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WORK-FAMILY CONFLICT AND ENRICHMENT:

DIRECT AND INDIRECT EFFECTS TOWARDS MENTAL HEALTH OUTCOMES

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ABSTRACT

There have been calls in the work-family literature for greater attention to moderation effects. Further, the established work-family conflict approach has expanded to include work-family enrichment. Consequently, the present study explores the interaction effects between work and family conflict and enrichment towards mental health outcomes which are explored throughout three different studies.

Study one uses a sample of 314 random New Zealand employees across a diverse range of industries and sectors to explore the work-family interface towards outcomes of emotional exhaustion, depression, cynicism and anxiety. Study two uses a sample of 146 random New Zealand business owners and entrepreneurs to explore the work-family interface towards the well-being of entrepreneurs, and specifically mental health outcomes of anxiety, emotional exhaustion and stress are investigated. Study three uses a sample of 266 New Zealand dual-earning couples to explore the work-family interface as predictors of job burnout. Specifically two dimensions of job burnout are investigated - emotional exhaustion and cynicism. Furthermore, the study explores the cross-over effect where males and females conflict and enrichment crosses over to the other's job burnout.

Using these samples we find strong support for work-family and family-work conflict positively influencing mental health, and work-family and family-work enrichment negatively influencing mental health outcomes. In addition, a number of consistent interaction effects were found especially between family-work conflict and family-work enrichment. Overall, enrichment was found to consistently buffer some dimension of work-family conflict, indicating that employees who are enriched may be able to alleviate the negative influences of their work and family roles. The implications for research and organizations are discussed, as well as future directions for the work-family field.

Keywords: work-family, conflict, enrichment, mental health, interactions.

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CHAPTER 1

INTRODUCTION

In recent years, the interaction between the work and non-work interface has become increasingly important to employees and employers alike as both groups attempt to discover ways to better manage the relationship between work, life, and family roles. The discourses of work-family conflict (WFC) and work-family enrichment (WFE) seek to explain fundamental tensions between demands placed on an individuals' capacity to coordinate obligations of work and non-work roles (Hoge, 2006). The growing importance of a sound work-family balance has been spurred by changes in the composition of the workforce, demographic shifts, and technological advancement (Bardoel, De Cieri & Santos, 2008; Greenhaus & Powell, 2006). Factors such as transformations of traditional gender roles (Hoge, 2006; Greenhaus & Powell, 2006); increased participation of women in the workforce (Bardoel et al., 2008); an increasing number of dual career couples (Bardoel et al., 2008; Hoge, 2006); the commonplace of single parent families (Kossek, Noe & Demarr, 1999; Haar, 2004); the increase of flexible work options; the increase of jobs in the service sector; growth in part-time work; and aging of the population (Bardoel, Morgan & Santos, 2007; Burgess & Connell, 2005; Haar, 2004) have all evoked both practitioner and academic interest in the work-family interface (Haar, 2006). Against the background of an evolving socio-political arena and shifts in organisation perspective, research has sought to better understand the complex relationship between work and family demands.

From the evolution of the socio-political arena it becomes clear that the work-family interface is an important issue for organizations to manage as it is an area of critical importance for employees and employers alike. Effective staff management is not only a key challenge facing managers today, but it can also double as a strategic tool for improving the quality of an organizations' workforce. Moreover, particularly in tough economic times and in the presence of the current

financial crisis, employers can use sound organizational practice (such as work-family practices) to encourage staff retention and entice top employees. Furthermore, employees are also highlighting generational differences as generation Y places more importance on positive work life-balance than their generation X counterparts. In popular literature, individuals born between 1963 and 1978 are said to belong to the Generation X cohort and workers born between 1977 and 1988 are said to belong to the Generation Y cohort (Tulgan & Martin, 2001). While a uniform definition does not exist as some theorists may argue to define generational groups by slightly different time based periods, the differences are nominal (Jorgensen, 2003). Based on this evolving trend the growing importance of policy to manage the complex relationship between conflicting demands of work and family roles is becoming increasingly evident. As such, it is of growing importance that organizations not only recognise the legitimacy of these issues but work to hone their responsiveness to the work-family interface.

Legitimacy of Work-Family Issues

The idea of work-family responsiveness as defined by Bardoel (2003) encompasses two key aspects: (1) formal policies and practices that an organization offers which are designed to help employees to balance their work and family lives, and (2) an informal work environment that is accommodating of the work-family needs of its employees. This view supports the idea that sound work-family practices necessitate a mix of both formal policy and a workplace that accommodates and supports the use of these policies. This is to say that if work-family issues are perceived as illegitimate within an organization, then an attitude of deception and/or resentment may be cultured in employees (Cramer & Pearce, 1990). For example, if a parent has a sick child and is consequently late for work as they try to find a caregiver, the employee may feel the need to fabricate a story about car trouble if they feel their manager does not recognise the legitimacy of the need of their sick child. In this situation, attitudes of top and middle management play a pivotal role in creating a culture of acceptance in recognising the legitimacy of family concerns. If work-family issues can be established as legitimate and employees are able to talk about these issues and concerns, balancing role demands of the work and family domain becomes easier.

In this sense, open communication is a constructive strategy for dealing with the reality of work and family issues for employees (Cramer & Pearce, 1990).

The Human Resource (HR) practitioner literature has largely centred on ways in which firms can effectively manage the situation through the creation of more flexible policies and procedures (Stoddard & Madsen, 2007). Such policies have been developed from the assumption that flexibility is an effective means of dealing with stress associated with WFC. Flexibility in the work domain empowers an individual to allocate more time to obligations of the family role, which thereby enhances performance in the family role (Greenhaus & Powell, 2006). Furthermore, individuals with greater flexibility in their family role are required to make fewer adjustments in their work schedule to accommodate family demands. In addition to this, flexibility to work on a project away from the office may allow a person greater freedom to make decisions to complete tasks at a time which fits in with demands of other roles (Stoddard & Madsen, 2007). Technological advancements have also increased organizational capacity to offer more flexible work options such as telecommuting, and developments in internet technology allows some projects to be taken virtually anywhere where there is a functional computer system for completion.

Do Work-Family Policies Provide a Competitive Advantage?

Most notably, work-family issues are of great importance when considering their potential competitive implications. Organizational policies and support programs to help employees deal with WFC such as childcare, eldercare, flexi-time, job-sharing, parental and maternity leave were once considered to be primarily employee benefits. While the idea of policies to ease the strain of juggling multiple roles between work and family domains has been called progressive and innovative by commentators and practitioners, they have rarely been considered strategic, or as a part of organizational best practice (Pfeffer, 1994; Perry-Smith & Blum, 2000). However a move to conceptualise such HR strategies as mutually beneficial and a source of competitive advantage for companies has re-branded work-family policies as key tools for corporate productivity (Perry-Smith & Blum, 2000). Further to this, organizations that appreciate the changing demographics of

the labour pool, which is increasingly dominated by two career families, single parents and those with dependent elders (Mason, 1993), are pioneering the drive for increased productivity, and employee recruitment and retention advantages of sound work-family policies. Research has shown that in addition to increases in salary or wages, employees desire flexibility and understanding from their employer (Cramer & Pearce, 1990; Bardoel, 2003). Mangers and strategists alike have come to the realisation that a good employee is an important resource and as such, not only attracting, but retaining a skilled workforce is a fundamental part of good business.

A bundle approach to work-family policies captures a broader, higher-level effect than that which can be captured by focusing on individual policies which is particularly appropriate for investigating firm-level effects (Becker & Gerhart, 1996; Perry-Smith & Blum, 2000). A work-family bundle is defined by Perry-Smith and Blum (2000) as a group of complementary, highly related, and in some cases overlapping HR policies that are designed to help employees manage non-work roles. Similarly, Pfeffer's (1994) symbolic action perspective denotes that actions that symbolize organizational concern or special treatment for employees, regardless of their actual content, can provide intangible benefits to the organization. This concept supports the idea that organizational actions, such as offering bundles of work-family policies, communicate an organizational attitude to employees that enhances their perception of the values and philosophies of the company (Perry-Smith & Blum, 2000). The symbolic action perspective works on the assumption that because work-family policies provide benefits that are not always mandatory, employees may feel they are receiving preferential treatment. This in turn concurrently symbolises that the company cares for employees, and represents the organization's value system (Grover & Crooker, 1995; Perry-Smith & Blum, 2000).

The outcomes of such policies are that employees are likely to respond favourably by contributing extra effort or developing concern for overall organizational performance (Pfeffer, 1994; Perry-Smith & Blum, 2000). Inspiring employee attitudes in this way through work-family policies is in turn likely to contribute to

increased organizational performance which has competitive implications for any firm including for-profit and not-for-profit (Ostroff, 1992; Perry-Smith & Blum, 2000).

RESEARCH OVERVIEW

This study focuses on the work-family interface. Specifically, it looks at work-family and family-work conflict and enrichment towards a number of outcomes which are explored throughout three different studies. These are outlined below:

Study One: Uses a sample of 314 random New Zealand employees across a diverse range of industries and sectors to investigate the interaction effects between work and family conflict and enrichment towards mental health outcomes. Specifically outcomes of emotional exhaustion, depression, cynicism and anxiety are explored with relevance to conflict and enrichment at the work-family interface.

Study Two: Uses a sample of 146 random New Zealand business owners and entrepreneurs to explore work-family conflict and work-family enrichment towards the well-being of entrepreneurs. Specifically mental health outcomes of anxiety, emotional exhaustions and stress are investigated. Given distinctions between employees and business owners/entrepreneurs, this sample is separated and distinct from Study One analysis.

Study Three: Uses a sample of 266 dual-earning couples and looks at work-family and family-work conflict and work-family and family-work enrichment as predictors of job burnout. Specifically two dimensions of job burnout are investigated - emotional exhaustion and cynicism. Furthermore, the study explores the cross-over effect where males and females conflict and enrichment crosses over to the other's job burnout. Given this data tests potential cross-over effects, it is distinct from both Study's One and Two and is thus analyzed separately.

The benefits of investigating multiple yet diverse populations are numerous in increasing our understanding of work and family domains, the interactions within and between them, which should improve the generalizability of findings. The populations have been separated and examined separately because each group is distinct with individual characteristics. As such the resulting findings provide testament of the comparative experiences of conflict and enrichment at the work-family interface, and how these experiences differ for employees, entrepreneurs and couples.

CHAPTER 2

WORK AND FAMILY CONFLICT

In the most general sense, WFC is a form of inter-role conflict whereby role pressures from the work and family domains are mutually incompatible; and participation in one role is made more difficult by participation in the other role (Kahn, Wolfe, Quinn, Snoek & Rosenthal, 1964). A further definition is offered by Boyar and Mosley (2007) which describes WFC as "the aggregate view of an individual's perceptions of the interference between work and family domains" (p.268), which may result in role overload (Voydanoff, 2002). This overload is likely to create conflict as competing demands from work and family roles produce incompatible pressure (Kopelman, Greenhaus, & Connolly, 1983; Greenhaus & Beutell, 1985). This is conducive of the foundations of scarcity theory which is itself an expected outcome when considering the ceiling of an individual's time and energy (Wayne, Musisca, & Fleeson, 2004). Of most importance to this study, WFC influences the development of job attitudes, judgments regarding overall job satisfaction, and decisions about whether to leave an organization (Boles et al., 2003). A more concise definition of WFC is offered by Greenhaus and Beutell (1985) who suggested that WFC exists when:

> (a) Time devoted to the requirements of one role makes it difficult to fulfil requirements of another; (b) strain from participation in one role makes it difficult to fulfil requirements of another; and (c) specific behaviours required by one role make it difficult to fulfil the requirements of another (p.76).

This is to say that WFC is characterised by three different types of conflict which as outlined above: time based conflict, strain based conflict and behaviour based conflict. These three types of stressors implicate an individual in terms of the capacity they have to adequately function in their roles within the work, life and family domains. Authors have suggested that the competing requirements of

different roles can be a source of conflict when demands from work roles cross over into the family domain, or when demands from family roles cross into the work domain (Greenhaus & Beutell, 1985; Hoge, 2008; Greenhaus & Powell, 2006; Frone, Russel & Cooper, 1997). In other words, work-family conflict exists where job requirements interfere with family-related responsibilities; and family-work conflict exists when family related obligations interfere with role performance in the workplace (MacEwen & Barling, 1994). Some of the common impacts of WFC are increased levels of stress, decreased performance at home and work (Haar, 2004), decreased life and work satisfaction (Rontondo, 2002), depression, anxiety, poor physical health, emotional exhaustion, cynicism, heavy alcohol use, and hypertension status (Frone et al., 1997).

The concept of time based conflict denotes that multiple roles may compete for a person's time, and time spent on activities within one role generally cannot be devoted to activities within another role (Greenhaus & Beutell, 1985). More specifically, time based conflict is described by two distinct categories where firstly, time pressures of one role make it physically impossible to comply with expectations of another role; and secondly, pressure may produce a preoccupation with one role even when one is attempting to meet demands of another role (Greenhaus & Beutell, 1985). The idea of time conflict is central to many employees who attempt to juggle commitments between work and family. It is important to note that it is an unrealistic expectation that employees are always focused on what they are doing immediately; a more realistic view would note the interdependence of what occupies a person and earns them a living, as individuals have conflicting pressure from different roles (Frone et al., 1997). Authors have linked the number of hours worked per week (Burke, Weir & Duwors, 1980; Keith & Schafer, 1980; Pleck, Staines & Lang, 1980) and the amount and frequency overtime worked (Greenhaus & Beutell, 1985) with WFC. This can be attributed to the fact that numbers of hours committed to the workplace are in most cases hours which cannot be devoted to family responsibilities, and therefore as work commitments escalate time to participate in family duties decreases which can act as a source of conflict. The reverse is also true of family to work conflict. Time-based conflict may include direct demands on an individual when enacting

two roles at the same time is necessitated (Kossek, Noe & DeMarr, 1999), for example, a parent may need to take a personal call at work from a school if a child is sick or in need of disciplinary action. In sum, work schedules, work orientation, marriage, children, and spouse employment patterns can all generate time-based conflict when pressure from these roles are incompatible with the demands of other role domains (Greenhaus & Beutell, 1985).

Strain-based conflict exists where strain from the demands of one role intrude into and interfere with participation in another role (Greenhaus & Beutell, 1985; Rontondo, Carlson & Kincaid, 2002). This type of conflict can be indirect by nature (Kossek et al., 1999) where for example, an individual is suffering psychological stress from worry about a sick child while at work. Strain-based conflict exists where emotional or physical exhaustion from the work (or family) role inhibits an individuals' ability to effectively function or fulfil role demands at home (or in the workplace) (Rontondo et al., 2002). Further to this, there is considerable evidence that stress from work can produce strain symptoms such as tension, anxiety, fatigue, depression, apathy and irritability (Hoge, 2006). Stress or strain from one role which impacts on performance in other role is also known as negative emotional spillover (Greenhaus & Beutell, 1985). This concept denotes that certain stressful events at work may produce tension, frustration, worry, or fatigue which may hinder a person's ability to engage in a satisfying non-work life. For example, an employee who is concerned about an approaching deadline may be detached or withdrawn from family activities as they are heavily mentally preoccupied with stress or worry about completing work tasks on time. Similar to time-based conflict, strain-based conflict has also been linked to extensive travel time, long and inflexible work hours, and the amount and frequency of overtime worked (Greenhaus & Beutell, 1985).

Behaviour-based conflict exists when explicit patterns of in-role behaviour may be incompatible with behavioural expectations of another role (Rontondo et al., 2002). If a person is unable to alter behaviour to conform to expectations of different roles, they are likely to experience conflict between roles (Greenhaus & Beutell, 1985). Often participation in different roles necessitates certain role-

specific behaviours. The inability to adjust emotions and suitable behaviours between roles, particularly where role-specific behaviours are contradictory between work and family domains, may lead to behaviour-based conflict. For example, how would a police officer deal with underage drinking or illegal substance abuse from their own child? A weak behaviour-based conflict may suggest that a parent would act with compassion and deal with the situation at home, whereas a strong behaviour-based conflict may see the parent acting as an officer of the law and collaborating with outside parties to deal with the situation. In any form (time, strain or behavioural), conflict can originate in one domain and spill over into the other, which may result in stress for the individual concerned.

Auxiliary to time, strain and behaviour based conflict is the idea of role conflict theory. The conceptual underpinnings of this theoretical perspective advocates that in addition to stress and time constraints, experiences in either the work or family role can also lead to dysfunctional behaviour in other roles (Cooke & Rousseau, 1984; Greenhaus & Beutell, 1985). Moreover, conflict that arises from participation in multiple roles can result in role overload, inter-role conflict, and symptoms of strain (Cooke & Rousseau, 1984) which is likely to decrease the individual's perceived quality of life (Allen, Herst, Bruck, & Sutton, 2000; Frone, 2003). Most notably however, role overload (when competing demands on a person's time and energy become too great for the individual to appropriately manage), can arise as a result of conflicting expectations or if timeliness of tasks are incompatible within and between roles (Voydanoff, 2002) thus influencing the individuals performance in these roles. In support of this assertion the scarcity perspective (Goode, 1960) was conceived to further explain the implications of inter-role conflict (Haar & Bardoel, 2008). The foundation of the scarcity perspective stems from the assumption that individuals have a finite measure of psychological and physiological resources on which to draw upon, and as such competing demands of multiple roles often results in a tug-of-war situation where participation in one role is generally considered to be at the expense of the other role (Wayne et al., 2004). To acknowledge that people have fixed resources recognises that physical and psychological capital invested in one role cannot be simultaneously invested in another role (Bielby & Bielby, 1989). As a result, the

strain inflicted by the direct incompatibility of participation in multiple roles can severely impair an individual's performance in one or both roles (Greenhaus & Beutell, 1985; Edwards & Rothbard, 2000). This advance has brought increasing interest in the scarcity perspective to further explain phenomenon of work-family interactions (Boyar & Mosley Jr., 2007).

While role conflict theory and by extension scarcity perspective describe some aspect of the work-family interface, the place of the gender role perspective is also elemental in building understanding of interaction between the work and family domains as differentiated by gender. It has been established that female and male experiences of role conflict and role ambiguity are different (Boles, Wood, & Johnson, 2003; Haar & Bardoel, 2008). These differences have been attributed in part to contrasting role perceptions of male and female employees (Boles et al., 2003), and society's historical perceptions of traditional male and female roles (Eagly, 1987). Theorists have suggested that women are likely to place more importance on family responsibilities as this role is likely to be more strongly linked to their social identity than men (Bem, 1993; Gutek, Searle, & Klepa, 1991). The traditional place of the male as head of the household and primary income earner creates a social status whereby it is acceptable by historical societal standards if men place priority on vocational duties. As such, males are not as likely to feel a threat to their social identity if their work interferes with their family responsibilities (Aryee & Luk, 1996; Grandey, Cordeiro, & Crouter, 2005). Moreover, the role of primary caregiver is often viewed by traditional societal standards as a maternal obligation, and therefore in line with this vein of thought women are likely to prioritise family issues over their work than their male counterparts (Gilbert, 1992; Marsiglio, 1993; Boles et al., 2003).

While these definitive stereotypes are being slowly eroded over time through the blurring of gender role boundaries, instances of sex typing of jobs and traditional expectations of the roles of men and women in the family domain are contributing factors when considering gender role perspectives (Rothbard & Brett, 2000). Stemming from this understanding, females are likely to experience higher family-work conflict, while males are likely to experience higher levels of work-

family conflict. However, as mentioned above, in the face of the changing demographics of society (Bardoel, De Cieri & Santos, 2008; Greenhaus & Powell, 2006), such as the breakdown of the nuclear family (Kossek, Noe & Demarr, 1999; Hoge, 2006), the increased participation of women in the workforce (Bardoel et al., 2008), and the commonplace of dual career couples (Bardoel et al., 2008; Hoge, 2006) these traditional gender roles are changing (Hoge, 2006; Greenhaus & Powell, 2006).

