

The copyright of this thesis vests in the author. No quotation from it or information derived from it is to be published without full acknowledgement of the source. The thesis is to be used for private study or non-commercial research purposes only.

Published by the University of Cape Town (UCT) in terms of the non-exclusive license granted to UCT by the author.



**Positive work-family spillover amongst white-collar employees**

**By**

**Stanley Edwin Horwitz  
(HRWSTA003)**

A dissertation submitted in partial fulfilment of the requirements for the award of  
the Degree of Masters of (Business Science or Commerce)  
in Organisational Psychology

Faculty of Commerce

University of Cape Town

2006

**COMPULSORY DECLARATION:**

This work has not been previously submitted in whole, or in part, for the award of any degree. It is my own work. Each significant contribution to, and quotation in, this dissertation from the work, or works of other people has been attributed, and has been cited and referenced.

Signature

Signed by candidate

Date: 3 December 2006

## TABLE OF CONTENTS

<b>CHAPTER 1: INTRODUCTION</b>	<b>1</b>
<b>CHAPTER 2: LITERATURE REVIEW</b>	<b>4</b>
<b>Spillover</b>	<b>5</b>
Negative Spillover	5
Positive Spillover (Enrichment)	7
The evolution from Negative to Positive Spillover research	12
<b>Correlates of Positive Spillover</b>	<b>13</b>
Positive Spillover and Work-Family Involvement	13
Positive Spillover and Social Support	16
Positive Spillover and Life Stage	19
<b>Summary of Propositions</b>	<b>20</b>
<b>Conclusion</b>	<b>21</b>
<b>CHAPTER 3: METHOD</b>	<b>22</b>
<b>Participants</b>	<b>22</b>
<b>Procedure</b>	<b>24</b>
<b>Measures</b>	<b>25</b>
Negative Work-family Spillover (NWFS)	25
Negative Family-Work Spillover (NFWS)	26
Positive Work-family Spillover (PWFS)	26
Positive Family-Work Spillover (PFWs)	27
Work-Family Involvement	27
Support	27
Life Stage	28
<b>Demographics</b>	<b>28</b>
<b>CHAPTER 4: RESULTS</b>	<b>29</b>
<b>Initial analysis</b>	<b>29</b>
Dimensionality of the scales - factor analysis	29
<b>Descriptive statistics</b>	<b>34</b>
<b>Correlation analysis</b>	<b>36</b>
<b>Regression analysis</b>	<b>37</b>
<b>ANOVA</b>	<b>41</b>
<b>Conclusion</b>	<b>43</b>
<b>CHAPTER 5: DISCUSSION</b>	<b>44</b>
<b>Negative Work- Family Spillover</b>	<b>44</b>
<b>Negative spillover as distinct from positive spillover</b>	<b>45</b>
<b>Discussion of propositions</b>	<b>47</b>

Dimensionality of positive spillover	47
The relationship between Positive Work-Family Spillover (PWFS) and Work Involvement	49
Positive Family-Work Spillover and the relationship to Family Support	51
Partner Support	52
Parent support	53
Domestic Support	54
The support combination of related support variables and PFWS	54
Positive spillover relationship with Life stage	55
<b>Management Implications of the Research</b>	<b>56</b>
<b>Limitations of this research</b>	<b>58</b>
<b>Suggestions for further research</b>	<b>59</b>
<b>Usefulness of the positive spillover construct</b>	<b>60</b>
<b>Conclusions</b>	<b>60</b>
<b>Reference List</b>	<b>62</b>

### LIST OF TABLES

1. Summary of self report studies of Positive Spillover	11
2. Factor Analysis: Positive and negative work-family and family-work scales – 4 dimensional factors	31
3. Factor Analysis: Positive Spillover Scales – 2 dimensional factors	32
4. Factor Analysis independent variables - Work Involvement	33
5. Factor Analysis independent variables – Partner / Spouse Support	33
6. Factor Analysis independent variables – Folk Support	33
7. Factor Analysis independent variables – Domestic Support	34
8. Descriptive statistics for summary scales	35
9. Regression summary PWFS with Gender, Marital status, age, years service, occupation, race and work involvement	38
10. Regression PWFS with Number of children and Partner Support	40
11. Partner Support: Change in the model by including Partner Support variable	41

### LIST OF GRAPHS

1. ANOVA test of significance for PFWS and Partner Support	42
--	----

## **Acknowledgements**

I would like to thank my supervisor, Professor Jeffrey Bagraim, for being the one to guide me in the right direction towards completion of this thesis under trying personal circumstances and time frames. I am eternally grateful for the encouragement, support and technical knowledge he imparted to me.

University of Cape Town

## **Abstract**

Positive work-family spillover in both directions was examined amongst white-collar employees (N = 152) in a single insurance brokerage and consulting organisation in the South African.

The results in this study indicate that positive spillover from work to family and positive spillover from family to work are two distinct constructs. Further results show that work involvement assists employees to cope with personal and practical issues at home (Positive work-family spillover); Partner support assists employees to feel confident about themselves at work (Positive family-work spillover); Parent support assists employees to feel confident about themselves at work (Positive family-work spillover) and Life Stage does not explain a significant amount of the variance in the extent of positive spillover between work-family domains.

The results of this study support the shift in focus from a negative conflict role-based view of work-family balance to a positive, enriching view, where positive elements of work-family spillover are experienced in both directions that is from work to family and family to work.

Managing positive spillover could be useful to South African organisations as part of their Human Resource strategies to attract and retain scarce talent and skills.

the demands of roles in both work and family. This may be particularly true where children are involved and where there is little or no domestic support (Greenhaus & Singh, 2003).

Stress and particularly work-related stress, occurs when job demands are incompatible with an individual's capability to manage and regulate their state of mind (Greenhaus & Singh, 2003). Stress has been viewed as both positive and negative. In this sense, it is regarded as the negative effect of conflicting role demands and the likes that place stress on the individual thereby impacting the balance in and of work life (Greenhaus & Singh, 2003).

### **Positive Spillover (Enrichment)**

"Work-family enrichment refers to the extent to which experiences in one role enhance performance and positive affects in the other role" (Greenhaus & Powell, 2006, p.72). Greenhaus & Singh (2003) defined positive work-family bi-directionality as "A variety of resources from work and family roles that have the capacity to provide positive experiences in the other role." (Greenhaus & Singh, 2003, p.1).

Numerous studies have been conducted in the field of positive work-family

Grzywacz and Marks (2000), using data from the National Survey of Midlife Development in the United States (N=1986) found that negative work-family spillover; positive work-family spillover; negative family-work spillover and positive family-work spillover were distinct experiences and distinct constructs. The researchers based their study on items of positive spillover in both directions with a Cronbach alpha finding of .73 measuring positive work-family spillover and a Cronbach alpha finding of .70 measuring positive family-work spillover (Grzywacz & Marks, 2000).

In support of their earlier study and findings, Grzywacz and Marks (2000a, & 2000b) distinguished between negative and positive spillover in a bi-directional manner. In their second study, they proposed that the process by which positive spillover occurred consisted of skills, behaviour, positive mood, sense of accomplishment and proposed that the negative spillover process consisted of time and strain. The researchers concluded that the negative forms of spillover showed a high correlation ( $r = .45$ ) which was distinct from positive forms of spillover (Grzywacz & Marks, 2000b).

A number of factors or components have been identified that could affect bi-directional spillover either negatively or positively. These are vast and include: Parenting (Kirchmeyer, 1992b); Accumulation of experience, skills and personal expertise (Greenhaus & Callanan, 1994); Individuals age, age of others in family, and generational events that can be characterised by high levels of strain (McDonald & Grzywacz, 2002) and Emotional and social support (Kaplan, Cobb, French, Harrison, & Pinneau, 1995). Research by Kirchmeyer (1993) examined both positive and negative spillover in terms of recreation (Kirchmeyer, 1993). Carlson, Kacmar, Wayne and Grzywacz, (2006) recently examined Development, Affect and Capital and work-family involvement (Carlson et al.,

2006) which is discussed in more detail in the section on Positive Spillover and work-family Involvement in this literary review.

Within the positive research stream, two main themes of research can be found. These include firstly, work-family enrichment using self-report scales and secondly, work-related and family-related variables consistent with the occurrence of work-family enrichment (Greenhaus & Powell, 2006). Greenhaus and Powell (2006) identified three ways in which participation in multiple roles can produce positive outcomes in and for individuals. These included, work and family experiences having additive effects on well-being; Participation in both roles as a buffer for individuals from stress in the other role and experience in one role producing positive outcomes in the other role. The researchers held that the experience in one role producing positive outcomes in the other role best articulates the concept of work-family enrichment and positive spillover (Greenhaus & Powell, 2006).

Greenhaus and Powell (2006) identified nineteen studies measuring work-family enrichment (including positive spillover) with self-report scales with many independent variables. Eighteen of the nineteen studies identified used fixed response scales. Eleven of the studies measured both directions of enrichment that is work to family and family to work (Greenhaus & Powell, 2006).

In summary of these studies, Greenhaus and Powell (2006) noted that where research examined enrichment and conflict, the average enrichment score was as high as the average conflict score or significantly higher. This suggests that employees perceive that work and family do enrich each other. Further correlations between work-family enrichment and work-family conflict were mostly small which suggests that work-family enrichment and work-family conflict are unrelated and independent of each other (Greenhaus & Powell, 2006).

Regarding the direction of the enrichment, the vast majority of research reflected on by Greenhaus and Powell (2006) showed that family to work enrichment was substantially higher than from work to family (Greenhaus & Powell, 2006).

Kinnunen et al. (2006) conducted a longitudinal study with 202 respondents in Finland to test the structure of the work-family interface. Both positive and negative work and family relationships were measured in both directions. All respondents in the sample had a spouse or partner. Results showed that positive work to family spillover was positively related to well-being at work. This finding was supportive of Wayne, Musisca, and Fleeson, (2004) who reported that positive work to family spillover experience correlated positively with well-being at work and with general well-being.

Having reviewed much of the research in the work-family domain and work-family enrichment in particular, Greenhaus and Powell (2006) maintained that there was still little understanding of the process of “how” and the question of “why” certain role experiences enhance the experience and outcomes in the other domain. Spillover may explain that the experience happens positively or negatively but does not explain “how” or “why” it occurs or the combination of factors that are interdependent and multidirectional causing the perceived balance or positive enrichment perception. To address this, the researchers developed and proposed a new model to measure the instrumental path of such causality. Work and family related variables are consistent with the occurrence of work-family enrichment, and were examined by Greenhaus and Powell (2006).

Table 1 below reflects a summary of relevant, recent research studies measuring positive work-family and family-work spillover.

