). Furthermore, several meta-analyses show that job insecurity was negatively related to job satisfaction (Cheng and Chan 2008; Sverke et al. 2002). In an analysis of data from a total of 52,470 individuals, a recent meta-analysis by Kooij et al. (2010) showed that job security is more strongly associated with job satisfaction than with other attitudinal outcomes such as affective commitment. We therefore expect the same pattern of finding in this research and we expect that this main effect will apply to both skilled migrants and ABWs.

The interactive effect of job security and skill utilization

Drawing on the job characteristics theory (Hackman and Oldham 1975), we expect that while job security is likely to associate with heightened job satisfaction, this association depends on an employee's perception of skill utilization. Skill utilization refers to the degree of match or

congruence between individuals' skills and the opportunity to use these skills in their work roles (O'Brien 1980). According to the job characteristics theory (Hackman and Oldham 1975), higher skill utilization is likely to influence employees' subjective evaluations of their jobs in a positive way for two key reasons. Firstly, it provides opportunities for growth and meaning (e.g., Hackman and Oldham 1976), and gives rise to positive self-identity and self-esteem. O'Brien (1982) stated that "the use of acquired or innate skills is a central component of self-identity" (p. 221), such that higher skill utilization will enhance an individual's self-identity and self-esteem because individuals can see what they are capable of doing, and they are more likely to make an internal attribution to explain the causality of positive work outcomes (Wu et al. 2015). In the same vein, Morrison et al. (2005) stated that "knowledge and its application can be seen as important sources of perceptions of efficacy, competence, and worth, central components of mental health" (p. 62). Secondly, better skill utilization may function as a resource at work that help individuals to deal effectively with job demands, thereby reducing the levels of experienced job strain or stress, which are frequently identified as important predictors of job dissatisfaction (Feldman and Bolino 2000; Humphrey et al. 2008; Wu et al. 2015).

The above arguments suggest that employees with high skill utilization would experience more positive self-identity at work and feel more confident in their current employment (O'Brien and Dowling 1980). We expect this positive self-evaluation will allow employees to perceive job security in a more positive light, thereby strengthening the effect of job security on job satisfaction. As discussed earlier, job security indicates a strong psychological contract between employees and their company (Cavanaugh and Noe 1999; De Cuyper and De Witte 2006; Kraimer et al. 2005). When this is coupled with high skill utilization, there might be a synergistic effect between these two factors which can increase positive feelings where employees perceive themselves as being greatly valued by their company. As a result, employees are likely to feel they have a positive and

sustainable future with their current company because they believe in their company's commitment to invest in their long-term employment through the provision of job security, and their needs for growth and development through the provision of skill utilization. These experiences are likely to enable employees to thrive at work and have high levels of job satisfaction.

In contrast, employees with low skill utilization are not provided with the opportunity to develop and maintain positive self-identity and confidence through the learning and application of their knowledge and skills. For these employees, they might experience frustration from less meaningful jobs and lacking of opportunities to bring the best of themselves to their work, and this may negatively impact the way they see their job security. Even with the presence of a high level of job security, employees might not feel valued by the company. They are less likely to perceive job security as a strong psychological contract between themselves and their company, and may instead perceive it as the only benefit from an unfulfilling job. Furthermore, due to the lack of challenging tasks and developmental opportunities, employees with low skill utilization might experience fear and worry over their future employability in an increasingly uncertain job market (Sverke et al. 2002), even when current job security is provided. For these reasons, we expect that low skill utilization is likely to suppress the positive effect of job security on job satisfaction. In summary, we expect an interactive effect between skill utilization and job security in shaping employees' job satisfaction. We hypothesize the following:

H1: The positive association between job security and job satisfaction is moderated by an employee's skill utilization, such that the positive relationship is stronger when the employee's skill utilization level is high.

Differential interaction effect of job security and skill utilization between skilled migrants and ABWs

Following on from the previous hypothesis, we further argue that the interaction effect between job security and skill utilization might manifest differently for skilled migrants and ABWs. In particular, we expect that skilled migrants will be more susceptible to the proposed moderation effect. Our arguments are based on the social identity theory (Ashford and Mael 1989). Central to social identity theory is the notion of the social self (or group self), according to which individuals define in part who they are through the social construction process of their identity (for recent reviews, see Abrams and Hogg 2010; Ellemers and Haslam 2011). Work and career plays an especially important role in one's identity construction process. As suggested by Dutton, Roberts and Bednar (2010), "work is a pervasive life domain and a salient source of meaning and self-definition for most individuals... individuals form, transform, and modify how they define themselves and others in the context of work-based situations and activities" (p. 265). While this holds true for most people, we expect that skilled migrants might be particularly sensitive to their work experiences in their receiving country compared to ABWs. This is because by trying to settle in a new society, skilled migrants need to go through a process of identity (re)construction through (dis)identification and (trans)formation (La Barbera 2015). Thus, positive evaluation of employment is likely to have heightened importance by bringing the security and belongingness that form, transform and modify their (re)constructed social identity (La Barbera 2015).

Despite of the need to seek and maintain positive employment, existing studies have suggested that skilled migrants are confronted with many challenges when attempting to establish their careers and lives in a new country. More often than not, when migrants leave their country of origin, they would also leave behind their social status, family, and social networks. In the new country, they often find themselves facing the harsh reality of job evaluation, and employment

difficulties that differs from “the idealized image of the receiving country as a place to better one’s life that originally drives migrants to leave their country of origin” (La Barbera 2015, p. 3). For example, studying migrants as a whole in the Australian context (rather than focusing on skilled migrants only), Ong and Shah (2012) and Kifle et al. (2016) found that migrants generally were less satisfied with various aspects of their jobs (e.g., work itself, job security, pay, work flexibility and working hours) and in particular, skill utilization (Dietz 2010; Dietz et al. 2015; Wagner and Childs 2006) relative to ABWs. This may be explained by “skill discounting” which refers to the devaluation of migrants’ foreign-acquired academic education, professional training and work experience (Dietz 2010; Dietz et al. 2015; Halvorsen et al. 2015). This means that for migrants, “skills are evaluated worse than those of locals, even if they are factually of the same quality” (Dietz et al. 2015, p. 1319). Skill discounting is “a common occurrence in the Australian labor market; migrants are frequently forced to accept jobs that are not ideally suited to them” (Halvorsen et al. 2015, p. 1309). This phenomenon might be even more unfavorable to skilled migrants who tend to have more advanced education, skills and experience (Dietz et al. 2015).