Work-Family and Family-Work Conflict

From the literature above, it is evident that both family-work and work-family conflict are separate but distinctly related categories of inter-role conflict (Greenhaus & Beutell, 1985; Kahn, 1981). In sum, work-family conflict occurs when tasks in the work role inhibit the completion of tasks or task performance in the family domain; and family-work conflict exists where activities in the home domain inhibit performance or task completion at work. Further to this, it has been recognised that family-work conflict and work-family conflict are commonly experienced concurrently (O'Driscoll et al., 2004; Grandey et al., 2005). Contrary to this, an outdated perspective once deemed that stress in either the family or work domain was not caused by events in the other domain (Renshaw, 1975). However an exploration of the current literature has shown that this perspective has changed. Factors such as an evolving socio-political arena and the changing demographics of the labour pool are given due weight as characteristics influential to the re-conception of the increasing importance of sound management of the work-family interface. However, not all interaction between the work and family roles result in conflict, as participation in different roles may also provide a form of enrichment and this is now addressed.

CHAPTER 3

WORK AND FAMILY ENRICHMENT

While much of the work-family literature shows a preoccupation with conflict, more recently a paradigm shift has given rise to the concept of enrichment (Frone, 2003; Greenhaus & Parasuraman, 1999; Carlson, Kacmar, Wayne, & Grzywacz, 2006; Greenhaus & Powell, 2006). The concept of WFE is defined by Greenhaus and Powell (2006) as "the extent to which experiences in one role improve the quality of life in the other role" (p.72). This definition encompasses both work-family enrichment, which recognises that engaging in skills, behaviours and positive moods from the workplace can positively influence an employee's performance in their family role; and family-work enrichment, whereby positive moods and a sense of accomplishment from the family role may increase the confidence of employees who also maintain necessary coping strategies resulting in increased efficiency and work productivity (Wayne et al., 2004). Development of the concept of enrichment has been spurred by the deficiencies of conflict theory which fails to recognise the capacity of work and family domains to have positive and enriching interdependencies (Greenhaus & Parasuraman, 1999). Theorists have postulated that involvement in multiple roles can improve psychological and mental health, and have positive influences on relationships (Wayne, Randel & Stevens, 2006). Further to this, job satisfaction, job effort, and intention to stay with the organization have been linked to enrichment (Wayne et al., 2004).

Terms such as positive spillover (Grzywacz, 2000; Sumer & Knight, 2001; Voydanoff, 2001), enhancement (Greenhaus & Powell, 2006) and facilitation (Frone, 2003; Tompson & Werner, 1997; Wayne et al., 2004) are variable concepts encompassing the idea of enrichment, all of which have a focus on the positive interdependencies between the work and family domains. While some commentators have used these concepts interchangeably (Frone, 2003), others

have argued that these constructs are distinctive and unique as they encompass different aspects of enrichment in form and function (Carlson et al., 2006). Conversely, Wayne et al., (2004) suggested that the work-family literature lacks a complete definition of facilitation, and as such is deficient in its attempts to explain how and why enrichment occurs. It is evident that further research is necessitated to understand fully the relative overlap and disparity between these concepts to allow for precise comparison between studies.

Enrichment has been defined into two distinct categories which are *instrumental* and *affective* (Hanson, Colton & Hammer, 2003). These two forms of enrichment describe the positive effect of experiences in one role on experiences in another role (Greenhaus & Powell, 2006). Instrumental enrichment refers to a situation in which skills, abilities, and values from one role are applied effectively in another role. Affective enrichment, describes a situation where affect or emotion is carried over from one role to another (Hanson et al., 2003). The concept of the instrumental pathway signifies that employees recognise that participation in work and family roles has in turn presented them with greater opportunity for varied interaction and communication, and an enhanced aptitude to multi-task (Crouter, 1984; Kirchmeyer, 1993; Ruderman, Ohlott, Panzer, & King, 2002). Conversely, the affective pathway implies that, for example, an employee in a positive mood at work is likely to be encouraged to engage positively and patiently in the family domain (Rothbard, 2001).

The two concepts of instrumental and affective enrichment embrace the idea that experiences and outcomes in one role can be positively related to experiences and outcomes in another role, whereby work and family roles enrich each other (Greenhaus & Powell, 2006; Bass, Butler, Grzywacz & Linney, 2008). In addition to the idea of instrumental and affective enrichment, there are three processes by which individuals may experience positive outcomes as a result of participation in multiple roles. Namely, enrichment may occur as a result of additive effects, buffering, or a transfer of positive experiences between roles (Voydanoff, 2001).

Firstly, experiences in the work role and experiences in the family role can have additive effects on an individual's well-being (Voydanoff, 2001). This is found to be particularly true where work and family roles are of high quality (Bass et al., 2008). This is to say that satisfaction with work roles and satisfaction with family roles have been found to have additive effects on happiness, life satisfaction, and perceived quality of life (Rice, Frone & McFarlin, 1992; Greenhaus & Powell, 2006). This concept signifies that those who not only participate in, but are satisfied with their roles in both the work and family domains, experience greater well-being than individuals who participate in only one domain, or who are dissatisfied with one or more of their roles (Greenhaus & Powell, 2006). Evidence of this interdependency between roles is important as it explains the effect that positive experiences in one role can have on another role.

Similarly to this view is the idea of enhancement theory which can be likened in its approach to suggest that participating in multiple family and work roles can result in positive outcomes (Haar & Bardoel, 2008), such as involvement in family roles acting to reduce levels of stain (Cooke & Rousseau, 1984). Enhancement theory operates on the assumption that experiences from either the work or family domain can effectively stimulate skills, knowledge, and resources which can be utilised in the other role. This transfer of skills, knowledge and resources has been linked to greater life satisfaction (Frone, 2003; Greenhaus & Powell, 2006) as involvement in these roles is likely to provide valued outcomes (Greenhaus & Powell, 2006), with participation in multiple roles having beneficial effects for both individuals and families (Beutell & Wittig-Berman, 2008).

Secondly, authors have suggested that spillover between role experiences can act as buffers for conflict whereby individuals who accumulate roles may compensate for dissatisfaction or negative experiences in one role by seeking gratification from another role (Bass et al., 2008; Greenhaus & Powell, 2006). In addition, a positive association between stress from family roles and decreased well-being is found to be weaker for those with more satisfying and high quality work experiences (Barnett, Marshall & Sayer, 1992). This signifies that positive role experiences can insulate an individual to buffer the effects of dissatisfying

experiences in other roles. This type of enrichment allows individuals to compensate for experiences between roles, and to allow buffers from multiple roles to contribute to greater enrichment.

Types of buffers include family resources such as love and support, and universal resources such as money (Bass et al., 2008). While love is considered to be a highly specific resource as it only has exchange value for a small and exact group of people, concrete resources such as money may be particularly effective as a buffer as it can be used to address a wide range of issues including childcare and eldercare (Bass et al., 2008). For example, using money to pay for the care of dependent children or parents may alleviate stress on an individual as these responsibilities are catered for by paid help. Conversely to this, while love may be invaluable in encouraging self esteem, support and self efficacy, it has narrow value in that it may offer little support in solving a wider range of conflict that may arise from the work-family interface (Bass et al., 2008). In addition to this, Greenhaus and Powell (2006) have identified five types of resources which contribute to an individual's enrichment:

1) Skills and perspectives including interpersonal and multi-tasking skills;
2) Psychological and physical resources, such as increased self-esteem and optimism; 3) Social-capital resources, related to interpersonal relationships at home and at work; 4) Flexibility in the timing and rate at which role requirements can be achieved; and
5) Material resources, such as money and gifts.

Thirdly, experiences in one role can create positive experiences and outcomes in the other role (Greenhaus & Powell, 2006). More specifically enrichment in this form describes a transfer of positive experience between different roles (Bass et al., 2008). Further to this argument, authors have suggested that energy and resources accumulated in one role may be used in another role (Greenhaus & Powell, 2006; Barnett et al., 1992). Resources such as feedback and recommendations from third parties may be utilised in both a family and work capacity. Accumulated experiences from multiple roles may also affect an individual's personality, for example, patience learnt from a parenting role may be

passed on to a work role, or tolerance for ambiguity from a work role may benefit a person's capacity to deal with the unknown (Sieber, 1974), such as managing a teenaged child. Transferring of experiences between roles supports the notion that WFE, like WFC, is bi-directional (Bass et al., 2008; Sieber, 1974; Greenhaus & Powell, 2006; Barnett et al., 1992; Wayne et al., 2006). In this sense the concept of bi-directionality denotes that experiences in work and family domains can provide an individual with resources which improves performance in the other domain (Grzywacz & Marks, 2000; Wayne et al., 2004).

An alternate perspective on enrichment is expansion theory which draws its foundation from social exchange theory (Blau, 1964). Social exchange theory, much like Pfeffer's (1994) symbolic action perspective operates on the fundamental assumption that "when employees perceive that their organization provides something beneficial to them or their families, they are likely reciprocate by demonstrating attitudes and behaviours consistent with the perceived benefit they have received" (Wayne et al., 2006, p.451). Drawing on this perspective the expansionist approach represents the idea that participation in multiple roles gives an employee the required time and energy to perform effectively (Kirchmeyer, 1993; Marks, 1977), as they are committed to performing in these roles (Marks, 1977; Aryee & Luk, 1996). As such, the expansionist perspective lends itself to the assertion that the benefits of participating in multiple roles are deemed likely to outweigh the detriments (Greenhaus & Powell, 2006; Barnett & Baruch, 1985).

To summarise, work-family enrichment exists when experiences at work improve the quality of experiences in the family domain; and family-work enrichment exists when experiences in the family domain improve the quality of experiences in the work domain (Greenhaus & Powell, 2006). Theorists have recognised the importance of resource generation (Greenhaus & Parasuraman, 1999, and personality (Greenhaus & Powell, 2006*)* as moderating factors in the enrichment process. Participation in multiple roles can lead to conflict and enrichment, and as such this can effect psychological and physical health including mental health (Thomas & Ganster, 1995; Greenhaus & Beutell, 1985) and well-being (O'Driscoll, et al., 2004; Barnett & Hyde, 2001; Voydanoff, 2002; Menaghan,

1991) outcomes; as well as job (Beutell & Witig-Berman, 2008; Brief, 1998), family (Beutell & Witig-Berman, 2008), and life satisfaction (Judge, Boudreau, & Bretz Jr., 1994; Beutell & Witig-Berman, 2008).

More specifically, an individual's job satisfaction is the outcome of affective and cognitive evaluations about job experiences, which are the sum of a person's favourable or unfavourable feelings and attitude towards their vocation (Beutell & Witig-Berman, 2008; Brief, 1998). Job characteristics and the employees' general disposition toward their job are regarded as predictors of job satisfaction (Grandey et al., 2005). Alternately, family satisfaction is defined as the degree to which a person has positive feelings and attitudes toward their situation at home (Beutell & Witig-Berman, 2008). The interdependencies between family and job satisfaction have been stipulated with life satisfaction being viewed as a function of the two variables (Judge et al., 1994; Beutell & Witig-Berman, 2008). This is to say that individuals make an overall judgement about the quality of their lives, contingent on family and job satisfaction (among other factors). It has also been proposed that happiness, positive and negative affect and life satisfaction are considered to be a general measure of well-being (Diener, 1984; Veenhoven, 1991).

Conflict and Enrichment

It has been suggested that conflict and enrichment are distinctive and separate experiences (Grzywacz & Marks, 2000; Frone, 2003; Kirchmeyer, 1993; Wayne et al., 2004) which do not exist as a continuum of phenomena (Voydanoff, 2002). However, as the nature of this relationship is yet to be clearly defined, theorists continue to be engaged in conceptual debates (Powell & Greenhaus, 2006). In addition to this, there are three competing paradigms on work-family role interaction which are: (1) *spillover*, whereby attitudes and behaviours experienced in one role are carried over to other domains (Leiter & Dump, 1996), (2) *compensation*, in which these roles are thought to counterbalance each other (Greenglass & Burke, 1988), and (3) *segmentation*, where it is assumed individuals can compartmentalise the competing work and family demands which they face (Lambert, 1990). However, there is some level of collective agreement

among experts in the field that conflict and enrichment can lead to either role strain or role alleviation (Voydanoff, 2002). It is evident that further research is necessary to advance our understanding of topics in these fields.

CHAPTER 4

MENTAL HEALTH OUTCOMES

As outlined above conflict theory is a noteworthy concept which can lead to negative outcomes for individuals in the form of role stress and role strain, which in turn can impact on organizations in terms of employee turnover and decreased staff efficiency and effectiveness (Frone, 2003; Frye & Breaugh, 2004). Furthermore, adverse outcomes at the individual level can include decreased well-being (Beehr & McGrath, 1992; Cohen & Wills, 1985), burnout (Haar, 2006), satisfaction (Adams et al., 1996; Netemeyer et al., 1996; Greenhaus & Beutell, 1985; Gutek et al., 1991; Voydanoff, 2002); and psychological health including depression (Ramsey, 1995; Johnson & Indvik, 1997), cynicism (Watt & Piotrowski, 2008), emotional exhaustion (Kahn, 1978; Posig & Kickul, 2004), and anxiety (Baruch & Lambert, 2006; Kennerley, 1995). Theorists have offered the idea of self-regulation as an explanation for how these types of negative emotions resulting from engagement in one role may reduce engagement in another role (Rothbard, 2001). The process of self-regulation involves comparison between one's current and ideal state, and where an inconsistency is perceived cognitive and behavioural action is taken to remedy the discrepancy (Carver & Scheier, 1981). Cognitive and behavioural actions may include focusing attention on the self (Greenberg & Pyszczynski, 1986; Wood, Saltzberg, & Goldsamt, 1990) and exercising self-control (Rothbard, 2001).

Types of self-regulation have been argued to sap energy, a process which has been termed by psychologists as ego depletion (Baumeister, Bratslavsky, Muraven & Tice, 1998). Furthermore, it has also been argued that self-regulation in the form of self-focused attention and ego depletion may provide an explanation for why negative emotions from experiences in one role can reduce engagement in another role (Rothbard, 2001). Underpinning this argument is the idea that negative emotions like depression, dissatisfaction, cynicism and anxiety can be a sign of

inconsistent perceived notions of ideal and current states, which is part of the process of self-regulation through self-focused attention (Wood et al., 1990). This type of self-regulation is argued to reduce an individual's engagement in other roles as a person who is self-focused is likely to deliberate or cogitate on problems from a single role and become self absorbed (Wood et al., 1990; Nolen-Hoeksema, 1987) and are therefore less cognitively available to engage in other roles. For example, an employee who dwells on work issues at home may become so preoccupied that they are interpersonally inept to deal with family interactions. This type of behaviour is grounded in depletion perspective in that engagement in one role can lead to a negative emotional response to that role. Moreover, work-family research in this area has attempted to explain how role engagement can lead to a negative emotional response to stress associated with that role (Frone, Russell & Cooper, 1992). Negative emotional responses are also referred to as strain which can include depressive symptoms and negative affect (Greenhaus & Beutell, 1985). Depletion can be broken into two steps: (1) that depletion is experienced when roles are stressful and as a result create strain (Greenhaus & Beutell, 1985), and (2) when these stressful experiences elicit negative emotions which are then translated into the home environment (Rothbard, 2001), (the reverse is also true of family-work conflict).

Much like work-family conflict, the construct of work-family enrichment has also been linked to mental health and well-being. Furthermore, the quality of experiences in one or both roles will have an impact on the level of enrichment experienced by the individual (Rothbard, 2001). Research on role accumulation has suggested that engagement in multiple roles may result in an individual accumulating positive resources and gratifying experiences (Sieber, 1974; Marks, 1977) such as role privileges, status, and self esteem (Sieber, 1974; Rothbard, 2001). However, of most significance, research has also suggested that individuals who participate in multiple roles have an improved state of mental health which highlights the benefits of participation in multiple roles (Baruch & Barnett, 1986; Verbrugge, 1986). These findings are congruent with the enrichment perspective which outlines that participation in multiple roles may result in gratification, greater self-esteem, and elicit a positive emotional response to that role (Rothbard,

2001). In addition, research has also advocated that the overall quality of the role experience is a key determinant in establishing if participation in a role will result in enrichment or strain (Verbrugge, 1986).

The enrichment perspective has been used to explain the positive effects of engaging in one or more roles. As such, it encapsulates a renewed focus on the positive effects of multiple roles on functioning and well-being (Rothbard, 2001). The enrichment perspective suggests that "the quality of the role experience (i.e., a person's emotional response to a role) determines whether participation in a role enhances or detracts from functioning" (Rothbard, 2001, p.661). In terms of mental health outcomes, the idea here is that benefits associated with one role can enhance an individual's sense of self-worth which in turn can lead to a positive emotional response with that role (Baruch & Barnett, 1986). For example, findings from Kemper and Reichler (1976) showed that among males, high levels of job satisfaction translated into the home as they did not bring work issues into the family domain, and as such a positive frame of mind made them more receptive to family needs. Research such as this has indicated that an individual's emotional response and mental health is a crucial factor in influencing both interpersonal availability and psychological presence in another role (Kemper & Reichler, 1976; Piotrkowski, 1979).

The five mental-health outcomes addressed throughout this study are explored below, specifically: anxiety, emotional exhaustion, depression, cynicism and stress. These five aspects are important as they are a fundamental part of an individual's mental health and well-being. If a person suffers adversely from one or more of these emotional states, this can have serious consequences in the work and/or family domain. This is to say that the state of an individual's mental health is an important part of normal role function (Rothbard, 2001) for employees, couples and entrepreneurs.

Anxiety

Anxiety is a strong emotion which can guide conduct and govern self-defensive behaviours. The word itself is derived from Freudian discourse, the term "angst"

(Freud, 1936) denoting the behavioural and physiological elements of negative affect or emotion and physiological arousal (Baruch & Lambert, 2007). The underpinning relationship between these elements can be categorised as the appraisal of a situation (real or perceived), elicited responses, and the motivations surrounding it (Baruch & Lambert, 2007). From this we can see that anxiety is not a straightforward one-dimensional theory, but a state of being resulting from a complexity of behaviours (Hallam, 1992).

Lazarus and Folkman (1984) produced a heavily cited model of anxiety which depicts the process by which anxiety is influenced by interaction between the evaluation of external and internal processes. The fundamental assumption of this model is based on a system of learnt beliefs which determine whether an individual perceives potential stressors as a possible threat, or a benign experience (Baruch & Lambert, 2007). In addition to this, Obholzer (1994) categorised the individual's experience of anxiety into three distinct levels. The first of which describes task related anxiety; for example a doctor performing a complex and risky operation which could have a potentially fatal outcome. The second level is innately tied to personal history and experience. This level derives associated anxiety from past experience, for example an employee whom has largely negative experiences with authority figures may feel anxious in any situation which triggers emotion or feelings associated with a past event of this nature (James & Clark, 2002). The third level stems from a more primal resolve and includes ingrained survival behaviours (Klein, 1959) and basic human social needs such as peer acceptance and inclusion (James & Clark, 2002).

It is important to note that low and manageable levels of anxiety are a normal response to perceived stressors and as such cognitive recognition of this emotion triggers an appropriate coping mechanism (Baruch & Lambert, 2007). With appropriate coping behaviours, feelings of anxiety are kept at a creative and manageable level otherwise known as containment (James & Clark, 2002). However the interaction between the cognitive processes leading to anxiety, namely real or perceived appraisal of the situation and the elicited coping strategies, will establish the extent to which the individual is affected by feelings

of anxiety (Baruch & Lambert, 2007). If the coping behaviour is inadequate, or if feelings of anxiety are prolonged without check this can lead to exhaustion and the disturbance of normal processes which can affect an individual's ability to function and lead to more serious problems such as burnout (Baruch & Lambert, 2007).

In the workplace there are ample prospects for anxiety to take root as vocational duties such as decision making and many everyday tasks involves some risk of failure. Likewise the family domain also offers a risk of performance anxiety, parental angst and some risk of failure. Anxiety can have acute psychological repercussions which can include hypersensitivity and chronic worrying (Kennerley, 1995), as well as a decreased capacity for concentration, memory, perception, appetite, sexual and sleep function (Baruch & Lambert, 2007). This diverse range of behaviours which are implicated as a result of a person's anxiety can lead to physiological and psychological disruption in the family and work domain. This is to say that anxiety stemming from work-family and family-work conflict can reduce an individual's ability to adequately function in these roles. In effect, if left unresolved this can create more problems at the individual and organizational level.