**Table 1:**  
*Summary of self report studies of Positive Spillover*

Study	Name of Concept	Direction	Mean	
Grzywacz et al. (2002)	Positive spillover	Work to Family	2.64	
		Family to Work	3.41	
Grzywacz et al. (2002)	Positive spillover	Work to Family	2.62	
		Family to Work	3.42	
Grzywacz & Marks (2000a)	Positive spillover	Work to Family	2.64	
		Family to Work	3.42	
Grzywacz & Marks (2000b)	Positive spillover	Work to Family	2.61	
		Family to Work	3.42	
Hammer, Cullen, Caubet, Johnson, Neal & Sinclair (2002)	Positive spillover			
		Wives	Work to Family Family to Work	3.72 3.94
		Husbands	Work to Family	3.61
			Family to Work	3.76
Hanson, Colton & Hammer (2003)	Positive spillover	Work to Family	3.20	
		Family to Work	3.67	
Kirchmeyer (1992b)	Positive spillover	parenting to work	3.16	
		community to work	3.09	
		recreation to work	3.10	
Kirchmeyer (1993)	Positive spillover	parenting to work	3.19	
		community to work	3.34	
		recreation to work	3.05	
Kirchmeyer (1995)	Positive spillover	Non-work to work	3.21	
Kinnunen et al. (2006)	Positive spillover	Work to family (women)	3.04	
		Work to family (men)	2.91	
		Family to work (women)	2.86	
		Family to work (men)	2.63	
Stephens, Frank & Atienza (1997)	Positive spillover	work to caregiver	3.59	
		caregiver to work	3.46	
Sumer & Knight (2001)	Positive spillover	work to home	3.34	
		home to work	3.47	

**Proposition 1:** Positive Spillover from work to family is a distinct construct from Positive Spillover from family to work.

### The evolution of Negative to Positive Spillover research

In finding alternatives to the negative conflict spillover perspective of early research that focused on work-family conflict, multiple roles and stress, researchers including Sieber (1974) and Marks (1977) led the field in suggesting that positive relations between work-family balance could exist and that multiple roles could in fact improve both work and family life (Sieber, 1974; Marks, 1977).

There has been an important evolution and shift in viewing the relationship between work and family (Greenhaus & Parasuraman, 1999). Recent research has reported the relationship as one where there are positive effects and bi-directional benefits where the two are regarded as “allies” rather than as enemies (Friedman & Greenhaus, 2000). In the latter school of thought, the thinking behind the positive aspects and enrichment is that both work and family each provide individuals with the necessary resources such as enhanced esteem, income, and other benefits that may help the individual perform better in other life domains (Carlson et al., 2006).

Kinnunen et al. (2006) noted that we still know very little about the prevalence and outcomes of the positive work-family interface despite calls from Frone (2003) to focus more research in this positive domain (Kinnunen et al., 2006). Recent research has started to propose positive interdependencies between work and family roles (Grzywacz, 2002). Such research included terminology of positive spillover effects (Grzywacz, 2002; Kinnunen et al., 2006) and the concept of enrichment (Kirchmeyer, 1992a; Rothbard, 2001; Carlson et al., 2006).

Greenhaus and Powell (2006) reported on spillover and especially the positive aspects of the spillover of roles which have been included in the enrichment terminology and research arena in the shift from the negative work-family research (Greenhaus & Powell, 2006). Evolving from the negative perspective, which sees roles as being in conflict with each other, the combination of certain roles has, from a positive perspective, a positive rather than a negative effect on well-being (Kinnunen et al., 2006). Kinnunen et al. (2006) noted that positive concepts such as resource enhancement, work-family success or balance, positive spillover and facilitation as concepts are used as synonyms and interchangeably referring to the process whereby the participation in one role is made easier by virtue of participation in the other (Kinnunen et al., 2006; Frone, 2003).

Greenhaus and Powell (2006) developed the latest model of an instrumental path to better understand the positive effects of work family balance that counters the work-family conflict perspective (Greenhaus & Powell, 2006).

### **Correlates of Positive Spillover**

#### **Positive Spillover and work-family Involvement**

Work involvement refers to the extent to which an individual is generally interested in and identifies with work in comparison to other aspects of life (Kanungo, 1982). Work involvement, reflects the significance individuals attach to having and performing work (Elloy & Terpening, 1992). Work involvement is an important variable that is of interest to organisations, especially in the new economy, which imposes the need for full mobilisation of the human resources (Gore, 2001).

Very little research has been conducted regarding work and family involvement linked to spillover (either positive or negative). Research has typically focused on negative spillover with particular emphasis on conflict between the two domains.

In the absence of relevant research on the relationship between Positive Work-Family spillover (PWFS) and Work-Family Involvement at the time of the commencement of this study, the work of Kanungo (1982) was used as a basis to formulate the proposition in this study.

Subsequent to the commencement of this study, Carlson et al. (2006) explored positive spillover in attempting to address the “how” and “why” questions around the process by which positive spillover is experienced. The researchers examined how work involvement affected family and how involvement in family affected work using a newly developed and proposed measurement scale with three dimensions – Development, Affect and Capital (Carlson et al., 2006). The result of their study was not published prior to the commencement of this particular study.

The importance of the research of Carlson et al. (2006) is that it now has provided a foundation that can be used to advance future work–family research particularly in the area of work involvement and its relationship to positive spillover. Carlson et al. (2006) go a long way to answer the call by Frone (2003) to provide a well developed measure of enrichment and positive spillover that has been absent in research.

In their research, Carlson et al. (2006) explored in detail (amongst other areas) Work-Family Involvement and Family-Work Involvement linkages and the relationship with enrichment and positive spillover.

Carlson et al. (2006) removed items from their original 18 item scale in the Work-Family Involvement direction which resulted in a final scale of 9 work-family items with three items representing each dimension of Development, Cronbach alpha ( $\alpha = .73$ ), Affect, Cronbach alpha ( $\alpha = .91$ ), and Capital, Cronbach alpha ( $\alpha = .90$ ). They also removed items from their original 18 item scale in the Family-Work Involvement direction resulting in a final scale of 9 family-work items with three items representing each of the dimensions - Development, Cronbach alpha ( $\alpha = .87$ ), Affect, Cronbach alpha ( $\alpha = .874$ ), and Efficiency, Cronbach alpha ( $\alpha = .82$ ). Overall they reported for the work-involvement items a Cronbach alpha ( $\alpha = .92$ ) and for the family-involvement items Cronbach alpha ( $\alpha = .86$ ). For the overall Work-Family Involvement scale a Cronbach alpha of ( $\alpha = .92$ ) was reported (Carlson et al., 2006).

According to Carlson et al. (2006) the scale developed in their research has distinct advantages over existing positive spillover scales that measure the positive side of the work-family interface. They noted that in the first instance, some of the existing measures of positive spillover only measure one direction of spillover (for example, Kirchmeyer, 1992b measured spillover to work) whereas their measure included items from both directions and is bi-directional (that is, work to family and family to work). Secondly, they noted that none of the existing measures fully capture the complexity of the enrichment construct by including the concepts of resource gains and enhanced functioning in each item. The scale developed by Carlson et al., (2006) therefore included both of these facets and was also tested to insure that both concepts were being considered by respondents when evaluating the items. Thirdly, they contended that most of the

existing scales measure the positive side of the work–family interface very broadly despite the theory suggesting that positive spillover is multi-dimensional. They suggested these existing positive spillover scales had not been subjected to rigorous scale development procedures. Specifically they referred to the Midus scales and the scales of Kirchmeyer (1992b) and Sumer and Knight (2001). Carlson et al., (2006) contended that their scale was systematically developed to include multiple dimensions of potential enrichment (which included positive spillover constructs in both directions) and purported that they followed established methodological procedures which were tested across five samples, validated and assessed (Carlson et al., 2006).

Carlson et al. (2006) empirically supported the notion that enrichment does not necessarily occur in the same manner in both directions as the domains of work and family are distinct and complimentary. The researchers argued that there is theoretical and empirical precedent for their results that are consistent with their findings (Carlson et al., 2006).

Carlson et al., (2006) suggested that their findings oppose arguments by prominent work–family researchers including Hochschild (1997) who contended that work and family are becoming more similar and that the separation of the work and family domain is a “myth”. The results of Carlson et al., (2006) suggested that work and family provide individuals with somewhat distinct resources that can be used to improve role performance and quality of life in other domains (Carlson et al., 2006).

**Proposition 2:**      *Work Involvement (WINV) assists people with personal and practical issues at home (Positive Work-Family Spillover – PWFS).*

## **Positive Spillover and Social Support**

Family support refers to the extent of behaviours or attitudes that are geared towards providing the member with encouragement, understanding, attention, positive regard, support and guidance with the day-to-day family household operations and work activities (King, Mattimore, King, & Adams, 1995). Domestic Support is taken to mean the support received from a paid domestic helper.

There has been little research done in the area of family, spouse or partner support; parent or folk support or domestic help support in relation to positive spillover (PFWS).

Demerouti, Sabine, Geurts and Kompier, (2004), conducted a study among 751 employees of the Dutch Postal Service showing that work-home interaction is best characterised by a four-dimensional model that crosses the distinction between the direction of influence (that is work to home influence, WHI vs. Home to work influence, HWI) and the quality of influence (negative vs. positive). Their results further supported their hypotheses, that job demands were most strongly related to negative influence from work (negative WHI), and home demands were primarily (albeit weakly) related to the negative influence from home (negative HWI). In accordance with their expectations, job support was associated with positive WHI. There was no support, however, for a similar process emanating in the home situation: home control and home support were not found to relate to any type of interaction. Further, particularly negative WHI was associated with fatigue and health complaints. These findings add to the existing knowledge about possible antecedents and consequences of the interaction between work and private life as well as support from home to work and work to home (Demerouti et al., 2004).

Focusing on the negative conflict stream of research, Kिरrane and Buckley, (2004) investigated the differential impact of the support of work colleagues, workplace supervisors, non-work friends, spouse or partner, and extended family on employees' perceptions of the balance between their work and family life commitments (Kिरrane & Buckley, 2004). The study did not however focus specifically on spouse support but included a number of other support sources.

Kिरrane and Buckley, (2004) used a sample of Irish employees (N = 170) who had a spouse-partner. They found that the spouse or partner and social support did not have an impact on experience of work interference (a negative conflict research term) in family life. The support of co-employees and workplace supervisors did not influence experience of work-family conflict. The researchers then tentatively suggested that positive spouse-partner instrumental support should lead to elevated work-family conflict (Kिरrane & Buckley, 2004).

Grzywacz and Marks (2000b) found that a low level of spousal support was positively associated with negative spillover from family to work and negatively associated with positive spillover from family to work (Grzywacz & Marks, 2000b). Having a partner that supports one and having the opportunity to talk through difficulties at work may assist individuals to recover from stress at work increasing the positive effect of positive spillover from family to work (Kinnunen et al., 2006).

Kaplan et al. (1995) developed a set of scales to measure emotional and social support (Kaplan et al., 1995). These scales were used to measure the positive spillover relationship with partner support in this study (refer Methods chapter).

**Proposition 3:** Family support and encouragement at home assists people to feel confident about themselves at work (*Positive Family-Work Spillover - PFWS*).

## **Positive Spillover and Life Stage**

Life stage refers to the five life stages (Growth, or childhood; Exploration, or adolescence; Establishment, or young adulthood; Maintenance, or middle adulthood; and Decline or old age) through which individuals progress over their lives (Super, 1990).

Grzywacz et al. (2002) showed that older employees report a higher level of positive spillover between work and family and that negative spillover between work and family increases across adulthood to midlife and then declines in later stages of work life as children grow and move on (Grzywacz et al., 2002).

Grzywacz et al. (2002) found that a number of distinct patterns emerged from their analyses of work-family spillover amongst employees (N = 2871), including (a) age-related associations across almost all the forms of work-family spillover and (b) clear differences in subjectively reported levels of negative and positive spillover between work and family, and (c) a relatively small, but significant, effect of self-reported negative spillover between work and family on the experiences of work-family stress. Age was found to have a persistent curvilinear effect on negative spillover from work to family (Grzywacz et al., 2002).