As a result of this skill discounting, skilled migrants are often confronted with the attitude that they “should accept whatever opportunities they were offered” and thus find themselves performing work that is not commensurate with the skills and abilities they possess (Wagner and Childs 2006, p. 56). Therefore, they may be particularly sensitive to whether their jobs in the new society offer them opportunities to utilize their skills, in addition to providing them job security. Given they are well aware of the skill utilization challenges that migrants typically face, when their skills are recognized by the employer and opportunity for personal-growth is provided, such a sense of better person-job fit is likely to give rise to positive formation and transformation of their self-identity (Dietz et al. 2015; O’Brien and Dowling 1980) and the feeling of being accepted by and integrated into the receiving society (La Barbera 2015). Therefore, when skilled migrants perceive high skill utilization

and high job security, they may be particularly appreciative of their employer and would feel particularly satisfied with their job. In contrast, when skilled migrants sense a low level of skill utilization, the sense of a less-than-ideal person-job fit limits the opportunity for skilled migrants to form positive self-concept through the context of work-based situations and activities, which is a critical source of meaning and self-definition for migrants and beyond (Dutton et al. 2010; O'Brien 1982). Consequently, such less-than-ideal fit might lead to a (re)constructed identity which differs sharply from the identity in their countries of origin. For these people, even when their jobs provide security, this may only contribute to feeling of “stuck” in a job where they cannot apply skills, or find a meaningful sense of achievement. Given the known employment discrimination against skilled migrants in the workplace (Dietz et al. 2015), high job security might inhibit migrants from reaching out and looking for alternative employment where they can better apply their skills, due to the worry and fear of losing the current level of job security.

In contrast, ABWs may be less susceptible to this complex and subtle effect from low skill utilization and job security, as they are less discriminated against in the job market (Dietz 2010; Dietz et al. 2015). This argument suggests a potential three-way interaction effect upon job satisfaction where we consider an employee's migrant status (i.e. whether this person is a skilled migrant or an ABW), in addition to the interactive effect of job security and skill utilization. Therefore, we develop the following hypothesis:

H2: There is a three-way interaction between job security, skill utilization, and employees' migrant status. The positive moderation effect of skill utilization on job security – job satisfaction relationship will be stronger for skilled migrants than for ABWs.

Methods

HILDA survey

In this study, we used data collected from the Household, Income and Labor Dynamics in Australia (HILDA) survey. HILDA is an annual nationwide household-based panel survey conducted in Australia since 2001. We used data collected from Wave 13 of the HILDA survey, which was released in 2014. This is the most recent wave of data at the time when this study was conducted.

For the purpose of our study, we selected from the survey two groups of participants: skilled migrants and ABW. The skilled migrant group includes the respondents who indicated in the self-completed questionnaire they were skilled migrants, and the ABW group includes Australian respondents who indicated that they were born in Australia. All respondents selected for our study indicated they were in paid employment at the time of the survey. We also restricted our participants to those who were aged 18 years and above. In order to examine our proposed differential effect between ABWs and skilled migrants, we created a dichotomous variable 'Migrant status' where ABWs were coded as 0 and skilled migrants were coded as 1.

These above screening processes resulted in a sample of 909 respondents. Further 564 respondents were excluded because they had incomplete responses. Data from the 344 respondents were used for data analysis, of whom 155 were female (45.1%) and 189 were male (54.9%), and 231 were ABWs and 113 were skilled migrants. Our selected participants aged between 18 and 64 years' old, and this data was captured using age brackets. The age brackets were (1) 18 to 19 years; (2) 20 to 21 years; (3) 22 to 24 years; (4) 25 to 34 years; (5) 35 to 44 years; (6) 45 to 54 years; and (7) 55 to 64 years. The mean of age was 5.08 (i.e. suggesting that the mean age falls between 35 to 44 years old), with a standard deviation of 1.44. For each respondent, the highest education level achieved was accounted for by a set of indicators denoting the highest level of education obtained (1) postgraduate degree, (2) graduate diploma/certificate, (3) bachelor's degree, (4) diploma, (5)

any certificate, (6) grade 12 completion, and (7) less than grade 12. The mean score on education is 4.61, suggesting that the average education level is between diploma and certificate.

Measures

Job security. We measured job security by two items selected from the survey: “I have a secure future in my job.” and “I worry about the future of my job.” These two items were found to be valid and psychometrically sound when combined to form a job security scale (Leach et al. 2010). Participants responded to the items on a 7-point Likert scale with 1 indicating strongly disagree and 7 indicating strongly agree. Cronbach’s alpha coefficient for job security in our sample was .66.

Skill utilization. We measured skill utilization by two items selected from the survey: “My job often requires me to learn new skills.” and “I use many of my skills and abilities in my current job”. The same two items were used to measure skill utilization by Wu et al. (2015). Participants responded to the items on a 7-point Likert scale with 1 indicating strongly disagree and 7 indicating strongly agree. Cronbach’s alpha coefficient for job security in our sample was .74.