Emotional Exhaustion

Theorists have argued that emotional exhaustion is one of the early and crucial elements of employee burnout (Maslach, 1978, 1982; Leiter & Maslach, 1988; Cordes & Dougherty, 1993). It is characterised by a feeling of lack of energy and depleted emotional resources (Posig & Kickul, 2004) which can in effect debilitate the state of an individual's mental health. Emotional exhaustion is highly responsive to work stressors (Leiter, 1991) and has been linked to work-family conflict (Haar, 2006). Work overload (Kahn, 1978; Posig & Kickul, 2004) and work-role expectations (Cooke & Rousseau, 1984) have been identified as two factors which are likely to contribute to emotional exhaustion. Work-role expectations are derived from colleagues and superiors expectations of in-role behaviour. Where these expectations are incompatible with time or psychological resources this is likely to drain a person's emotional capital. Maslach and

Goldberg (1998) offered congruent evidence that job demands and quantitative work overload are influential factors leading to emotional exhaustion. Quantitative work overload describes incompatible time pressures or more specifically, when the amount of work exceeds the amount of time available to complete it (Kahn, 1978).

Consequently, emotional exhaustion exists where an employee expending large amounts of time and emotional energy endeavouring to meet work-role expectations has deficient time and resources to do so. Furthermore, emotional exhaustion has been linked to decreased job satisfaction (Lee & Ashforth, 1996) and a decline in job performance and subsequently higher turnover (Wright & Cropanzano, 1998). Furthermore in the home environment, emotional exhaustion can lead to detached engagement with spouse or children, as well as a limited emotional capacity to function normally as is required by that role (Burke, 1998; Kinnunen & Mauno, 1998). It is evident that a feeling of lack of energy and deficient emotional resources can affect an individual's performance in the home and in the workplace.

Depression

Depression is one of the most common and widely experienced mental illnesses with an estimated 50% of all adults affected to some degree during their lifetime (Ramsey, 1995). Generally the term depression describes a general state of malaise, pessimism and/or despondence, and strong negative affect (Gray, 2008). It is characterised by a number of behaviours including a prolonged melancholy mood for an extended period of time (typically longer than two weeks), increase or decrease in appetite, sleep disturbances, fatigue, limited ability to think or concentrate, loss of pleasure in something usually enjoyed, recurrent suicidal thoughts, feelings of worthlessness and significant weight loss or gain (Braus, 1991; Shoor, 1994). In the workplace, depressive symptoms may manifest as a lack of enthusiasm, frequent complaining, reduced productivity, aggressive behaviour, decreased career interest, absenteeism (Gray, 2008), low morale, lack of co-operation, health complaints, or drug and alcohol abuse (Johnson & Indvik, 1997). Depression may also influence an employee's relationships with co-

workers, particularly where a person's job requires collaboration with others as these working relationships may become strained and more irritable (Johnson & Indvik, 1997). Most seriously however, depression can incapacitate an individual's will leaving them with feeling of helplessness and no motivation for even mundane daily tasks (Ramsey, 1995).

Causes of depression can be refined to external (exogenous) or internal (endogenous) origin. External causes are usually situational in nature as the source is outside the individual's sphere of influence or control. Internal causes are strongly tied to self-image and self-perception in that they surface from the way in which a person conceptualises themselves (Gray, 2008). For example, a divorce or termination of employment is a potential external factors which may impact an individual in such a way that they become depressed. Likewise, a failure in the home or family environment may redefine a person's image of themselves thus eliciting internal responses causing feelings of hopelessness, despair, inadequacy, isolation and worthlessness. Job pressure, conflicting and ambiguous demands, role overload, lack of job autonomy, job insecurity, hurried deadlines, and harassment have all been credited as factors liable to contribute to depression (Ramsey, 1995; Johnson & Indvik, 1997). Depression can permeate an employee's behaviour to affect their performance; however this does not affect their capability. This is to say, while depression can disable a person in terms of their immediate capacity to complete required tasks, it does not render them permanently incapable (Gray, 2008). Depression is highly individual by nature in that what triggers one person may not cause all people to feel depressed. This is suggestive that any approach to remedy the condition should take into account individual sensitivities and needs.

Cynicism

Research in the area of cynicism has yielded well established findings, specifically around the work in the Maslach Burnout Inventory (Maslach, Jackson, & Leiter, 1996). Despite this, theorists have yet to provide a uniform definition of the concept of cynicism and as such a consensus of the definition and measure of the construct is yet to be reached (Andersson & Bateman, 1997;

Wanous, Reichers, & Austin, 2000; Stanley, Meyer, & Topolnytsky, 2005; Qian & Daniels, 2008). Currently there are two competing paradigms on cynicism: (1) which divulges the concept as a reflection of a stable personality trait, and (2) depicts cynicism as an explicit construct focussed on society, vocations, institutions and organizational change (Qian & Daniels, 2008). The primary difference between the two formulations denotes the first as a personal attribution, and the second a situational attribution. It has also been argued that cynicism is more accurately described as a learned response as opposed to a predisposition of personality (Wanous et al., 2000). But for the purpose of this study we will focus on the latter situational attribution as this is aligned with the Maslach Burnout Inventory (Maslach et al., 1996).

In the workplace employee cynicism can manifest as "feelings of frustration and disillusionment as well as negative feelings toward and distrust of a person, group, ideology, social convention, or institution" (Andersson & Bateman, 1997, p.450). Another definition is offered by Dean, Brandes, and Dharwadkar, (1998) who describe employee cynicism as the product of (1) "a belief that the organization lacks integrity", (2) "negative affect towards the organization", and (3) "tendencies for disparaging and critical behaviour towards the company that are consistent with these beliefs and affect" (p. 345). In this respect, cynicism is considered as a passive reaction (Qian & Daniels, 2008) which is congruent with a definition based on situational attribution. Generally, cynicism in the workplace is deemed to be of a destructive nature to the organization (Andersson & Bateman, 1997). However some theorists challenge this notion and note the positive aspects of the construct. As such, some credit cynicism as a motivational factor (Qian & Daniels, 2008); and others argue that a cynical employee has a more realistic perspective on potential issues and challenges facing an organization (Watt & Piotrowski, 2008; Foy, 1985).

The literature shows a predominant adoption of psychological contract violation theory to explain the root cause of employee cynicism (Qian & Daniels, 2008; Wanous et al., 2000; Watt & Piotrowski, 2008). Breach of a psychological contract involves the cognitive recognition that an employer has not fulfilled one

or more of its perceived obligations (Morrison & Robinson, 1997). The breach or violation is therefore defined as a calculative identification of injustice (Pate, 2005). Research has identified several factors which have been linked with engendering cynicism in employees. These factors include; flawed organizational design, lack of faith in leadership, unrealistic or frustrated expectations and organizational change (Watt & Piotrowski, 2008; Bernerth, Armenakis, Field, & Walker, 2007). Likewise in the home environment cynicism can effect interactions with family members and shape a person's general demeanour and perspective. Cynicism has been linked with increased beliefs of unfairness, feelings of distrust, decreased commitment (to family or work responsibilities), decreased job/life satisfaction and feelings of alienation (Andersson & Bateman, 1997; Watt & Piotrowski, 2008). In addition to this a cynical employee is likely to be significantly less engaged at work, experience increased absenteeism and overall role performance (Wanous et al., 2000).

Stress

In its simplest form the term stress refers to a state of mental or emotional strain or suspense (Israel, Baker, Goldenhar, Heaney & Schurman, 1996). It manifests as a diverse range of phenomena which may be cognitive, emotional, physical or behavioral in nature. Symptoms of short term responses include poor judgment, a general negative outlook, excessive worrying, moodiness, irritability, agitation, inability to relax, feeling lonely or isolated, depressed, aches and pains, diarrhea or constipation, nausea, dizziness, chest pain, rapid heartbeat, eating too much or not enough, sleeping too much or not enough, withdrawing from others, procrastinating or neglecting responsibilities, using alcohol, cigarettes, or drugs to relax, and nervous habits (such as nail biting or pacing) (Israel et al., 1996). If this stress continues over time, primary concern is directed towards the outcomes of stress, known as strain which may have enduring health outcomes, such as cardiovascular disease, anxiety disorders, or alcoholism (Siegall, 2000). The cognitive model of stress (Lazarus & Folkman, 1984; Chang, 1998; Tomaka, Blascovich, Kibler, Ernst, 1997) denotes that a situation is not stressful and as such does not cause distress, unless it is perceived by the individual as threatening. For example, an employee may not be bothered by an approaching

company deadline if it is not directly or indirectly related to them, but where a threat (real or perceived) is evident this may cause distress for the employee. The well established constructs of role conflict and role ambiguity are measures which assess the degree to which an individual appraises role specific expectations. As such, both constructs can be a measure of stress for an individual where inconsistent, mutually exclusive, or inconsistent expectations are evident (Siegall, 2000).

Research has attempted to define sources of psychological work stress into distinct categories (Cooper, Cooper, & Eaken, 1988; Hedge, Erikson, & Rubin, 1992). These include firstly, factors intrinsic to the job or job tasks such as working conditions, shift work, risk and danger and new technology; physical surroundings including air quality, temperature (both heating and cooling), quality of and sufficient lighting, decoration and fittings, noise, and personal space. All of these factors are said to have an effect on an individual's overall mood and mental well-being (Manshor, Fontaine & Choy, 2003). Secondly, a person's role in the organization has also been identified as stress has been linked to role ambiguity, role conflict and low levels of leader support (Cooper et al., 1988). If an employee does not have clear expectations about work objectives, co-workers' expectations, or the scope and responsibilities of their job the resulting ambiguity can be a source of stress. Likewise competing role demands can cause stress if a worker perceives they have inadequate time or resources to complete all necessary tasks in a timely fashion. Further to this, low levels of leader support can also cause stress as active leadership can buffer the impact of stress on mental health (Caplan, 1972; Eaton, 1978). Thirdly, and related to this, relationships at work and more specifically interaction with peers, subordinates and management can have a considerable impact on the way an employee feels throughout, and at the end of the day. For example, an employee who is bullied at work may suffer considerable stress as a result of poor relationships with colleagues and co-workers.

A spectrum of issues related to career development such as lack of job security, fear of redundancy, obsolescence or retirement, and performance appraisals can

act as sources of potential stress. Furthermore, being overlooked for a promotion or frustration of reaching a career plateau can be sources of immense stress (Manshor et al., 2003). Moreover, it has been suggested that employees who suffer from career stress are likely to have increased dissatisfaction, job mobility, burnout, poor work performance, and have strained interpersonal relationships at work (Hedge et al., 1992). In addition to these factors, workplace stress can also be attributed to a multiplicity of causes including socio-economic (Braus, 1991) and family issues (Haar, 2006). The contribution of factors such as workload, relationships at work, role ambiguity, role conflict, leader support, and career stress can all hold a level of significance for employees. It is important to note that causes of stress are not always universal or directly transferable and what causes stress for one person may not be deemed stressful by another. Consequently, sources of stress are individualistic by nature and linked to a person's situational and cognitive appraisal.

Conflict and Enrichment towards Mental Health

The detrimental outcomes associated with conflict have been well established, such as decreased levels of family and job satisfaction (Carlson et al., 2006; Frone, 2003; Kossek & Ozeki, 1998), life satisfaction (Kossek & Ozeki, 1998; Adams et al., 1996; Allen et al., 2000; Beutell & Witting-Berman, 2008; Rice et al., 1992); higher levels of stress (Bedeian et al., 1988), and decreased marital satisfaction (Bedeian et al., 1988) have been argued to have detrimental effects on an individual's mental health (Boles et al., 2001). Research has shown that high levels of job involvement were related to high levels of job satisfaction and work-family conflict (Adams et al., 1996), and increased involvement in the family domain leads to heightened levels of emotional sustenance and positive life satisfaction (Adams et al., 1996). Further to this, factors such as job type and job demands can be linked to greater stress (Boles et al., 2001). However it is important to recognise that the quality of experiences in the workplace can be hinged on an employee's emotional and mental state. An occupation is no longer considered as just for monetary gain, but an avenue for personal fulfilment or frustration, and an inescapable part of our way of life (Gray, 2008). Work situations can become adversely stressful or cultivate feelings of accomplishment

and a sense of achievement, which is to say that various aspects of the work experience can be functional or dysfunctional depending on how they are dealt with (Gray, 2008).

Mental Health Outcomes and Implications for Employers

Poor employee mental health can have additional impacts on organizations, for example, through reduced productivity and increased staff absences. Anxiety (Baruch & Lambert, 2006; Kennerley, 1995), depression (Ramsey, 1995; Johnson & Indvik, 1997), emotional exhaustion (Kahn, 1978; Posig & Kickul, 2004; Haar, 2006), and cynicism (Watt & Piotrowski, 2008) are all common outcomes of both work-family and family-work conflict. Similarly, employee absenteeism as a result of poor employee mental health is an active phenomenon which is seen to be increasing within businesses of all sizes and forms (Duran-Whitney, 2004). Absenteeism is described by Markowich (2003) as term generally used to refer to unscheduled employee absences from the workplace, which includes both legitimate and illegitimate reasons for absence. Absenteeism in the workplace exists as a problem which compromises both organizational form, and function. The costs of absenteeism as identified by Tylczak (2000) include lost productivity of the absent employee, overtime for other employees to take on an increased workload, decreased overall productivity of those employees, any temporary help costs incurred, reimbursement of sick pay or benefits, possible loss of business or dissatisfied customers, and problems with employee morale and overall workplace cohesion. In the absence of sound work-family policy to help employees attenuate conflict at the work-family interface employees may suffer anxiety, depression and cynicism which in turn may lead to employee burnout and/or increased absences in the workplace (Duran-Whitney, 2004).

To date work-family research has had a significant focus on mental health outcomes in both conflict and enrichment literature. Consistent findings have established a strong link between conflict at the work-family interface and psychological distress (Allen, Herst, Bruck & Sutton, 2000; Major, Klein & Ehrnart, 2002; Frone, 2000); and likewise enrichment at the work-family interface has also been explored (Hanson, Hammer, & Colton, 2006; Stephens, Franks &

Atienza, 1997). It has been argued that differentiating levels of conflict and/or enrichment at the work-family interface can influence the state of a person's mental health, and furthermore, both work-family and family-work dimensions have been linked with mental health outcomes (Grzywacz, Almeida, & McDonald, 2002; Hanson, et al., 2006; Hammer, Cullen, Neal, Sinclair & Shafiro, 2005). As such, it is expected that conflict will be positively related to mental health outcomes, while enrichment will be negatively related. In alignment with current practice in the literature, both work-family and family-work dimensions will be tested. This leads to the following direct effect hypotheses for study 1.

Hypothesis 1: Higher work-family conflict will be positively related to (a) anxiety, (b) depression, (c) emotional exhaustion, and (d) cynicism.
Hypothesis 2: Higher family-work conflict will be positively related to (a) anxiety, (b) depression, (c) emotional exhaustion, and (d) cynicism.
Hypothesis 3: Higher work-family enrichment will be negatively related to (a) anxiety, (b) depression, (c) emotional exhaustion, and (d) cynicism.
Hypothesis 4: Higher family-work enrichment will be negatively related to (a) anxiety, (b) depression, (c) emotional exhaustion, and (d) cynicism.

Two-Way Interaction Effects

In addition to the direct effects of conflict and enrichment on mental health, the present study also tests for potential interaction effects. There have been calls in the work-family literature for greater complexity through testing interaction effects (Perry-Jenkins, Repetti & Crouter, 2000). Graves, Ohlott and Ruderman (2007) have criticized the work-family literature for failing to explore more non-work factors, such as family, and highlighted the importance of understanding roles a person has in their life outside of work. Furthermore, researchers have suggested the need to test effects from one domain into another (Bishop, Scott, Goldsby & Cropanzano, 2005), with greater tests of the influence of family to work and work to family crossovers. Similarly, Ford, Heinen and Langkamer (2007) noted the influence of non-work factors on job outcomes, such as family dimensions, might be greater than originally thought. This is reinforced by

findings that employees with the highest quality of life was amongst those more satisfied in family than work (Greenhaus, Collins & Shaw, 2003).

It has recently been suggested that enrichment may moderate the detrimental effects of conflict because the positive role experiences buffer conflict through allowing employees to compensate for the detrimental incidents from one role (e.g. work-family conflict) through enjoyment from another role (e.g. work-family enrichment) (Bass, Butler, Grzywacz & Linney, 2008; Greenhaus & Powell, 2006). The cross-over between roles is also supported by findings that reductions in employee well-being from family roles are weaker for those with higher work experiences (Barnett, Marshall & Sayer, 1992). Consequently, enrichment may protect an employee from the effects of conflict, in particular between opposite roles (i.e. work and family). The ability of enrichment to buffer stress may be through a number of mechanisms. Bass et al. (2008) suggested that buffers include family resources including love and money. At its most basic, financial resources provide multiple buffers through reducing childcare concerns, perhaps through purchasing high quality care of a nanny. Hence, knowing that a child will be cared for – even if work meetings go late – may alleviate the stressor of childcare for the employee. Furthermore, love from one's family may encourage the employee to keep working through challenging times at work, such that instead of looking for a new job (i.e. turnover intentions), they rely on family support through such times that they have gained greater control of their work situation. While Bass et al. (2008) found buffering effects they tested only one direction of conflict (work-family) and did not specifically test enrichment. Furthermore, authors have suggested the crossover effects may also include work-family enrichment to family-work conflict, which was not tested.

The interaction effects bi-directional dimensions of conflict have been tested, with Haar (2005) finding intensification effects from conflict from the other role, such that high levels of conflict from both work-family and family-work lead to greater reductions in commitment and satisfaction at the job. This approach indicates that conflict from one domain may intensify the influence of conflict from the other domain. Similarly, while we understand that enrichment can influence outcomes in opposite ways to conflict, there has been little exploration of work-family

enrichment with work-family conflict towards outcomes. However, recently there has been support for work-family enrichment buffering the influence of work-family conflict towards outcomes (Haar & Bardoel, 2009). There is also theoretical support for enrichment buffering conflict, with the positive interference theory. Sieber (1974) suggested that the advantages of role accumulation could outweigh any negative outcomes, resulting in net gratification. This author also noted that positive interference overpowering negative interference has been largely ignored, and the present study tests these effects to confirm assertions that enrichment may provide some remedy towards the influence of conflict. This leads to the following hypotheses for study 1.

Hypothesis 5: High work-family enrichment will buffer (moderate) the relationship between work-family conflict and (a) anxiety, (b) depression, (c) emotional exhaustion, and (d) cynicism.

Hypothesis 6: High work-family enrichment will buffer (moderate) the relationship between family-work conflict and (a) anxiety, (b) depression, (c) emotional exhaustion, and (d) cynicism.

Hypothesis 7: High family-work enrichment will buffer (moderate) the relationship between work-family conflict and (a) anxiety, (b) depression, (c) emotional exhaustion, and (d) cynicism.

Hypothesis 8: High family-work enrichment will buffer (moderate) the relationship between family-work conflict and (a) anxiety, (b) depression, (c) emotional exhaustion, and (d) cynicism.

CHAPTER 5

ENTREPRENEURS

To further understand the nature of the work-family interface it is important to investigate different populations to create a more holistic view of how such phenomena eventuate in different contexts. This allows the opportunity to draw parallels and dissimilarities in order to enhance knowledge of these areas. Stemming from this understanding, the value of examining entrepreneurs who have a work environment unique to many other occupations cannot be overlooked. Entrepreneurship describes the phenomena which stimulates change and drives innovation. The study of entrepreneurship is still in its infancy and, in consequence, those working in the field continue to be engaged in conceptual and methodological debates. This in itself has moved to bring entrepreneurship in theory and in practice forward as an establishing paradigm (Shook, Priem & Mcgee, 2003). However, the intention of this discourse is not to further the definitional debate but instead to examine conflict and enrichment and their links to occupational stress, mental health, depression and job satisfaction for entrepreneurs. Therefore, for the purpose of this study entrepreneurship will be defined in its broadest sense as a behaviour which includes "(1) initiative taking, (2) the organising and reorganising of social and economic mechanisms to turn resources and situations to practical account, (3) the acceptance or risk or failure" (Shapero & Sokol, 1982, p. 10).