Grzywacz et al. (2002) found that negative work-family spillover was significantly lower for employees aged between 55 and 64 than employees between 25 and 34 and 35 to 44. This suggests that in their study they confirmed that negative spillover tends to decline across later midlife to later adulthood following a curvilinear effect (Grzywacz et al., 2002). It could be suggested that the converse is true that positive spillover increases across later midlife to later adulthood.

Casper et al. (2002) proposed that age and generational events, as well as, age of others in the family unit could be extended to include research dealing with issues of work-family conflict and perceived organisational support among employed mothers (Casper et al., 2002).

**Proposition 4:** *Life Stage (LS)* explains a significant amount of the variance in the extent of positive spillover between the work-family domains.

### Summary of propositions

In summary, four propositions were postulated at the commencement of the research process following an extensive literature review and consolidation of focus to specifically assess positive spillover. These included:

- Positive spillover from work to family is a distinct construct from positive spillover from family to work.
- *Work Involvement* assists people with personal and practical issues at home (*Positive Work-Family Spillover – PWFS*).
- Family support and encouragement at home assists people to feel confident about themselves at work (*Positive Family-Work Spillover – PFWS*).
- *Life Stage* explains a significant amount of the variance in the extent of positive spillover between the work-family domains.

## Conclusion

This chapter examined both negative and positive spillover with specific emphasis on positive spillover. The evolution from negative research to positive work-family research was examined. The correlates of positive spillover including work involvement; support and life stage were examined and literature pertaining to these independent variables was reviewed as well as the usefulness of the variables in explaining positive spillover. Gaps in the literature and research were identified with specific relevance to South Africa. Four propositions were postulated.

There is no comprehensive theoretical framework in which researchers can research positive effects of combining work and family (Frone 2003). In the absence of relevant models, a new emerging model, describing an instrumental pathway for work-family relationship has been proposed but not yet tested (Greenhaus & Powell, 2006). The large variety of scales have also recently been revised and a comprehensive scale measuring specifically the enrichment construct developed and validated by Carlson et al. (2006) who responded to Frone's challenge to develop a comprehensive scale to measure bi-directional enrichment encompassing positive spillover. This appears to be the latest development in the field.

In the South African context no relevant literature in the work-family positive spillover domain could be found. Globally little research has been conducted in the area of positive spillover and work involvement (work-family) or in the area of positive spillover and spouse support (family-work) until the recent publication of the research of Carlson et al. (2006).

## **CHAPTER 3: METHOD**

This chapter describes the nature of the chosen methods and participants in the study, the measures and instruments used to test the various propositions and the data gathering procedure and demographics. The primary focus of this study was to test various aspects of positive spillover in order to test and confirm the results of previous research in the work-family domain. The study utilised an electronic, on-line survey instrument to explain the experience of positive spillover amongst white-collar employees in a large South African national insurance brokerage and consulting company.

This study did not examine the longitudinal experience of positive spillover over time. Rather, it represents a snap-shot of participants' experience of positive spillover at a particular point in time. The study was not designed to make predictions about the relationships of spillover but was rather designed to describe positive spillover via self report amongst a cross section of employees at one particular organisation. The on-line survey instrument made use of scales that have been previously tested. Participants participated voluntarily and the responses were treated in strict confidence.

### **Participants**

The company used in this study, employs 1100 full time employees 900 of whom had access to the intranet and internet facility. From these 900 full time employees with intranet access, a sample of 450 was randomly selected. Of the 450 employees sampled, 152 completed the on-line questionnaire achieving a 34% response rate.

Data analysis was restricted to those participants (N= 152), who had answered the electronic on-line questionnaire. All data was usable. The nature of the analysis conducted was quantitative.

Of these 152 respondents, 19% (N = 29) were men and 81% (N = 123) were women. Most of the respondents had children 78% (N = 118). In terms of marital status, 71% (N = 108) reported that they were married; 7% (N = 11) living together; 11% (N = 17) divorced and 11% (N = 16) single. Regarding race, 76% (N = 116) of the respondents were White (N = 116) and 19% Black (N = 28) with 5% of participants (N = 8) choosing not to disclose race.

The average age of the respondents was 41 years (SD = 10.97), with each person working an average of 41 hours (SD = 15.90) per week. The average tenure was 8, 5 years (SD = 7.20).

In terms of occupation, 6% (N = 9) of participants were at an Executive level and 10% (N = 15) at a Senior Management level; 15% (N = 23) of respondents were at a Middle Management level while 10% (N = 15) were at a Junior Management level. Interesting to note is that a total of 41% (N = 62) of the sample were at a Managerial or Executive level and 17% (N = 26) at a Professional level. The balance, that is, 42% (N = 64) was made up of 3% (N = 5) of participants in sales and 39% (N = 59) in Administration or Support.

## Procedure

A proposal was presented to the faculty academic staff of the Department of Organisational Psychology at the University of Cape Town (UCT) regarding the nature, purpose and expected results of the research. Particular focus was placed on the ethical considerations involved in such research particularly pertaining to confidentiality and anonymity. An application was submitted with an ethical declaration and this was approved by the University of Cape Town (UCT).

A letter was written to the Human Resource Director at the insurance organisation contextualising the research, the purpose, objectives, ethics, anonymity issues and confidentiality and requesting permission to conduct the study.

Having gained permission from the organisation to conduct the research, e-mails explaining the purpose and nature of the research were sent to the sample group requesting their participation. Issues of confidentiality and anonymity were explained in the covering letter and each respondent was assigned a link to the on-line questionnaire. Each respondent was able to generate a unique user name and identity which were particular to his/her questionnaire. The survey was hosted on an independent third party site to which only the researcher and administrator had access.

While a campaign of follow up e-mails was planned to improve response rates, it was not implemented as the organisation requested the researcher to refrain from sending these out, as the organisation was experiencing "email fatigue". This could have affected the response rate.

Once all data was collected on the electronic survey system, the data was downloaded to an Excel spreadsheet where it was checked and cleaned prior to uploading it into Statistica 7.0 for analysis.

## Measures

The measures used in this study were adapted from previous studies investigating spillover. Most of these studies made use of the Likert – type items (five point scale) and the majority of the constructs in this study were tested as the mean score of multiple Likert-type questions on a 1-5 scale (1=“Strongly disagree” or “never”; 5=“Strongly agree” or “very often”). Seven key areas were measured in this study including: *Negative Work-Family Spillover (NWFS)* measures; *Negative Family-Work Spillover (NFWS)* measures; *Positive Work-Family Spillover (PWFS)* measures; *Positive Family-Work Spillover (PFWS)* measures; *Work-Family Involvement – Work Involvement (WINV)* measures; Support measures including *Partner Support (PARTSUP)*, *Parent Support (FOLKSUP)*, *Domestic Support (DOMESSUP)* and *Life Stage (LS)* measures.

***Negative Work-Family Spillover (NWFS) measures:*** Work to family spillover was measured using scales from the research of Frone et al., (1992) and Netemeyer et al., (1996). The scale used in the Frone et al., (1992) study consisted of two items and a Cronbach alpha of .76 was reported. The scale made use of a five point Likert-type response scale 1=“almost never”; 5=“almost always”. The scale used in the Netemeyer et al., (1996) study consisted of two items. The scale made use of a five point Likert-type response scale. *NWFS* was also assessed using the scale from Gryzwacz and Marks (2000). The scale measured negative spillover from work to family by using three items of the MIDUS survey which reported a Cronbach alpha of .82 and made use of a five point Likert-type response scale 1=“almost never”; 5=“almost always” (Gryzwacz & Marks, 2000). The items were combined and seven items in total were used for the purposes of this study to measure *NWFS*.

**Negative Family-Work Spillover (NFWS) measures:** *NFWS* was assessed using the scale from the research of Frone et al (1992). and Netemeyer et al., (1996). The scale used in the Frone et al., (1992) study consisted of two items and a Cronbach alpha of .76 was reported. The scale made use of a five point Likert-type response scale (1="almost never"; 5="almost always"). The scale used in the Netemeyer et al., (1996) study consisted of two items. The scale made use of a five point Likert-type response scale. *NFWS* was also assessed using the scale from Gryzwacz and Marks (2000). The scale measured *NFWS* using three additional items of the MIDUS survey and they reported a Cronbach alpha of .82 and made use of a five point Likert-type response scale 1="almost never"; 5="almost always" (Gryzwacz & Marks, 2000). The items were combined and seven items in total were used for the purposes of this study to measure *NFWS*.

**Positive Work-Family Spillover (PWFS) measures:** *PWFS* was measured using a scale that was developed for the National Survey of Midlife Development in the United States (MIDUS) and has been frequently used by other researchers to tap the *PWFS* construct (Grzywacz and Marks, 2000a and Grzywacz and Marks, 2000b). The scale consists of four items to measure *PWFS*. An example of a work-family item is "The things you do at work help you deal with personal and practical issues at home." A Cronbach alpha of .79 was reported by Grzywacz and Marks (2000a) for *PWFS* and the measure made use of a five point Likert-type response scale 1="almost never"; 5="almost always". An additional three items were tested to measure *PWFS* through the Survey Work-Home Interaction Nijmegen (SWING; Wagena & Geurts, 2000). These spillover items were based on positive mood, skills or behaviour and the measure made use of a five point Likert-type response scale 1="almost never"; 5="almost always" (Kinnunen et al., 2006). The items were combined and a total of seven items were used for the purposes of this study to measure *PWFS*.

**Positive Family-Work Spillover (PFWS) measures:** *PFWS* was measured using a scale developed for the National Survey of Midlife Development in the United States (MIDUS) that has been frequently used by other researchers to tap *PFWS* (Grzywacz and Marks, 2000a and Grzywacz and Marks, 2000b). The scale consists of six items to measure positive spillover from family to work. An example work-family item is "After spending time with my spouse or family, I go to work in a good mood" A Cronbach alpha of .69 was reported for *PFWS* to work and the measure made use of a five point Likert-type response scale 1="almost never"; 5="almost always" (Grzywacz & Marks, 2000).

**Work-Family Involvement (Work Involvement – WINV) measures:** The work-family involvement measure was based on the Work and Family Involvement Questionnaire developed by Kanungo (1982). He developed separate measures to distinguish between two constructs, work involvement and job involvement. He collected and analysed data from a heterogeneous sample (N = 703) to establish two scales which were tested and shown to be reliable. The work involvement scale comprised six items (Cronbach alpha = .75) An example includes: "the most important things that happen in life involve work". Six items measuring family involvement were restated based on the work involvement scale for example "the most important things that happen in life involve family" (Kanungo, 1982).

**Support measures:** A four item scale was used to measure levels of emotional and social or Spouse Support (Partner Support) to work (Kaplan, Cobb, French, Harrison & Pinneau, 1995). An example of *Partner Support (PARTSUP)* item is "My partner goes out of his or her way to make my work life easier". Kaplan et al., (1995) reported a Cronbach Alpha of .68. A six point Likert-type response scale was used (Kaplan, Cobb, French, Harrison & Pinneau, 1995). The six point scale was consistent with their study and included a "Not applicable" option.