Job satisfaction. We measured job satisfaction by six items selected from the survey. Participants were asked how satisfied or dissatisfied they were across six different aspects of their job. The six aspects of job satisfaction were in relation to satisfaction with their: “total pay”, “job security”, “nature of work itself”, “number of hours worked”, “flexibility to balance work and non- work commitments”, and “overall job satisfaction”. Participants responded to these six items on a 11-point Likert scale with 0 indicating totally dissatisfied and 10 indicating totally satisfied. The same six items were used to measure job satisfaction by Kifle et al. (2016), and Ong and Shah (2012). Cronbach’s alpha coefficient for job satisfaction in our sample was .80.

Control variables. We included several potential control variables that may affect job satisfaction. Specifically, we included individual characteristics such as age, gender, and educational

background, as well as other job-feature measures including job autonomy, time pressure and job strain, to confirm the unique effect of skill utilization and job security on job satisfaction. Six items were used to measure job autonomy. This measure has been identified in work design research (Morgeson and Humphrey 2006) and used to indicate job autonomy in several past studies (e.g., Wu 2016; Wu et al. 2015). Sample items are “I have a lot of freedom to decide how I do my own work” and “I have a lot of say about what happens on my job”. Cronbach’s alpha coefficient for these items was .84. Three items were used to measure time pressure. These items have been used to measure time pressure in previous studies (e.g., Karasek, 1979; Wu 2016). Cronbach’s alpha coefficient for these items was .69. Three items were used to measure job strain. These items have also been used in previous studies (e.g., Sill and Gamero 2014; Wu 2016). A sample item is “My job is more stressful than I had ever imagined”. Cronbach’s alpha coefficient these items was .71.

Results

Table 1 presents means, standard deviations, and correlations among the key study variables and control variables. As indicated in Table 1, job security and skill utilization both significantly and positively correlated with job satisfaction. Migrant status had a small positive relationship with skill utilization, suggesting that skilled migrants tend to perceive that they utilized more skills in their jobs, compared to ABWs. In terms of demographic control variables, age, gender and education did not correlate with the outcome of job satisfaction, yet education had a negative relationship with skill utilization, suggesting that more highly educated participants perceived their skills to be less utilized at their jobs. The three job-related control variables have significant correlations with job satisfaction, where job autonomy has a positive relationship with job satisfaction, and job strain and time pressure have negative relationships with job satisfaction, suggesting the need to include them in further analysis to control for the confounding effect.

Insert Table 1 about here

Next, we conducted a hierarchical regression analysis to examine our proposed hypotheses. In the first step of the regression analysis, we entered the six control variables, including demographic variables (age, gender, education, migrant status) and job-related control variables (job autonomy, job strain and time pressure). In the second step, we entered our key study variables, including job security, skill utilization and migrant status. In the third step, we entered the three two-way interaction terms between our key study variables (job security \times skill utilization, job security \times migrant status, and skill utilization \times migrant status), using the centered scores on these variables. In the fourth and last step, we entered the three-way interaction term (job security \times skill utilization \times migrant status) using the centered scores on these variables.

Our results are shown in Table 2. In step two, the main effects of the two job characteristics were positive and significant. There was a significant positive effect of job security on job satisfaction ($\beta = .31, p < .01$). There was also a significant positive effect of skill utilization on job satisfaction ($\beta = .27, p < .01$). In step three, the two-way interaction between job security and skill utilization was non-significant, thus our Hypothesis 1 which predicts that an employee's skill utilization moderates the positive association between job security and job satisfaction was not supported ($\beta = .04, n.s.$). In step four, the three-way interaction between job security, skill utilization, and employee's migrant status, was significant ($\beta = .18, p < .01$), and the three-way interaction term explained additional significant variance in job satisfaction ($\Delta R^2 = .03, p < .01$). This lends initial support to Hypothesis 2, which posits that the interaction effect of skill utilization and job security would be different for skilled migrants and ABWs, in predicting job satisfaction.

Insert Table 2 about here

We plotted the interaction effect to demonstrate how the interaction of skill utilization and job security was different for skilled migrants and ABWs in Figure 1 and 2. For skilled migrants, there was a significant positive relationship between job security and job satisfaction for high levels of skill utilization ($\beta = .43, p < .01$); whereas there was no significant association between job security and job satisfaction for low levels of skill utilization ($\beta = -.07, p = .63$). Figure 1 depicts the two-way interaction for skilled migrants where high skill utilization tends to strengthen the positive effect of job security on job satisfaction ($\beta = .31, p < .01$). For ABWs, there were significant positive relationships between job security and job satisfaction for both low ($\beta = .36, p < .01$) and high ($\beta = 0.28, p < .01$) levels of skill utilization. Figure 2 shows that skill utilization does not impact the relationship between job security and job satisfaction. For ABWs, there was an overall positive effect of job security on job satisfaction and this effect was independent of the strength of skill utilization. This result supports H2 such that skilled migrants are more susceptible to the extent of which they utilize their skills, compared to ABWs.

Insert Figure 1 and 2 about here

We also conducted a number of supplementary analysis to check if the proposed moderation effect only occurs when considering skill utilization, but not other job features, is used as the moderator. To test this, we performed separate hierarchical regression analyses by using the three control variables (job autonomy, job strain and time pressure) as potential moderators. Our results demonstrate that none of the three-way interactions (job security \times job autonomy \times migrant status, job security \times job strain \times migrant status, job security \times time pressure \times migrant status) was significant. This confirms that only skill utilization has this unique moderation effect.

To summarize, in this study we examined the effect of skill utilization and job security on job satisfaction among skilled migrants and ABWs. We found that skill utilization and job security

both had a significant positive effect on job satisfaction, and this applies both to skilled migrants and ABWs. Furthermore, we found a differential moderation effect between job security and skill utilization for skilled migrants and ABWs. In particular, skilled migrants were more susceptible to the changes in their skill utilization at their jobs. When they perceive high skill utilization, having high job security shapes their job satisfaction; yet when they perceive low skill utilization, having high job security does not have much impact on their job satisfaction.