The purpose of this portion of the study is to undertake an analytical review and synthesis of the existing literature pertaining to understanding the relationship between occupational stress of entrepreneurs and mental health issues. In particular a focus on entrepreneurship within SME (small to medium-sized enterprise) is established and this is of interest as it is directly relevant to the distinctive New Zealand business environment which is largely dominated by SME's. It is also notable that the early stages of new business creation

demonstrate elements of entrepreneurial activity (Carland, Hoy, Boulton & Carland, 1984.)

The Landscape for New Zealand Entrepreneurs

Entrepreneurial firms and small businesses represent a large and diverse proportion of the New Zealand economy. An estimated 350,000 SMEs make up more than 99% of all businesses and account for about 60% of employment (New Zealand Centre for SME Research, 2008). The SME sector broadly covers micro-enterprises (fewer than 5 staff), small enterprises (6-49) and medium enterprises (50-100). Small firms are not simply infantile large firms; they have a distinct and separate role to play in an economy and to the local and regional communities where they are based. Statistics New Zealand (2007) reported that 64% of enterprises have no employees, 87% of enterprises employ 5 or fewer people, 30% of all employees are employed in SMEs, and from 2001 to 2006, SMEs accounted for 59% of all new net jobs in the economy (Ministry of Economic Development, 2007).

Prospective entrepreneurs and individuals who set out to create new business ventures face many challenges and difficulties in the start up and operation of a new entity. The entrepreneurial SME owner must undertake the formidable process of developing an entrepreneurial idea - against daunting odds, from conception into fruition as a functional business. The rate of failure for aspiring entrepreneurs is intimidating high, with nearly 50% of all new ventures failing after four years and approximately 60% failing after six (Ministry of Economic Development, 2007). This high failure rate denotes that entrepreneurs must attempt to manage significant financial and emotional stress in creating and operating a new business (Duran-Whitney, 2004). Buttner (1992) identified lack of social support or help, heavy workload, job insecurity, and multiple work role demands as conditions with links to occupational stress. While there has been extensive research correlating business start up and high levels of stress (Buttner, 1992; Duran-Whitney, 2004; Buttner & Moore, 2007; Hisrich, 1990; Kets de Vries, 1985), there is an absence of literature specifically detailing entrepreneurs and small business owners experiences of stress and related mental health issues

(Boyd & Gumpert, 1983; Mack, 2000; Rahim, 1996), which subsequently, this paper will seek to address.

'Push' and 'Pull' Factors as Antecedents to Entrepreneurship

The inspiration and drivers for entrepreneurs to start a new business are a descriptive category of motivations central to the individual entrepreneur. Research by Kuratko, Hornsby and Naffziger (1997), Mandel (1996), and Hughes (2003), have attempted to narrow these motivations into categories of 'push' and 'pull' factors. Persuasive elements which contribute to making the prospect of starting a new business more appealing are referred to as 'pull' factors. These include desirable outcomes such as independence, being your own boss, prospect of financial reward and increased income, and the opportunity to exercise creativity and engage in new challenges. 'Push' factors are described by Duran-Whitney (2004) as "those where a person feels they have few employment options other than going it alone" (p. 23). Examples of these include redundancy, dismissal, restructuring or corporate downsizing and lack of work opportunities (Hughes, 2003). Brockhaus and Nord (1979) established a link between the Push−Pull hypothesis and job satisfaction. The study examined the role of dissatisfaction as a motivation for entrepreneurship. "There was substantial support for a modified 'push' scenario which breaks the entrepreneurial decision into two stages − the decision to leave a previous employer and the decision of what to do next" (p. 37). Furthermore, dissatisfaction as a 'push' for entrepreneurship included facets of vocational circumstance, an entrepreneur's personal circumstances outside of work, and as an outcome of moving into a new cycle or stage of life (Brockhaus & Nord, 1979).

The argument proposed by Wong, Lee and Leung (2006) is that individuals who are dissatisfied with their jobs are more likely to seek alternative mode of employment such as self-employment. In other words, poor job circumstances may push individuals to leave their paid employment to start their own businesses. On the other hand, personal abilities such as self-efficacy may pull individuals toward starting their own businesses in areas where they are confident and competent in. This is because self efficacy represents an individual's beliefs about

their capacity to perform, and as such it can influence how people think, motivate themselves, feel, and behave (Bandura, 1994). This type of complacency or unhappiness in a work situation may cause an individual to actively search the environment for entrepreneurial opportunity as remedy to the confines of their current occupational circumstance. Research has shown that entrepreneurs themselves credit motivational factors such as social support and networks (Mack & McGee, 2001), the desire for autonomy and independence (Burch, 1986), desire for challenge and meaningful work (Hughes, 2003), job satisfaction and opportunity for higher earning potential as personal drivers for entrepreneurship (Duran-Whitney, 2004).

Entrepreneurship and Occupational Stress

Hisrich (1990) asserted that the emotional and financial risks in entrepreneurship are very high as start up capital of many SMEs are often financed by personal savings, mortgaging the family house, or loans from family and friends. This suggests that entrepreneurs can have high levels of stress particularly during testing financial times. Entrepreneurs must balance competing demands on time, resources, finances, and family/friends as the professional domain often merges uninvited into their personal life (Buttner, 1992; Avey, Patera & West, 2006). In addition to this, Smith-Hunter, Kapp and Yonkers (2003) suggested that the experience of work is different for owners/entrepreneurs than non-owner employees across a number of conditions. In concurrence with this vein of research, Chay (1993) found that entrepreneurs and small business owners experienced elevated levels of job demand, longer working hours, and a reduced capacity for leisure activities compared with their non-entrepreneurial and non-owner peers. Further to this, Boyd and Gumpert's (1983) survey of 450 SME owners found that 50% took only two weeks holiday (or less) per year, 60% worked more than 50 hours per week, almost 67% worked on week nights, and 55% commonly worked Saturdays.

These findings by Boyd and Gumpert (1983) provide insight into the distinct and demanding lifestyle of the entrepreneur. Furthermore, we gain an understanding of the strength of motivation and the amount of constant energy required to keep a

business afloat in an unforgiving marketplace. Consequently for these entrepreneurs, the prospect of possible failure and loss lurks as a constant possibility (Duran-Whitney, 2004). This type of occupational stress has been correlated with greater behavioural and physiological risk factors among entrepreneurs, which has been linked to statistics showing less frequent and fewer visits from this group to physicians in comparison to their non-entrepreneurial and non-business owner counterparts. (Dolinsky & Caputo, 2003; Lewin, Epstein & Yuchtman-Yaar, 1991). The fear of disrupting regular business operations has been credited as a major factor for discouraging time away from work as this is viewed to be largely at the expense of lost business and lost profits (Duran-Whitney, 2004). This illustration of the entrepreneur has aimed to set the foundations to grasp understanding of the factors which differentiate entrepreneurs from their salaried peers. This in turn divulges the prospect of entrepreneurs as a vulnerable population who may be at greater risk of occupational stress (Duran-Whitney, 2004).

The definition of occupational stress is readily described by Duran-Whitney (2004) as "the dynamic process that occurs when an individual evaluates and perceives a real or imagined discrepancy between occupational demands and the resources with which they have to cope" (p.6). The work of French, Caplan and Harrison (1982) theorised stress as the interaction between the job (business) demands upon the employee, and the employee's demands on the job (business), from which, stress occurs as a result of an incompatible person-environment fit. Incompatibility exists where supplies (such as money, reward and satisfaction) and the demands of a job or business are conflicting with the goal, values, or abilities of an individual (Duran-Whitney, 2004). However of most prominence to the present study is the emerging area of research which details the connection between occupational stress and psychological problems such as depression (Wang & Patten, 2001), anxiety (French et al., 1975), and substance abuse (Frone, Russel & Barnes, 1996). In addition to this, academic investigations have also ventured to establish the relationship between stress and habits of smoking, fatigue, and workaholism (Porter, 1996).

These findings indicate potentially detrimental implications for entrepreneurs. If the demands and pressures on an entrepreneur exceed the expertise and competencies of this person, this discord can lead to work overload, role ambiguity, and conflicting role demands which is indicative of work-family conflict (Duran-Whitney, 2004). The consequent stress caused by this poor fit can lead to psychological harm and physiological strain for an entrepreneur. Additional research by Maslach (2003) focused on a compilation of symptoms such as depression and anxiety more commonly known as 'burnout'. Glass and McKnight (1996) added to this discussion to include components of emotional exhaustion, depersonalisation, and a sense of reduced personal accomplishment. Further to this, outcomes for these symptoms of occupational stress include substance abuse, aggression, suicide and violence (Maslach, 2003).

Karasek (1996) developed this further and presented the idea that another variable in this relationship is the relative control that the entrepreneur has to meet these demands. An entrepreneur's active control or perceived exercised control over their work situation can result in constructive stress for the entrepreneur. Selye (1991) described this type of positive stress as a "pleasant stress of fulfilment" (p.33) which is a form of enrichment, this could instigate a sense of challenge, creativity, satisfaction and increased productivity. In addition to this, passive job situations were correlated with low job satisfaction (Karasek &Theorell, 1990). This could have potential implications for entrepreneurs who have been shown to have higher job demands than non owners. Furthermore, job type and job demands are factors which have been linked to greater stress (Boles et al., 2001), which has implications for the discussion of entrepreneurs as the role of an entrepreneur can be high in demand. Such demands in extenuating circumstances can create stress which may lead to implications for mental health including emotional exhaustion, and cynicism (Glass & McKnight, 1996).

Success and Job Satisfaction

Entrepreneurship can be viewed as a way to escape the structure of formal employment and a means to realising a more satisfying and challenging way of life. Wong, Lee and Leung (2006) examined the relationship between success and

job satisfaction and found a modest positive association between job satisfaction and self employment. This was further iterated by the US National Survey of Families and Households (1992-1994) which showed that self employed individuals reported higher levels of job satisfaction. Consistent with these findings, a substantial part of this relationship was credited to indicatively high levels of self-efficacy and low levels of depression among entrepreneurs and the self-employed compared to others (Wong, Lee & Leung, 2006). Success was found to have a moderating effect on job satisfaction whereby success was influential (but not contingent) in increasing an entrepreneur's satisfaction for work (Wong, Lee & Leung, 2006). The notion that entrepreneurs and self employed develop greater satisfaction from their work is widely represented both in the popular press (Leonard, 2000; Jay, 1997; Willax, 1998 and in the academic literature (Scarborough & Zimmerer, 2000; Zimmerer & Scarborough, 1996; Willax, 1998). However Wong, Lee and Leung (2006) identified the quantity and quality of time spent in self employment; and differences between the newly self employed and self employment veterans as moderating variables for job satisfaction and as a direction for future research.

The lifestyle of the entrepreneurial SME owner and the level of uncertainty involved in running an entrepreneurial venture indicate that these individuals are likely to be faced with numerous internal and external challenges. The entrepreneur risks financial well-being, career opportunities, personal conflict as well as physical and mental health. These stressors have been linked with a higher risk of occupational stress and mental health outcomes (Buttner, 1992; Duran-Whitney, 2004; Buttner & Moore, 2007; Hisrich, 1990; Kets de Vries, 1985). While stress can be defined as inducing negative behaviours such as decreased productivity and lowered sense of well-being, it has also been shown that constructive stress may lead to a sense of challenge, satisfaction, creativity and increased productivity. While it may not be possible to drastically reduce the demands placed on entrepreneurs, it is possible to change their coping mechanisms in terms of increasing their social support and resource networks (Duran-Whitney, 2004). Additionally, the literature suggests that entrepreneurs report higher levels of job satisfaction than others but the degree of difference is

modest. Given entrepreneurs are likely to be a very distinct group, they are tested separately. Hypotheses tested for study 2 are listed below including direct and indirect effects. While the rationale behind the hypotheses remain unchanged from study 1 (direct and indirect effects), the mental health outcomes are slightly different to extend our understanding of the influence of the work-family interface towards mental health outcomes.

Hypothesis 9: Higher work-family conflict will be positively related to (a) anxiety, (b) emotional exhaustion, and (c) stress.
Hypothesis 10: Higher family-work conflict will be positively related to (a) anxiety, (b) emotional exhaustion, and (c) stress.
Hypothesis 11: Higher work-family enrichment will be negatively related to (a) anxiety, (b) emotional exhaustion, and (c) stress.
Hypothesis 12: Higher family-work enrichment will be negatively related to (a) anxiety, (b) emotional exhaustion, and (c) stress.

Two-Way Interaction Effects

Hypothesis 13: High work-family enrichment will buffer (moderate) the relationship between work-family conflict and (a) anxiety, (b) emotional exhaustion, and (c) stress.
Hypothesis 14: High work-family enrichment will buffer (moderate) the relationship between family-work conflict and (a) anxiety, (b) emotional exhaustion, and (c) stress.
Hypothesis 15: High family-work enrichment will buffer (moderate) the relationship between work-family conflict and (a) anxiety, (b) emotional exhaustion, and (c) stress.
Hypothesis 16: High family-work enrichment will buffer (moderate) the relationship between family-work conflict and (a) anxiety, (b) emotional exhaustion, and (c) stress.

CHAPTER 6

CROSSOVER EFFECT

An under researched avenue in the work-family literature relates to the way that the work-family interface not only effects employees but others, specifically the partner. Theorists have separated this phenomenon into two categories: (1) spillover and (2) crossover. Spillover occurs when stress in an individual's work/family role leads to stress in that same individual's family/work role (Boldger, DeLongis, Kessler & Wethington, 1989; Westman, 2001). In its most familiar application spillover is in the work-family conflict field (Bakker, Westman & van Emmerick, 2009a) which is descriptive of the stress created in an individual's workplace spilling over and creating stress in the family domain (the reverse is also true for family-work conflict). Comparatively however, crossover occurs when stress created for an individual in the work domain crosses over and creates stress for their spouse or partner in the family domain (Boldger et al., 1989). This foundation definition has been expanded to include the reciprocal occurrence of stress and strain in the family domain crossing over to cause stress for spouses in the workplace (Westman, 2001). The underpinnings of processes and outcomes relevant to crossover are based largely upon role conflict theory. In sum, a succinct comparison of the two has been provided by Westman (2001) who defines crossover as a "dyadic, inter-individual transmission of stress" (p. 718) and spillover as "intra-individual transmission of stress" (p. 718).

To date, research has had a central focus on how the work-family interface influences the individual in both family and work domains, but much less consideration has been given to how this stress affects immediate family and those with whom the individual frequently interacts with outside of work (Bakker et al., 2009a; Hammer, Allen & Grigsby, 1997; Westman, 2001). This widened lens of focus has been argued to help organizations to deal with the ever changing dynamics of the workforce through a greater capacity to understand and anticipate

evolution of work and family roles, along with organization support structures that help workers deal with these changes (Hammer et al., 1997). The importance of a deeper understanding of crossover theory is further reiterated by Westman (2001) through identifying its contribution to role theory whereby individuals may "redefine their roles at work and at home thereby altering their perceived role processes" (Westman, 2001, p. 747). Consequently, understanding the crossover effects that work-family interface has can be very important for employees and employers. Furthermore, there has been a distinct lack of crossover studies testing the potential of work-family enrichment to benefit the partner or spouse, which further provides avenues for research.

The relative newness of crossover theory is responsible for a formative understanding of the crossover process where there is substantial endorsement of its existence, but a limited body of evidence accounting for how or why it occurs (Hartel & Page, 2009). It has been suggested that crossover has strong links to emotions and as such the crossover process occurs via the unconscious contagion of another's emotions (Bakker et al., 2009a). This is indicative that those with an increased emotional sensitivity are more likely to experience crossover than those who are inept to emotional stimuli (Doherty, Orimoto, Singelis, Hatfield, & Hebb, 1995; Stiff, Dillard, Somera, Kim, & Sleight, 1988). This is to say that the relative interrelatedness (as opposed to independence) of a relationship and the attentiveness of the individual to their partner/spouse are influential factors in understanding the crossover process (Bakker et al., 2009a). Most notably this is to say that a spouse or significant other is more likely to experience crossover effects due to the nature of their relationship with the individual, which is suggestive of their relative interrelatedness and emotional attentiveness towards that person. Empathy has also been suggested as a contingent factor in the crossover process, however work by Bakker and Demerouti (2009) found only "partial support for the direct empathy explanation offered by Westman (2001)" (p.230). This study investigated both empathic concern and perspective taking and found support only for perspective taking and as such "crossover of work engagement from women to men was strongest when men were high in perspective taking (the spontaneous

tendency of a person to adopt the psychological perspective of other people)" (Bakker & Demerouti, 2009, p. 220).

Crossover and Gender

The role of gender in the crossover relationship has also been a source of discord throughout the literature. The exploration to map the role of gender in the crossover process was pioneered by Boldger et al (1989). Key findings from this study were (1) women (and to a lesser extent men) increased their workload at home to compensate for their spouse experiencing greater stress at work, (2) males were found to be more easily stressed by home factors, and (3) females were not found to take home stress to work as often as assumed by early literature. Findings by Hartel and Page (2009) proposed that females may be more susceptible to crossover than their male counterparts. Work by Prince, Manolis and Minetor (2007) also found agreement with this assertion as their research findings suggested that wives are likely to be more expressive and responsive than their husbands, and as such are better equipped to experience and relate to their husband's emotions. Conversely, many theorists have found relative non-support for the moderating effect of gender on the crossover process (Bakker, Demerouti & Burke, 2009; Westman & Etzion, 1995; Westman & Vinokur, 1998). Such dissension in the literature is evidence that further research is necessitated in order to divulge a more coherent understanding of the role of gender in the crossover process.

Crossover Research

Crossover research has thus far followed a similar trend to the evolution of conflict and enrichment theory, whereby the exploration of the negative effects of crossover (Jackson & Maslach, 1982; Boldger et al., 1989; Hammer, Allen & Grigsby, 1997) has largely preceded work on positive effects of crossover (Westman, 2001; Bakker & Demerouti, 2009; Demerouti, Bakker & Schaufeli, 2005; Prince et al, 2007; Westman, Etzion & Chen, 2009). Areas with significant findings include the crossover effects of work-family conflict, health, psychological well-being, exhaustion, distress, depression, anxiety, mood, and burnout. A comprehensive and highly cited study by Hammer et al. (1997)

concluded that work-family conflict had significant crossover effects for males and females, and most notably that a spouse or partner's work-family conflict explained more variance in work-family conflict than family involvement, perceived work flexibility and work salience. In addition to this, work-family conflict was also found to be greater for males when their female partners placed higher priority on the male partner's career than their own (Hammer et al., 1997; Bakker, Demerouti & Dollard, 2008; Westman & Etzion, 2005). Of most importance however, Bakker et al. (2008) substantiated postulations that an individual's work-family conflict crossed over to their partner's family-work conflict which contributed to partner exhaustion. This is a direct indication of crossover from one partner to the other. In this same vein of thought, research by Fagan and Press (2008) found that mothers reported higher levels of work-family conflict when their husband brought stress from work into the home and consequently mothers also reported increased work-family balance when their partner's job had more flexibility to increase his involvement in childcare.

A recent body of research has ascertained the negative effects of job stressors on the psychological health and general well-being of not only the individual but their spouse or partner (Crossfiled, Kinman & Jones, 2005). One of the first explorations of crossover processes established the crossover of job stressors (namely an increased likelihood to display anger, time away from home, and disengagement with family life) to wives who subsequently reported increased distress and dissatisfaction with their marital relationship (Jackson & Maslach, 1982). Following on from this, research has attempted to understand more about the crossover process. Theorists have determined crossover effects between wives exhaustion and their partner's subsequent perceived level of their own exhaustion (Demerouti et al., 2005); and between the transfer of psychological health (including fatigue and depressive symptoms) and work/home demands (workload and overtime) from husbands to wives (Dikkers, Geurts, Kinnunen, Kompier & Taris, 2007). This same study also provided evidence of time-based crossover whereby a husband's workload had consequent stress on the wife's workload at home. Strain-based crossover was also found and evidence of this existed specifically where a husband's psychological well-being was found to affect the

wife's workload at home (Dikkers et al., 2007). Additionally, empathy-based crossover was also evident where a husband's psychological well-being was found to have an effect on his wife's psychological well-being (Dikker et al., 2007).