In this study, to measure Parent Support (*FOLKSUP*) as well as *Domestic Support (DOMESSUP)*, the wording of the items used to measure Spouse Support was amended from Kaplan et al.'s scale (1995).

**Life Stage (LS) measures:** The extent of positive spillover was tested against the LS of participants in order to test whether the experience of positive spillover correlated with LS. No scales were used but data analysed with positive spillover as the dependant variable and age as the independent variable to explore the relationship. In this study, age was used as the primary demographic to test positive spillover and LS.

### Demographics

Demographic information was requested from respondents in order to test whether demographic variables contributed to predicting positive spillover relationships - *WIN*, *PARTSUP*, *FOLKSUP*, *DOMESSUP* and *LS*. Demographic details requested in this study were: gender, marital status, race, age, average hours of work per week, years of service in the organisation, occupational type, number of children and age of children.

This chapter described the methods and the data gathering, procedure, participants and measures used in this study to test the various propositions.

## CHAPTER 4: RESULTS

The following section presents the results of the analysis carried out on the data collected for this study. The cleansed data was analysed using the statistical programme Statistica 7.0. Item and exploratory factor analysis was conducted to test the dimensionality of the scales and testing the reliability of the scales through reliability analysis (Cronbach alphas) before producing the descriptive statistics. A series of correlation analyses and regression analyses were conducted to identify relationships between variables. ANOVA was used to identify differences across groups.

### Initial Analysis

#### Dimensionality of the scales

Initially a factor analysis was done on four spillover scales, *Negative Work-Family Spillover (NWFS)*; *Positive Work-Family Spillover (PWFS)*; *Negative Family-Work Spillover (NFWS)* and *Positive Family-Work Spillover (PFWS)*. Items were removed that were not significant to create summary scales (refer Table 3). Factor analysis was run on the items for the four spillover constructs (*PWFS*, *PFWS*, *NWFS* and *NFWS*). This was done using Principal Axis Extraction with Varimax Normalised loadings. Important to note was that all factor analyses were carried out in this manner. A minimum value of 1.0 was set for the eigenvalue of each factor.

Items that cross loaded were removed one by one and those items with a factor loading of less than .35 were excluded as they were not significant. In total three items were removed, one from the *PWFS* scale and two from the *PFWS* scale. Prior to the removal of these factors the marked loadings were  $>.460$  and after the removal of the items  $>.400$ . The items that were eliminated included *PWFS* 4 (When I come home cheerfully after a successful day at work, I find that this positively affects the atmosphere at home), *PFWS* 2 (I take my responsibilities at work more seriously because I am required to do the same at home) and *PFWS* 3 (I manage my time at work more efficiently because at home I have to do that as well).

Factor analysis was also carried out on the *Work Involvement* items and *Partner Support*, *Folk Support* or parent support and *Domestic Support*. A maximum number of four factors were allowed for extraction also with a minimum value of 1.0 for the eigenvalues. Summary scales were then created for the four constructs but no items removed as they all loaded above .35 (refer Table 5).

The following Spillover Summary scales were created based on the factor analysis by taking the mean of the item scores (Refer Table 2 below).

**Table 2.**

*Factor Analysis: Positive and negative work-family and family-work scales - 4 dimensional factors*

Variable	Items	FL1	FL2	FL3	FL4
NWFS1	Your job or career interferes with your responsibilities at home, such as cooking, shopping, child care, yard work and house repairs	.843	.135	-.048	.061
NWFS2	The demands of your job interfere your home and family life	.848	.094	-.039	-.037
NWFS3	Your job or career prevents you from spending the desired amount of time with your family	.803	.130	-.073	.023
NWFS4	Your job reduces the effort you can give to your activities at home.	.860	.038	-.165	-.085
NWFS5	Stress at work makes you irritable at home.	.640	.303	-.260	-.053
NWFS6	Your job makes you feel too tired to do the things that need attention at home.	.767	.189	-.206	-.138
NWFS7	Job worries or problems distract you when you are at home.	.622	.190	-.215	-.146
PWFS1	The things you do at work help you deal with personal and practical issues at home.	-.115	-.042	.669	.071
PWFS2	The things you do at work make you a more interesting person at home.	-.106	-.130	.780	.080
PWFS3	The skills you use on your job are useful for things you have to do at home.	-.062	-.011	.757	.149
PWFS5	You fulfil your domestic obligations better because of the things you have learnt on your job?	-.171	.085	.713	.131
PWFS6	You manage your time at home more efficiently as a result of the way you do your job?	-.269	.044	.559	.170
NFWS1	Your home life interferes with your responsibilities at work, such as getting to work on time, accomplishing daily tasks or working overtime	.174	.753	-.017	.024
NFWS2	The demands of your family or spouse / partner interfere with your work related activities	.190	.716	-.015	-.062
NFWS3	Your home life prevents you from spending the desired amount of time on job or career related activities	.073	.753	.078	-.027
NFWS4	Responsibilities at home reduce the effort you can devote to your job.	.205	.747	.002	-.036
NFWS5	Personal or family worries and problems distract you when you are at work.	.029	.651	-.005	-.111
NFWS6	Activities and chores at home prevent you from getting the amount of sleep you need to do your job.	.293	.562	-.104	-.044
NFWS7	Stress at home makes you irritable at work.	.016	.654	-.011	-.051
PFWS1	After spending time with your spouse/family, you go to work in a good mood and find this positively affects the atmosphere at work?	.035	-.252	.085	.405
PFWS4	Talking with someone at home helps you deal with problems at work.	-.001	.146	.323	.513
PFWS5	The love and respect you get at home makes you feel confident about yourself at work.	-.143	-.029	.069	.924
PFWS6	Your home life helps you relax and feel ready for the next day's work.	-.112	-.142	.185	.634
Explained Variance		4.571	3.714	2.810	1.909
Prp Total		.199	.161	.122	.083
Eigenvalues		6.322	3.111	2.271	1.299

Notes: N=152, varimax normalized, FL – factor loading

Factor analysis was then conducted on positive spillover work to family in both directions.

To test the first proposition, positive spillover from work to family is a distinct construct from positive spillover from family to work, a factor analysis was carried out with just the items for the two positive spillover constructs (refer Table 3.)

**Table 3.**  
*Factor Analysis: Positive Spillover Scales – 2 dimensional factors*

Variable	Items	FL1	FL2
PWFS1	The things you do at work help you deal with personal and practical issues at home.	.672	.093
PWFS2	The things you do at work make you a more interesting person at home.	.785	.121
PWFS3	The skills you use on your job are useful for things you have to do at home.	.739	.172
PWFS5	You fulfil your domestic obligations better because of the things you have learnt on your job?	.736	.155
PWFS6	You manage your time at home more efficiently as a result of the way you do your job?	.592	.206
PFWS1	After spending time with your spouse/family, you go to work in a good mood and find this positively affects the atmosphere at work?	.073	.403
PFWS4	Talking with someone at home helps you deal with problems at work.	.303	.494
PFWS5	The love and respect you get at home makes you feel confident about yourself at work.	.056	.937
PFWS6	Your home family helps you relax and feel ready for the next day's work.	.176	.706
<b>Explained Variance</b>		<b>2.640</b>	<b>1.905</b>
<b>Eigenvalues</b>		<b>3.226</b>	<b>1.319</b>

Notes: N=152, varimax normalized, FL – factor loading

Similarly, an iterative process of factor analysis was conducted on the independent variables *Work Involvement; Partner Support; Folks Support and Domestic Support* until a clear factor structure emerged (Refer Tables 4-7).

**Table 4.***Factor Analysis independent variables - Work Involvement*

<b>Variable</b>	<b>Factor 1</b>
WINV1	-.651
WINV2	-.808
WINV3	-.734
WINV4	-.806
WINV5	-.735
WINV6	-.649
<b>Expl.Var</b>	<b>3.227</b>
<b>Eigenvalues</b>	<b>3.227</b>

Notes: N=152, varimax normalized, FL – factor loading

**Table 5.***Factor Analysis independent variables Partner / spouse support*

<b>Variable</b>	<b>Factor 1</b>
PART1	-.753
PART2	-.877
PART3	-.918
PART4	-.908
<b>Expl.Var</b>	<b>3.004</b>
<b>Eigenvalues</b>	<b>3.003</b>

Notes: N=127, varimax normalized, FL – factor loading

**Table 6.***Factor Analysis independent variables Folk support*

<b>Variable</b>	<b>Factor 1</b>
FOLKS1	-.804
FOLKS2	-.892
FOLKS3	-.889
FOLKS4	-.902
<b>Expl.Var</b>	<b>3.045</b>
<b>Eigenvalues</b>	<b>3.044</b>

Notes: N=84, varimax normalized, FL – factor loading

**Table 7.**

*Factor Analysis independent variables Domestic*

<b>Variable</b>	<b>Factor 1</b>
<i>DOMES1</i>	-.924
<i>DOMES2</i>	-.931
<i>DOMES3</i>	-.920
<i>DOMES4</i>	-.868
Expl.Var	3.319
Eigenvalues	3.319

Notes: N=57, varimax normalized, FL – factor loading

All Items were included in the summary scales despite the relatively low N values for *Partner Support* (N = 127) and low N values for *Folks Support* (N = 84) and *Domestic Support* (N = 57) because of the high factor loadings.

### **Descriptive statistics**

The mean (M), standard deviations (SD) and Cronbach alphas ( $\alpha$ ) were calculated for all the summary scales presented in Table 8.

The mean of the *PFWS* (M = 3.666; SD = .780) was significantly higher than the mean of the *PWFS* (M = 2.614; SD = .769) scale. The *NWFS* mean (M = 3.033; SD = .920) was higher than the *PWFS* mean (M = 2.614; SD = .769). The *PFWS* mean (M = 3.666; SD = .780) was higher than the *NWFS* mean (M = 2.129; SD = .796). The *NWFS* mean was lower than the average. The *Work Involvement* mean was average (M = 2.554; SD = .833). *Partner Support* revealed the highest mean (M = 4.301; SD = 1.000). *Parent Support* showed a high mean (M = 3.901; SD = 1.285). *Domestic Support* (M = 3.605; DS = 1.444) reflected a high mean.

**Table 8.**  
*Descriptive statistics for summary scales*

	N	Mean	Confid- -95.00%	Confid- +95.00%	Standard Deviation	Standard Deviation Error.	Cronbach alpha	Standard- ised alpha
<i>PWFS</i> Summary scale	152	2.614	2.491	2.737	.769	.062	.839	.843
<i>PFWS</i> Summary scale	152	3.666	3.541	3.791	.780	.063	.731	.733
<i>NWFS</i> Summary scale	152	3.033	2.887	3.182	.920	.074	.924	.925
<i>NFWS</i> Summary scale	152	2.129	2.002	2.257	.796	.064	.872	.874
<i>WINV</i> Summary scale	152	2.554	2.421	2.698	.833	.067	.822	.825
<i>PART</i> Support Summary scale	127	4.301	4.125	4.4768	1.000	.088	.879	.887
<i>FOLKS / Parents Support</i> Summary scale	84	3.901	3.622	4.180	1.285	.140	.889	.894
<i>DOMESTIC Support</i> Summary scale	57	3.605	3.222	3.989	1.444	.191	.931	.931

Notes: A number of respondents answered some questions pertaining to *Partner Support*, *Folks Support* and *Domestic Support* with a "not applicable" option reducing N.