Discussion

Research on skilled migrants has highlighted a fundamental issue: skilled migrants are increasingly becoming an important part of Australia's workforce, as well as many other developed countries', to fill "skills gaps" in the local labor market. However, migrants often report lower job satisfaction as compared to their local counterparts, which represents a less pleasurable emotional state resulting from the appraisal of their jobs (Locke, 1976). There has been considerable research undertaken to demonstrate how low levels of job satisfaction can exert negative impacts on employees' well-being, attitudinal, and behavioral outcomes (e.g., see Dormann and Zapf 2001, for a meta-analytic review). This poses a challenge for the management of skilled migrants in organizations because employers are interested in utilizing skilled migrants' unique skills, qualifications, and experiences to fill "skills gap" to improve organizational effectiveness, yet they often do not have the capacity to capitalize on skilled migrants' full potential (Guo and Al Ariss 2015). Furthermore, while we have observed less satisfaction among skilled migrants, researchers know little about the reasons behind such dissatisfaction, and this impacts our ability to adopt more effective mechanisms in enhancing skilled migrants' well-being at work.

In this study, we address this void by using a national sample of Australian workers to examine the effect of job security, skill utilization upon job satisfaction, and by comparing skilled

migrants with ABWs. We expected that when we consider skilled migrants and ABWs, the joint effect of job security and skill utilization would shape their job satisfaction in different ways. This allowed us to tease out the unique pattern that influences skilled migrants' job satisfaction. Our results suggest that whilst a positive two-way interaction between job security and skill utilization was not supported, we found that this was due to this two-way interaction being largely different between skilled migrants and ABWs. Skilled migrants appeared to be more susceptible to the positive moderation effect of skill utilization upon the job security and job satisfaction association. This shows that a high level of skill utilization is of particular importance to skilled migrants because they often feel "their skills are systematically devalued" (Dietz et al. 2015, p. 1318). Given the importance of skill utilization in positively shaping individuals' self-identity (e.g., O'Brien 1982), a higher level of skill utilization can act as a crucial component of skilled migrants' identity (re)construction process in a new society (La Barbera 2015). Consequently, skilled migrants may be particularly appreciative and thus feel particularly satisfied with their job when such jobs are commensurate with the skills, qualifications and experiences gained in their country of origin (i.e., skill utilization), in addition to bonding them with a strong psychological contract through the provision of job security. On the other hand, when they feel that their skills are indeed devalued at work, high job security may not necessarily lead to increased job satisfaction, but may instead inhibit their desire to look for better alternatives due to expected employment discrimination against skilled migrants (Dietz et al., 2015; Wagner and Childs 2006).

This subtle and complex effect coming from skill utilization was not found for ABWs, for whom the effects of skill utilization and job security were much more straightforward, as can be seen in the direct main effect of these two factors on their job satisfaction. It is worth mentioning that the moderation effect of skill utilization on job security and job satisfaction was found even after controlling for a number of commonly studied job features including job autonomy, job strain

and time pressure, suggesting that the moderation effect is robust. We believe that this shows the unique effect of skill utilization as a moderator, due to its central role in shaping individuals' self-identity and self-esteem (e.g., O'Brien 1982), which is of particular importance to skilled migrants' identity construction process.

Our findings have several important theoretical implications. Firstly, the results suggest that skill utilization, as a stand-alone construct, not only predicts job satisfaction, but can also potentially moderate the relationship between job security and job satisfaction. This result suggests that when organizations promise long-term job security as a way of improving employees' job satisfaction, they also need to consider whether their job design fully utilizes their employees' skills and abilities which give rise to individuals' positive self-identity and self-esteem (e.g., Hackman and Oldham 1976; O'Brien 1982; Wu et al. 2015) so that the positive influence of job security can be better capitalized. Secondly, when studying the joint effect of job security and skilled utilization upon job satisfaction, it is important to make a distinction between skilled migrants and ABWs, as it provides a more nuanced understanding of the job satisfaction among different demographic groups. Most of the previous job satisfaction literature indicates that higher job security and skill utilization are strong predictors of employees' subjective evaluation of their jobs (Holman 2013). Thus, it is reasonable to believe that higher job security and skill utilization should lead to increased job satisfaction. Our findings suggest that this is not necessarily the case, as we showed that the moderating patterns are different for skilled migrants and native employees in the Australian context. Our findings therefore add value by showing that, in fact, when speculating the positive effect of job security and skill utilization upon job satisfaction, it is critical to take a more fine-tuned approach by understanding our target sample groups. High job security does not necessarily leads to positive outcomes (i.e., job satisfaction) from all employees, as this effect may be dependent on the unique situations or challenges the target sample groups are facing.

Our findings also have clear implications for practice and policy. Firstly, although job security is strongly and positively related to job satisfaction, managers need to be aware that any such direct relationship is contingent on a number of other job factors. For example, managers need to provide opportunities for employees to apply their acquired skills and abilities. There are a number of possible ways in which managers can facilitate employees' skill utilization. For example, redesign jobs to allow more autonomy so that employees develop confidence in their capabilities to apply their acquired skills and abilities (Grant and Parker 2009), or introduce the notion of idiosyncratic deals ('i-deals'; Rousseau et al., 2006) to allow employees to take on more challenging tasks or projects.