There have been calls in the literature to widen the lens of measurement to move away from traditional gender roles and "homogenous and male-dominated professions" (Crossfield et al., 2005, p.213). Stemming from this paradigm is a body of work aiming to investigate the bi-directionality of the crossover process. This includes research by Crossfield et al., (2005) which examined crossover effects of work stressors, anxiety and depression as it occurs from males to females, and females to males. As a result of this differentiated approach the findings showed that a female's work stress, anxiety and depression crossed over to their male partner, but most interestingly the reciprocal was not found to be true for males. These findings combined with other studies which suggested one-directional crossover of stress or strain (Westman, Etzion & Danon, 2001; Jones & Fletcher, 1993), create discord in the literature which hosts a variety of work which suggests bidirectional crossover of stress and strain (Westman & Vinokur, 1998; Vinokur, Price, & Caplan, 1996; Westman & Etzion, 1995).

Furthermore, findings of the bi-directionality of crossover of strain have spanned both cross-sectional and longitudinal research design. Cross-sectional studies include work by Westman and Etzion (1995) who found evidence of bi-directional crossover of burnout from career officers to their partner's and vice versa, after controlling for both partners job stress. Jones and Fletcher (1993) found crossover effects of husband's job demands on wives' anxiety and depression after controlling for job stress of wives. Hammer et al. (1997) found bi-directional crossover of work-family conflict from husbands to wives and vice versa. Longitudinal studies by Barnett, Raudenbush, Brennan, Pleck and Marshall (1995), and Westman and Vinokur (1998), investigated crossover of distress and found bidirectional crossover from husbands to wives and from wives to husbands. Furthermore, there have been a collection of studies that have been unidirectional in nature and investigated crossover of stress and have found

evidence of husband's job stress on the well-being of their wives (Burke, Weir, & DuWors, 1980; Jackson & Maslach, 1982; Long & Voges, 1987; Rook, Dooley, & Catalano,1991). In these studies, wives were viewed as the passive recipients of stress and strain from their husbands, wives job and life stress were not controlled for, and some studies used mixed samples of working and non-working wives. In addition, Westman et al. (2001) suggested that the absence of a significant pathway from a wife's burnout to her husbands indicates that females may be more empathetic to the emotional states of their husband's than vice versa.

Further research has been conducted to explore crossover in areas including workplace aggression (Haines, Marchand & Harvey, 2006), mood (Song, Foo & Uy, 2008), financial problems and associated mental and physical health (Gorgievski-Duiresteijn, Giesen & Bakker, 2000), depressive symptoms and stressful life events (Westman & Vinokur, 1998), job loss and unemployment (Howe, Levi & Caplan, 2004), bidirectional crossover of anxiety of the unemployed partner/spouse (Westman, Etzion & Hororitz, 2004), burnout (Bakker, Demerouti & Schaufeli, 2005; Westman & Etzion, 1995), life satisfaction (Demerouti et al., 2005; Galambos & Silbereisen, 1989) marital/relationship satisfaction (Westman, 2005; Westman & Vinokur, 1998; Mauno & Kinnunen, 1999), and work engagement (Bakker & Demerouti, 2009; Westman, Etzion & Chen, 2009). Crossover research to date has spanned a diverse range of analysis with the intention of bringing the concept of crossover forward as an establishing paradigm. It is notable that further research is necessitated as concept of crossover is deficient of an overarching theory as much is still to be understood about the explanatory mechanisms in the crossover process (Hartel & Page, 2009). As with study 2, the following group are distinct because this part of the thesis tests crossover effects between partners. Hypotheses tested for study 3 are listed below including direct and crossover effects. While the rationale behind the hypotheses remain unchanged from study 1 (direct effects), the crossover effects are based on the literature above, and the mental health outcomes focus specifically on job burnout only (emotional exhaustion and cynicism) due to their common occurrence in the crossover literature.

Hypothesis 17: Higher work-family conflict will be positively related to (a) emotional exhaustion and (b) cynicism for males.

Hypothesis 18: Higher work-family conflict will be positively related to (a) emotional exhaustion and (b) cynicism for females.

Hypothesis 19: Higher family-work conflict will be positively related to ((a) emotional exhaustion and (b) cynicism for males.

Hypothesis 20: Higher family-work conflict will be positively related to (a) emotional exhaustion and (b) cynicism for females.

Hypothesis 21: Higher work-family enrichment will be negatively related to (a) emotional exhaustion and (b) cynicism for males.

Hypothesis 22: Higher work-family enrichment will be negatively related to (a) emotional exhaustion and (b) cynicism for females.

Hypothesis 23: Higher family-work enrichment will be negatively related to (a) emotional exhaustion and (b) cynicism for males.

Hypothesis 24: Higher family-work enrichment will be negatively related to (a) emotional exhaustion and (b) cynicism for females.

Crossover Effects

Hypothesis 25: Higher work-family and family-work conflict will be positively related to (a) emotional exhaustion and (b) cynicism from males to females.

Hypothesis 26: Higher work-family and family-work conflict will be positively related to (a) emotional exhaustion and (b) cynicism from females to males.

Hypothesis 27: Higher work-family and family-work enrichment will be negatively related to (a) emotional exhaustion and (b) cynicism from males to females.

Hypothesis 28: Higher work-family and family-work enrichment will be negatively related to (a) emotional exhaustion and (b) cynicism from females to males.

Hypothesis 29: Higher anxiety and emotional exhaustion will be positively related to (a) emotional exhaustion and (b) cynicism n from males to females.

Hypothesis 30: Higher anxiety and emotional exhaustion will be positively related to (a) emotional exhaustion and (b) cynicism from females to males.

CHAPTER 7

METHOD

Overall, three studies were conducted and analysed for this thesis. While all three studies test the influence of work-family conflict and work-family enrichment, they are presented separately because they involve distinct groups and different outcome variables. Study 1 is on a random group of New Zealand employees, Study 2 is on a random group of New Zealand business owners/entrepreneurs, and Study 3 is on a purposeful group of employees and their partners (to test for crossover effects). The methodologies for all three groups are presented below (separately).

Sample and Procedure (Study 1)

Data were collected from a local regional area of New Zealand. In total 500 surveys were distributed by a number of research assistants to a wide range of organizations. Given criticism of work-family research, and its focus on women, married and parental samples, research assistants were told to target organizations in a variety of settings (public, private, and not-for-profit), and to seek participation from a wide range of employees by gender, age, position, and status. Employees were approached in person, had the research outline explained, and were invited to participate in a short survey. In total, 314 responses were received. On average, the participants ranged in age from 17 to 61 years (average 31 years, SD=12 years), with 44% female, 43% married, 34% parents. Education varied widely, with 46% having a high school qualification, 19% having a technical college qualification, 30% a university qualification, and 5% with a postgraduate qualification. There was also a wide representation of ethnicity, with 69% Pakeha/European, 11% Maori, 14% Asian, 6% others. With regard to working hours, the average working week was 36.5 hours, with average overtime being 4 hours a week. Respondents came from all sectors: 60% private, 33% public, and 7% not-for-profit.

Sample and Procedure (Study 2)

Research assistants distributed questionnaires to local firms within a wide regional location in New Zealand, with the survey specifically targeting the business owner. A total of 200 surveys were physically distributed to business owners, and a total of 146 owner surveys were returned, yielding a response rate of 73%. The high response rate is likely due to research assistants talking directly to the business owner in person, and the survey being short in nature. Owner respondents averaged 41.4 years of age (SD=11.5 years), with 56% male, 87% married and 75% parents. Firm size ranged from one (owner/operator) to 400 employees, with an average of 17.6 employees (SD=53.5 employees). Business owner's education was well spread, with 35% having a high school qualification, 29% having a technical college qualification, 26% having a bachelor's degree and 9% having a postgraduate qualification. Overall, respondents worked 44.8 hours per week (SD=13.5 hours), with an average tenure in their current business of 12.5 years (SD=9.1 years). By industry sector, 4% were in agriculture, 6% manufacturing, 7% construction, 65% retail, 2% transport, 13% finance, and 3% community. The majority of respondents founded their company (57%), with 38% purchasing it and 5% inheriting it.

Sample and Procedure (Study 3)

Research assistants recruited participants from a random selection of firms from a wide regional location. Research assistants outlined the study and the requirements and were told to target a range of firms in different sectors and with of various sizes. Further, the work-family literature has been criticised with focusing on homogeneous and specific groups and workplaces (Kossek & Ozeki, 1998) such as females, executives, and parents (e.g. Judge et al. 1994; Greenhaus, Parasuraman & Collins, 2001). While the present study similarly focuses on couples to allow for the study of cross-over effects, to gain a fairer representation of work and non-work roles of employees and to apply these criticisms in a constructive manner, respondents were targeted from a wide variety of industries and professions, and both parents and non-parents were actively sought. A total of 500 surveys were distributed with a cover letter seeking participation in the study with an accompanying letter and survey to approximately 100 firms. Participants

were informed that the study also sought their partner's participation in their own survey and it was stressed that partners had to be living together in a relationship, although being married was not a requirement.

A total of 268 matched surveys were returned from both partners. After checking two surveys were found to be from same sex couples, which were removed due to lying outside the scope of the current crossover literature, which is dominated by male to female analysis. The final total of 266 means a response rate of 53.2% was achieved. Respondents ranged in age from 18 to 65 years, with an average age of 35.8 years (SD=12.8 years), with 21% union members, 85% married, 52% parents, and an average family size of 1.7 dependents. Respondents had an average contracted working week of 44.2 hours per work (SD= 12.1 hours/week), and had average tenure of 5.6 years (SD=7.0 years). Respondent education was well spread: 41% high school qualification, 19% technical college qualification, 29% bachelor's degree and 11% postgraduate qualification. By industry sector, 66% were in the private sector, 31% in the public sector and 3% in the not-for-profit sector.

Measures (Study 1)

Criterion Variables

Anxiety and Depression were measured using 12-items by Axtell, Wall, Stride, Pepper, Clegg, Gardne, and Bolden (2002), coded 1=never, 5=all the time. Respondents were presented with six adjectives for each dimension and were asked to describe how often these apply to them at work, with three of the items reverse coded. Sample items are "calm" (reverse coded) and "anxious" for anxiety and "enthusiastic" (reverse coded) and "depressed" for depression. A high score represents heightened anxiety or depression. Both measures have a strong internal reliability (anxiety $\alpha = .80$ and depression $\alpha = .82$).

Emotional Exhaustion and Cynicism were measured with 5-items each by Maslach and Jackson (1981), coded 1=never, 5=always. A sample item is "I feel used up at the end of the workday" (emotional exhaustion) and "I have become more cynical about whether my work contributes anything" (cynicism). Both

measures has a strong internal reliability (emotional exhaustion α = .87 and cynicism α = .90).

Predictor and Moderation Variables

To confirm the dimensions of work-family conflict and enrichment, 12 items evenly spread across work-family and family-work domains and conflict and enrichment dimensions were tested by structural equation modeling (SEM) using AMOS (Arbuckle, 1997). While studies using SEM typically offer a number of goodness-of-fit indexes, recently, Williams, Vandenberg and Edwards (2009) argued that some are meaningless (e.g. chi-square goodness-of-fit statistic) while others have become less useful (e.g. GFI). These authors suggested three goodness-of-fit indexes: the comparative fit index (CFI), the root-mean-square error of approximation (RMSEA), and the standardized root mean residual (SRMR) as superior ways to assess model fit. Overall, a good model is reflected in scores with CFI greater than 0.95, RMSEA below 0.08 and SRMR less than 0.10. The measurement model did fit the data well for a four-factor solution: CFI = .98, RMSEA = 0.05 (LO 90 = 0.04 and HI 90 = 0.07), and SRMR = 0.0476. The CFA was re-ran testing two alternative models: (1) a single work-family interface model with all items loaded onto one measure, which was a poor fit: CFI = .40, RMSEA = 0.27 (LO 90 = 0.25 and HI 90 = 0.28), and SRMR = 0.2118, and (2) a model with only one measure for conflict and one measure for enrichment was also a poor fit: CFI = .63, RMSEA = 0.21 (LO 90 = 0.20 and HI 90 = 0.22), and SRMR = 0.1372, Overall, the SEM supported the theoretical separation of work-family and family-work dimensions towards conflict and enrichment.

All responses were coded 1=strongly disagree, 5=strongly agree. WFC and FWC were measured with 3-items (each) from Carlson, Kacmar and Williams (2000) and WFE and FWE measured with 3-items (each) from Carlson, Kacmar, Wayne, and Grzywacz (2006). Sample items for conflict are: WFC (α = .79) “When I get home from work I am often too frazzled to participate in family activities/responsibilities” and FWC (α = .72) “Due to stress at home, I am often preoccupied with family matters at work”. Items for enrichment followed the stem “my involvement in my work/family…” and sample items are: WFE (α = .91)

"Puts me in a good mood and this helps me be a better family member" and FWE (α = .91) "Makes me cheerful and this helps me be a better worker". The correlations (Table 1) shows that the measures of work-family interfaces are distinct, with WFC significantly correlated with FWC (r= .53, p< .01) and WFE (r= -.19, p< .01). FWC is also significantly correlated with WFE (r= -.11, p< .05), while WFE is significantly correlated with FWE (r= .52, p< .01). There is no evidence of concept redundancy as none of the correlations are above .75 (Morrow, 1983).

Control Variables

A number of demographic variables typical of the literature were controlled for including; hours overtime worked due to their influence on work-family conflict (Major, Klein & Ehrhart, 2002; Kossek, Colquitt & Noe, 2001), Gender (1=female, 0=male), Marital Status (1=married/partnered, 0=single), Parental Status (1=parent, 0=non-parent), Hours Overtime (average hours overtime per week above regular contracted hours), and Job Tenure (in years).

Measures (Study 2)

Criterion Variables

Anxiety was measured using 6-items by Axtell et al. (2002), coded 1=never, 5=all the time. Respondents were presented with six adjectives for anxiety and were asked to describe how often these apply to them at work, with three of the items reverse coded. Sample items are "calm" (reverse coded) and "anxious", with a high score representing heightened anxiety. This measure had a strong internal reliability (α = .88).

Emotional Exhaustion was measured with 3-items each by Maslach and Jackson (1981), coded 1=never, 5=always. A sample item is "I feel used up at the end of the workday" (emotional exhaustion) and this measure had a strong internal reliability (α = .90).

Stress was measured with 4-items by Motowidlo, Packard, and Manning (1986), coded 1=strongly disagree, 5=strongly agree. Questions followed the stem "About

your work…" and a sample item is "My job is extremely stressful". This measure has a Cronbach's alpha of .71.

Predictor and Moderation Variables

To confirm the dimensions of work-family conflict and enrichment, 12 items evenly spread across work-family and family-work domains and conflict and enrichment dimensions were tested by structural equation modelling (SEM) using AMOS (Arbuckle, 1997). The measurement model did fit the data well for a four-factor solution: CFI = .98, RMSEA = 0.05 (LO 90 = 0.01 and HI 90 = 0.08), and SRMR = 0.0514. The CFA was re-run testing two alternative models: (1) a single work-family interface model with all items loaded onto one measure, which was a poor fit: CFI = .85, RMSEA = 0.14 (LO 90 = 0.12 and HI 90 = 0.16), and SRMR = 0.0811, and (2) a model with only one measure for conflict and one measure for enrichment was also a poor fit: CFI = .52, and RMSEA = 0.24 (LO 90 = 0.22 and HI 90 = 0.26) and SRMR = 0.2071. Overall, the SEM supported the theoretical separation of work-family and family-work towards conflict and enrichment.

All responses were coded 1=strongly disagree, 5=strongly agree. WFC and FWC were measured with 3-items (each) from Carlson, Kacmar and Williams (2000) and WFE and FWE measured with 3-items (each) from Carlson, Kacmar, Wayne, and Grzywacz (2006). Sample items for conflict are: WFC (alpha= .83) "When I get home from work I am often too frazzled to participate in family activities/responsibilities" and FWC (alpha= .75) "Due to stress at home, I am often preoccupied with family matters at work". Items for enrichment followed the stem "my involvement in my work/family…" and sample items are: WFE (alpha= .84) "Puts me in a good mood and this helps me be a better family member" and FWE (alpha= .90) "Makes me cheerful and this helps me be a better worker". The correlations (Table 1) shows that the measures of work-family interfaces are distinct, with WFC significantly correlated with FWC ($r = .57$, $p < .01$), WFE ($r = -.23$, $p < .01$) and FWE ($r = -.18$, $p < .05$). FWC is also significantly correlated with WFE ($r = -.18$, $p < .05$) and FWE ($r = -.23$, $p < .01$), while WFE is significantly correlated with FWE ($r = .64$, $p < .01$). There is no evidence of concept redundancy as none of the correlations are above .75 (Morrow, 1983).

Control Variables

A number of demographic variables typical of the literature were controlled for including; hours overtime worked due to their influence on work-family conflict (Major et al., 2002; Kossek et al., 2001), Gender (1=female, 0=male), Marital Status (1=married/partnered, 0=single), Parental Status (1=parent, 0=non-parent), Hours Worked (average hours worked including overtime per week), and Business Tenure (years working in their business). In addition, due to the focus on entrepreneurs, Firm Size was also controlled for. It was measured by total number of full-time employees. While this variable had a high level of skewness (5.715), a number of transformations are available to deal with such problems (Cohen & Cohen, 1983). Because firm size differed across the number of cases, a log-transformation was conducted on organizational size to induce normality (Stone and Hollenbeck, 1989). After the log transformation, the skewness was within normal boundaries of ±1.0 (0.949).

Measures (Study 3)

The identical items was used for both male and female (partner) respondents.

Criterion Variables

Emotional Exhaustion and Cynicism were measured with 4-items each by Maslach and Jackson (1981), coded 1=never, 5=always. A sample item is "I feel used up at the end of the workday" (emotional exhaustion) and "I have become more cynical about whether my work contributes anything" (cynicism). Both measures has a strong internal reliability for emotional exhaustion (males $\alpha = .84$ and females $\alpha = .86$) and cynicism (males $\alpha = .84$ and females $\alpha = .86$).

Predictor Variables

WFC and FWC were measured with 3-items (each) from Carlson et al. (2000) and WFE and FWE measured with 3-items (each) from Carlson et al. (2006). All responses were coded 1=strongly disagree, 5=strongly agree. Sample items for conflict are: WFC (males $\alpha = .81$ and females $\alpha = .84$) "When I get home from work I am often too frazzled to participate in family activities/responsibilities" and FWC (males $\alpha = .87$ and females $\alpha = .85$) "Due to stress at home, I am often preoccupied with family matters at work". Items for enrichment followed the stem

"my involvement in my work/family…" and sample items are: WFE (males α = .93 and females α = .94) "Puts me in a good mood and this helps me be a better family member" and FWE (males α = .93 and females α = .95) "Makes me cheerful and this helps me be a better worker".

To confirm the separate dimensions of the work-family and family-work enrichment measures and confirm the unique nature of emotional exhaustion and cynicism, all items were tested by structural equation modelling (SEM) using AMOS (Arbuckle, 1997) to assess the convergent and discriminant validity of the multiple-item measures (Gerbing & Anderson, 1993). Three goodness-of-fit indexes were used: the comparative fit index (CFI), the root-mean-square error of approximation (RMSEA), and the standardized root mean residual (SRMR) as superior ways to assess model fit. Overall, a good model is reflected in scores with CFI greater than 0.95, RMSEA below 0.08 and SRMR less than 0.10. The model included both male and female responses, hence four predictors and two outcomes for males and four predictors and two outcomes for females. A total of twelve measures were tested together. Overall, the measurement model did fit the data well for a 12-factor solution: CFI = .95, RMSEA = 0.05 (LO 90 = 0.04 and HI 90 = 0.05), and SRMR = 0.0450. To check whether this was the best model based on the conceptualization of enrichment, the CFA was re-run testing two alternative models: (1) a ten-factor model with the dimensions of job burnout combined (emotional exhaustion and cynicism) for both males and females, which was a poor fit: CFI = .89, RMSEA = 0.07 (LO 90 = 0.06 and HI 90 = 0.07), and SRMR = 0.0578, and (2) a model with the a combined measure of conflict (work-family and family-work) and combined measure of enrichment (work-family and family-work). However, this was also a poor fit: CFI = .70, RMSEA = 0.11 (LO 90 = 0.11 and HI 90 = 0.11), and SRMR = 0.1088. Overall, the SEM supported the theoretical separation of work-family and family-work towards conflict and enrichment towards emotional exhaustion and cynicism towards males and females.