## Correlation Analysis

To test the relationship between *PWFS* as a distinct construct from positive spillover from *PFWS* a correlation analysis was conducted which showed that despite the two scales being distinct as per the factor analysis, a relationship exists between *PWFS* and *PFWS* ( $N = 152$ ;  $p < .050$ ;  $r = .38$ ).

To test the proposition that *Work Involvement* assists people with personal and practical issues at home (*PWFS*) a correlation was done which analysed *PWFS* summary scale and *Work Involvement* ( $N = 152$ ;  $p < .05$ ;  $r = .22$ .) reflecting a small but definite relationship.

The factor analysis results (reflected in Tables 5-7) showed that all items pertaining to *Partner Support*, *FOLK Support* and *Domestic Support* were significant. To test the proposition that family support and encouragement at home assists people to feel confident about themselves at work (*PFWS*), a correlation was conducted that firstly analysed *PFWS* and *Partner Support* ( $N = 127$ ;  $p < .05$ ;  $r = .61$ ) reflecting a significant moderate positive relationship. A correlation was also conducted that analysed using *PWFS* and *Partner Support* ( $N = 127$ ;  $p < .05$ ;  $r = .21$ ) demonstrating a small but definite relationship.

The relationship between *PFWS* and *Folk Support* was correlated ( $N = 84$ ;  $p < .05$ ;  $r = .29$ ) showing a positive, small but definite correlation. The relationship between *PWFS* and *Folk Support* was correlated ( $N = 84$ ;  $p < .05$ ;  $r = .23$ ) reflecting a positive small but definite correlation.

No correlation was found between *PFWS* and *Domestic Support*. Finally the relationship between *PWFS* and *Domestic Support* was correlated ( $N = 57$ ;  $p < .05$ ;  $r = .26$ ) showing small, positive definite correlation  $r = .26$ .

*Partner Support* correlated significantly and moderately with *PFWS*, this area is described in more detail in this report specifically in the Regression analysis section.

### Regression analysis

Regression analysis was conducted in order to test the effect of adding variables as a predictor of *PWFS*, the dependant variable and the independent variables, *WINV*, occupational level and demographics were used as the independent variables. Demographic variables (age, gender, marital status and race) were then brought in to the assessment.

A regression was done on *PWFS* with *WINV* as the independent variable ( $N = 152$ ;  $R = .22$ ;  $R^2 = .049$ ;  $p < .005$ ,  $\beta = .22$ ;  $p = .005$ ). In regressing *WINV* on *PWFS* it was found that the beta coefficient was significant for *WINV* ( $\beta = .22$ ;  $p < .005$ ). *WINV* was found to explain 5 percent of the variation in *PWFS*.

*Occupational type (OCCTP)* was then brought into the second step of the regression. The *WINV* coefficient ( $\beta = .232$ ;  $p < .005$ ) and the *OCCTP* coefficient ( $\beta = -.157$ ;  $p < .003$ ). Both coefficients were significant. The occupational level that people hold explains 7% *PWFS* ( $R^2 = .074$ ;  $p < .003$ ). The occupational type and level held by individuals in this study were found to have a negative influence on *PWFS*. This means that the individuals in lower occupational types experience higher levels of *PWFS*.

When demographic variables (gender, marital status, age, years service and race) were brought in to the last step of the regression, gender was found to have a significant positive coefficient (beta = 0.189 p < .003). *WINV* and *OCCTP* remained significant. (Refer Table 9).

**Table 9.**  
*Regression summary PWFS with Gender, Marital status, age, years service, occupation, race and work involvement*

	Beta	SE	B	SE	t(144)	p-level
Gender	.189	.086	.370	.168	2.200	.029
Marital Status	.075	.079	.055	.058	.944	.347
Age	.129	.099	.009	.006	1.302	.195
Years service	-.152	.097	-.016	.010	-1.565	.119
Occupational type	-.272	.088	-.102	.033	-3.073	.002
Race	.129	.080	.097	.060	1.611	.109
Work Involvement Summary scale	.245	.079	.226	.073	3.098	.002

Note: N = 152; R = .365; R<sup>2</sup> = .133; Adjusted R<sup>2</sup> = .091; F (7,144) = 3.181; SE of estimate: .733

Regression analysis was conducted in order to test the effect of adding variables as a predictor of positive family-work spillover with the dependent variable being *PWFS* and the independent variables being *PARTSUP*, *FOLKSUP* and *DOMESSUP*.

With the dependant variable *PWFS*, *PARTSUP* (N = 127; p < .000) was found to have a significant coefficient (beta = .61; p < 0.05). *Partner Support* explains 36% of *PWFS* (R<sup>2</sup> = .368; p < .003).

*FOLKSUP* (N = 84; p = .007) was found to have a significant coefficient (beta = .292; Multiple R = .291; R<sup>2</sup> = .084; Adjusted R<sup>2</sup> = .073; p = .007; Standard error of estimate = .746; Intercept = 2.974; Std. Error = .261; t (82) = 11.368).

Combined, *PARTSUP* (N = 127; p = .000) with *FOLKSUP* (N = 84; p = .007) was able to explain 39% of *PFWS* (R = .627; R<sup>2</sup> = .393; Adjusted R<sup>2</sup> = .376; p = .000)

Two further regression models were run. Both were run at a tolerance level of 0.5 for multicollinearity (in the independent variables). The dependent variable was set to be *PFWS* and the predictor variable *PARTSUP*. The differences in the models were the controls brought in to the analysis in the first step. For the first model, Numchild, CU5 and CB6-18 were brought collectively in the first step before bringing *PARSTSUP* individually in the second step of the first model.

For the second model, gender, marital status, age and race were then brought in as independent variables to the first step before bringing in the *Partner Support* variable in the second step.

Prior to bringing children in to the first model, the regression summary for the Dependent Variable *PFWS* showed (R = .123; R<sup>2</sup> = .015; R<sup>2</sup> = (no change); F (3, 118) = .609; p < .609; Std. Error of estimate = .801).

For the first model the number of children (Numchild), children under 5 years of age and children between the ages of 6-18 was brought collectively in the first step before bringing *PARSTSUP* in the second step (Refer Table 10).

**Table 10.****Regression PWFS with Number of children and Partner Support**

	Beta	SE	B	SE	T (117)	p-level
CU5	.040	.073	.034	.062	.543	.597
CB6-18	.053	.074	.037	.048	.726	.485
CO18	.036	.072	.029	.054	.364	.726
<i>PARTSUP</i> -sumscale	.625	.072	.497	.067	8.476	.000

Note: N = 122; R = 624; R<sup>2</sup> = .389; Adjusted R<sup>2</sup> = .368; F (4,117) =18.652; p<.000; SE of estimate: .634

When the control variable for family (CU5, CB6-18 and CO18) were brought into the analysis none was found to be significant but *PARTSUP* remained significant (beta = .487, p < 0.00). R<sup>2</sup> increased from (R<sup>2</sup> = .015; p < .609) to (R<sup>2</sup> = .389; p < .000).

For the second model, another regression was run with the support variables and demographic variables (gender, marital status, age and race) which were brought in the first step before bringing in the partner support variable. Race showed a significant value (beta = .369; p < .036).

However once the partner support variable was reintroduced into the analysis in step 2, with *PFWFS* being the dependant variable, race then failed to be significant but the demographic variable of gender became significant together with *Partner Support* ( Refer Table 11).

**Table 11.**

*Partner Support: Change in the model by including Partner Support variable*

N=122	Beta	SE	Beta	SE	t(117)	p-level
Gender	0.20	0.07	0.38	0.14	2.79	0.01
Marital status	0.04	0.07	0.05	0.08	0.60	0.55
Age	0.00	0.07	0.00	0.01	0.04	0.97
Race	0.13	0.07	0.24	0.14	1.79	0.08
Partner Support	0.63	0.07	0.50	0.06	8.73	0.00

Note: N = 122; R = .663; R<sup>2</sup> = .440; F (5,116) = 18.279; p<.000; SE of estimate: .609

Some minor differences were recorded. In the first model, *Partner Support* with *PFWS* (R = .624; R<sup>2</sup> = .389; p = 0). In the second model, *Partner Support* with *PFWS* (R = .663; R<sup>2</sup> = .440; p = 0). The regression only helped to explain an extra 5% of how the demographic variables assist in explaining *Partner Support* and *PFWS*.

### ANOVA and T-tests

To test the proposition that *Life Stage* explains a significant amount of the variance in the extent of positive spillover between the work-family domains, some variables were re-categorised to correspond with the literature review refer Grzywacz, Almeida and McDonald (2002).

- The age variable was subdivided into five categories <35 ; 35-44 ; 45-54; 55-64 ; >64
- The race groups were categorised into two categories White and Black
- Occupational Type into Manager/Professional and Technical/Sales

Data exploration was then carried out using a series of t-tests and ANOVA tests. T-tests were carried out between the gender groupings to see if there were differences in the out variables (*PWFS* and *PFWS*). ANOVA tests were carried

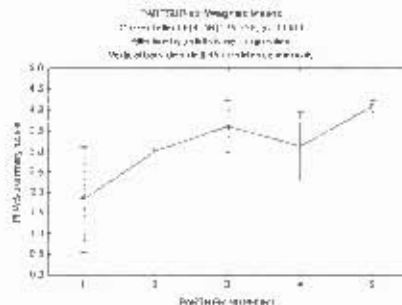
out on the other categorical variables also to test for differences in the outcome variables.

Hierarchical regression was then carried out. In the first step those variables which showed significant differences for the outcome variables in the ANOVA and T-tests were brought in. In the second step the partner support variable was brought in. Once again a regression summary was produced in order to see the change in the model due to bringing the partner support variable in the second step.

No statistically significant differences in *PWFS* were observed for any of the categorical variables regarding *gender*; *age*; *race*; *hours of work*; *Occupational type*; or with *Partner Support* or *Work Involvement*. Similarly when the ANOVA tests were carried out for *PFWS*, no significant differences were found in the variables relating to the *PFWS* scale in terms of *gender*; *age*; *hours of work*; *Occupational type* or *Work Involvement*. However, significance was discovered regarding *PFWS* and *Partner Support* as well as *PFWS* and *Race*. Statistically significant differences, at 0.05 level of significance, were found in partner support (refer Graph 1).

**Graph 1.**

*ANOVA test of significance for PFWS and Partner Support*



## Conclusion

According to the results in this study, *PWFS* and *PFWS* are two distinct constructs. *Work Involvement* does to a small but definite level assist people with personal and practical issues at home *PWFS*. *Partner Support* moderately explains that encouragement from home does assist people to feel confident about themselves at work (*PFWS*). *Parent Support* at a small but definite level explains that encouragement from home does assist people to feel confident about themselves at work (*PFWS*). *Life Stage* does not explain a significant amount of the variance in the extent of positive spillover between work-family domains in either direction. The first three propositions are therefore confirmed and the final proposition predicting that *Life Stage* explains a significant amount of the variance in the extent of positive spillover between work-family domains is not confirmed.