Secondly, we echo Guo and Al Ariss's (2015) and Halvorsen et al.'s (2015) assertion that organizations need to step away from encompassing a "one-size-fits-all" human resource management (HRM) approach in promoting employee well-being at work (i.e., job satisfaction). Our findings also present the human resource (HR) practices with an insight into how to improve an essential aspect of skill migrants' career development and well-being at work. A key indicator for HRM system's success is the attraction, development and retention of its workers (Pfeffer, 2005). Our study shows that while job security and skill utilization lead to increased job satisfaction, the strength of its influence varies amongst different employee groups (i.e., skill migrants and ABWs). As skilled migrants (and migrants at large) are becoming an increasingly important component of the workforce in Australia, our study highlights the critical role of HR practices in shaping and promoting migrants' positive evaluation of their jobs and values they bring to their workplaces, and in turn, their well-being at work. As Guo and Al Ariss (2015) pointed out, HRM strategies and policies need to be developed accordingly to "facilitate the transfer and utilization of knowledge and skills of international migrants, which subsequently can enhance a firm's strategic competitive advantages" (p. 1290).

Thirdly, our study also has implication for policies at large. At the national level, policy-makers concerned with economic competitiveness already focus on skill supply and the provision of a more educated workforce, yet they tend to be reluctant to intervene at the employer level (Dietz et al. 2015; Wager and Childs 2006). As argued by Guo and Al Ariss (2015), employer practice is not necessarily consistent with the policy-makers' vision of utilizing skilled migrants as a key labor market strategy to stay current and competitive internationally. For example, the skills for which a migrant may have been permitted entry to a country under the rubric of public policy may not be adequately recognized at the local level by professional bodies and employers. Taking Australia as an example, the formal recognition process of a migrant's skill is seen as especially problematic, because the "formal recognition process conducted by professional bodies often required local professional knowledge, systems knowledge and an understanding of the professional landscape" (Wagner and Childs, 2006, p. 52). Such entrenched resistance to placing value on foreign professional expertise and qualification has been identified as one key barrier for skilled migrants to obtain jobs that are commensurate with the skills, qualifications and experiences gained in their country of origin. Without assistance from organizations and policy makers, many skilled migrants may fail to achieve equivalent status and recognition of their qualifications and skills. As Dietz et al. (2015) pointed out, "The more advanced migrants' foreign skills are, the more difficult their recognition by local institutions turns out to be; if skills are not recognized, chances of finding employment decrease" (p. 1320). We highlight the need for an active dialogue between employers and policy regulators in order to understand how jobs can be designed that match migrants' attributes in a holistic manner – such as knowledge, skills, and abilities – to achieve more desired outcomes at organizational and national level.

Our findings also have implications for future research in the literature on skilled migrants. More research is needed to explain why skilled migrants are less satisfied with their jobs relative to

their local counterparts. For example, drawn from the Job Demand-Control-Support model (Häusser et al. 2010; Van der Doef and Maes 1999), future studies could examine how on-the-job and off-the-job social support could buffer the negative effects of low job security and low skill utilization, to improve on-the-job satisfaction among skilled migrants (Humphrey et al. 2007). This would be an important addition given the increasing prominence of social and interactive aspects of work, particularly for many of these migrants who are presented with overt discrimination, stereotyping and marginalization at work (Dietz et al. 2015; Guo and Al Ariss 2015).

Notes:

This paper uses unit record data from the Household, Income and Labor Dynamics in Australia (HILDA) Survey. The HILDA Project was initiated and is funded by the Australian Government Department of Social Services (DSS), and is managed by the Melbourne Institute of Applied Economic and Social Research (Melbourne Institute). The findings and views reported in this paper, however, are those of the author and should not be attributed to either DSS or the Melbourne Institute.

References

- Abrams, D., & Hogg, M.A. (2010). Social identity and self-categorization. In J.F. Dovidio, M. Hewstone, P. Glick, & V. M. Esses (Eds.). *The Sage handbook of prejudice, stereotyping and discrimination*. (pp. 179-193). Los Angeles: Sage Publications.
- Aiken, L., & West, S. G. (1991). *Multiple regression: Testing and interpreting interactions*. Newbury Park, CA: Sage Publications.
- Aletraris, L. (2010). How satisfied are they and why? A study of job satisfaction, job rewards, gender and temporary agency workers in Australia. *Human Relations*, 63(8), 1129-1155.
- Ashford, S. J., Lee, C., & Bobko, P. (1989). Content, cause, and consequences of job insecurity: A theory-based measure and substantive test. *Academy of Management Journal*, 32(4), 803-829.
- Australian Bureau of Statistics (2013-2014). *Migration, Australia, 2013-14* (cat. no. 3412.0). Canberra: Australian Bureau of Statistics Office.
- Ashforth, B. E., & Mael, F. (1989). Social identity theory and the organization. *Academy of Management Review*, 14(1), 20-39.
- Bal, P. M., De Lange, A. H., Jansen, P. G., & Van Der Velde, M. E. (2008). Psychological contract breach and job attitudes: A meta-analysis of age as a moderator. *Journal of Vocational Behavior*, 72(1), 143-158.
- Cavanaugh, M. A., & Noe, R. A. (1999). Antecedents and consequences of relational components of the new psychological contract. *Journal of Organizational Behavior*, 20(3), 323-340.
- Cheng, G. H. L., & Chan, D. K. S. (2008). Who suffers more from job insecurity? A meta-analytic review. *Applied Psychology*, 57(2), 272-303.

