Chapter 6
Exploratory Empirical Tests of Work-Based Identity Antecedents and Consequences

Roslyn de Braine, F. Chris Bothma, and Paul G.W. Jansen

6.1 Introduction

The previous two chapters (Chaps. 4 and 5) provided an overview of the current research literature on the antecedents and the consequences of WI, respectively. This chapter focuses on the results of two studies that, respectively, explored the antecedents and the consequences of WI.

The first section of the chapter briefly recaps on how the WI construct was conceptualised (covered in more detail in Chap. 2) and then operationalised. The conceptual model and framework introduced in Chap. 1 (Fig. 1.4 and Table 1.1) guides the presentation of the results in this chapter.

The second section mainly reports on the findings of the De Braine (2012) study where selected job demands (JDs) and job resources (JRs) from the traditional job demands-resources (JD-R) model as well as the JD-R survey were used to predict WI. It was also tested whether the relationship between JRs and WI was mediated by JDs that is whether the impact of resources on WI is 'channelled' through dealing with demands. This was tested in De Braine's (2012) and Bester's (2012) study. It was also tested whether JDs moderate the relationship that JRs have with WI. JDs are also usually associated with physiological and psychological costs to individuals (Schaufeli and Bakker 2004), which may in this case serve to weaken an employee's work identity. Furthermore, the prediction model of WI was also tested for possible moderation effects by biographical and demographical variables.

R. de Braine (✉) • F.C. Bothma
Department of Industrial Psychology and People Management, University of Johannesburg, Johannesburg, South Africa
e-mail: roslynd@uj.ac.za; bothmafc@gmail.com

P.G.W. Jansen
Department of Management and Organisation, Faculty of Economics and Business Administration, VU University Amsterdam, Amsterdam, The Netherlands
e-mail: p.g.w.jansen@vu.nl

P.G.W. Jansen, G. Roodt (eds.), *Conceptualising and Measuring Work Identity*,
DOI 10.1007/978-94-017-9242-4_6

The third section of the chapter mainly reports on the Bothma (2011) where subjective and objectives outcomes of WI were investigated. It was also tested whether the relationship between WI and objective consequences are mediated by subjective consequences. The prediction models of the objective consequences were also tested as in the case of Bester's (2012) study for moderation effects by biographical and demographical variables.

As a brief background, both the De Braine (2012) and Bothma (2011) studies were conducted in a South African ICT sector company that employs around 24,000 people. A census-based sampling approach yielded a cross-sectional sample of 2,429 employees of all levels in the organisation excluding top management. The survey collected data for both the De Braine and Bothma studies. The respondents were from all regions in South Africa.

6.2 Conceptualisation of Work-Based Identity

WI is conceptualised as '…a multi-layered and multi-dimensional phenomenon' that develops through the interaction (a key process) between an individual (with distinctive personal identity, biographical and demographical characteristics) and the work-related environment as antecedent (Kirpal 2004a: 202). Through the identity formation process (identification), certain meanings, norms, expectations, beliefs and core values that are derived from specific social foci (e.g. careers, professions, organisations, work groups and job characteristics) are cognitively and hierarchically stored in the self, in order of importance, ready to serve as behaviour guides.

Depending on the selected foci, the work-related identity construct (derived from the self-concept through the identification process) may be referred to as career, occupational, professional or organisational identification. In response to a social situation (input), an identity is activated which results in behavioural and cognitive outcomes.

Although work-related identities are closely related to social identity, they differ from the latter, as they are work-related and linked to economic activities, while social identity concerns social status. According to Schaufeli and Bakker (2001), employees' psychological identification with work happens within four broad focal areas: firstly, *work* in general (work centrality/work involvement); secondly, *what* the person does (career/occupational/professional identity); thirdly, *where* the person works (organisational membership) and lastly, the *specific work* the person does (job involvement).

6.2.1 The Work-Based Identity Prototype as a Foundation

Through the identity formation process, certain meanings, norms, expectations, beliefs and core values are derived from specific social foci (such as careers, professions, organisations, supervisors, work groups and job characteristics), which are

cognitively and hierarchically 'stored' in prototypes (according to the social identity theory) or identity standards (according to the identity theory) (Abrams and Hogg 2004; Burke and Stets 2009; Hogg 2001; Stryker and Burke 2000) and which are then ready to serve as behaviour guides (Kirpal 2004b). Burke and Stets (2009) suggested that the identity standard and prototype should be treated equivalent to cognitive representations, and defined the prototype (a.k.a. identity standard) as '…a cognitive representation of a social category containing the meanings and norms the person associates with the social category' (p. 19).

Depending on the work-related foci, the WI construct may be referred to as professional, occupational, vocational or work identity (Crawford et al. 2008; Fugate et al. 2004; Kirpal 2004a, b; Pratt et al. 2006). In response to perceptions received about a specific social situation, the most appropriate identity (behaviour guide) is selected and activated to guide behaviour (Buche 2003, 2006, 2008; Hitlin 2003; Hogg and Ridgeway 2003; Hogg and Terry 2000; Kirpal 2004a, b; Olkkonen and Lipponen 2006; Stets and Burke 2003; Stryker and Burke 2000; Stryker and Serpe 1982; Tajfel 1981; Tajfel and Turner 1985; Walsh and Gordon 2007).

Work identity has been described as the way individuals define themselves at work. The dynamic content of this identity is stored in the WI prototype that acts as a behavioural guide. The following descriptions provide clarification of the content of this concept. Witt et al. (2002: 488) view work identity as a '…work-relevant target with which the individual primarily identifies: the occupation or the employing organisation'. Another description that is more inclusive of other components of the work environment is that: work identities are primarily identification with the work environment, the company, the company's objectives or the work-related activities and tasks which individuals perform that make individual and collective productivity possible.

Kirpal (2004b: 202) further elaborated on work identity that it is 'multilayered and multidimensional'. Other descriptions focus more on the 'self'. Buche (2003: 10) in her study of information technology professionals' work identities describes it as '…a socially constructed representation of an individual's unique self-perception based on his or her interactions within the employment environment'. Buche (2003: 4) further argues that work identity addresses '…an employee's self-image (at work) …who they see when they look in a mirror' (portion in parenthesis added for clarity).

6.2.2 The Work-Based Identity Prototype Conceptualisation

The following two theoretical definitions have been used as support of the prototype structure conceptualisation. Walsh and Gordon (2007: 2) define work identity as '…a work-based self-concept constituted of a combination of organisational, occupational, and other identities that shapes the roles a person adopts and the corresponding ways he or she behaves when performing his or her work'. For the purposes of the current study, Lloyd et al. (2011: 13 of 15) defined WI as '…a multi-identity, multi-faceted and multi-layered construction of the self (in which the

self-concept fulfills a core, integrative function), that shapes the roles individuals are involved in, within their employment context'. This definition guided the operationalisation of the WI construct.

Both of these aforementioned theoretical definitions of WI are grounded in personal identity, social identity theory and identity theory and they include the 'self-concept' as being multifaceted. Both definitions also make reference to the roles that individuals adopt and fulfil in their work something strongly supported by identity theory. A third reason for their inclusion is that the work-based self-concept consists of a combination of organisational, occupational and other identities. This is supported by social identity theory and social categorisation theory because individuals identify with categories or groups, such as an organisation, a work team or an occupational group.

Considering these theoretical definitions, WI, due to its multifaceted and multi-identity characteristic, is operationalised by an array of possible indicators which include work centrality, job involvement, organisational identification, person-organisation fit and career/occupational identity in the studies of Bothma (2011) and De Braine (2012). In order to understand the importance of each of the above-mentioned indicators in WI, we will make use of Kirpal's (2004a) perspective on the dimensions that influence identity formation processes. A three-part WI prototype was developed that consists of a structural, social and an individual-psychological dimension as set out below.

6.2.3 The Work-Based Identity Prototype Dimensions

The *structural* dimension refers to individual and societal paradigms of work that are influenced and shaped by how work, training systems and patterns of employment are embedded within a country's current and historical culture (Kirpal 2004a). As alluded to in Chap. 1, SA's transition from an apartheid regime to democracy has changed the meaning of the concept 'South African' (Distiller 2008: 273). Through labour law reforms, the SA workplace has increased in diversity and placed more emphasis on skill development for the previously disadvantaged race groups.

The *social* dimension refers to the social interaction that individuals engage in with other individuals (i.e. colleagues and supervisors), groups (i.e. communities of practice, work units and occupational groups) and/or institutional bodies (i.e. trade unions and professional bodies). The indicators of WI that fall under this social dimension include occupational/professional or career identity and organisational identification.

The *individual-psychological* dimension specifically focuses on the individual's personal identity orientation. This dimension focuses on the career history and professional development of individuals (Kirpal 2004a), and it also focuses on how an individual perceives his or her work (Kirpal 2004a). The indicators of WI that fall under this social dimension include work centrality, job involvement and person-organisation fit.

6.3 Operationalisation of Work-Based Identity

Given the aforementioned theoretical foundation and the conceptualisation of the WI construct, the following section will focus on how the WI scale was operationalised.

6.3.1 Work-Based Identity Scale (WI-28)

Although previous attempts were made to measure work identity (Aryee and Luk 1996; Buche 2003, 2006, 2008; Walsh and Gordon 2007; Wayne et al. 2006), no suitable measuring instrument was found that complied with the requirements of the theoretical definition of WI as described above. Therefore, scales that measure individual facets of work identity as defined in the WI prototype (Bothma 2011), such as work role centrality, person-environment fit, organisational identification, job involvement, occupational and/or professional identity and career identity, were sourced, adapted and combined to create a scale to measure WI (Lauver and Kristof-Brown 2001; Lodahl and Kejner 1965; Mael and Ashforth 1992; Roodt 1997; Roodt et al. 2009; Serafini et al. 2006).