Analysis (Study 1)

Separate hierarchical regressions were conducted to examine the direct effects of WFC (Hypotheses 1 and 2), the direct effects of WFE (Hypotheses 3 and 4), and the interaction effects of these measures (Hypotheses 5 to 8). Step 1 contained the control variables (gender, marital status, parental status, overtime hours and job tenure). Step 2 contained the conflict variables (WFC and FWC), while Step 3 contained the enrichment variables (WFE and FWE). The work-family interface variables (conflict and enrichment) were entered separately in different steps to allow for comparisons between these effects. To test for moderation, Step 4 held the interaction between conflict and enrichment (WFC x WFE, WFC x FWE, FWC x WFE, and FWC x FWE). To address issues of multi-collinearity, mean centering of the interaction terms was completed (Aiken & West, 1991). A total of four regression models were run (anxiety, depression, emotional exhaustion and cynicism) on the sample of employees.

Analysis (Study 2)

Separate hierarchical regressions were conducted to examine the direct effects of WFC (Hypotheses 9 and 10), the direct effects of WFE (Hypotheses 11 and 12), and the interaction effects of these measures (Hypotheses 13 to 16). Step 1 contained the control variables (gender, marital status, parental status, hours worked, business tenure and firm size). Step 2 contained the conflict variables (WFC and FWC), while Step 3 contained the enrichment variables (WFE and FWE). The work-family interface variables (conflict and enrichment) were entered separately in different steps to allow for comparisons between these effects. To test for moderation, Step 4 held the interaction between conflict and enrichment (WFC x WFE, WFC x FWE, FWC x WFE, and FWC x FWE). To address issues of multi-collinearity, mean centering of the interaction terms was completed (Aiken & West, 1991). A total of three regression models were run (anxiety, emotional exhaustion and stress) on the sample of entrepreneurs.

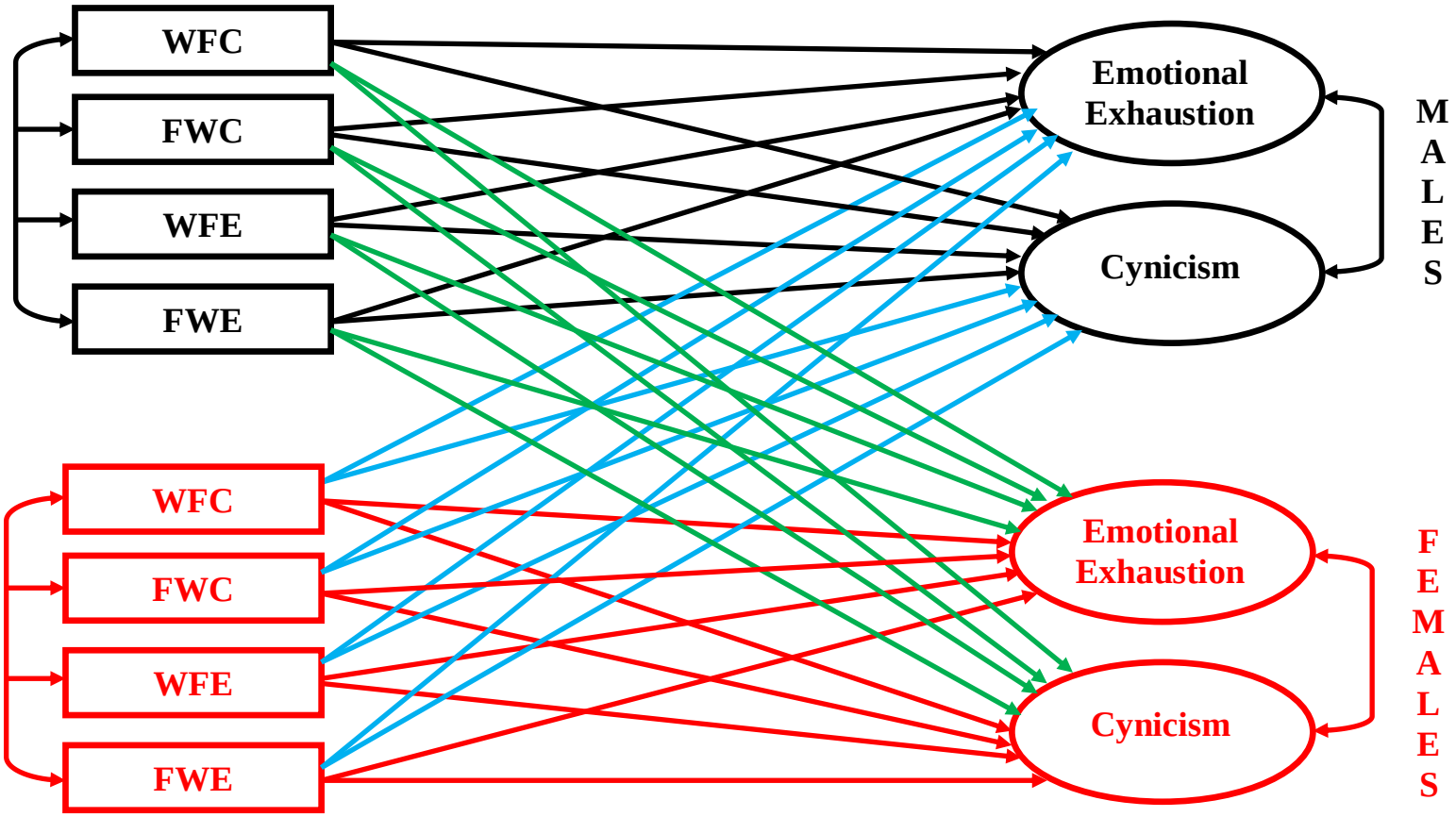
Analysis (Study 3)

Separate hierarchical regressions were conducted to examine the direct effects of WFC for males and females (Hypotheses 17 to 20), the direct effects of WFE for

males and females (Hypotheses 21 to 24), and the crossover effects of the work-family variables (Hypotheses 25 to 28) and emotional exhaustion and cynicism on partner outcomes (Hypotheses 29 and 30), SEM was used to run the prediction model. The expected prediction model is shown in Figure 13.

Study 3 Data (Dual-Earning Couples)

Figure 13. Predicted Crossover Effects Model towards Job Burnout



Key: Black lines=males, Red lines=females, Green lines=male crossover to females, Blue lines=female crossover to males

CHAPTER 8

RESULTS

Study 1

Descriptive statistics for all the study variables is shown in Table 1.

Table 1 shows that WFC and FWC are significantly correlated with all four outcomes (all $r > .21$, all $p < .01$), while WFE is significantly and negatively correlated with all four outcomes (all $r > -.28$, all $p < .01$). FWE is significantly correlated with anxiety ($r = -.14$, $p < .05$), depression ($r = -.15$, $p < .05$) and cynicism ($r = -.17$, $p < .01$) although not with emotional exhaustion ($r = -.03$). Finally, the four criterion variables (anxiety, depression, emotional exhaustion and cynicism) are all significantly correlated (all $r > .38$, all $p < .01$).

Study 1 Data (Employees)

Table 1. Descriptive Statistics and Correlations

Variables	M	SD	1	2	3	4	5	6	7	8	9	10
1. Hours Overtime	4.2	5.8	--									
2. Job Tenure	3.9	5.3	.15*	--								
3. WFC	2.5	.90	.14*	-.07	--							
4. FWC	2.1	.74	.06	-.02	.47**	--						
5. WFE	3.1	.81	-.02	.14*	-.20**	-.05	--					
6. FWE	3.7	.76	-.02	.10	-.04	-.05	.39**	--				
7. Anxiety	2.6	.68	.18**	-.10	.36**	.22**	-.38**	-.14*	--			
8. Depression	2.4	.68	-.02	-.17**	.31**	.24**	-.39**	-.15*	.59**	--		
9.Emotional Exhaustion	2.8	.86	.10	-.16**	.52**	.29**	-.29**	-.03	.50**	.53**	--	
10. Cynicism	2.5	1.0	-.03	-.19**	.34**	.33**	-.45**	-.17**	.39**	.64**	.64**	--

N=314, *p< .05, **p< .01

Direct Effects of Conflict

Results of the hierarchical regressions for Hypotheses 1 to 8 are shown in Tables 2 to 5.

Table 2. Regression Coefficients for Anxiety

Variables	Models with Anxiety			
	Step 1 Controls	Step 2 Conflict Predictors	Step 3 Enrichment Predictors	Step 4 Interactions
Gender	-.06	-.06	-.04	-.03
Marital Status	-.00	.01	-.02	-.03
Parental Status	-.06	-.06	.02	.03
Hours Overtime	.19**	.13*	.13*	.14*
Job Tenure	-.10	-.07	-.07	-.09
WFC		.33***	.27***	.25***
FWC		.07	.06	.07
WFE			-.31***	-.30***
FWE			.04	.01
WFC × WFE				-.03
WFC × FWE				.07
FWC × WFE				.08
FWC × FWE				-.22***
R^2 change	.05*	.13***	.08***	.04*
Total R^2	.05	.18	.26	.29
Adjusted R^2	.03	.16	.23	.26
F Statistic	2.723*	8.007***	9.705***	7.868***

† p< .1, * p<.05, ** p<.01, *** p< .001. Standardized regression coefficients, all significance tests were single-tailed.

Table 3. Regression Coefficients for Depression

Variables	Models with Depression			
	Step 1 Controls	Step 2 Conflict Predictors	Step 3 Enrichment Predictors	Step 4 Interactions
Gender	-.04	-.05	-.02	-.02
Marital Status	-.01	.01	-.01	-.01
Parental Status	-.21*	-.21**	-.12	-.12
Hours Overtime	.02	-.03	-.03	-.03
Job Tenure	-.06	-.04	-.04	-.06
WFC		.25***	.18**	.18**
FWC		.12*	.11*	.10†
WFE			-.33***	-.33***
FWE			.01	-.00
WFC × WFE				.03
WFC × FWE				.03
FWC × WFE				.04
FWC × FWE				-.17**
R^2 change	.07**	.10***	.10***	.02†
Total R^2	.07	.16	.26	.28
Adjusted R^2	.05	.14	.23	.24
F Statistic	3.539**	7.110***	9.773***	7.384***

† p< .1, * p<.05, ** p<.01, *** p< .001. Standardized regression coefficients, all significance tests were single-tailed.

Table 4. Regression Coefficients for Emotional Exhaustion

Variables	Models with Emotional Exhaustion			
	Step 1 Controls	Step 2 Conflict Predictors	Step 3 Enrichment Predictors	Step 4 Interactions
Gender	.08	.07	.08	.08
Marital Status	.04	.03	.02	.02
Parental Status	-.21**	-.22**	-.17*	-.17*
Hours Overtime	.17**	.09	.09	.09
Job Tenure	-.09	-.05	-.05	-.06
WFC		.47***	.43***	.45***
FWC		.05	.05	.03
WFE			-.22***	-.24***
FWE			.08	.07
WFC × WFE				.08
WFC × FWE				.04
FWC × WFE				-.04
FWC × FWE				-.17**
R^2 change	.08**	.24***	.04**	.02†
Total R^2	.08	.32	.36	.39
Adjusted R^2	.06	.30	.34	.35
F Statistic	4.459**	17.260***	15.845***	11.941***

† p< .1, * p<.05, ** p<.01, *** p< .001. Standardized regression coefficients, all significance tests were single-tailed.

Table 5. Regression Coefficients for Cynicism

Variables	Models with Cynicism			
	Step 1 Controls	Step 2 Conflict Predictors	Step 3 Enrichment Predictors	Step 4 Interactions
Gender	.07	.06	.10	.10*
Marital Status	-.07	-.03	-.05	-.05
Parental Status	-.27**	-.28***	-.17*	-.17**
Hours Overtime	.03	-.02	-.03	-.01
Job Tenure	-.00	.01	.01	-.00
WFC		.22***	.13*	.16**
FWC		.22***	.21***	.18**
WFE			-.41***	-.41***
FWE			-.01	-.04
WFC × WFE				.07
WFC × FWE				.16**
FWC × WFE				-.11*
FWC × FWE				-.17**
R^2 change	.10***	.14***	.15***	.04**
Total R^2	.10	.23	.38	.42
Adjusted R^2	.08	.21	.36	.39
F Statistic	5.415***	10.969***	17.316***	13.728***

† p< .1, * p<.05, ** p<.01, *** p< .001. Standardized regression coefficients, all significance tests were single-tailed.

The tables show that the conflict variables consistently influence all outcomes, although the family-work dimension has less consistent influence. WFC is significantly associated consistently towards: anxiety (ß = .33, p< .001), depression (ß = .25, p< .001), emotional exhaustion (ß = .47, p< .001), and cynicism (ß = .22, p< .05). FWC is not significantly associated with either anxiety or emotional exhaustion, but it is towards depression (ß = .12, p< .05) and cynicism (ß = .22, p< .001). Overall, these findings support Hypotheses 1a to 1d, and Hypotheses 2b and 2d. From the R^2 Change figures in Step 2, we see the conflict variables account for sizeable and significant amounts of overall variance: 13% for anxiety (p< .001), 10% for depression (p< .001), 24% for emotional exhaustion (p< .001), and 14% for cynicism (p< .001).

Direct Effects of Enrichment

Tables 2 to 5 also show that the enrichment variables consistently influence all outcomes, although the family-work variable consistently has no influence. WFE is significantly and negatively associated towards all outcomes: anxiety (ß = -.31, p< .001), depression (ß = -.33, p< .001), emotional exhaustion (ß = -.22, p< .001), and cynicism (ß = -.41, p< .001). Overall, these findings support Hypotheses 3a to 3d. From the R^2 Change figures in Step 3, we see the enrichment variables account for significant amounts of overall variance: 8% for anxiety (p< .001), 10% for depression (p< .001), 4% for emotional exhaustion (p< .001), and 15% for cynicism (p< .001).

Two-Way Interaction Effects

The tables show that there are a number of significant interaction effects towards all outcomes. Towards anxiety, there is a significant interaction between FWC and FWE (ß = -.22, p< .001), supporting Hypothesis 8a. Step 4 shows the two-way interactions accounted for an additional 4% of variance towards anxiety (p< .05). Towards depression, there is a significant interaction between FWC and FWE (ß = -.172, p< .01), with the two-way interactions accounted for an additional 2% of variance towards depression (p< .1). This supports Hypothesis 8b. Towards emotional exhaustion, there is a significant interaction between FWC and FWE (ß = -.17, p< .01), with the two-way interactions accounting for an additional 2% of

variance (p< .1), supporting Hypothesis c. Finally, towards cynicism, there is a significant interaction between WFC and FWE (ß = .16, p< .01), FWC and WFE (ß = -.11, p< .05), and FWC and FWE (ß = -.17, p< .01), this block of two-way interactions accounted for an additional 4% of variance (p< .01). Overall, these findings support Hypotheses 6d, 7d, and 8d.

To facilitate interpretation of the significant moderator effects, interactions are presented in Figures 1 to 6.