## CHAPTER 5: DISCUSSION

The aim of this study was to understand the structure of the work-family interface measure and expand the concepts of negative and positive spillover between work and family. Particular focus was placed on the positive elements of spillover in both directions in a single organisation in the South African context. Very little research has been conducted in the areas of *PWFS* and *Work Involvement*, *PFWS* and *Partner Support*, *Folks Support* or *Domestic Support* or in the area of Positive spillover in both directions and *Life Stage*.

This study examined each type of positive spillover (*PWFS* and *PFWS*) by taking into account *gender*, *race*, *number of children*, *occupational type*, *age* and *weekly working hours*. The relationship between *Work Involvement* and *PWFS* was studied. Further exploration was done to examine the relationship between *PFWS* with *Support*. Finally the linkages of positive spillover to *Life stage* in the work-family domain were examined. The findings of this study and implications for management and organisations are discussed. The opportunity to use positive spillover knowledge to strategically address the critical challenges of talent management (attracting and retaining scarce skilled white-collar, knowledge management employees) in the South African context is explored.

### Negative Work-Family Spillover

In this study, factor analysis suggested that *NWFS* and *NFWS* are distinct from each other. Factor analysis findings showed that the scale used to measure *NWFS* was excellent in terms of reliability (Cronbach alpha = .924). The scale used to measure *NFWS* was very good in terms of reliability (Cronbach alpha = .872).

Respondents in this study reported that work impacted more negatively in terms of spillover from work to family ( $M = 3.033$ ;  $SD = .920$ ) when compared with the level of negative impact from family to work ( $M = 2.129$ ;  $SD = .796$ ).

### **Negative spillover as distinct from positive spillover**

The results of this study confirmed the findings of Grzywacz and Marks (2000) that negative spillover from work to family; positive spillover from work to family; negative spillover from family to work and positive spillover from family to work were distinct experiences and distinct constructs (Grzywacz & Marks, 2000).

In this study, the findings revealed that the *NWFS* ( $M = 3.033$ ;  $SD = .920$ ) was higher than the *PWFS* ( $M = 2.614$ ;  $SD = .769$ ). The higher level of negative spillover from work to family as compared to the positive spillover from work to family finding suggests that respondents have more negative spillover, rather than positive spillover from their work into their family lives. The implications of this are that ways need to be found by organisations to increase the positive spillover from work to family in order to assist people to achieve a better balance and improved well-being while simultaneously reducing the levels of negative spillover flowing into the family and home from work. Human Resource strategies should be developed to improve work-family integration.

*PFWS* ( $M = 3.666$ ;  $SD = .780$ ) was higher than the *NFWS* ( $M = 2.129$ ;  $SD = .796$ ) suggesting that respondents experience higher positive spillover from family to work as compared to negative spillover from family to work. The implication of this finding suggests that the positive experiences of family flow into the workplace more than the negative experiences of family to work. This

means that employees who take the positive experiences of home into their workplace are more likely to do so rather than taking their negative experiences from home to work. The importance of this finding is that organisations focusing on Positive Spillover could find ways to encourage employees to create positive home and family lives through Employee Assistance Programmes as they, the employers, would benefit from the positive spillover from family to the workplace. The low NFWS indicates that employees in this study do not experience a high negative spillover from family to work.

In this study, it was found that the enrichment score is higher from family to work and that negative conflict is higher from work to family as compared to the positive enrichment reported from work to family. These findings do not support those discussed by Greenhaus and Powell (2006) who noted that where research examined enrichment and conflict, the average enrichment score was as high as the average conflict score or significantly higher (Greenhaus & Powell, 2006).

Greenhaus and Powell (2006) suggested from their summary of other research studies that employees perceive work and family as enriching each other and that correlations between work-family enrichment and work-family conflict were mostly small. They suggested that work-family enrichment and work-family conflict are unrelated and independent of each other (Greenhaus & Powell, 2006). Evidence in this study was found to support these studies reported on by Greenhaus and Powell (2006). In this study both work-family conflict and the positive types of spillover were definitely correlated but this correlation was small (-.25) The positive types of spillover were independent from the negative spillover types as reflected in the factor analysis. This result is supportive of other research findings (refer Carlson et al., 2000; Frone et al., 1997b; Grzywacz & Bass, 2003; Grzywacz & Marks, 2000b; Wayne et al., 2004).

These findings regarding negative spillover as being distinct from positive spillover and the experience of the different types of spillover and the direction of experience pose a challenge to organisations and the Strategic Human Resource Partner and their Business Partners. Creative strategies need to be developed to help minimise negative spillover from the work-family and improve the levels of positive spillover from work-family in order to help retain skilled employees. This idea will be explored in more detail in the Management implications of the research section of this chapter.

## **Discussion of the propositions**

### **Dimensionality of Positive spillover**

This study confirmed that Positive Spillover from work to family is a distinct construct from Positive Spillover from family to work.

In this study, factor analysis loadings showed that the scale used to measure *PWFS* was very good in terms of its reliability (Cronbach alpha = .839) and good in terms of its reliability for *PFWS* (Cronbach alpha = .731). The findings indicated that *PWFS* is distinct from *PFWS*.

To test the proposition and the relationship between positive spillover from work to family and positive spillover from family to work, a correlation analysis was conducted. The findings of this analysis showed that despite the two scales being distinct as indicated by the factor analysis, a small but definite relationship exists between the *PWFS* and *PFWS* ( $N = 152$ ;  $p < .050$ ;  $r = .38$ ). This relationship could refer to the commonality of the positive nature of the two constructs rather than the relationship between the two domains of work and family.

The *PFWS* mean ( $M = 3.666$ ;  $SD = .780$ ) was significantly higher than the mean of the *PWFS* ( $M = 2.614$ ;  $SD = .769$ ). This suggests that employees experience a higher level of positive spillover from their family lives to work than vice versa. The challenge could exist for organisations to increase the positive experience from work to family and to find ways to tap into the positive spillover from family to work thereby improving the organisation.

Grzywacz and Marks (2000) reported a Cronbach alpha of .73 for *PWFS* and .70 for the *PFWS* scales. In this study higher Cronbach alphas were reported .839 for *PWFS* showing very good reliability for the scale and good reliability of Cronbach alpha = .731 for the *PFWS* scale. Both scales used in this study were highly reliable.

Kinnunen et al., (2006) reported that a number of studies consistently demonstrated that work to family conflict is reported to occur more frequently than family to work conflict (Kinnunen et al., 2006). This study showed *PWFS* ( $M = 2.164$ ;  $SD = .769$ ) was lower than *PFWS* ( $M = 3.666$ ;  $SD = .780$ ) as compared to negative spillover findings which showed *NWFS* ( $M = 3.033$ ;  $DS = .920$ ) and *NFWS* ( $M = 2.129$ ;  $SD = .796$ ). The mean of the *PFWS* ( $M = 3.666$ ;  $SD = .780$ ) was significantly higher than the mean of the *PWFS* ( $M = 2.614$ ;  $SD = .769$ ) scale. This suggests that employee's reported experiencing a higher level of positive spillover from their family to their work than from their work to their family and that work to family conflict is reported to occur more frequently than family to work conflict. These findings support the studies commented on by Kinnunen.

The findings of this study showed that the respondents experienced and reported a higher positive spillover from their families to their work thereby benefiting the workplace when compared to a lower reciprocal positive experience from work to

family. These findings are supportive of other research findings (Grzywacz, 2000; Grzywacz et al., 2002; Grzywacz and Bass, 2003; Grzywacz and Marks, 2000b; Hammer et al., 2002; Hanson et al., 2003; Hill, 2005; Sumer and Knight, 2001 and Wayne et al., 2004).

### **The relationship between Positive Work-Family Spillover (PWFS) and Work Involvement**

This study confirmed that *Work Involvement* assists people with personal and practical issues at home (Positive work-family spillover).

In the absence of relevant research in the area of *PWFS* and its relationship with *Work Involvement*, the second proposition tested *PWFS* relationship with work involvement using the Job and Work involvement scales as developed by Kanungo (1982).

In this study, the findings of the factor analysis loadings showed that the scale used to measure *WINV* was very good in terms of its reliability (Cronbach alpha = .822) and *PWFS* was very good in terms of its reliability (Cronbach alpha = .839). The recent research and scales developed by Carlson et al. (2006) reported work involvement with (Cronbach alpha = .92); family involvement items with (Cronbach alpha = .86) and for the overall work-family involvement scale (Cronbach alpha = .92) Carlson et al., (2006). In this study *Work Involvement* was reported as having (Cronbach alpha = .822) including both the work and family items. It appears as though the more recent scales could have been of more value to this study in understanding and explaining more of the relationship between *PWFS* and *Work Involvement* rather than the reliability of the scale.

The findings in this study showed that the *WINV* mean ( $M = 2.554$ ;  $SD = .8.33$ ) was average indicating that employees do not experience a high or low level of work involvement in the organisation.

The findings of the correlation showed that there was a small but definite relationship between *PWFS* and *WINV* ( $N = 152$ ;  $p < .05$ ;  $r = .22$ ).

Regression analysis findings showed that initially *WINV* explained only 5% of *PWFS* but with the addition of other independent variables (occupational, age, gender, marital status and race) it changed to explain 9% of the *PWFS* construct. *OCCTP* was found to have a negative influence on *PWFS*. This result was surprisingly low but could possibly be explained by the scales used in this study that were focused on Job or Work Involvement but not originally conceptualised to link with positive spillover concepts.

Greenhouse, Parasuraman and Collins, (2001) found that work to family conflict (but not family to work conflict) was positively related to intentions to withdraw or resign from an organisation. They also found that withdrawal behaviour was stronger for individuals who were relatively uninvolved in their careers. Conversely for those who were highly involved in their careers their intention to withdraw was low (Greenhouse et al., 2001). The findings of this study could be used (tentatively) by organisations and the Strategic Human Resource Partner to better understand that *PWFS* and higher levels of work involvement could lead to a reduction in people's intentions to resign from the organisation. This is important as positive spillover and job involvement could be used as part of any talent management and retention strategy. Work involvement is of interest and importance to organisations who need to fully mobilise employees in the new economy (Gore, 2001).

The results of Carlson et al., (2006) suggested that work and family provide individuals with somewhat distinct resources that can be used to improve role performance and quality of life in other domains (Carlson et al., 2006). Carlson et al. (2006) argued that there is theoretical and empirical precedent for their results that are consistent with their findings (Carlson et al., 2006). The results of this study lend support to the findings of Carlson et al., (2006).

### **Positive Family-Work Spillover and the relationship to Family Support**

This study confirmed that family support and encouragement at home assists people to feel confident about themselves at work (*PFWS*).

Similarly to the theory of Involvement, there has been very little research conducted in the area of family, spouse or partner support in relation to *PFWS* and therefore there is little source of comparison for the findings of this study.

*Positive Family-Work Spillover* was measured linking the level of support received from partners (spouses), parents (folks) and domestic helpers to the amount of positive spillover experienced from family to work. Particular items assessed included those around partner and parent support and some items were added and developed to test the domain of domestic help support particularly prevalent in the South African context.

Three areas of support were studied, *Partner Support*, *Parents Support* and *Domestic Support*.

## Partner Support

In this study, the findings of the factor analysis loadings showed that the scale used to measure *PARTSUP* was very good in terms of its reliability (Cronbach alpha = .879).

The findings showed that the *PARTSUP* mean ( $M = 4.301$ ;  $SD = 1.000$ ) was very high showing that employees who reported having a partner or spouse felt that they received a high level of positive support from their partner.