A proposed WI scale was compiled, consisting of 36 items that represented the five different facets of WI (refer to the left column of Table 5.1 and to Appendix A for the complete WI scale). Items from the following scales were selected:

Items were selected from the organisational-related commitment scale of Roodt (1997) to capture different work-related foci. Examples of the selected items are: 'To what extent do you regard work as the most important aspect in your life?' and 'To what extent does your job allow for the achievement of personal goals?'

Job involvement was measured with items that were selected from Lodahl and Kejner's (1965) Job Involvement Scale, for example, 'How likely are you to regard your work as only a small part of who you are?'

Items were also selected from three subscales of the Functions of Identity Scale of Serafini et al. (2006), namely, *structure* (defined as '…the structure of understanding of who one is'), *goals* (defined as '…meaning and direction through commitments, values and goals') and *future* (defined as '…meaning and direction through commitments, values and goals and sense of future').

Organisational identification was measured with the scale of Mael and Ashforth (1992). Examples of the chosen items are: 'How often do you say 'we' rather than 'they' when you talk about the organisation that you work for?' and 'How interested are you in what others think about the organisation that you work for?'

Person-organisation fit was measured with items from the scale of Lauver and Kristof-Brown (2001). Examples of the selected items are: 'To what degree do your values match or fit the values of the organisation that you work for?' and 'To what degree are you able to maintain your values at the organisation that you work for?' The reliability and validity of the instrument was determined by submitting the

initial 36-item questionnaire to a first- and second-level factor analysis to determine the factor structure. This yielded a final 28-item, unidimensional WI scale (Roodt et al. 2009) with a Cronbach alpha of .95.

6.4 An Exploratory Factor Analysis (EFA) Approach

The EFA procedure described below was followed in both the studies of Bothma (2011) and De Braine (2012) and is reported below.

6.4.1 Descriptive Statistics

The distribution of item mean scores for the WI scale seems to be slightly negatively skewed. This trend is a desired outcome as one would want employees to have a well-developed WI and a high level of work engagement (Bothma 2011).

The results of the Kolmogorov-Smirnov and Shapiro-Wilk tests of the dataset indicated a violation of the assumption of normality. As the significance values of both tests are respectively smaller than $p \leq .001$, it can be concluded that the dataset does not stem from a normal distribution. This violation of normality is not serious as long as the non-normality is caused by data skewness and not by outliers in the data. The latter was not the case.

The risk of drawing incorrect inferences is reduced if samples of greater than 200 are used (Tabachnick and Fidell 1996, 2001, 2007), considerably less than the sample of $n = 2{,}429$ used in both the De Braine and the Bothma study. The data collected were therefore suitable for the parametric statistical procedures applied in the study. This statement is supported by Norman (2010, p. 631), who concluded that '… parametric statistics can be used with Likert data, with small sample sizes, with unequal variances, and with non-normal distributions, with no fear of "coming to the wrong conclusion"'.

6.4.2 First-Level Factor Analysis

A first-level factor analysis was conducted on the item intercorrelation matrixes of the initial 36 items of the WI scale (WI-28). (Refer to Appendix A for viewing the 36 items initially included in the scale.) Item scores were intercorrelated and this matrix was tested by means of the Kaiser-Meyer-Olkin (KMO) of Measure of Sampling Adequacy (MSA) and the Bartlett's Test of Sphericity to determine its suitability for factor analysis. KMO's MSA values of all the items in the

anti-image matrix exceed the recommended value of .6 (Hair et al. 1998; Kim 2011; Pallant 2005, 2007). Six factors were postulated based on Kaiser's (1970) criterion of eigenvalues larger than unity. Principal Axis Factoring (PAF) was used as the extraction method, followed by a varimax rotation with Kaiser normalisation.

6.4.3 Second-Level Factor Analysis

A second-level factor analysis was conducted on the extracted first-level factors sub-scores of the WI scale (WI-28). Suitability of the 6 × 6 sub-score intercorrelation matrix for further factor analysis was confirmed with KMO's MSA, which measured .78, that is above the recommended value of .6 (Hair et al. 1998). Bartlett's Test of Sphericity Chi-square value was statistically significant (X^2 (630) = 3,884.30; $p \leq .001$), thereby indicating the appropriateness of the data for factor analysis. Two factors were postulated based on Kaiser's (1970) criterion of eigenvalues larger than unity. These two factors were extracted by means of PAF and a direct oblimin rotation and explained about 66 % of the variance in the factor space. The outcomes of the above-mentioned EFA procedure can be summarised in Table 6.1.

It should be noted from the first column in Table 6.1 that the six theoretical dimensions (work, job, career/occupation, organisational identification, future and person – environment fit) all yielded acceptable internal consistency reliabilities with the exception of person – environment fit (which is on the low side) where the third item was omitted from further analysis. These findings suggest that a different five factor latent model for the WI construct (excluding the *future* dimension) can be tested by means of CFA within a SEM. This option was not pursued in the current work identity project.

The results obtained from the iterative item reliability analysis of the WI scale, (work-based identity in the third column of the above table), yielded a Cronbach Alpha of .95, indicating an acceptable internal consistency reliability. The second extracted factor (that contained experimental items on 'future') did not form part of the theoretical conceptualisation of WI and was omitted from further analysis. WI was therefore conceptualised as a unidimensional construct with an acceptable internal consistency reliability (Cronbach Alpha = .95). Both Bothma (2011) and the De Braine (2012) used this unidimensional scale in their respective exploratory studies that shared the WI scale.

With the antecedents and the consequences of WI now clearly established in the studies De Braine (2012) and Bothma (2011), respectively, it was established that WI can be successfully used as both as a criterion or as a predictor. Bester (2012) then proceeded by including the WI construct in a structural equation model (SEM). The results of this study are reported in Chap. 7.

Table 6.1 Factor analysis of the WI scale

Theoretical sub-constructs			First level FA			Second level FA		
Item per dimension	Item reliability	Dimension reliability	Item	Item loadings	Factor reliability	Item	Item reliability	Construct reliability
DQ1	.77	Work $\alpha = .82$	DQ18	0.79	WI 1 $\alpha = .94$	DQ18	.942	Work-based identity $\alpha = .95$
DQ2	.76		DQ1	0.77		DQ17	.942	
DQ3	.77		DQ7	0.77		DQ7	.943	
DQ4	.81		DQ8	0.74		DQ8	.942	
DQ16	.82		DQ10	0.71		DQ10	.942	
EQ1	.83		DQ9	0.7		DQ9	.945	
DQ5	.79	Job $\alpha = .82$	DQ5	0.67		DQ5	.943	
DQ6R	.82		DQ2	0.67		DQ2	.943	
DQ9	.80		DQ19	0.66		DQ19	.943	
DQ13	.81		DQ3	0.66		DQ3	.943	
DQ14	.82		DQ12	0.65		DQ12	.942	
DQ15	.80		EQ1	0.51		EQ1	.945	
DQ17	.78		DQ6R	0.5		DQ11	.942	
DQ19	.78		DQ11	0.5		DQ1	.943	
DQ20	.81		DQ1	0.49		DQ4	.944	
DQ7	.80	Career / Occupation $\alpha = .85$	DQ4	0.4		DQ2	.945	
DQ8	.76		DQ20	0.38		GQ19	.944	
DQ18	.82		EQ4	0.3		GQ20	.945	
DQ10	.86	Organisational ID $\alpha = .87$	GQ19	0.82	WI 2 $\alpha = .87$	GQ17	.944	
DQ11	.85		GQ20	0.77		GQ18	.943	
DQ12	.85		GQ17	0.7		GQ15	.944	
GQ15	.85		GQ18	0.68		GQ16	.946	
GQ16	.87		GQ15	0.62		DQ15	.944	
GQ17	.85		GQ16	0.46		DQ14	.946	
GQ18	.84		DQ15	0.63	WI 3 $\alpha = .74$	DQ16	.944	
GQ19	.85		DQ14	0.56		DQ13	.945	
GQ20	.85		DQ16	0.56		EQ7	.944	
GQ21R	.88		DQ13	0.35		EQ8	.945	
EQ2	.68	Future $\alpha = .72$	EQ2	0.81	WI 4 $\alpha = .78$	EQ2	.460	Future $\alpha = .74$
EQ3	.65		EQ3	0.72		EQ3	.520	
EQ4	.74		EQ8	0.72	WI 5 $\alpha = .82$	EQ5	.700	
EQ5	.58		EQ7	0.67		EQ6	.560	
EQ6	.67		EQ6	0.8	WI 6 $\alpha = .80$			
EQ7	.34	Person – environment fit $\alpha = .60$	EQ5	0.72				
EQ8	.28		*Key: Boxes shaded in grey denote deleted items or factors*					
EQ9R	.82							

6.5 Antecedents of WI

The subjective and objective antecedents of WI as reported in De Braine (2012) and Bester's (2012) study will be presented in this section. As in the case of the prediction of work engagement, the JD-R model was used (Hakanen and Roodt 2010), but in the case of this research project, job resources and demands were used to predict work-based identity (WI). Job resources (JRs) as predictors of WI are discussed next.