- Dawson, J. F., & Richter, A. W. (2006). Probing three-way interactions in moderated multiple regression: development and application of a slope difference test. *Journal of Applied Psychology, 91*(4), 917-926.
- De Cuyper, N., & De Witte, H. (2006). Autonomy and workload among temporary workers: Their effects on job satisfaction, organizational commitment, life satisfaction, and self-rated performance. *International Journal of Stress Management, 13*(4), 441-459.
- De Cuyper, N., Notelaers, G., & De Witte, H. (2009). Job insecurity and employability in fixed-term contractors, agency workers, and permanent workers: associations with job satisfaction and affective organizational commitment. *Journal of occupational health Psychology, 14*(2), 193-205.
- De Witte, H., De Cuyper, N., Handaja, Y., Sverke, M., Näswall, K., & Hellgren, J. (2010). Associations between quantitative and qualitative job insecurity and well-being: A test in Belgian banks. *International Studies of Management & Organization, 40*(1), 40-56.
- Demerouti, E., Bakker, A. B., Nachreiner, F., & Schaufeli, W. B. (2001). The job demands-resources model of burnout. *Journal of Applied Psychology, 86*(3), 499-512.
- Dietz, J. (2010). Introduction to the special issue on employment discrimination against immigrants. *Journal of Managerial Psychology, 25*(2), 104-112.
- Dietz, J., Joshi, C., Esses, V. M., Hamilton, L. K., & Gabarrot, F. (2015). The skill paradox: explaining and reducing employment discrimination against skilled immigrants. *The International Journal of Human Resource Management, 26*(10), 1318-1334.
- Dormann, C., & Zapf, D. (2001). Job satisfaction: A meta-analysis of stabilities. *Journal of Organizational Behavior, 22*(5), 483-504.
- Dutton, J. E., Roberts, L. M., & Bednar, J. (2010). Pathways for positive identity construction at work: Four types of positive identity and the building of social resources. *Academy of*

Management Review, 35(2), 265-293.

Ellemers, N., & Haslam, S.A. (2011). Social identity theory. In: P. van Lange, A. Kruglanski, & T. Higgins (Eds.). *Handbook of theories of social psychology* (pp. 379-398). London: Sage.

Feldman, D. C., & Bolino, M. C. (2000). Skill utilization of overseas interns: antecedents and consequences. *Journal of International Management*, 6(1), 29-47.

Grant, A. M., & Parker, S. K. (2009). 7 redesigning work design theories: the rise of relational and proactive perspectives. *The Academy of Management Annals*, 3(1), 317-375.

Green, F. (2006). *Demanding work: The paradox of job quality in the affluent economy*. Princeton: Princeton University Press.

Green, F., & McIntosh, S. (2007). Is there a genuine under-utilization of skills amongst the over-qualified? *Applied Economics*, 39(4), 427-439.

Guo, C., & Al Ariss, A. (2015). Human resource management of international migrants: Current theories and future research. *The International Journal of Human Resource Management*, 26(10), 1287-1297.

Hackman, J. R., & Oldham, G. R. (1976). Motivation through the design of work: Test of a theory. *Organizational Behavior and Human Performance*, 16(2), 250-279.

Halvorsen, B., Treuren, G. J., & Kulik, C. T. (2015). Job embeddedness among migrants: fit and links without sacrifice. *The International Journal of Human Resource Management*, 26(10), 1298-1317.

Häusser, J. A., Mojzisch, A., Niesel, M., & Schulz-Hardt, S. (2010). Ten years on: A review of recent research on the Job Demand–Control (-Support) model and psychological well-being. *Work & Stress*, 24(1), 1-35.

Holman, D. (2013). Job types and job quality in Europe. *Human Relations*, 66(4), 475-502.

Humphrey, S. E., Nahrgang, J. D., & Morgeson, F. P. (2007). Integrating motivational, social,

and contextual work design features: a meta-analytic summary and theoretical extension of the work design literature. *Journal of Applied Psychology*, 92(5), 1332-1356.

Humphrys, P., & O'BRIEN, G. E. (1986). The relationship between skill utilization, professional orientation and job satisfaction for pharmacists. *Journal of Occupational Psychology*, 59(4), 315-326.

Kalleberg, A. L. (2013). Book review symposium: Response to Reviews of Arne L Kalleberg, Good Jobs, Bad Jobs: The Rise of Polarized and Precarious Employment Systems in the United States, 1970s to 2000s. *Work, Employment & Society*, 27(5), 896-898.

Kifle, T., & Kler, P. (2008). The financial satisfaction of African immigrants in Australia. *Australasian Review of African Studies*, 29(1/2), 66-78.

Kifle, T., Kler, P., Shankar, S., Ziderman, A., & Lange, T. (2016). Immigrant job satisfaction: the Australian experience. *International Journal of Manpower*, 37(1). doi: 10.1108/IJM-02-2014-0053

Kooij, D. T., Jansen, P. G., Dikkers, J. S., & De Lange, A. H. (2010). The influence of age on the associations between HR practices and both affective commitment and job satisfaction: A meta-analysis. *Journal of Organizational Behavior*, 31(8), 1111-1136.

Kraimer, M. L., Wayne, S. J., Liden, R. C., & Sparrowe, R. T. (2005). The role of job security in understanding the relationship between employees' perceptions of temporary workers and employees' performance. *Journal of Applied Psychology*, 90(2), 389-298.

La Barbera, MariaCaterina (2015) *Identity and migration in Europe: Multidisciplinary perspectives*. Springer: Switzerland

Leach, L., Butterworth, P., Rodgers, B., & Strazdins, L. (2010). Deriving an evidence-based measure of job quality from the HILDA Survey. *Australian Social Policy Journal*, 9, 67-86.

Locke, E. A. (1976). The nature and causes of job satisfaction. *Handbook of industrial and*

organizational psychology, 1, 1297-1343.