Figure 1. Interaction between FWC & FWE with Anxiety as Dependent Variable

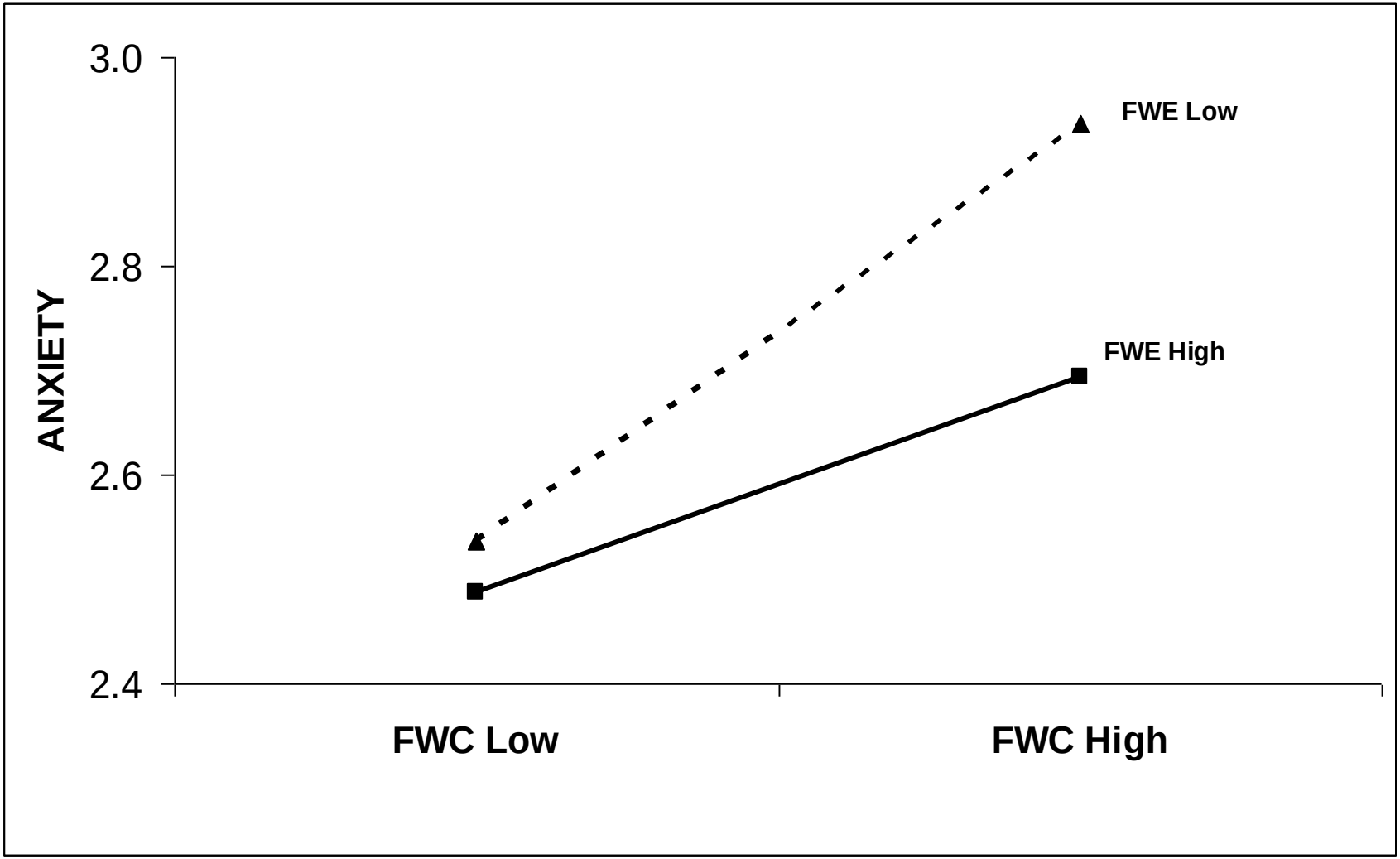


Figure 2. Interaction between FWC & FWE with Depression as Dependent Variable

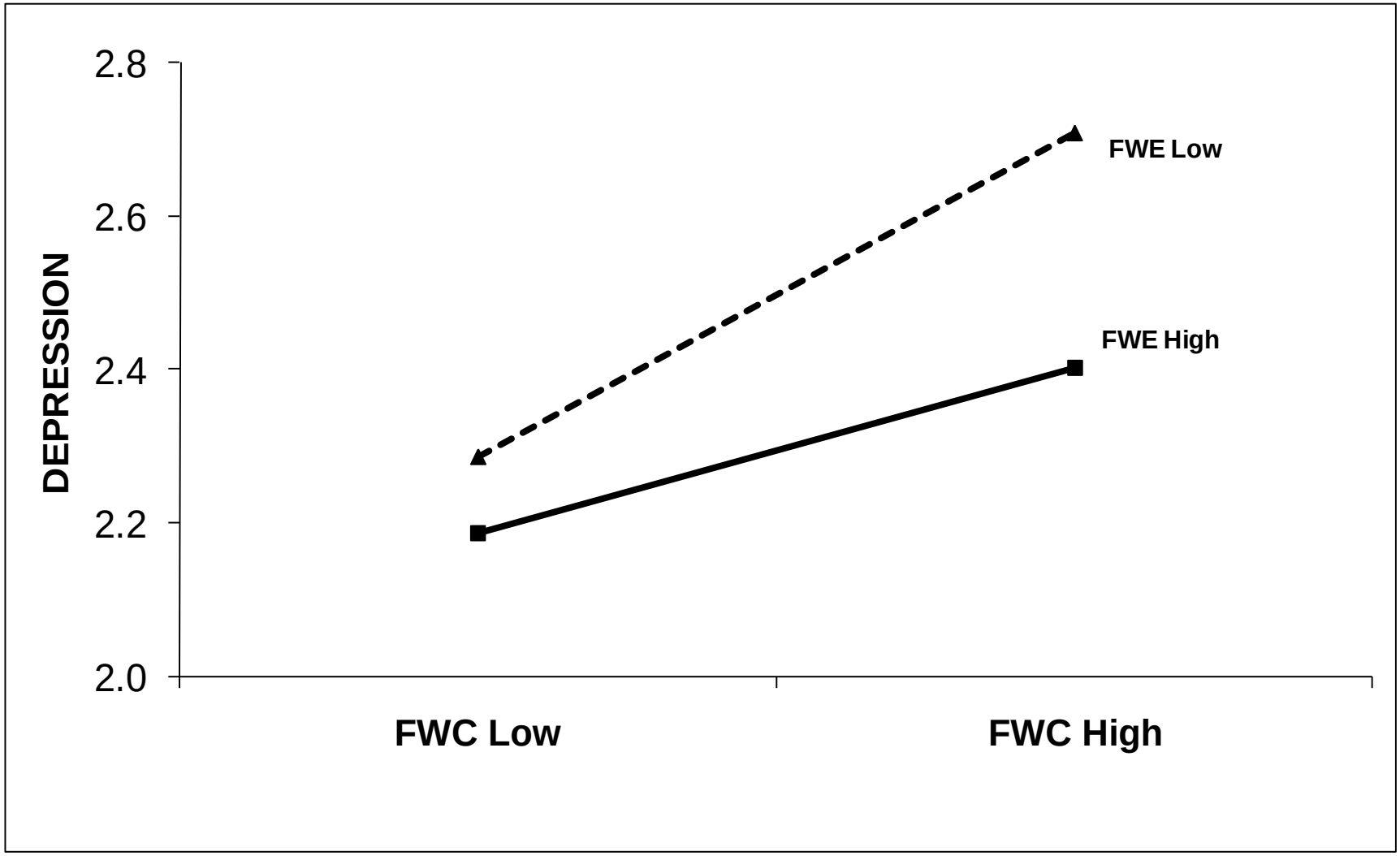


Figure 3. Interaction between WFC & FWE with Emotional Exhaustion as Dependent Variable

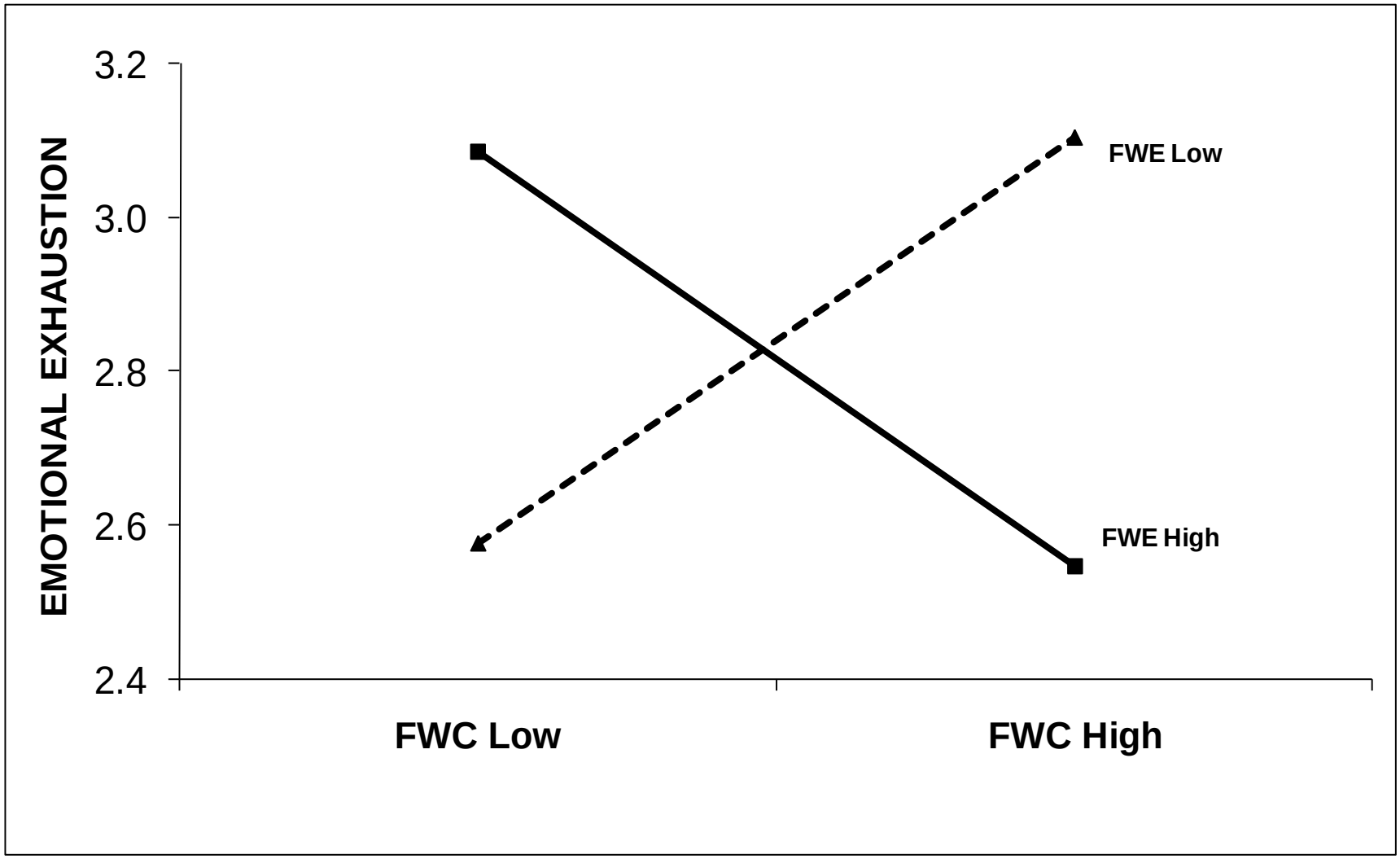


Figure 4. Interaction between WFC & FWE with Cynicism as Dependent Variable

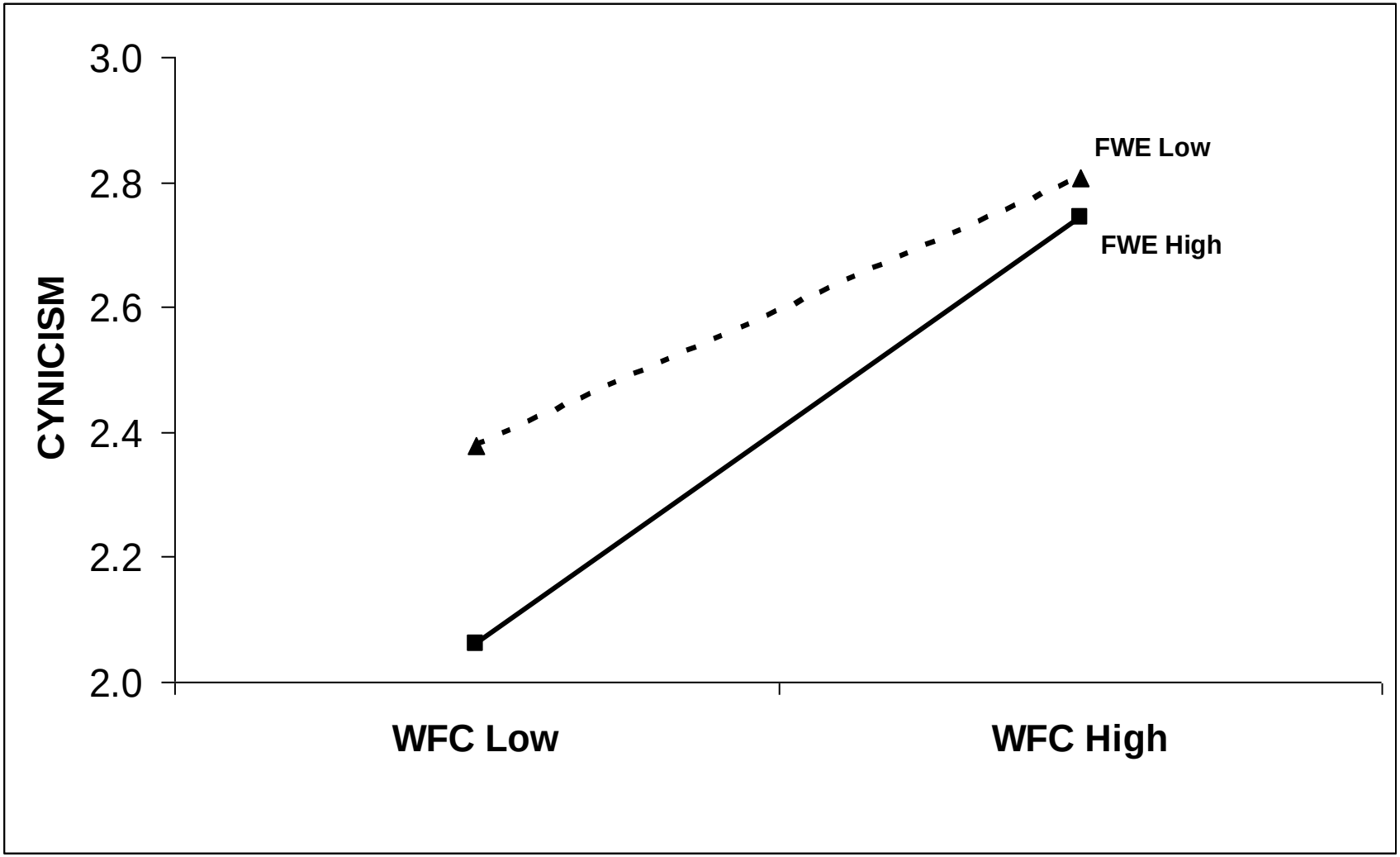


Figure 5. Interaction between FWC & WFE with Cynicism as Dependent Variable

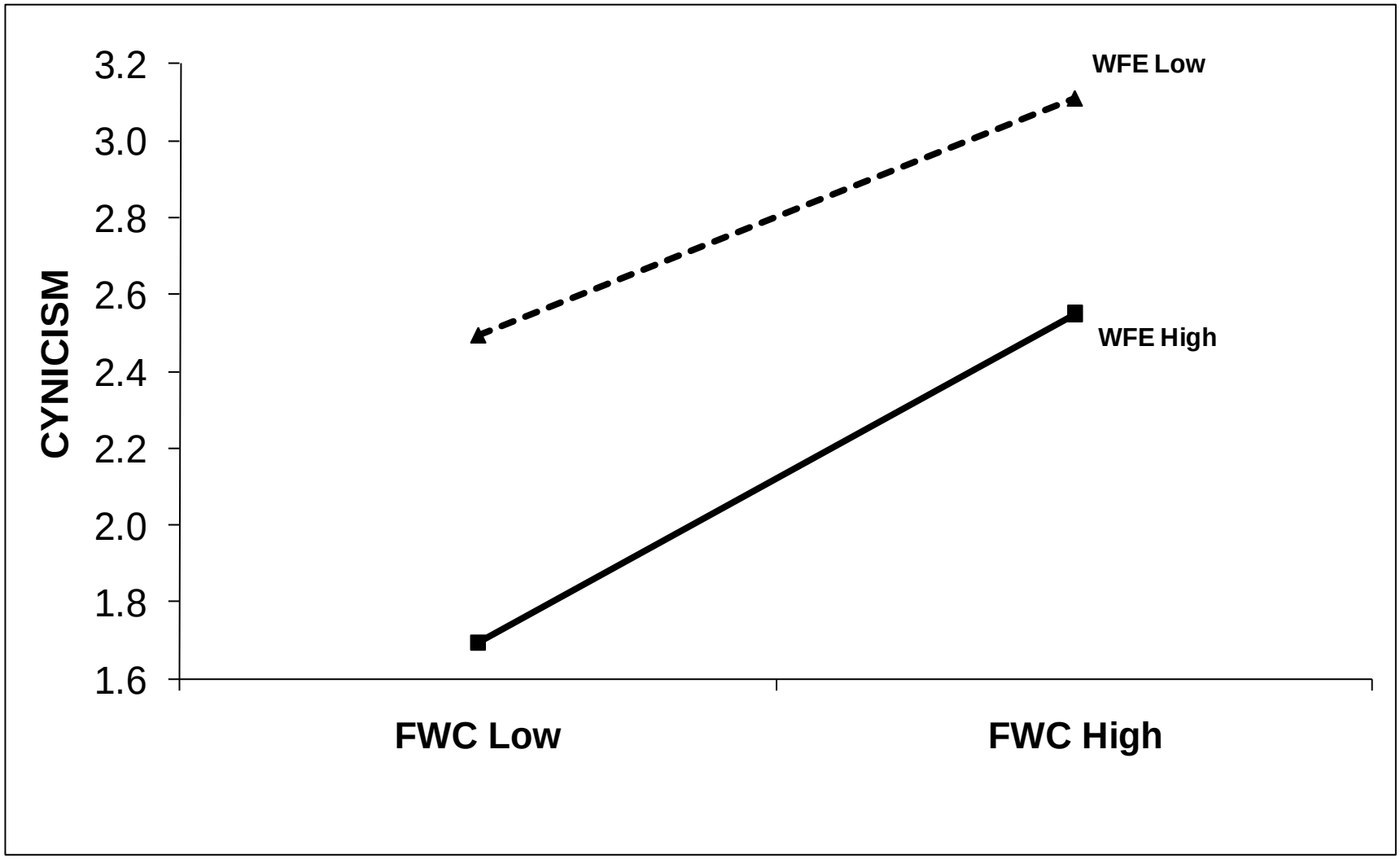
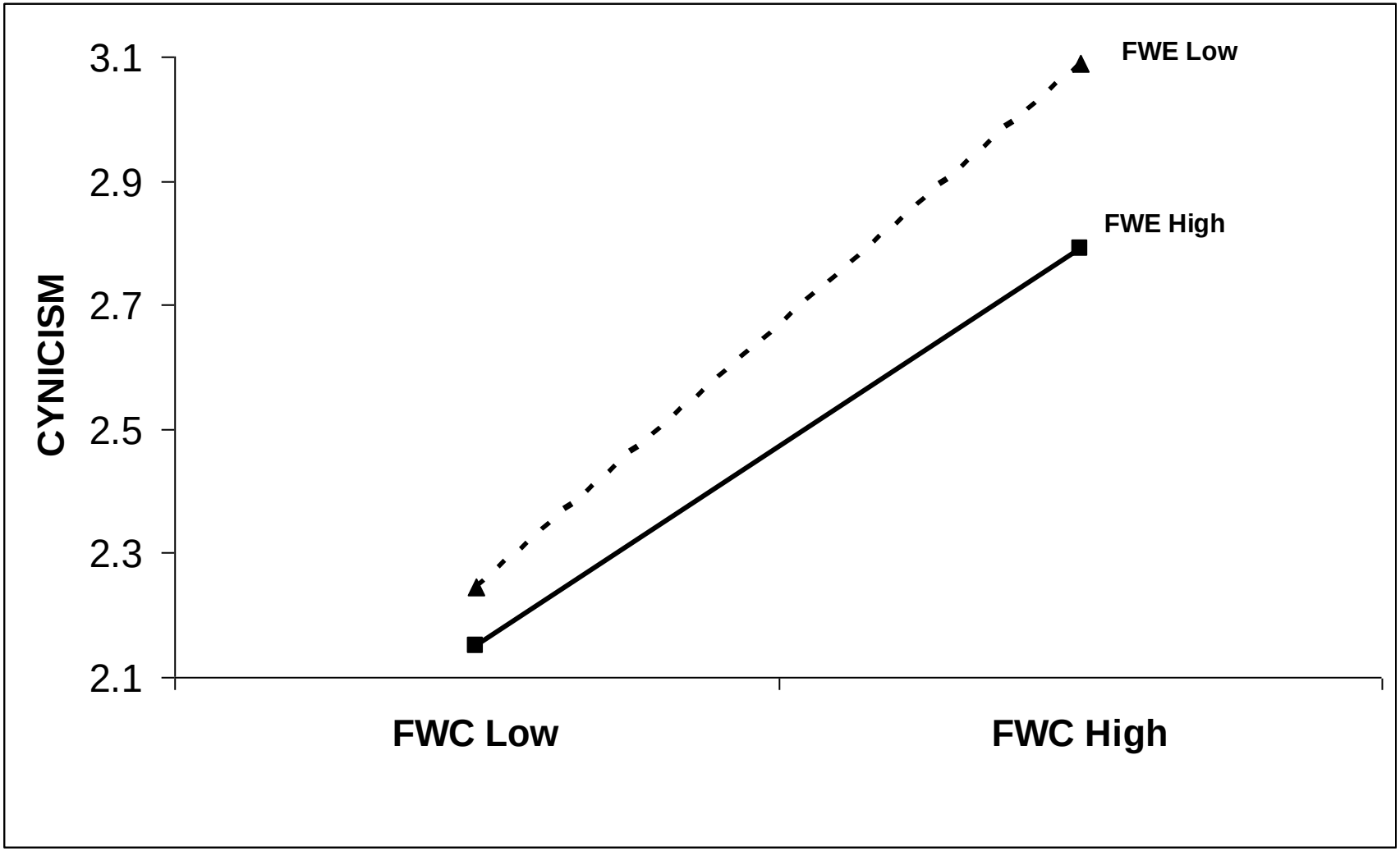


Figure 6. Interaction between FWC & FWE with Cynicism as Dependent Variable



Plotting the interaction terms for FWC and FWE towards anxiety (Figure 1) illustrates that at low levels of FWC, there is little difference in anxiety irrespective of level of FWE. When FWC increases from low to high, there is an increase in anxiety amongst all respondents. However, those with high FWE report a significantly weaker increase in anxiety compared to those with low levels of FWE. Overall, this supports the effects of enrichment buffering conflict towards anxiety.

Figure 2 has the plots of the interaction terms for FWC and FWE towards depression and shows that at low levels of FWC, there is some difference in amongst respondents, with those with low FWE reporting higher levels of depression. When FWC increases to high, there is an increase in depression amongst all respondents. However, those with high FWE report a significantly weaker increase in depression compared to those with low levels of FWE. Overall, this supports the effects of enrichment buffering conflict towards depression.

Plotting the interaction terms for FWC and FWE towards emotional exhaustion (Figure 3) illustrates that at low levels of FWC, there are major differences in emotional exhaustion amongst respondents, with those reporting high levels of FWE having greater emotional exhaustion. However, when FWC increases to high, respondents with high FWE report a significant decrease in emotional exhaustion while those with low FWE report a significant increase. Overall, this supports the effects of enrichment buffering conflict towards emotional exhaustion.

Figure 4 has the plots of the interaction terms for WFC and FWE towards cynicism and shows that at low levels of FWC, there is a major difference amongst respondents, with those with low FWE reporting higher levels of cynicism. When WFC increases to high, there is an increase in cynicism amongst all respondents. However, those with high FWE report a significantly stronger increase in cynicism compared to those with low levels of FWE. However, those

with high FWE still report overall levels of cynicism which are lower than respondents with low FWE.