6.5.1 Job Resources as Predictors of Work-Based Identity

The first objective of De Braine's (2012) study was to establish whether a relationship exists between JRs and WI. JRs are '…those physical, psychological, social or organisational aspects of a job that either/or (1) reduce job demands and the associated physiological and psychological costs; (2) are functional in achieving work goals; and (3) stimulate personal growth, learning and development' (Demerouti et al. 2001: 501). In this study use was made of the JR items of the job demands-resources scale (JD-RS) that was developed by Jackson and Rothmann (2005). The JRs included growth opportunities, organisational support and advancement. Task identity (Hackman and Oldham 1975), team climate (Anderson and West 1998) and perceived external prestige (Carmeli et al. 2006) were used as additional JRs outside the traditional JD-RS model, in the prediction of work-based identity. From the JD-RS, growth opportunities included items related to skill variety and opportunities to learn. Organisational support included items related to relationships with supervisors and colleagues, flow of information and communication, role clarity and participation in decision-making. The items covered under advancement included remuneration, career possibilities and training opportunities. Task identity, as defined by Hackman and Oldham (1975: 161) is '…the degree to which the job requires completion of a 'whole' and identifiable piece of work…' Task identity was measured with two items that were adapted from the job diagnostic survey (JDS) by Hackman and Oldham (1975). Team climate is a team's shared perceptions of organisational policies, practices and procedures (Anderson and West 1998). This was measured with an adapted scale by Howard et al. (2005). Perceived external prestige (PEP) refers to '…the employee's personal beliefs about how other people outside the organization such as customers, competitors and suppliers judge its status and prestige' (Carmeli et al. 2006). PEP was measured with an adapted corporate image questionnaire by Riordan et al. (1997). In Table 6.2 the intercorrelations between the different variables of De Braine's (2012) study are provided.

The JR, *growth opportunities,* was found to be positively related to WI ($r = 0.51$, $p \leq .001$) with a large effect size. *Organisational support* also positively related to WI ($r = 0.51$, $p \leq .001$) with a large effect size. The JR, *advancement,* positively related to WI ($r = 0.35$, $p \leq .001$) with a medium effect size. *Task identity* positively

Table 6.2 Intercorrelations of JDs and JRs with WI in De Braine's (2012) study

	M	SD	OL	JI	WFC	GO	OS	Adv	TId	PEP	TC	WI
OL	39.38	7.37	[.78]									
JI	10.24	5.79	−.06**	[.90]								
WFC	16.75	8.44	.42**	−.07**	[.96]							
GO	31.35	8.81	.12**	.31**	−.03	[.84]						
OS	90.38	18.1	−.01	.33**	−.11**	.56**	[.90]					
Adv	18.54	7.47	−.06**	.40**	−.12**	.39**	.37**	[.84]				
TId	9.63	3.28	−.05*	.24**	−.10**	.43**	.42**	.23**	[.89]			
PEP	18.57	7.01	−.03	.33**	−.08**	.30**	.34**	.41**	.22**	[.90]		
TC	28.24	8.39	−.09**	.32**	−.14**	.50**	.69**	.37**	.38**	.39**	[.89]	
WI identity	136.8	29.3	.12**	.26**	-.04*	.51**	.51**	.35**	.31**	.46**	.48**	[.95]

M mean, *SD* standard deviation. Coefficient alphas are presented in brackets along the diagonal. *$p<0.05$; **$p<0.001$; $n=2{,}429$

Correlations ranging between: $0.10 \leq r \leq 0.29$ small effect, $0.30 \leq r \leq 0.49$ medium effect and $0.50 \leq r \leq 1.00$ large effect

OL Overload, *JI* job insecurity, *WFC* work-family conflict, *GO* growth opportunities, *OS* organisational support, *Adv* advancement, *Tld* task identity, *PEP* perceived external prestige, *TC* team climate, *WI* work-based identity

related to WI ($r=0.301$, $p \leq .001$) with a medium effect size. The JR, *team climate,* also positively related to WI ($r=.48$, $p \leq .001$) with a medium effect size. The JR, *perceived external prestige,* positively related to WI($r=0.46$, $p \leq .001$) with a medium effect size.

Furthermore, in terms of the average mean scores in Table 6.2, the participants experienced higher than average levels of the following job resources: growth opportunities, organisational support, task identity and perceived external prestige. However, the participants experienced below average levels of advancement and team climate. In terms of the mean score of WI, the participants also displayed above average levels of WI.

In order to assess the overall worth of JRs as a predictor of WI in De Braine's (2012) study, all of the above job resources were combined as a predictor of WI. It yielded a strong relationship with WI ($r=0.622$, $p \leq .001$) with a large effect size. Each JR was also tested as individual predictor of WI. The hypotheses that each of the JRs would have a positive relationship with WI were supported. The same hypotheses were tested on a multivariate level. This analysis was conducted using stepwise multiple regression analysis to establish the amount of variance that each JR accounted for in the prediction of work-based identity. Each of the JRs was entered into the regression equation sequentially.

The results indicated that 26 % of the variance in the WI variable was explained by growth opportunities in the first step of the regression analysis. Hereafter, perceived external prestige, organisational support, team climate and advancement were entered into the regression equation. Perceived external prestige and team climate were JRs that fell outside of the traditional JD-R model and they were not part of the JD-RS. They were included as additional JRs. The sixth and last step in the model accounted for 42 % of the variance in WI. Only a small increase in R^2 was obtained when advancement was entered into the regression analysis. Task identity did not enter into the regression analysis.

So, WI as construction of the self that shapes the work roles that individuals are involved in is codetermined by growth opportunities in the job, by perceived external prestige of the employee's organisation, by support provided by the organisation (mostly through the direct manager) and by climate in the work team. This indicates that the JRs required for employees to identify with their work and work organisation are varied and multifaceted. These factors also provide clues for strengthening WI.

6.5.2 Job Demands as Predictors of Work-Based Identity

The second objective of De Braine's (2012) study was to establish if a relationship exists between the job demands and WI. *Job demands* (JDs) refer to '…those physical, social, psychological, or organisational aspects of a job that require sustained physical and/or psychological (i.e. cognitive and emotional) effort on the part of the employee and are therefore associated with certain physiological and/or psychological costs' (Demerouti et al. 2001: 501). Overload and job insecurity were the

job demands used in this study. Both of them were extracted from the JD-RS (Jackson and Rothmann 2005). Work-family conflict was the additional JD that was used. It was measured with a work-family conflict scale that was adapted from Netemeyer et al. (1996).

Overload is regarded as anything that places high attentional demands on an employee (Berry 1998). *Job insecurity* is defined as '…a sense of powerlessness to maintain desired continuity in a threatened job situation' (Greenhalgh and Rosenblatt 1984: 438). *Work-family* conflict is defined as '…a form of interrole conflict in which the role pressures from the work and family domains are mutually incompatible in some respect' (Greenhaus and Beutell 1985: 77).

It was hypothesised that each of these mentioned JDs would be negatively related to WI. Overload was found to be positively related to WI ($r=0.12$, $p \leq .001$) with a small effect size. Job insecurity was found to be positively related to WI ($r=0.26$, $p \leq .001$) with a small effect size. Work-family conflict is negatively related to WI ($r=-0.04$, $p \leq .05$) with no effect size (refer to Table 7.1). The hypotheses that each of the JDs would have a negative relationship with WI were not supported, except in the case with work-family conflict. Furthermore, in terms of the mean scores, the participants experienced higher than average levels of overload and average levels of work-family conflict and job insecurity.

In order to assess the overall effect of all these JDs as a predictor of WI, they were combined. All the JDs combined yielded a weak relationship with WI ($r=0.17$, $p \leq .001$). The same hypotheses were tested on a multivariate level. Overload was the only and fourth variable to enter into the regression analysis. Job insecurity and work-family conflict did not enter into the multiple regression analysis when used in combination with JRs, despite the fact that significant relationships were reported on a bivariate level. This also means that job insecurity and work-family conflict do not explain any additional variance than those variables already included in the regression equation.

So, WI as construction of the self that shapes the work roles that individuals are involved in is codetermined, but only to a small degree ($\beta=0.10$), by job overload. An explanation for this may be that the participants perceive their respective overload demands rather as job challenges than job hindrances. It may also be that individuals argue that they have to be able to demonstrate that they can cope with extra role responsibilities that are part of their WI. According to Van den Broeck et al. (2010), when individuals perceive a job demand as a job challenge this stimulates individuals to give more effort as they execute their work tasks in the midst of work difficulties or challenges. WI is therefore not only shaped by resources but also by demands.

6.5.3 JDs as Mediator or Moderator of the JRs: WI Relationship

The third objective of De Braine's (2012) study was to establish if JDs mediated the relationship between JRs and WI. It was hypothesised that JDs would mediate the said relationship. The aim was to investigate how JDs would affect the positive relationship that WI has with JRs. The results indicated that there was no

statistically significant main effect for JDs $F(1, 2429) = .739$; $p = .390$, when predicting WI. It was shown in the previous section that JDs had a weak relationship with WI. There was a statistically significant main effect for JRs, $F(1, 2429) = 53.784$; $p < .001$, when predicting WI. However, the interaction effect between JDs and JRs was not statistically significant, $F(1, 2429) = .150$; $p = .699$. As a result, no mediation has taken place as the independent variable JRs did not interact and had no effect on the mediator JDs. According to Baron and Kenny (1986), if this occurs, then there is no evidence of mediation.

In De Braine's (2012) study, the possible moderating effects of JDs on the relationship of JRs and WI were also assessed in a two-step regression model. The results indicated that there was a statistically significant effect for JRs $F(1, 2428) = 1{,}580.419$; $p \leq .000$, when predicting WI in the first step. There was a statistically significant main effect for JRs, $F(1, 2428) = 545.457$; $p \leq .000$, when predicting WI in the second step, when the interaction term JRs*JDs were entered into the regression. But an inspection of the unstandardised coefficients shows that only JRs contributed to the second step. The inclusion of JDs $t(2428) = .474$, $p = .636$, and the interaction JRs*JDs $t(2428) = .765$, $p = .444$, did not make a meaningful contribution in the second step. So in this instance, JDs did not serve as a moderator of the relationship between JRs and WI.