- Loi, R., Ngo, H. Y., Zhang, L., & Lau, V. P. (2011). The interaction between leader–member exchange and perceived job security in predicting employee altruism and work performance. *Journal of Occupational and Organizational Psychology*, 84(4), 669-685.
- Mavromaras, K., Sloane, P., & Wei, Z. (2015). The scarring effects of unemployment, low pay and skills under-utilization in Australia compared. *Applied Economics*, 47(23), 2413-2429.
- McLean Parks, J., Kidder, D. L., & Gallagher, D. G. (1998). Fitting square pegs into round holes: Mapping the domain of contingent work arrangements onto the psychological contract. *Journal of Organizational Behavior*, 19, 697–730.
- Morgeson, F. P., & Humphrey, S. E. (2006). The work design questionnaire (WDQ): Developing and validating a comprehensive measure for assessing job design and the nature of work. *Journal of Applied Psychology*, 91, 1321–1339.
- Morrison, D., Cordery, J., Girardi, A., & Payne, R. (2005). Job design, opportunities for skill utilization, and intrinsic job satisfaction. *European Journal of Work and Organizational Psychology*, 14(1), 59-79.
- United Nations. (2013, September 3). Population facts. Department of Economic and Social Affairs, Population Division. New York, NY: Author
- O'Brien, G. E. (1982). The relative contribution of perceived skill-utilization and other perceived job attributes to the prediction of job satisfaction: A cross-validation study. *Human Relations*, 35(3), 219-237.
- O'Brien, G. E. (1983). Skill-utilization, skill-variety and the job characteristics model. *Australian Journal of Psychology*, 35(3), 461-468.
- O'Brien, G. E., & Dowling, P. (1980). The effects of congruency between perceived and desired job attributes upon job satisfaction. *Journal of Occupational Psychology*, 53(2), 121-130.

- Okay-Somerville, B., & Scholarios, D. (2013). Shades of grey: Understanding job quality in emerging graduate occupations. *Human Relations*, 66(4), 555-585.
- Ong, R., & Shah, S. (2012). Job security satisfaction in Australia: Do migrant characteristics and gender matter? *Australian Journal of Labour Economics*, 15(2), 123-139.
- Robinson, S. L., Kraatz, M. S., & Rousseau, D. M. (1994). Changing obligations and the psychological contract: A longitudinal study. *Academy of Management Journal*, 37(1), 137-152.
- Sánchez-Sánchez, N., & McGuinness, S. (2015). Decomposing the impacts of overeducation and overskilling on earnings and job satisfaction: an analysis using REFLEX data. *Education Economics*, 23(4), 419-432.
- Silla, I., & Gamero, N. (2014). Shared time pressure at work and its health-related outcomes: Job satisfaction as a mediator. *European Journal of Work and Organizational Psychology*, 23, 405-418.
- Summerfield, M., Freidin, S., Hahn, M., Li, N., Macalalad, N., Mundy, Waston, N., Wilkings, R., & Wooden, M. (2014). HILDA User Manual—Release 13: Melbourne Institute of Applied Economic and Social Research, University of Melbourne.
- Sverke, M., Hellgren, J., & Näswall, K. (2002). No security: A meta-analysis and review of job insecurity and its consequences. *Journal of Occupational Health Psychology*, 7(3), 242-264.
- Turchick Hakak, L., & Al Ariss, A. (2013). Vulnerable work and international migrants: A relational human resource management perspective. *The International Journal of Human Resource Management*, 24(22), 4116-4131.
- Van der Doef, M., & Maes, S. (1999). The job demand-control (-support) model and psychological well-being: a review of 20 years of empirical research. *Work & Stress*, 13(2), 87-114.

- Wagner, R., & Childs, M. (2006). Exclusionary narratives as barriers to the recognition of qualifications, skills and experience - A case of skilled migrants in Australia. *Studies in Continuing Education*, 28(1), 49-62.
- Witte, H. D. (1999). Job insecurity and psychological well-being: Review of the literature and exploration of some unresolved issues. *European Journal of Work and Organizational Psychology*, 8(2), 155-177.
- Wu, C. H., Griffin, M. A., & Parker, S. K. (2015). Developing agency through good work: Longitudinal effects of job autonomy and skill utilization on locus of control. *Journal of Vocational Behavior*, 89, 102-108.
- Wu, C. H. (2016). Personality change via work: A job demand–control model of Big-five personality changes. *Journal of Vocational Behavior*, 92, 157-166.
- Zhao, H. A. O., Wayne, S. J., Glibkowski, B. C., & Bravo, J. (2007). The impact of psychological contract breach on work-related outcomes: A meta-analysis. *Personnel Psychology*, 60(3), 647-680.

Table 1
Descriptive Statistics, Correlations and Scale Reliabilities

	M	SD	1	2	3	4	5	6	7	8	9	
1. Age ¹	5.08	1.44										
2. Gender ²	1.45	0.50	-.06									
3. Education ³	4.61	2.51	-.37**	-.03								
4. Job autonomy	3.88	1.35	.21**	-.12*	-.18**	(.84)						
5. Job strain	3.30	1.35	.24**	-.03	-.16**	-.07	(.71)					
6. Time pressure	4.73	1.28	.12*	.08	-.10	-.09	.55**	(.69)				
7. Job security	4.79	1.55	-.03	.04	.07	.13*	-.15**	-.02	(.66)			
8. Skill utilization	4.98	1.50	.10	-.07	-.20**	.15**	.33**	.38**	.11*	(.74)		
9. Migrant status	0.33	0.47	.35**	-.01	-.44**	.16**	.17**	.03	-.09	.12*		
10. Job satisfaction	7.31	1.49	.03	-.02	-.01	.38**	-.19**	-.13*	.40**	.24**	-.01	(.80)

* $p < .05$ level. ** $p < .01$ (two-tailed test).