The findings of the correlation showed a significant but moderate positive relationship between *PFWS* and *PARTSUP* ( $N = 122$ ;  $p < .05$ ;  $r = .61$ ). This correlation suggests that partners play a significant role in the extent to which employees experience positive spillover from their families to their work.

Regression analysis findings showed that initially *PARTSUP* explained 36.8% of *PFWS*. After bringing in the age of children with *PARTSUP*, *PARTSUP* explained 38.9% of *PFWS*. The impact of children on partner support was small in adding to the family support to *PFWS*. With the addition of other independent variables (occupational, age, gender, marital status and race) *PARTSUP* changed to explain 44% of the *PFWS* construct.

The findings of this study supported Kinnunen et al's., (2006) contention that having a partner that supports one and having the opportunity to talk through difficulties at work may assist individuals to recover from stressors at work increasing the positive effect of positive spillover from family to work (Kinnunen et al., 2006).

The findings of this study also shows that the spouse or partner play a very important part in explaining and understanding PFWS and provides support to O'Neil and Greenberger's (1994) contention that Spouse Support is an important buffer for job related stress (O'Neil & Greenberger, 1994). The significant moderate positive relationship result in this study between *PFWS* and *Partner Support* is important for organisations and Human Resource partners as the involvement of the spouse or partner by the organisation in the employees work life could be an effective strategy to increase the retention of the white-collar employee in a retention plan.

Kirrane and Buckley's (2004) proposition that positive partner support should lead to elevated work-family conflict was not supported by the findings in this study. Rather, the findings of this study suggest that positive partner support spills over positively from family to work.

### **Parent Support**

In this study, the findings of the factor analysis loadings showed that the scale used to measure *FOLKSUP* was very good in terms of its reliability (Cronbach alpha = .889).

Findings showed that the *FOLKSUP* has a high mean score ( $M = 3.901$ ;  $SD = 1.285$ ) indicating that those respondents ( $N = 84$ ) who have parents reported that they receive a high level of support from them. It is important to note that only 84 (55%) of respondents reported having *FOLKSUP*.

The findings of the correlation showed that a small but definite relationship between *PFWS* and *FOLKSUP* ( $N = 84$ ;  $p < .05$ ;  $r = .29$ ).

Regression analysis findings showed that initially *FOLKSUP* explained 8% of *PFWS*. This finding suggests that parents play a part in the overall support of employees in their experience of *PFWS*.

### **Domestic Support**

In this study, the findings of the factor analysis loadings showed that the scale used to measure *DOMESSUP* was excellent in terms of its reliability (Cronbach alpha = .931).

Findings showed that the *DOMESSUP* has a high mean score ( $M = 3.605$ ;  $DS = 1.444$ ) suggesting that those respondent who reported having domestic help feel that they get a high level of support from such help. No correlation was found between *PFWS* and domestic support ( $N = 57$ ). Perhaps the reason for the lack of a correlation had to do with the low number ( $N = 57$ ) of respondents who reported having domestic help.

Regression analysis findings showed that *DOMESSUP* explained 8% of *PFWS*.

### **The support combination of related support variables and *PFWS***

Combined, *PARTSUP* ( $N = 127$ ;  $p = .000$ ) with *FOLKSUP* ( $N = 84$ ;  $p = .007$ ) was able to explain 39% of *PFWS* ( $R = .627$ ;  $R^2 = .393$ ; Adjusted  $R^2 = .376$ ;  $p = .000$ ). The high levels of support help understand why family spillover to work is experienced at a higher level than work spillover to family. It also suggests that the higher the level of spouse and parental support the higher the positive spillover and benefit to the organisation. If organisations are able to increase the feelings of support received by employees at home and in the family the spillover should be experienced positively in the workplace.

### **Positive spillover relationship with Life stage**

The finding in this study did not support the proposition that Life stage explains a significant amount of the variance in the extent of positive spillover between the work-family domains,

In this study age did not correlate with PWFS or PFWS. Age was regressed on *PFWS* and *PWFS* separately to investigate this proposition. For *PFWS* age did not have a significant B coefficient ( $B = -.031$ ). By itself it explained only 0.097 % of the variation in *PFWS*. All the variations in *PFWS* were found to be explained by the following collection of variables; *Age, gender, marital status, number of children, partner support, folk support and domestics support.*

For *PWFS* age also did not have a significant B coefficient ( $B = .054$ ) and only explained 0.293 % of the variation in *PWFS*.

These findings were contrary to the literature and studies. Grzywacz et al. (2002) found age to have a persistent curvilinear effect on negative spillover from work to family (Grzywacz et al., 2002). As discussed in the literature review, research has found a relation between negative spillover experience and life stage and that as individuals get older the negative spillover effects decrease from work to family Grzywacz et al., (2002). While the findings of this did not support the findings of the research done by Grzywacz et al., (2002), it should be noted that this research examined the positive spillover from work to family and not the negative spillover from work to family as was the case in the Grzywacz et al., (2002) research.

The converse of the Grzywacz et al., (2002) research that positive spillover should increase based on age at later stages of family was not evidenced in this study. Possible reasons for this finding could be the size of the sample which was not large or that this study was not a longitudinal one. Other reasons could include the different countries in which the research was conducted and the fact that this research was conducted in a single organisation in South Africa.

Perhaps a reason for the finding that Life stage did not explain a significant amount of the variance in the extent of positive spillover between the work-family domains, is that in the South African workplace, many White employees as they get older fear the consequences of Employment Equity and retaining their positions against this particular South African phenomenon. The negative aspects or perceptions towards Employment Equity could increase negative spillover as employees get older rather than increase positive spillover. In this study, 76% of respondents were White (N = 116); 19% Black (N = 28) and 5% of participants (N = 8) choosing not to disclose race.

### **Management implications of the research**

The findings presented and discussed above have a number of important Implications for organisations and the Strategic Human Resource partner in developing and implementing Human resource and talent management strategies in South Africa.

There appears to be a number of challenges in the external environment which many South African organisations now face that need to be addressed if they are to compete as global players. Some of these challenges include: a supply side problem of producing sufficient critical skills into the South African economy with demand for certain skills outstripping supply; Demand for skills globally in a war

for talent (Glen, 2006) and finally organisations' (in general) seeming inability to successfully attract and retain skilled talent.

This study showed that positive spillover from work to family is lower than positive spillover from family to work. Employees who are in demand look for ways to balance these and arguably have higher expectations from their employers to increase the amount of positive spillover from work to family. Perhaps the employee who is actively involved in work requires more *PWFS* in order to feel a sense of belonging and value from the organisation and to commit to it. The support of the spouse could be used as a strategy to involve the family more in the workplace thereby increasing a sense of involvement and reduce labour turnover amongst white-collar employees.

Positive spillover constructs *PWFS* and *PFWS*, *Work Involvement* and *Partner Support* findings of this study may be cautiously used by South African organisations and Human Resource Strategic Partners wishing to increase the positive experience of employees in both domains and increase overall involvement to the organisation. In so doing, organisations could use positive spillover as part of their organisational strategies to attract, motivate and retain scarce skilled resources in the war for talent.

From an organisational perspective, strategies and policies that promote positive spillover from work to family and family to work could assist in achieving more work-family balance. An organisational culture that embraces work-family balance and positive spillover could hold a key to competitive advantage to motivate and retain employees as organisations demonstrate through practices that people are indeed their most valued asset.

While differences may exist across cultures, organisations and individuals in terms of their specific work–family balance needs, the general and specific findings of this study could be used in developing and framing family-friendly cultures, strategies, policies and practices to attract and retain talent especially in the South African context. Conducting business in South Africa has the added challenge for organisations to redress the past inequalities and imbalances of apartheid by implementing employment equity strategies.

Organisations facing employment equity challenges where scarce Black skills are in even higher demand, could seek ways to develop and enhance the bi-directional experience of positive spillover from family to work and work to family in becoming employers of choice, designing strategies, mechanisms, policies, practices and organisational cultures that offer work-family balance as a core value or cultural feature. This may be particularly important as a strategy amongst the knowledge, white-collar employees where employees may seek improved meaning and quality of work-family balance.

### **Limitations of this research**

It seems that both further theoretical development and longitudinal studies are needed that extend beyond the scope of this cross sectional, single organisational study to understand the processes by which positive spillover relates to domain-specific outcomes. The use of self-reported data by the respondents can be regarded as another limitation of this study. The data collection was narrow in that it focused on one particular South African organisation which employs mainly white-collar, White, female employees.

### **Suggestions for further research**

In South Africa it appears as though there is no research in the field of positive spillover and in work-family balance. Perhaps the challenge in future is to initiate more of such published research as this global trend is impacted by the scarce talent available and skills shortage amongst key critical resources in the South African labour market.

Research should be conducted to find mechanisms to increase the PWFS in particular and thereby improving the quality of experience of work life to family.

It should be noted that while much research has been conducted on the negative work-family interface there is an urgent need internationally and locally to focus research on particular areas of positive spillover particularly in the area of PWFS and the relationship to work and family involvement using newer scales, perhaps those produced this year by Carlson et al. (2006). Information and data should be gathered and analysed so as to determine "how" to increase positive spillover and improve understanding of how PWFS is related to work and family involvement.

Further research also needs to be done exploring the relationship between PFWS and support particularly spouse or partner support as little has been done in this regard. Given that the higher experience of spillover from family to work that has been reported in this study as compared to PFWS, the challenges facing the Human Resource Strategic Partner to expand and increase the positive experience of positive spillover in both directions is critical as an area of future research. Family-friendly work policies and practices in assisting employees

achieve a balance and improve the quality of life at work and home are another important area of future research.

This study supported current research insights into the interface between work and family by showing that employees do report positive spillover between their work and family roles. Although the work-family interface measure used in this study might benefit from some scale development, it is an important step in the direction of conceptualising the concept of positive spillover within the work-family interface more broadly.

### **Usefulness of the positive spillover construct**

Positive spillover is a useful construct in understanding the positive elements and experience from and to both work and family domains. It is a practical construct that can be used as part of an organisation's Human Resource strategies to attract and retain scarce skills.

### **Conclusion**

This study focused on bi-directional (from family to work and work to family) positive spillover in one South African organisation. The findings add support to the growing trend of research in the field focusing on the positive effects of work family spillover in both domains and adds to an almost non-existent body of research in this field in the South African context.

The results of the first three propositions supported current and recent findings which also shift the debate and research from a negative conflict role-based one to a positive supportive, enriching one where positive elements are experienced in both directions that is from work to family and family to work. Only the last

proposition regarding the linkage of Life stage to Positive Spillover was not supported.

Particularly in the South African context, the challenge for the future is to undertake research to increase our understanding of the conditions under which work and family are allies rather than enemies (Greenhaus & Powell, 2006). Increasing our understanding of the multi dimensionality of Positive Spillover can assist organisations to better develop meaningful Human Resource strategies and practices that positively impact on organisations and their employees.