In the Bester (2012) study, it was also postulated that JDs would act as a moderator between JRs and WI. However, the procedure as described in the previous paragraph was not followed in the Bester study. A structural equation model (refer to Chap. 5) has shown that there was a significant path between JRs and JDs in the prediction of WI. So, the JDs (breach of psychological contract and work-family conflict) in Bester's study served to strengthen the relationship that JRs have with WI, contrary to the expectation that JDs would reduce the effect that JRs had on WI. Once again, this may allude to the fact that sometimes JDs are seen as job challenges rather than job hindrances or the individuals may have tended towards making better use of JRs (in this instance, remuneration perceptions, task resources, need for organisational identity and organisation reputation) at their disposal to handle the respective JDs better, thus strengthening their WIs.

6.5.4 Biographical Variables as Moderators in the Prediction of WI

The fourth objective of De Braine's (2012) study was to establish if biographical variables moderated the relationship between JDs and JRs when predicting WI. Only significant moderation results are reported below.

6.5.4.1 Race

Four race groups participated in the study, namely, Black, White, Coloured and Asian/Indian. Race did not moderate all of the JRs and JDs. It only moderated the respective relationships that WI had with job insecurity, work-family conflict, advancement, task identity and perceived external prestige.

The interaction effect between *job insecurity* and race was statistically significant, $F(3, 2421) = 2.937$; $p = .03$, with a small effect size (partial eta squared = .004). WI was the weakest for the White group in comparison to the Black, Coloured and Asian/Indian groups in terms of job insecurity. The White participants may be feeling less secure about their jobs due to affirmative action measures that are in place within the organisation. South African organisations are required to achieve certain numeric goals in terms of equitable representation of all race groups according to the Employment Equity Act, No. 55 of 1998 (Republic of South Africa 1998). This sense of job insecurity may be affecting their WI.

The interaction effect between *work-family conflict* (WFC) and race was statistically significant when predicting WI, $F(3, 2421) = 2.71$; $p = .04$, with a small effect size (partial eta squared = .003). All the race groups WI decreased with an increase in WFC, with the exception of the Asian/Indian group. The White group presented the weakest WI in relation to WFC when predicting WI compared to the Asian/Indian group who presented the WI least affected by WFC when predicting WI. This is an interesting finding as one may assume that all race groups would have a lowered WI by the experience of work-family conflict. This could be the result of different cultural perceptions across race groups regarding how work and family life is seen in relation each other. Amongst the Asian/Indian group, work and family may be seen as almost overlapping. This then may influence the way that they deal with any interrole conflict as a result of any WFC experienced, thus affecting their levels of WI.

There was a statistically significant interaction effect between *advancement*, race and WI, $F(3, 2421) = 3.69$; $p \leq .01$, with a small effect size (partial eta squared = .005). The White race group WI was weaker in comparison to the other race groups in terms of advancement opportunities. The Asian/Indian race group initially displayed a stronger WI than the Black race group, but as advancement levels increased, so did the Black group's WI become stronger than the Asian/Indian group. This result may be due to the implementation of affirmative action policies as according to the Employment Equity Act, No. 55 of 1998 (Republic of South Africa 1998) that South African companies have to adhere to. Through this Act, employers are required to achieve equity in the workplace by implementing affirmative action measures to redress the disadvantages experienced by the designated groups (African, Indians/Asians, Coloureds, women and disabled people) as a result of the previous apartheid regime. The designated groups are then given preferential treatment in respect of retention, development and other opportunities over White employees. According to the Act, this is done to ensure equitable representation of all race groups in all occupational categories and levels in the South African workforce. This may be the reason to why the White participants experienced weaker identification with their work in relation to advancement opportunities.

The interaction effect between *task identity* and race was also statistically significant when predicting WI, $F(3, 2421) = 3.94$; $p = .008$, with a small effect size (partial eta squared = .005). The WI of the Black group was the strongest in comparison to the other race groups and the White group displayed the weakest WI. The White participants may have experienced reduced involvement in their job, as a result of

lowered task identity. This may be a result of affirmative action measures that have influenced what employees are doing in this organisation. Task identity is also known to predict job involvement which is an indicator of work identity. This may provide an explanation for their weaker WI.

The interaction effect between *perceived external prestige (PEP)* and race was statistically significant when predicting WI, $F(3, 2421) = 5.77$; $p \leq .001$, with a small effect size (partial eta squared = .007). The Asian/Indian race group displayed the strongest WI in terms of PEP. The Coloured group displayed the weakest levels of WI, when PEP increased. Based on this result, it is surmised that the Asian/Indian group may feel that their self-status or self-image amongst their own race group is enhanced by working for this organisation, as this organisation may be perceived as a good or a 'high-status' organisation to work for. Thus, their work identity may be strengthened through the enhancement of their self-image or social status by working for this organisation.

6.5.4.2 Gender

Gender only moderated the relationship that growth opportunities had with work-based identity. The interaction effect between gender and *growth opportunities* was statistically significant, $F(1, 2425) = 5.114$; $p = .02$. The interaction plot showed that the females WI were stronger than the males, but as growth opportunities increased, the male's WI levels surpassed the female's WI. The males in this regard are perhaps making more use of the growth opportunities in organisation than the females do, or males perceive these opportunities more relevant and appropriate for them.

6.5.5 Demographical Variables as Moderators in the Prediction of WI

The fifth objective of De Braine's (2012) study was to establish if the demographical variables marital status, job level, membership of a medical fund and work region moderated the relationship between JDs and JRs when predicting WI.

6.5.5.1 Marital Status

Marital status moderated the respective relationships that overload, job insecurity and growth opportunities had with WI. Marital status was divided into single, married/cohabitating and divorced/separated/widowed. The significant results are reported below:

The interaction effect between marital status and *overload* was statistically significant when predicting WI, $F(2, 2423) = 3.759$; $p = .023$, with a small effect size (partial eta squared = .003). WI was initially higher for the single group in comparison

to the married/cohabiting and divorced groups, but as overload increased, the WI of the single group decreased. The married participants in the end displayed the strongest levels of WI. This may be attributed to the married employees perhaps having extra support, in the form of spousal support to deal with any with any associated overload demands in their jobs.

The interaction effect between marital status and *job insecurity* proved also to be statistically significant when predicting WI, $F(2, 2423) = 4.222$; $p = .015$, with a small effect size (partial eta squared = .003). Initially the single group displayed the lowest WI in comparison to the married and divorced participants, but when the levels of job insecurity increased, as according to the interaction plot, the single employees exhibited slightly higher WI than the married employees. Single employees may experience job insecurity not as insurmountable to deal with as married employees, because they may not have a family or spouse that they are responsible for, as in the case of married employees. Although it could be argued that it could be easier for married employees to cope with job insecurity, because they have a spouse to fall back on for financial support.

The interaction effect between marital status and the JR *growth opportunities* was statistically significant when predicting WI, $F(2, 2423) = 4.761$; $p = .009$, with a small effect size (partial eta squared = .004). The married participants presented a stronger WI than the single and divorced participants. Perhaps the married participants are given more growth opportunities by the organisation, which thus influences them to remain with the organisation because they have to support their families.

6.5.5.2 Job Level

Job level proved to be the most significant moderator. It moderated job insecurity, work-family conflict and all the JRs, except task identity's relationship when predicting WI. There were three job level groups: management, specialist and operational. The managerial employees are at a higher hierarchical level within the organisation than the specialist and operational employees.

The interaction effect between job level and *job insecurity* was statistically significant when predicting WI, $F(2, 2423) = 7.345$; $p \leq .001$, with a small effect size (partial eta squared = .006). It was observed that the management employees exhibited the stronger WI in comparison to the operational and specialist employees. The operational group exhibited higher levels of WI than the specialist group. It is assumed that most organisations hold less management positions that those positions lower down the hierarchical chain. So, these managerial employees who exhibit higher levels of WI than the other employees perhaps feel less threatened of losing their jobs than other employees, thus leading to an enhanced WI.

The interaction effect between job level and *work-family conflict* (WFC) was statistically significant in predicting WI, $F(2, 2423) = 8.614$; $p \leq .001$, with a small effect size (partial eta squared = .007). The management group displayed stronger WI in relation to WFC than the operational and specialist groups. The operational group was the only group that experienced a decrease in their WI as WFC increased.

The interaction effect between job level and *growth opportunities* in predicting WI was statistically significant, $F(2, 2423) = 3.479$; $p = .031$, with a small effect size (partial eta squared = .003). In terms of the interaction effect of job level and growth opportunities, the management WI was stronger than that of the specialists and operational workers. This means that growth opportunities had a higher impact on the WI of the managerial staff than for the other two groups. Perhaps WI for the managers for a larger part is driven by the need to excel and grow their careers, whereas WI for the other two groups may consist of just wanting to perform satisfactorily in their jobs.

The interaction effect between job level and *organisational support* was also statistically significant, $F(2, 2423) = 9.377$; $p \leq .001$, with a small effect size (partial eta squared = .008). The same level of organisational support had a higher impact on the managers' WI than the other two groups. This may be attributed to the managers' WI consisting for a larger part of managing their divisions well, by ensuring that they elicit continuous organisational support. The other groups WI may be more consisting of managing their individual work roles well.