¹ Age brackets: 1) 18 to 19 years; 2) 20 to 21 years; 3) 22 to 24 years; 4) 25 to 34 years; 5) 35 to 44 years; 6) 45 to 54 years; 7) 55 to 64 years. ²Gender: 1) male; 2) female. ³ Education levels: 1) postgrad degree, 2) graduate diploma, 3) bachelor degree, 4) diploma, 5) any certificate, 6) grade 12, 7) below grade 12

Table 2
Results of Hierarchical Regression Analyses for Job Satisfaction

	Step 1	Step 2	Step 3	Step 4
Age	.01	.03	.05	.04
Gender	.02	.03	.04	.04
Education level	.04	.04	.05	.06
Job autonomy	.37**	.29**	.28**	.28**
Job strain	-.15*	-.14*	-.17**	-.18**
Time pressure	-.01	-.12	-.11	-.09
Job security		.31**	.32**	.33**
Skill utilization		.27**	.34**	.34**
Migrant status		-.03	-.02	-.03
Job security × skill utilization			.04	-.04
Job security × migrant status			-.06	-.12*
Skill utilization × migrant status			-.13*	-.09
Job security × skill utilization × migrant status				.18**
Adjust R^2	-.01	.18**	.19	.21**
$R^2\Delta$.00	.19**	.02	.03**

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

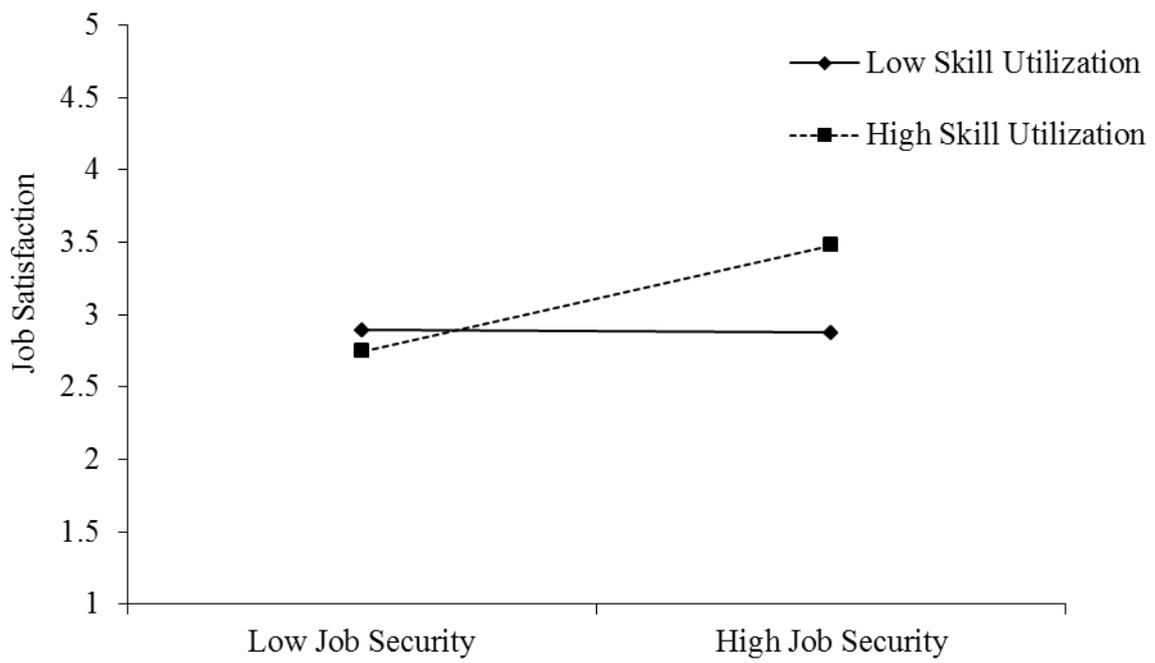


Figure 1. Plot of interaction effect of perceived job security, skill utilization on job satisfaction with skilled migrants.

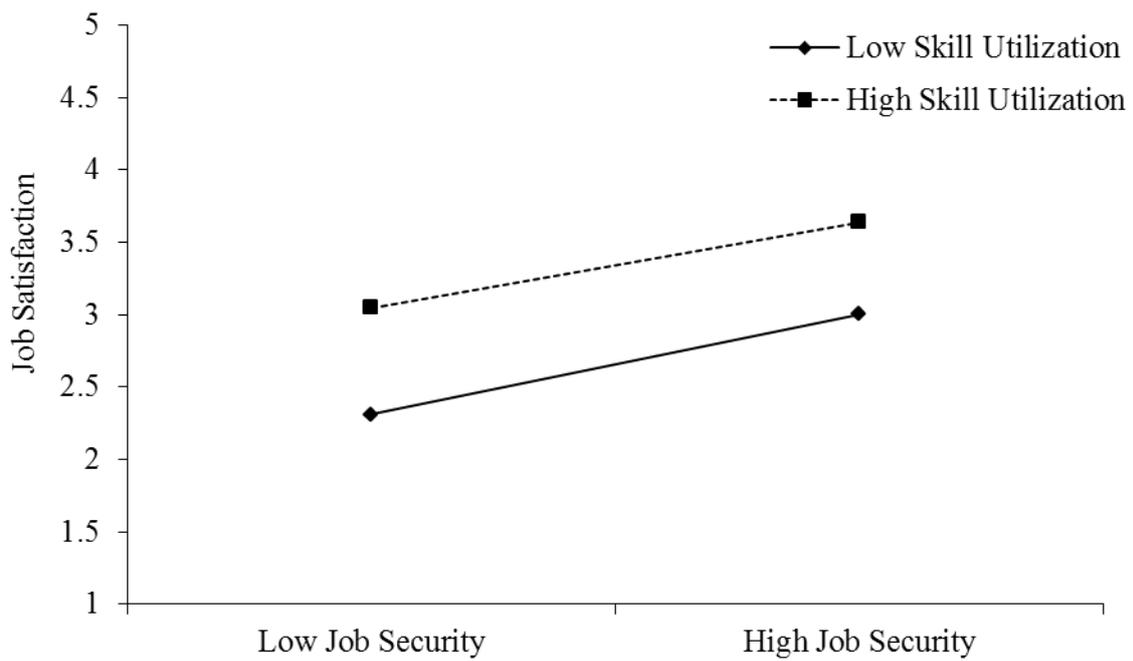


Figure 2. Plot of interaction effect of perceived job security, skill utilization on job satisfaction with Australian-born workers.