University of Cape Town

## REFERENCES

- Almeida, D., McDonald, D., & Grzywacz, J.G. (2002). Work-Family spillover and daily reports of work and family stress in the adult labor force. *Family Relations*, 51, 28-36.
- Barnett, R. C. (1988). Towards a review and reconceptualization of the Work-family literature. *Genetic, Social, and General Psychology Monographs*, 124, 125-182.
- Brown, A., Duncan, A., Harris, N., & Kelly, S. (2003). Strategic talent retention. *Strategic HR Review*, 2, 4, 22-27.
- Burke, R. J. (1999). Workaholism among women managers: Personal and workplace correlates. *Journal of Managerial Psychology*, 15, 520-534.
- Carlson, A. S., Kacmar, K. M., Wayne, J. H., & Grzywacz, J. G. (2006). Measuring the positive side of the work-family interface: Development and validation of a work-family enrichment scale. *Journal of Vocational Behavior*, 68, 131-164.
- Casper, W. J., Martin, J. A., Buffardi, L. C., & Erdwins, C. J. (2002). Work-family conflict, perceived organizational support, and organizational commitment among employed mothers. *Journal of Occupational Health Psychology*, 7, 99-108.
- Demerouti, E., Sabine, A. E., Geurts, S., & Kompier, M. (2004). Positive and negative work-home interaction: prevalence and correlates. *Equal Opportunities International*, 23, 1/2.
- Desrochers, S. & Sargent, L. (2003). Boundary Theory and Work-Family Integration. Chestnut Hill: Boston College. Retrieved March 28th, 2006 from [http://wfnetwork.bc.edu/encyclopedia\\_template.phpid=220](http://wfnetwork.bc.edu/encyclopedia_template.phpid=220).
- Elloy, D.F., & Terpening, W.D. (1992). An empirical distinction between job involvement and work involvement: some additional evidence. *Canadian Journal of Behavioural Science*, 24, 465-78.
- Friedman, S. D., & Greenhaus, J. H. (2000). *What Happens when business professionals confront family choices*. New York: Oxford University Press.
- Frone, M. R. (2003). Work-family balance. In J. C. Quick & L. E. Tetrick (Eds.), *Handbook of occupational health psychology* (pp. 143-162). Washington DC: American Psychological Association.

- Frone, M. R., Russell, M., & Cooper, M. L. (1992). Antecedents and outcomes of Work-Family conflict: Testing a model of work-family interface. *Journal of Vocational Behavior*, 50, 145-167.
- Glen, C. (2006). Key skills retention and motivation: the war for talent still rages and retention is the high ground. *Industrial and Commercial Training*, 38(1), 37-45.
- Gore, N. (2001). What's all this mobilizing about? *Canadian HR Reporter*, 14 (21), 17-19.
- Greenhaus, J. H., & Beutell, N. J. (1985). Sources of conflict between work and family roles. *Academy of Management Review*, 10, 76-88.
- Greenhaus, J. H., & Callanan, G. A. (1994). *Career management*. Fort Worth: Dryden.
- Greenhaus, J. H., & Parasuraman, S. (1999). Research on Work, Family and Gender: Current status and future directions. In G. N. Powell (Ed.), *Handbook of gender and work* (pp. 391 – 412). Newbury Park, CA: Sage.
- Greiner, B. A., Krause, N., Ragland, D. R., & Fisher, J. M. (1998). Objective stress factors, accidents, and absenteeism in transit operators: A theoretical framework and empirical evidence. *Occupational Health Psychology*, 3, 130-146.
- Greenhaus, J. H., & Beutell, N. J. (1985). Sources of conflict between work and family roles. *Academy of Management Review*, 10, 76 – 88.
- Greenhaus, J. H., & Callanan, G. A. (1994). *Career Management*. Fort Worth, TX: Dryden Press.
- Greenhaus, J. H., & Parasuraman, S. (1999). Research on work, family, and gender: Current status and future directions. In G. N. Powell (Ed.), *Handbook of gender and work*: 391-412. Newbury Park, CA: Sage.
- Greenhaus, J. H., Parasuraman, S., & Collins, K. (2001). Career involvement and family involvement as moderators of relationships between work-family conflict and withdrawal from a profession. *Journal of Occupational Health Psychology*, 6, 2, 91-100.
- Greenhaus, J.H., & Powell, G.N. (2006). When work and family are allies: A theory of work family enrichment. *Academy of Management Review*, Vol. 31, 1, 72-92.

- Greenhaus, J., & Singh, R. (2003). Work-Family Linkages. Sloan Work and Family Encyclopaedia Entry Chestnut Hill, MA: Boston College. Retrieved March, 27th, 2006 from [http://wfnetwork.bc.edu/encyclopedia\\_entry.php?id=263](http://wfnetwork.bc.edu/encyclopedia_entry.php?id=263).
- Grzywacz, J. G. (2002). Work-family spillover and health during midfamily: Is managing conflict everything? *American Journal of Health Promotion*, 14, 236-243.
- Grzywacz, J. G., Almeida, D. M., & McDonald, D. A. (2002). Work-family spillover and daily reports of work and family stress in the adult labour force. *Family Relations*, 51, 28-36.
- Grzywacz, J. G., & Bass, B. L. (2003). Work, family, and mental health: Testing different models of work-family fit. *Journal of Marriage and Family*, 65, 248-262.
- Grzywacz, J. G., & Marks, N. F. (2000a). Family, work, work-family spillover and problem drinking during midfamily. *Journal of Marriage and Family*, 62, 336-348.
- Grzywacz, J. G., & Marks, N. F. (2000b). Reconceptualizing the work-family interface: An ecological perspective on the correlates of positive and negative spillover between work and family. *Journal of Occupational Health Psychology*, 5, 111-126.
- Gutek, B., Searle, S., & Klepa, L. (1991). Rational versus gender role explanations for family-work conflict. *Journal of Applied Psychology*, 76, 560-568.
- Haas, L. (1999). Families and Work. In M. Sussman, S. K. Steinmetz, & G. W. Peterson (Eds.), *Handbook of Marriage and family*, 571-612. New York: Plenum Press.
- Hair, J. F., Babin, B., Money, A.H., & Samouel, P. (2003). *Essentials of business research methods*. United States: Leyh Publishing, LLC.
- Hammer, L. B., Cullen, J. C., Caubet, S., Johnson, J., Neal, M. B., & Sinclair, R. R. (2002, March). *The effects of work-family fit on depression: A longitudinal study*. Paper presented at the 17th Annual Meeting of SIOP, Toronto.
- Hammer, L. B., & Thompson, C. (2003). *Work-family role conflict*. Boston College: Chestnut Hill.

- Hanson, G. C., Colton, C. L., & Hammer, L.B. (2003, March). *Development and validation of a multidimensional scale of work-family positive spillover*. Paper presented at the 17th Annual Meeting of SIOP, Toronto.
- Hill, E. J. (2005). Work-family facilitation and conflict, working fathers and mothers, work-family stressors and support. *Journal of Family Issues*, 26, 793-819.
- Hochschild, A. R. (1997). *The time bin: When work becomes home and home becomes work*. New York: Metropolitan Books.
- Kanungo, R. N. (1982). Measurement of Job and Work Involvement. *Journal of Applied Psychology*, 67, 341-349.
- Kaplan, R. D., Cobb, S., French, J. R. P., Harrison, R. & Pinneau, S. R. (1995). *Job demand and worker health* (DHEW Publication number 75-160). Washington DC: US Government Printing Office.
- King, L.A., Mattimore, L.K., King, D.W., & Adams, G.A. (1995). Family Support Inventory for Workers: A new measure of perceived social support from family members. *Journal of Organizational Behavior*, 16, 235-258.
- Kinnunen, U., Feldt, T., Geurts, S., & Pulkkinen, L (2006). Types of work family interface: Well being correlates of negative and positive spillover between work and family. *Scandinavian Journal of Psychology*, 47, 149-162.
- Kinnunen, U., & Mauno, S. (1998). Antecedents and outcomes of work-family conflict among employed women and men in Finland. *Human Relations*, 51, 157-177.
- Kirchmeyer, C. (1992a). Nonwork participation and work attitudes: A test of scarcity vs. expansion models of personal resources. *Human Relations*, 45, 775-795.
- Kirchmeyer, C. (1992b). Perceptions of nonwork-to-work spillover: Challenging the common view of conflict-ridden domain relationships. *Basic and Applied Social Psychology*, 13, 231-249.
- Kirchmeyer, C. (1993). Nonwork to work spillover. A more balanced view of the experiences and coping of professional women and men. *Sex Roles*, 28, 531-552.
- Kirchmeyer, C. (1995). Managing the work-nonwork boundary: An assessment of

- organizational responses. *Human Relations*, 48, 515-536.
- Kirrane, M., & Buckley, F (2004). The influence of support relationships on work-family conflict: differentiating emotional from instrumental support. *Equal Opportunities International*, 23, 1/2.
- Lewis, S. (2003). The integration of paid work and the rest of family. Is post-industrial work the new leisure? *Leisure Studies*, 22, 343 – 355.
- MacIntosh, H. Mason, T., Bax, K., Beauregard, C., & Lee, C. (2000). The Work Family Interface in Men and Women. Family Psychology Laboratory. Ottawa. Retrieved 27 March 2006 from <http://www.psy.ulaval.ca/~sqrp/communications/sqrp-2000410.htm>.
- Marks, S. R. (1997). Multiple roles and role strain: Some notes on human energy, time and commitment. *American Sociological Review*, 42, 921 – 936.
- Mauno, S., Kinnunen, U., & Pyykko, M. (2005). Does work-family conflict mediate the relationship between work-family culture and self reported distress? Evidence from five Finnish organizations. *Journal of Occupational and Organizational Psychology*, 78, 509- 530.
- Mossholder, K. W., Settoon, R. P., & Henagan, S. C. (2005). A relational perspective on turnover: Examining structural, attitudinal, and behavioural predictors. *Academy of Management Journal*, 48, 4, 607-618.
- Netemeyer, R. G., Boles, J. S., & Mc Murrian, R. (1996). Development and validation of work-family conflict and family-work conflict scales. *Journal of Applied Psychology*, 81, 400-410.
- O'Neil, R. & Greenberger, E. (1994). Patterns of commitment to work and parenting: Implications for role strain. *Journal of Marriage and Family*, 61, 101-112.
- Rothbard, N. P. (2001). Enhancing or depleting? The dynamics of engagement in work and family roles. *Administrative Science Quarterly*, 46, 655-684.
- Rotondo, D. M., Carlson, D. S., & Kincaid, J. F. (2003). Coping with Multiple dimensions of work-family conflict. *Personnel Review*, 32, 275-296.
- Sieber, S. D. (1974). Towards a theory of role accumulation. *American Sociological Review*, 39, 567 - 578.
- Stephens, M. A. P., Franks, M. M., & Atienza, A. A. (1997). Where two roles

intersect: Spillover between parent care and employment. *Psychology and Aging*, 12, 30-37.

Sumer, H. C., & Knight, P. A. (2001). How do people with different attachment styles balance work and family? A personality perspective on work-family linkage. *Journal of Applied Psychology*, 86, 653-663.

Super, D. E. (1990). *Career choice and development*. San Francisco: Jossey-Bass.

Wagena, E. & Geurts, S. (2000). SWING: the development and validation of Survey Work-home interaction Nijmegen. *Behaviour and Health*, 28, 138-158.

Wayne, J. H., Musisca, N., & Fleeson, W. (2004). Considering the role of personality in the work-family experience: Relationships of the big five to work-family conflict and facilitation. *Journal of Vocational Behavior*, 64, 108-130.

University of Cape Town