The interaction effect between job level and *advancement* was statistically significant when predicting WI, $F(2, 2423) = 12.773$; $p \leq .001$, with a small effect size (partial eta squared = .010). The management group displayed higher levels of WI than the operational and specialist workers in terms of similar advancement opportunities. The specialist staff initially presented higher levels of WI than the operational group, but as advancement increased for both groups, the specialist group experienced lower levels of WI than the operational group. Managerial employees already have made some use of the advancement opportunities within the organisation, as they are in management. This may enhance their self-image and thus strengthen their WI.

The interaction effect between job level and *perceived external prestige (PEP)* was statistically significant in the prediction of WI, $F(2, 2423) = 6.354$; $p = .002$, with a small effect size (partial eta squared = .005). The WI of the managers was stronger than the specialists and operational workers. Initially, the operational workers presented the lowest levels of WI, but as PEP increased, they experienced a stronger WI than that of the specialists. Perhaps WI for managers for a larger part consists of PEP, whereas for the other two groups consists of other work-related components such as task identification.

The interaction effect between job level and *team climate* was statistically significant in predicting WI, $F(2, 2423) = 6.992$; $p \leq .001$, with a small effect size (partial eta squared = .005). The WI of the management group was the strongest in comparison to the operational and specialist group in terms of team climate. The same level of team climate had a higher impact on the managerial employees than the other two groups. The operational group had initially a lower WI than the specialist group, but as team climate increased for both groups, the operational group WI surpassed the specialist group. The managerial employees WI may consist for a larger part of team-related aspects, such as team leadership, whereas for the other two groups WI, fulfilling their individual role within the team may be more important in WI formation.

6.5.5.3 Membership of a Medical Fund

Membership of a medical fund did not moderate any of the JRs, and moderated only one JD, namely, overload. The interaction effect between medical fund and the JD *overload* was statistically significant when predicting WI, $F(1, 2425) = 7.643$; $p = .006$, with a small effect size (partial eta squared = .003). Participants who are members of a medical fund exhibited stronger WI in relation to overload. Many South African organisations apportion pay for their employees' medical fund membership. This is regarded as an important benefit for employees, due to the high cost of medical care. Employees may then view this as part of an organisation's support towards their welfare and lessening their burden. This therefore may serve to strengthen their organisational identification, thus enhancing their WI.

6.5.5.4 Work Region

Work region (the geographical region where a person works) had a moderating effect on the respective relationships that work-family conflict, task identity and perceived external prestige had with WI. Participants were grouped according to the region (location) where they were based (Central, Corporate, Eastern, Gauteng Central, Northeastern, Southern and Western).

The interaction effect between region and *work-family conflict* in predicting WI was statistically significant, $F(6, 2425) = 2.583$; $p \leq .01$, with a small effect size (partial eta squared = .006). The Central region's participants displayed the largest decrease WI in relation to WFC in comparison to the other regions. The Western region displayed the lowest WI. The Central region's employees may be experiencing longer commuting times to and fro from work that may heighten their stress and irritation levels owing to traffic-related problems that may in turn impact their levels of WFC and thus influencing their WI.

The interaction effect between region and *task identity* was statistically significant when predicting WI, $F(6, 2415) = 2.536$; $p \leq .01$, with a small effect size (partial eta squared = .006). The combination of WI and task identity was stronger for the participants from the Eastern region than participants from the other regions. The Western region participants displayed the weakest WI levels. WI for the Eastern region employees perhaps consists of to a larger part task identity, whereas for the other groups, WI consists of other work-related aspects besides the tasks that they do.

The interaction effect between region and *perceived external prestige* was statistically significant, $F(6, 2415) = 2.622$; $p \leq .01$, with a small effect size (partial eta squared = .006). The interaction of region and PEP had a higher impact on the WI of the Northeastern region in comparison to the other regions. Perhaps the Northeastern employees' WI consists to a larger part of PEP than the other regions. The other regions WI may consist of other work-related dimensions such as the type of work

that they do. The Northeastern region of the organisation is also based in a province where there are not many large organisations that provide employment. So, perhaps to work for this large South African ICT sector company in this region is regarded as a privilege and as an indication of high social status. This may be the reason why this region's employees display the strongest WI in terms of perceived external prestige.

In the next section of this chapter, the consequences of WI will be discussed.

6.6 Consequences of Work-Based Identity

The subjective and objective consequences of work-based identity (WI) as reported in the Bothma (2011) study will be presented in the next section.

6.6.1 Work-Based Identity Relationships with the Subjective Consequences

The first objective of Bothma's (2011) study was to determine the relationships between WI and the subjective consequences (for ease of reference, abbreviations are used as in Table 6.3), namely, personal alienation, helping behaviour, work engagement and the three burnout dimensions: emotional exhaustion, depersonalisation and reduced personal accomplishment. Turnover intentions and task performance were the objective outcome variables. The intercorrelations between the different variables are provided in Table 6.3.

It was found that there are statistically significant negative relationships between WI and personal alienation ($r=-0.53$; $p<0.01$), WI and emotional exhaustion ($r=-0.39$; $p<0.01$) WI and depersonalisation ($r=-0.23$; $p<0.01$), and reduced personal accomplishment ($r=-0.35$; $p<0.01$). Statistically significant positive relationships were found between WI and helping behaviours ($r=0.37$; $p<0.01$) and WI and work engagement ($r=0.71$; $p<0.01$). Increased levels of WI will therefore result in reduced levels of the negatively correlated subjective outcomes but also in increased levels of the positively correlated subjective outcomes. According to the principles of force field analysis, a work context will become more conducive to exhibiting engaging work behaviours (or more likely to elicit engaging behaviours) if positive aspects (driving forces) are enhanced and negative aspects (restraining forces) are reduced. Interventions to promote WI can therefore be used to effectively manage desired subjective consequences. Caution should however be taken to consider the possible mediation effects of subjective consequences on the WI – objective consequences relationships. Such possible mediation effects are discussed in a section further down.

Table 6.3 Intercorrelations matrix (Pearson correlations) of the different constructs

	M	SD	WI	AL	H-OCB	PA	EE	DP	WE	TI	TP
WI	136.84	29.3	[0.95]								
AL	20.76	7.02	−.53^{++}	[0.81]							
H-OCB	49.36	8.66	.37^{++}	−.13^{++}	[0.86]						
PA	29.15	7.55	−.35^{++}	.22^{++}	−.29^{++}	[0.71]					
EE	19.82	11.6	−.39^{++}	.54^{++}	−.10^{++}	.04^{+}	[0.89]				
DP	8.49	6.34	−.23^{++}	.28^{++}	−.08^{++}	.05^{+}	.60^{++}	[0.70]			
WE	24.13	6.99	.71^{++}	−.59^{++}	.35^{++}	−.42^{++}	−.41^{++}	−.23^{++}	[0.91]		
TI	25.21	8.14	−.56^{++}	.73^{++}	−.12^{++}	.20^{++}	.58^{++}	.31^{++}	−.58^{++}	[0.80]	
TP	51.75	8.79	.08^{++}	−.13^{++}	.13^{++}	−.08^{++}	−.07^{++}	−.05^{+}	.09^{++}	−.13^{++}	[0.94]

AL personal alienation, *H-OCB* helping behaviour, *WE* work engagement, *EE* emotional exhaustion, *DP* depersonalisation, *PA* reduced personal accomplishment, *TI* turnover intentions, *TP* task performance

M = mean, SD = standard deviation. Coefficient alphas are presented in brackets along the diagonal. $^{+}p < 0.05$; $^{++}p < 0.001$; $n = 2{,}429$

Correlations ranging between: $0.10 \leq r \leq 0.29$ small effect; $0.30 \leq r \leq 0.49$ medium effect and $0.50 \leq r \leq 1.00$ large effect

6.6.2 *Work-Based Identity Relationships with the Objective Consequences*

The second objective of Bothma's (2011) study was to determine the relationship between WI and the objective consequences turnover intention and task performance.

It was found that there is a statistically significant negative relationship between WI and turnover intention ($r = -0.56$; $p < 0.01$) as well as a statistically significant but weak positive relationship between WI and task performance ($r = 0.08$; $p < 0.01$). Based on this finding, it is postulated that building a stronger WI amongst scarce talent (and thereby reducing turnover and organisational memory loss) is viewed as a more cost-effective strategy compared to trying to enhance task performance. Stated differently, this means that the monetary benefits of cost savings associated with reduced turnover is relatively higher than the yield of monetary benefits by improving task performance when WI levels are improved. This finding implies that WI has a hygienic effect as it does not increase positive consequences (task performance) but it decreases negative consequences (turnover intentions).

6.7 Subjective Consequences' Mediation Effect

The third objective of Bothma's (2011) study was to determine the possible mediating effect the subjective consequences (personal alienation, helping behaviour, work engagement and the three burnout dimensions: emotional exhaustion, depersonalisation and reduced personal accomplishment) may have on the relationship between work-based identity and the objective consequences turnover intention and task performance.

Mediation occurs when a third variable (mediator) explains (completely or only partially) the relationship between a predictor (independent variable) and an outcome variable (dependent variable) (Baron and Kenny 1986). A mediating variable is one which 'specifies how (or the mechanism by which) a given effect occurs' between an independent variable (predictor) and a dependent variable (outcome) (Holmbeck 1997: 599). Bennett (2000) stated that mediators 'provide additional information about how or why two variables are strongly associated' (p. 415). The mediation process can be graphically depicted as in Fig. 6.1.

Baron and Kenny's (1986) four-causal step method, performed with four multiple regression equations, was used to establish if the mediator variables mediate the relationship between a predictor variable (independent variable) and outcome variable (dependent variable). The four-step method:

1. Regression Equation 1: Establish the relationship between the predictor and the outcome variable. This is to determine if the predictor predicts the outcome variable (path c – direct effect).

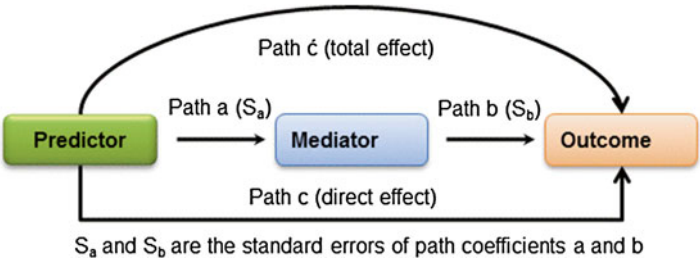

Fig. 6.1 An illustration of mediation (Adapted from Frazier et al. 2004)

2. Regression Equation 2: Establish the relationship between the predictor and the mediator variable. This is to determine if the predictor predicts the mediator variable (path a).
3. Regression Equation 3: Establish the relationship between the mediator variable and the outcome variable. This is to determine if the mediator variable predicts the outcome variable (path b).
4. Regression Equation 4: Recompute path c while controlling for the mediator (path ć). A decrease of the strength of the relationship between the predictor variable and outcome variable compared with Regression Equation 1 would be indicative of mediation (compare path c, direct effect with path ć, mediated effect).

The significance of the mediated effect was tested through computing the product of paths *a* and *b* and dividing it by the standard error term described by Baron and Kenny (1986). The standard error term used is the square root of $b^2sa^2 + a^2sb^2 + sa^2sb^2$, where *a* and *b* are unstandardised regression coefficients and *sa* and *sb* are their standard errors (Baron and Kenny 1986; Frazier et al. 2004). The calculated *Z*-score of the mediated effect confirms if the mediation effect is significant. Full mediation occurs when the mediator accounts for 100 % of the total effect. Partial mediation occurs when the predictor-outcome relationship becomes weaker but still is significant after inclusion of the mediator in the model (Baron and Kenny 1986; Bennett 2000; Frazier et al. 2004; Holmbeck 1997). The mediation effects of the four subjective consequence variables will be provided in Table 6.3.

6.7.1 Subjective Consequences as Possible Mediators

Table 6.4 provides a summary of the mediating effects of the subjective consequences between either WI and turnover intentions (TI) or WI and task performance (TP).

Table 6.4 A summary of mediating variable effects on the objective outcomes

Mediating variable	Path c	Path ć	Mediation effect	% mediation explained	Standard error term	*Z*-score	*p* of *Z*
Personal alienation							
Between WI and TI	−0.75	−0.29	−0.46	61.25	.018	25.0596	≤0.001
Between WI and TP	.08	.01	.068	88.57	.014	4.998	≤0.001
Helping behaviours							
Between WI and TI	–	–	–	–	–	–	ns
Between WI and TP	.08	.05	.0318	41.38	.0083	3.833	≤0.001
Emotion exhaustion							
Between WI and TI	−0.75	−0.54	−0.212	28.44	.0132	−16.024	≤0.001
Between WI and TP	–	–	–	–	–	–	ns
Depersonalisation							
Between WI and TI	−0.75	−0.66	−0.85	11.44	.0088	−9.6995	≤0.001
Between WI and TP	.08	.06	.013	16.88	.0056	2.3087	≤0.001
Reduced personal accomplishment							
Between WI and TI	–	–	–	–	–	–	ns
Between WI and TP	.08	.06	.02	26.93	.0076	2.7174	≤0.001
Work engagement							
Between WI and TI	−0.75	−0.39	−0.36	47.76	.0229	−15.5876	≤0.001
Between WI and TP	–	–	–	–	–	–	ns

ns nonsignificant

It is evident from Table 6.4 that no full mediation effects were detected. The obtained partial mediation effects (ranging between 11 and 88 %) will be further discussed according to the listed mediator variables:

Personal alienation as a mediator. The data supports the hypothesis that personal alienation partially mediates the relationship between WI and turnover intention. This finding therefore suggests that higher WI reduces personal alienation that will result in lower levels of turnover or vice versa in the case of lower WI.

The data supports the hypothesis that personal alienation partially mediates the relationship between WI and task performance. In a same line of argumentation,

these findings suggest that higher WI reduces personal alienation that will result in higher levels of task performance or vice versa in the case of lower WI.

Helping behaviours as a mediator. It was found that helping behaviours did not mediate the relationship between WI and turnover intentions.

The data supports the hypothesis that helping behaviours partially mediate the relationship between WI and task performance. This finding suggests that higher WI enhances helping behaviours that will result in elevated task performance levels or vice versa in the case of lower WI.

Emotional exhaustion (a dimension of burnout) as a mediator. The data supports the hypothesis that emotional exhaustion partially mediates the relationship between WI and turnover intention. This finding suggests that higher WI reduces emotional exhaustion that will result in lower turnover intention levels or vice versa in the case of lower WI.

It was found that emotional exhaustion did not mediate the relationship between WI and turnover intention.

Depersonalisation (a dimension of burnout) as a mediator. The data supports the hypothesis that depersonalisation partially mediates the relationship between WI and turnover intention. In a similar vein this finding suggests that higher WI reduces depersonalisation that will result in lower turnover intention levels or vice versa in the case of lower WI.

The data supports the hypothesis that depersonalisation partially mediates the relationship between WI and task performance. This finding suggests that higher WI reduces depersonalisation that will result in higher task performance levels or vice versa in the case of lower WI.

Reduced personal accomplishment (a dimension of burnout) as a mediator. It was found that reduced personal accomplishment did not mediate the relationship between WI and turnover intention.

The data supports the hypothesis that reduced personal accomplishment partially mediates the relationship between WI and task performance. This finding suggests that higher WI enhances personal accomplishment (absorption) that will result in higher task performance levels or vice versa in the case of lower WI.

Work engagement as a mediator. The data supports the hypothesis that work engagement partially mediates the relationship between WI and turnover intention. This finding suggests that higher WI enhances work engagement that will result in lower levels of turnover intention or vice versa in the case of lower WI.

It was found that work engagement did not mediate the relationship between WI and task performance.

Overall, these findings suggest that by increasing WI in combination with decreasing burnout and personal alienation, the turnover intentions levels can be reduced and/or the task performance levels can be improved. In a similar line it is argued that if by increasing WI in combination with helping behaviours and work engagement, this will also reduce turnover intentions and/or improve task performance levels. It therefore seems that increased levels of WI reduce burnout and personal alienation levels, which in turn will improve task performance levels or

reduces actual turnover. A similar line of argumentation is that increased levels of WI enhance work engagement and helping behaviour levels which in turn will improve task performance levels and reduce actual turnover.

6.8 Work-Based Identity Predicting Turnover Intentions and Task Performance

The fourth objective of Bothma's (2011) study was to determine if the selected predictors (including WI with the subjective consequences personal alienation, helping behaviour, work engagement and the burnout dimensions emotional exhaustion, depersonalisation and reduced personal accomplishment) could predict the objective consequence turnover intentions.

Hierarchical, stepwise regression analysis was conducted to test the hypothesis that WI can be used to predict turnover intention. A regression model was generated for turnover intention using the variable WI with other predictor variables as mentioned in the previous paragraph.

There was a strong positive correlation between the observed and predicted values of turnover intentions ($R = 0.79$). The WI regression model explained 62 % of the variation in turnover intentions ($R^2 = 0.62$). Both WI and WE have a weak negative association with turnover intentions ($\beta = -0.04$), while personal alienation (AL) has the strongest association with turnover intentions ($\beta = 0.54$), followed by emotional exhaustion (EE) ($\beta = 0.15$). The insignificant associations between reduced personal accomplishment ($p = 0.55$) and depersonalisation ($p = 0.58$) and turnover intentions were removed from the equation. The simplified regression equation for turnover intention (TI) is as follows:

$$\mathrm{TI} = 19.41 + 0.54\left[\mathrm{AL}\right] + 0.15\left[\mathrm{EE}\right] - 0.04\left[\mathrm{WI}\right] - 0.04\left[\mathrm{WE}\right]$$

Based on the above results, it was found that WI is a predictor of turnover intention. Despite the strong relationships between alienation and emotional exhaustion in relation to turnover intentions, WI still emerged as a significant predictor of turnover intentions.

The finding that WI could predict turnover intention was also confirmed in the Bester (2012) study. The regression showed that WI had a significant impact on turnover intentions, ($F(637) = 79.34$ ($p < .001$), $R^2 = .11$, adj$R^2 = .11$, $t = -8.99$, $p \leq .001$). This result shows that it can be confidently expected that turnover intentions will decrease as WI grows.

The fifth objective of Bothma's (2011) study was to determine the ability of the selected predictors (including WI with the subjective consequences personal alienation, helping behaviour, work engagement and the burnout dimensions emotional exhaustion, depersonalisation and reduced personal accomplishment) and to predict the objective outcome task performance (TP).

Hierarchical, stepwise regression analysis was conducted to test the hypothesis that WI can be used to predict task performance. A regression model was generated for task performance using the variable WI with the other predictor variables as described in the paragraph above.

There is a weak positive correlation between the observed and predicted values of task performance ($R = 0.17$). The WI regression model explained only 3 % of the variation in task performance ($R^2 = 0.03$). Personal alienation had a slightly weaker association with task performance ($\beta = -0.14$), followed by a positive association with helping behaviours ($\beta = 0.15$). The association between the other variables and task performance was insignificant and removed from the equation. The combined regression equation for task performance (TP) can therefore be depicted as follows:

$$\mathrm{TP} = 48.08 - 0.14\left[\mathrm{AL}\right] + 0.15\left[\mathrm{H\text{-}OCB}\right]$$

Based on the above results, it was found that WI is not a predictor of task performance. It is concluded that this insignificant relationship between WI and task performance could possibly be attributed to a skewed task performance measure. However, in the study of Ewinyu (2012) on the same dataset, a skewness correction on the task performance measure indicated no change in the relationship between these two mentioned variables.

6.9 Moderating Effects on Prediction of Turnover Intentions and Task Performance

The sixth objective of Bothma's (2011) study was to determine which of the selected biographical variables (age, gender and race) and demographical variables (job tenure, education, region, marital status and job level) moderate the relationship between the predictors (including WI and selected subjective consequences) and turnover intention. All these variables are classified as categorical variables with no value limit, meaning these variables are divided into many subgroups.

The results of the eight sub-hypotheses tested indicate that none of the selected biographical variables (age, gender and race) and demographical variables (job tenure, education, region, marital status and job level) moderate the relationship between WI when predicting turnover intention.

In the Bester (2012) study only education level and nationality groups were moderators in the structural equation model (these results are presented later in more detail in Chap. 7).

The seventh objective of Bothma's (2011) study was to determine which of the selected biographical variables (age, gender and race) and demographical variables (job tenure, education, region, marital status and job level) moderate the relationship between the predictors (including WI and selected subjective consequences)

and task performance. All these variables are classified as categorical variables with no value limit, meaning these variables are divided into many subgroups.

A two-way between-groups analysis of variance was conducted to explore the impact of work-based identity and education on task performance. Participants were divided into four groups based on their education: ((1) grade 12 or less, (2) post-school certificate/diploma, (3) national diploma/national higher diploma, (4) bachelor's degree or equivalent or higher). The result of the test for a moderating effect between WI and education on task performance was statistically significant, (F (342, 1,774) = 1.169; p = 0.027) with a small effect size (partial eta squared = 0.03). The results suggest that there is a moderating interaction between WI and education level in the prediction of task performance in that employees with qualifications of a National Diploma/National Higher Diploma showed higher WI levels relative to their task performance scores compared to employees in other qualification categories. The ICT sector company is heavily reliant on technically qualified staff (employees with National Diploma/National Higher Diploma) and the organisation is taking extra measures to retain this scarce talent category to retain or enhance performance levels. This may explain the higher work identification levels in this category. WI and education individually have no significant relationships with task performance. The data support the hypothesis that education moderates the relationship between WI and task performance.

The results of the other seven sub-hypotheses tested indicated that none of the selected biographical variables (age, gender and race) and demographical variables (job tenure, region, marital status and job level) moderate the relationship between work-based identity and task performance.

6.10 Conclusions and Implications for Practitioners

The chapter consists of two sections. The first section reports on the empirical results pertaining to the antecedents of WI. The second section reports on the consequences of WI. The most important conclusions and recommendations are listed below:

1. The De Braine study has shown by means of multiple regression analyses that growth opportunities, perceived external prestige, organisational support, team climate and advancement were the JRs that significantly predicted WI. Based on these findings it becomes evident that opportunities for personal development and growth, career advancement and external prestige co-determine and reflect a seemingly ambitious WI. It seems that organisational support and a conducive team climate are preconditions for realising an optimal functioning WI. The only JD that contributed to WI is overload which is probably more likely to be a job challenge (a structural condition in the SA work context) rather than a job hindrance. SA workers seem to prefer a job that poses some challenge.

2. Bester in his study used push and pull factors outside the traditional JD-R context in his structural equation model. In this case pull factors such as remuneration perceptions, task resources, need for organisational identity and organisational reputation and push factors breach of psychological contract and work-family conflict were significant predictors of WI. This finding shows that other push and pull factors outside the traditional JD-R model may still serve as important co-determinants of WI as they are explaining a significant amount of variance in WE and turnover intention.
3. Findings of both the De Braine and Bester studies indicate that WI is co-determined by factors inside and outside the traditional JD-R model. If these JRs or pull factors are enhanced, the levels of WI can be improved, or alternatively if the JDs or push factors are reduced, WI can also be enhanced. A word of caution here, there may be a range of possible interactions between the different JRs and JDs that may relate to WI. These relationships should not be interpreted in a linear cause-and-effect style only. These relationships may be much more complex.
4. WI development is however not solely dependent on JRs and JDs inside the traditional JD-R model but also on other push and pull factors that contribute to the codetermination of WI. The explanation of WI should therefore not only be restricted to JRs and JDs in the JD-R model.
5. It was also confirmed by the Bester study that there were significant interaction effects between the JDs and the JRs where the JRs acted as buffers for the JDs when explaining WI. This study was conducted in the UAE and may be a context specific finding. However, in the SA context De Braine found no moderation effects between the JDs and the JRs in the prediction of WI. An explanation may be that in the latter case the JDs can be viewed as challenges or that the ICT company where the study was conducted was well resourced (that there were few demands).
6. Some significant moderation effects were reported in both the Bester and the De Braine studies. In the Bester study it was found that education levels and nationality groups (or culture groups) were significantly moderating paths in the structural equation model. In the De Braine study it was also found that gender in relation to growth opportunities and race (in relation to task identity, perceived external prestige, job insecurity and work-family conflict) moderated the prediction model.
7. In the case of gender, it was found that males' WI became stronger as growth opportunities have grown. In the case of race, it was evident that Whites' WI was the weakest in relation to the mentioned JRs and JDs. This is a disturbing finding which shows that the White group probably alienated from the work context and the work organisation, hence the high negative correlation between WI and personal alienation (the inability of the work context to satisfy salient needs). Personal alienation is also a significant predictor of turnover in this study. This finding can most probably be attributed to Broad-based, Black Economic Empowerment (Affirmative Action) legislation which introduced a basis for systematic (reversed) discrimination against Whites.

8. With reference to the second section of the chapter, the Bothma study found that WI significantly relates to subjective consequences (personal alienation, burnout, helping behaviours and work engagement) and to objective consequences (task performance and turnover intentions). In the latter case, turnover intentions were used as a proxy for actual turnover. In view of these findings, WI can be used to reduce the negative effects of personal alienation and burnout or to enhance the positive effects of work engagement and helping behaviours; altogether a more constructive and conducive environment to work in.
9. The study also reported significant mediation effects by subjective consequences between WI and the objective consequences (task performance and turnover intentions). In this case it was found that WI either reduced burnout and personal alienation levels or enhanced helping behaviours and work engagement when explaining task performance and turnover intentions. In practice this means that higher WI would result in reduced turnover and improved task performance levels. Significantly reduced turnover has possibly clear cost advantages above slightly improved task performance benefits.
10. Only education level was found to be a moderator in the Bothma study where the category with a National Diploma or a Higher National Diploma has shown significant relations with WI in the prediction of task performance. In the Bester study both education level and nationality moderated paths in the structural equation model.

References

Abrams, D., & Hogg, M. A. (2004). Meta-theory: Lessons from social identity research. *Personality and Social Psychology Review, 8*(2), 98–106. doi:10.1207/s15327957pspr0802_2.

Anderson, N. R., & West, M. A. (1998). Measuring climate for work group innovation: Development and validation of the team climate inventory. *Journal of Organisational Behaviour, 19*(3), 235–258. doi:10.1002/(SICI)1099-1379(199805)19:3<235::AID-JOB837>3.0.CO;2-C.

Aryee, S., & Luk, V. (1996). Work and non-work influences on the career satisfaction of dual-earner couples. *Journal of Vocational Behavior, 49*, 38–52. doi:10.1006/jvbe.1996.0032.

Baron, R. M., & Kenny, D. A. (1986). The moderator-mediator variable distinction in social psychology research: Conceptual, strategic, and statistical considerations. *Journal of Personality and Social Psychology, 51*(6), 1173–1182.

Bennett, J. A. (2000). Focus on research methods mediator and moderator variables in nursing research: Conceptual and statistical differences. *Research in Nursing and Health, 23*, 415–420.

Berry, L. M. (1998). *Psychology at work: An introduction to industrial and organisational psychology* (2nd ed.). New York: McGraw-Hill Companies.

Bester, F. (2012). *A model of work identity in multicultural work settings*. Unpublished doctoral thesis, University of Johannesburg, Johannesburg.

Bothma, F. C. (2011). *The consequences of employees' work-based identity*. Unpublished doctoral thesis, University of Johannesburg, Johannesburg.

Buche, M. W. (2003). *IT professional work Identity: Construct and outcomes*. Unpublished dissertation, University of Kansas, Lawrence, KS.

Buche, M. W. (2006). Gender and IT professional work identity. In E. Trauth (Ed.), *Gender and IT encyclopaedia* (pp. 434–439). University Park: Information Science Publishing. doi:10.4018/978-1-59140-815-4.ch068.

Buche, M. W. (2008). *Influence of gender on IT professional work identity: Outcomes from a PLS study*. Retrieved from http://portal.acm.org/citation.cfm?id=1355272

Burke, P. J., & Stets, J. E. (2009). *Identity theory and social identity theory*. Retrieved from http://www.scribd.com/doc/19720726/identity-theory-and-social-identity-theory

Carmeli, A., Gilat, G., & Weisberg, J. (2006). Perceived external prestige, organisational identification and affective commitment: A stakeholder approach. *Corporate Reputation Review, 9*(2), 92–104.

Crawford, P., Brown, B., & Majomi, P. (2008). Professional identity in community mental health nursing: A thematic analysis. *International Journal of Nursing Studies, 45*, 1055–1063. doi:10.1016/j.ijnurstu.2007.05.005.

De Braine, R. (2012). *Predictors of work-based identity*. Unpublished doctoral thesis, University of Johannesburg, Johannesburg.

Demerouti, E., Bakker, A. B., Nachreiner, F., & Schaufeli, W. B. (2001). The job demands-resources model. *Journal of Applied Psychology, 86*, 499–512. doi:10.1037/0021-9010.86.3.499.

Distiller, N. (2008). Surviving the future. Towards a South African cultural studies. *Cultural Studies, 22*(2), 273–283. doi:10.1080/09502380701789182.

Ewinyu, A. (2012). *The correction of skewness of a task performance measure*. Unpublished master's minor dissertation, University of Johannesburg, Johannesburg.

Frazier, P. A., Tix, A. P., & Baron, K. E. (2004). Testing of moderator and mediator effects in counselling psychology. *Journal of Counselling Psychology, 51*(1), 115–134. doi:10.1037/0022-0167.51.1.115.

Fugate, M., Kinicki, A. J., & Ashforth, B. E. (2004). Employability: A psycho-social construct, its dimensions and applications. *Journal of Vocational Behavior, 65*(1), 14–38. doi:10.1016/j.jvb.2003.10.005.

Greenhalgh, L., & Rosenblatt, Z. (1984). Job insecurity: Towards conceptual clarity. *Academy of Management Review, 9*, 438–448.

Greenhaus, J. H., & Beutell, N. J. (1985). Sources of conflict between work and family roles. *Academy of Management Review, 10*(1), 76–88.

Hackman, J. R., & Oldham, G. R. (1975). Development of the job diagnostic survey. *Journal of Applied Psychology, 60*(2), 159–170. doi:10.1037/h0076546.

Hair, J. F., Anderson, R. E., Tatham, R. L., & Black, W. C. (1998). *Multivariate data analysis* (5th ed.). Upper Saddle River: Prentice-Hall International.

Hakanen, J. J., & Roodt, G. (2010). Using the job demands-resources model to predict engagement: Analysing a conceptual model. In A. B. Bakker & M. P. Leiter (Eds.), *Work engagement, a handbook of essential theory and research* (pp. 85–101). Hove: Psychology Press.

Hitlin, S. (2003). Values as the core of personal identity: Drawing links between two theories of self. *Social Psychology Quarterly, 66*(2), 118–137. doi:10.2307/1519843.

Hogg, M. A. (2001). A social identity theory of leadership. *Personality and Social Psychology Review, 5*(3), 184–200. doi:10.1207/S15327957PSP R0503_1.

Hogg, M. A., & Ridgeway, C. L. (2003). Social identity: Sociological and social psychological perspectives. *Social Psychology Quarterly, 66*(2), 97–100.

Hogg, M. A., & Terry, D. J. (2000). Social identity and self-categorization processes in organisational contexts. *Academy of Management Review, 25*(1), 121–140.

Holmbeck, G. N. (1997). Toward terminological, conceptual, and statistical clarity in the study of mediators and moderators: Examples from the child-clinical and paediatric psychology literatures. *Journal of Consulting and Clinical Psychology, 65*, 599–610.

Howard, L. W., Foster, S. T., & Shannon, P. (2005). Leadership, perceived team climate and process improvement in municipal government. *The International Journal of Quality and Reliability Management, 22*(8/9), 769–795. doi:10.1108/02656710510617229.

Jackson, L. T. B., & Rothmann, S. (2005). Work-related well-being of educators in a district of the North West Province. *Perspectives in Education, 23*, 107–122.

Kaiser, H. F. (1970). A second generation little jiffy. *Psychometrika, 35*, 401–415. doi:10.1007/BF02291817.

Kim, P. S. (2011). *How to choose a factor analysis extraction method in SPSS*. Retrieved from eHow.com http://www.ehow.com/how_7894964_choose-analysis-extraction-method-spss.html#ixzz1Ix4ugEOO

Kirpal, S. (2004a). Researching work identities in European context. *Career Development International, 9*(3), 199–221. doi:10.1108/1362043 0410535823.

Kirpal, S. (2004b). Work identities of nurses. Between caring and efficiency demands. *Career Development International, 9*(3), 274–304. doi:10.1108/13620430410535850.

Lauver, K. J., & Kristof-Brown, A. (2001). Distinguishing between employees' perceptions of person-job and person-organisation fit. *Journal of Vocational Behavior, 59*, 454–470. doi:10.1006/jvbe.2001.1807.

Lloyd, S., Roodt, G., & Odendaal, A. (2011). Critical elements in defining work-based identity in post-apartheid South Africa. *SA Journal of Industrial Psychology, 37*(1), Art. #894, 15 pages. doi:10.4102/sajip.v37i1.894.

Lodahl, T. M., & Kejner, M. (1965). The definition and measurement of job involvement. *Journal of Applied Psychology, 49*, 24–33. doi:10.1037/h0021692.

Mael, F., & Ashforth, B. E. (1992). Alumni and their alma mater: A partial test of the reformulated model of organisation. *Journal of Organisational Behavior, 13*, 103–123. doi:10.1002/job.4030130202.

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

Norman, G. (2010). Likert scales, levels of measurement and the "laws" of statistics. *Advances in Health Sciences Education, 15*(5), 625–632. doi:10.1007/s10459-010-9222-y.

Olkkonen, M. E., & Lipponen, J. (2006). Relationships between organisational justice, identification with organisations and work-unit, and group-related outcomes. *Organisational Behavior and Human Decision Processes, 100*, 202–215. doi:10.1016/j.obhdp.2005.08.007.

Pallant, J. (2005). *SPSS survival manual: A step by step guide to data analysis using SPSS version 15* (2nd ed.). New York: Open University Press.

Pallant, J. (2007). *SPSS survival manual: A step-by-step guide to data analysis using SPSS version 15* (3rd ed.). New York: Open University Press.

Pratt, M. G., Rockmann, K. W., & Kaufmann, J. B. (2006). Constructing professional identity: The role of work and identity learning cycles in the customization of identity among medical residents. *The Academy of Management Journal, 49*(2), 235–262. doi:10.5465/AMJ.2006.20786060.

Republic of South Africa. (1998). Employment Equity Act, No. 55. Government Gazette, No.16861, Pretoria.

Riordan, C. M., Gatewood, R. D., & Bill, J. B. (1997). Corporate image: Employee reactions and implications for managing corporate social performance. *Journal of Business Ethics, 16*(4), 401–412. doi:10.1023/A:1017989205184.

Roodt, G. (1997). Theoretical and empirical linkages between work-related commitment foci. *SA Journal of Industrial Psychology, 23*(2), 6–13.

Roodt, G., De Braine, R., Bothma, F. C., & Jansen, P. G. (2009). *The work-based identity questionnaire (WI-28)*. Unpublished questionnaire, University of Johannesburg, Johannesburg.

Schaufeli, W. B., & Bakker, A. B. (2001). Werk en welbevinden: Naar een positiewe benadering in de arbeids- en gezondheidspsychologie. *Gedrag en Organisatie, 14*(5), 229–253.

Schaufeli, W. B., & Bakker, A. B. (2004). Job demands, job resources, and their relationship with burnout and engagement: A multi-sample study. *Journal of Organisational Behaviour, 25*(3), 293–315. doi:10.1002/job.248.

Serafini, T. E., Maitland, S. B., & Adams, G. R. (2006). *The functions of identity scale: Revisions, validation and model testing*. Retrieved from w3.fiu.edu/srif/…/Serafini/

Stets, J. E., & Burke, P. J. (2003). A sociological approach to self and identity. In M. Leary & J. Tangney (Eds.), *Handbook of self and identity* (pp. 128–152). New York: Guilford Press.

Stryker, S., & Burke, P. J. (2000). The past, present and future of an identity theory. *Social Psychology Quarterly, 63*(4), 284–297. doi:10.2307/2695840.

Stryker, S., & Serpe, R. T. (1982). Commitment, identity salience, and role behavior. In W. Ickes & E. S. Knowles (Eds.), *Personality, roles, and social behavior* (pp. 199–218). New York: Springer.

Tabachnick, B. G., & Fidell, L. S. (1996). *Using multivariate statistics* (3rd ed.). New York: Harper Collins.

Tabachnick, B. G., & Fidell, L. S. (2001). *Using multivariate statistics* (4th ed.). Needham Heights: Allyn and Bacon.

Tabachnick, B. G., & Fidell, L. S. (2007). *Using multivariate statistics* (5th ed.). Boston: Pearson Education.

Tajfel, H. (1981). *Human groups and social categories: Studies in social psychology*. Cambridge: Cambridge University Press.

Tajfel, H., & Turner, J. C. (1985). The social identity theory of intergroup behavior. In S. Worchel & W. G. Austin (Eds.), *Psychology of intergroup relations* (2nd ed., pp. 7–24). Chicago: Nelson-Hall.

Van den Broeck, A., De Cuyper, N., De Witte, H., & Vansteenkiste, M. (2010). Not all job demands are equal: Differentiating job hindrances and job challenges in the Job Demands-Resources model. *European Journal of Work and Organizational Psychology, 19*(6), 735–759. doi:10.1080/02678370802393672.

Walsh, K., & Gordon, J. R. (2007). Creating an individual work identity. *Human Resource Management Review, 18*(1), 46–61. doi:10.1016/j.hrmr.2007.09.001.

Wayne, J. H., Randel, A. E., & Stevens, J. (2006). The role of identity and work-family support in work-family enrichment and its work-related consequences. *Journal of Vocational Behavior, 69*, 445–461. doi:10.1016/j.jvb.2 006 07. 002.

Witt, L. A., Patti, A. L., & Farmer, W. L. (2002). Organisational politics and work identity as predictors of organisational commitment. *Journal of Applied Social Psychology, 32*(3), 486–499. doi:10.1111/j.1559-1816.20 02.tb00226.x.