Plotting the interaction terms for FWC and WFE towards cynicism (Figure 5) illustrates that at low levels of FWC, there are major differences in cynicism amongst respondents, with those reporting high levels of WFE having significantly lower levels of cynicism. When FWC increases to high, all respondents report an increase in cynicism, with those with high WFE reporting a significant weaker increase in cynicism compared to those with low WFE. Overall, this supports the effects of enrichment buffering conflict towards cynicism.

Finally, Figure 6 has the plots of the interaction terms for FWC and FWE towards cynicism and shows that at low levels of FWC, there is no difference amongst respondents, with similarly low levels of cynicism amongst respondents. However, when FWC increases to high, there is an increase in cynicism amongst all respondents. However, those with high FWE report a significantly weaker increase in cynicism compared to those with low levels of FWE. Overall, this supports the effects of enrichment buffering conflict towards cynicism.

Overall, the models are all significant: anxiety (R^2 = .29, F = 7.868, p< .001), emotional exhaustion (R^2 = .39, F = 11.941, p< .001), and cynicism (R^2 = .42, F = 13.728, p< .001). Finally, the variance inflation factors (VIF) were examined for evidence of multicollinearity, which can be detected when the VIF values equal 10 or higher (Ryan, 1997). However, all the scores for the regressions were below 1.9, indicating no evidence of multicollinearity unduly influencing the regression estimates.

RESULTS *(Study 2)*

Descriptive statistics for all the study variables is shown in Table 6.

Study 2 Data (Entrepreneurs)

Table 6. Descriptive Statistics and Correlations

Variables	M	SD	1	2	3	4	5	6	7	8	9	10
1. Total Hours Worked	44.8	13.5	--									
2. Business Tenure	12.5	9.1	.13	--								
3. Firm Size	1.6	1.4	.16	.19*	--							
4. WFC	2.5	1.0	.40**	-.04	.03	--						
5. FWC	2.0	.81	.12	-.02	-.05	.57**	--					
6. WFE	3.4	.83	-.09	-.01	-.04	-.23**	-.18*	--				
7. FWE	3.7	.84	-.01	.00	.04	-.18*	-.23**	.64**	--			
8. Anxiety	2.7	.83	.35**	-.07	.06	.40**	.17*	-.38**	-.19*	--		
9.Emotional Exhaustion	2.5	1.1	.31**	-.02	.05	.65**	.37**	-.19*	-.13	.42**	--	
10. Stress	3.0	.79	.43**	.09	.22**	.57**	.29**	-.17*	-.06	.47**	.49**	--

N=114, *p< .05, **p< .01

Table 6 shows that WFC and FWC are significantly correlated with all three outcomes (all $r > .16$, all $p < .05$), while WFE is significantly and negatively correlated with all four outcomes (all $r > -.16$, all $p < .05$). FWE is significantly correlated with anxiety only ($r = -.19$, $p < .05$), and not emotional exhaustion or stress. Finally, the three criterion variables (anxiety, emotional exhaustion and stress) are all significantly correlated (all $r > .41$, all $p < .01$).

Direct Effects of Conflict

Results of the hierarchical regressions for Hypotheses 9 to 16 are shown in Tables 7 to 9.

Table 7. Regression Coefficients for Anxiety

Variables	Models with Anxiety			
	Step 1 Controls	Step 2 Conflict Predictors	Step 3 Enrichment Predictors	Step 4 Interactions
Gender	-.00	.01	.02	-.02
Marital Status	.01	.02	.02	-.01
Parental Status	.07	.07	.08	.14
Hours Worked	.37***	.24*	.23*	.22*
Business Tenure	-.14	-.12	-.13	-.19*
Firm Size	.01	.03	.01	-.01
WFC		.31**	.26*	.22*
FWC		-.08	-.07	-.05
WFE			-.33**	-.33**
FWE			.09	.11
WFC × WFE				-.17†
WFC × FWE				.10
FWC × WFE				-.18†
FWC × FWE				.19†
R^2 change	.15**	.06*	.08**	.07*
Total R^2	.15	.21	.29	.36
Adjusted R^2	.11	.15	.22	.27
F Statistic	3.400**	3.709**	4.368***	4.166***

†p< .1, *p<.05, **p<.01, ***p< .001. Standardized regression coefficients, all significance tests were single-tailed.

Table 8. Regression Coefficients for Emotional Exhaustion

Variables	Models with Emotional Exhaustion			
	Step 1 Controls	Step 2 Conflict Predictors	Step 3 Enrichment Predictors	Step 4 Interactions
Gender	.08	.13	.13	.12
Marital Status	-.02	-.02	-.02	-.02
Parental Status	-.08	-.10	-.10	-.12
Hours Worked	.38***	.09	.09	.09
Business Tenure	-.02	.03	.03	.04
Firm Size	-.04	.01	.01	.01
WFC		.65***	.65***	.67***
FWC		.01	.01	-.02
WFE			-.02	.01
FWE			.01	-.01
WFC × WFE				-.16†
WFC × FWE				-.07
FWC × WFE				.06
FWC × FWE				.06
R^2 change	.13**	.34***	.00	.03
Total R^2	.13	.47	.48	.50
Adjusted R^2	.09	.44	.43	.44
F Statistic	3.044**	13.085***	10.303***	7.956***

†p< .1, *p<.05, **p<.01, ***p< .001. Standardized regression coefficients, all significance tests were single-tailed.

Table 9. Regression Coefficients for Stress

Variables	Models with Stress			
	Step 1 Controls	Step 2 Conflict Predictors	Step 3 Enrichment Predictors	Step 4 Interactions
Gender	-.21*	-.17*	-.17*	-.14*
Marital Status	-.04	-.04	-.04	-.03
Parental Status	.19*	.17*	.18*	.10
Hours Worked	.41***	.20*	.20*	.20**
Business Tenure	-.03	.01	.01	.09
Firm Size	.12	.16*	.16*	.15*
WFC		.47***	.46***	.45***
FWC		-.01	-.01	-.01
WFE			-.08	-.04
FWE			.05	.01
WFC × WFE				-.23**
WFC × FWE				.01
FWC × WFE				.08
FWC × FWE				-.21*
R^2 change	.32***	.17***	.00	.07**
Total R^2	.32	.49	.50	.57
Adjusted R^2	.29	.46	.45	.52
F Statistic	9.467***	14.176***	11.304***	10.494***

† p< .1, * p<.05, ** p<.01, *** p< .001. Standardized regression coefficients, all significance tests were single-tailed.

The tables show that the conflict variables consistently influence all outcomes, although the family-work dimension was not significantly associated. WFC is significantly associated consistently towards: anxiety (ß = .31, p< .001), emotional exhaustion (ß = .65, p< .001), and stress (ß = .47, p< .001). FWC is not significantly associated with anxiety, emotional exhaustion, or stress. Overall, these findings support Hypotheses 9a to 9c. From the R^2 Change figures in Step 2, we see the conflict variables account for sizeable and significant amounts of overall variance: 6% for anxiety (p< .01), 34% for emotional exhaustion (p< .001), and 17% for stress (p< .001).

Direct Effects of Enrichment

Tables 7 to 9 also show that the enrichment variables were a consistently poor predictor of outcomes, when work-family conflict had already been applied to the models (in Step 2). WFE is significantly and negatively associated to anxiety (ß = -.33, p< .001), but not towards emotional exhaustion or stress. Overall, these findings support Hypotheses 11a only. From the R^2 Change figures in Step 3, we see the enrichment variables account for a significant amount of variance towards anxiety (8%, p< .001), but no additional variance towards emotional exhaustion and stress.

Two-Way Interaction Effects

The tables show that there are a number of significant interaction effects towards all outcomes. Towards anxiety, there is a significant interaction between WFC and WFE (ß = -.17, p< .1), FWC and WFE (ß = -.18, p< .1) and FWC and FWE (ß = .19, p< .1). This provides support for Hypotheses 13a, 14a and 16a. Step 4 shows the two-way interactions accounted for an additional 7% of variance towards anxiety (p< .05). Towards emotional exhaustion, there is a significant interaction between WFC and WFE (ß = -.16, p< .1), with the two-way interactions accounting for an additional 3% of variance (non significant) and support Hypothesis 13b only. Finally, towards stress, there is a significant interaction between WFC and WFE (ß = -.23, p< .01) and FWC and FWE (ß = -.21, p< .05), this block of two-way interactions accounted for an additional 7% of variance (p< .01). This provides support for Hypotheses 13c and 16c.

To facilitate interpretation of the significant moderator effects, interactions are presented in Figures 7 to 12.

Figure 7. Interaction between WFC & WFE with Anxiety as Dependent Variable (Entrepreneurs)

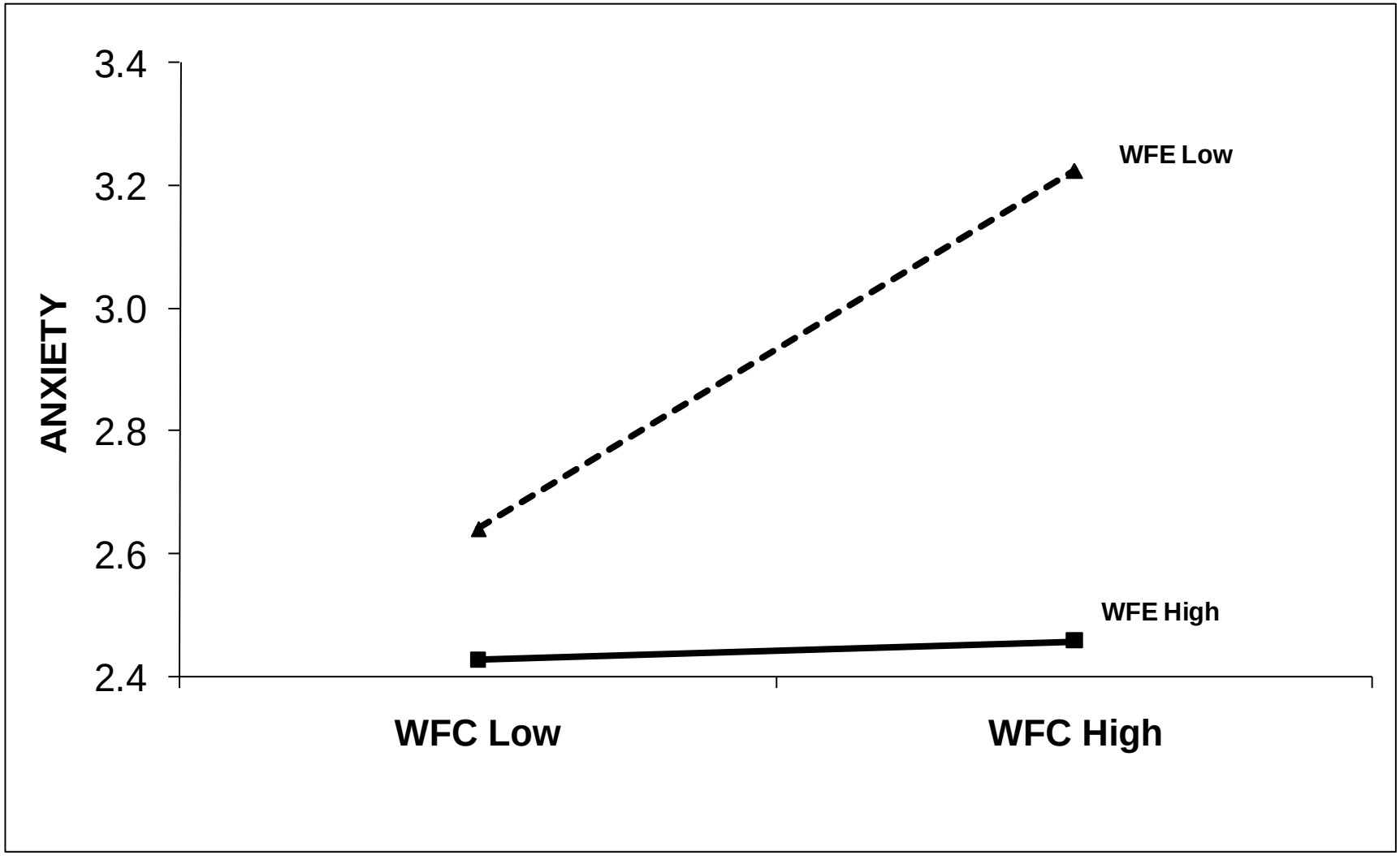


Figure 8. Interaction between FWC & WFE with Anxiety as Dependent Variable (Entrepreneurs)

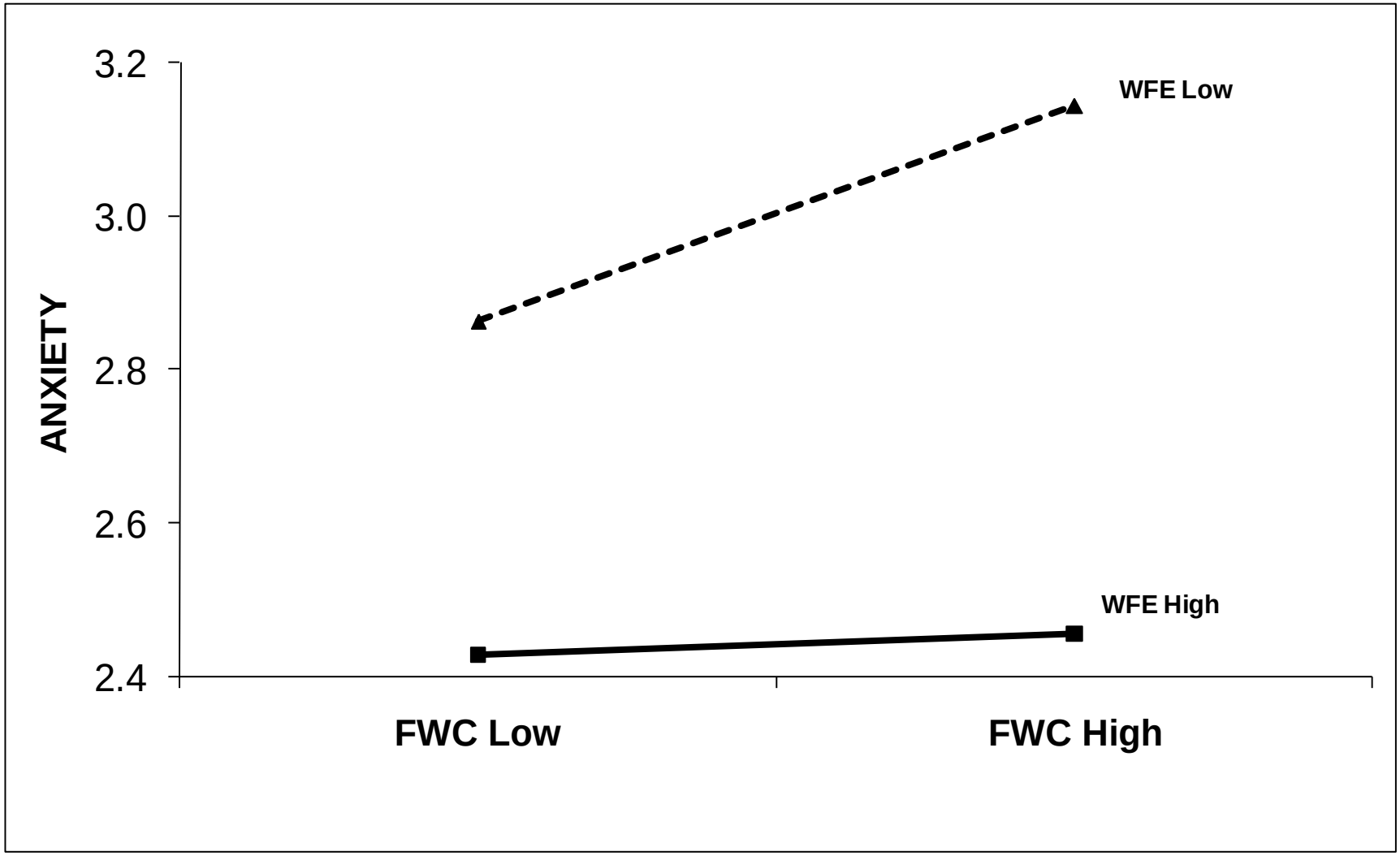


Figure 9. Interaction between FWC & FWE with Anxiety as Dependent Variable (Entrepreneurs)

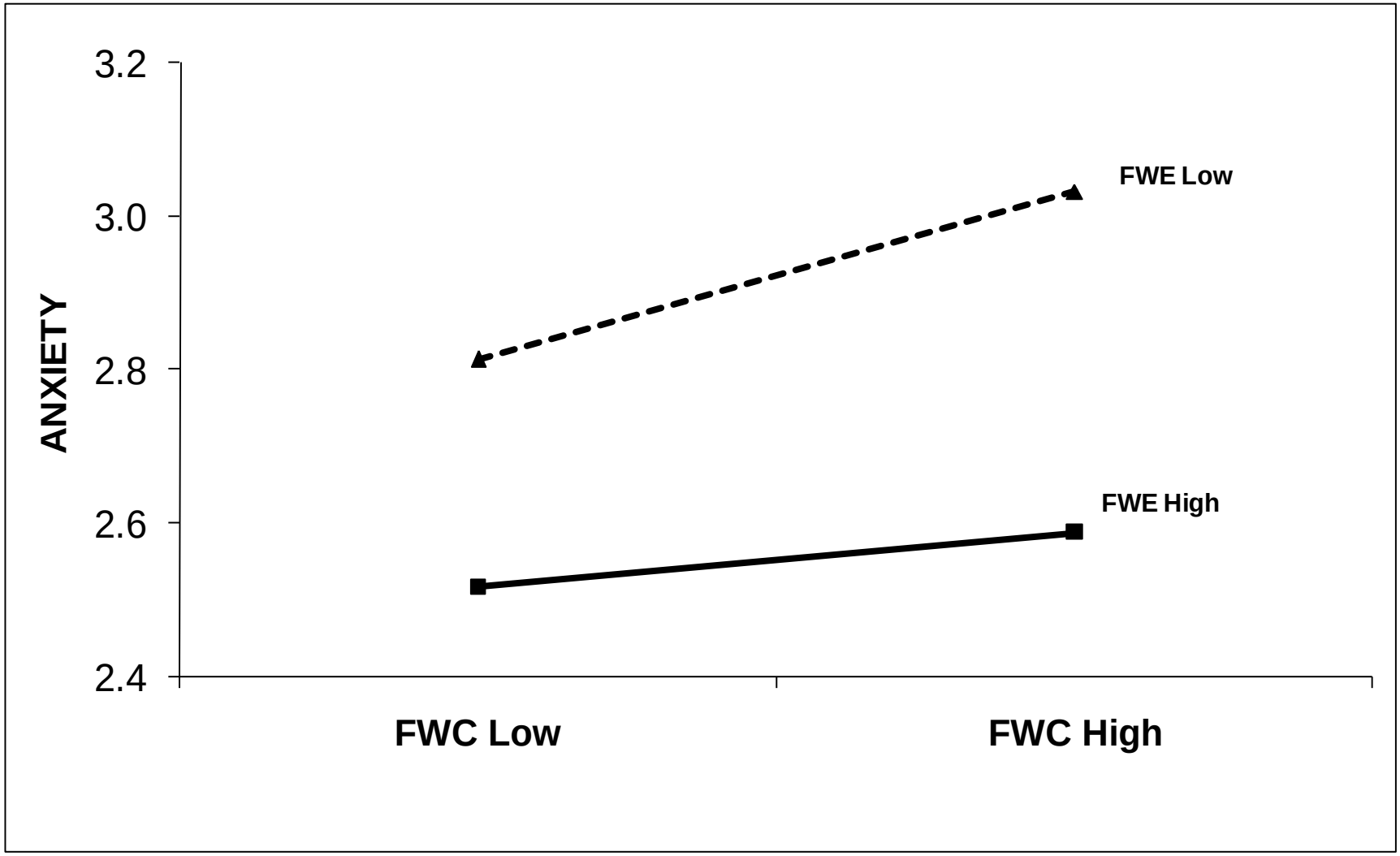


Figure 10. Interaction between WFC & WFE with Emotional Exhaustion as Dependent Variable (Entrepreneurs)

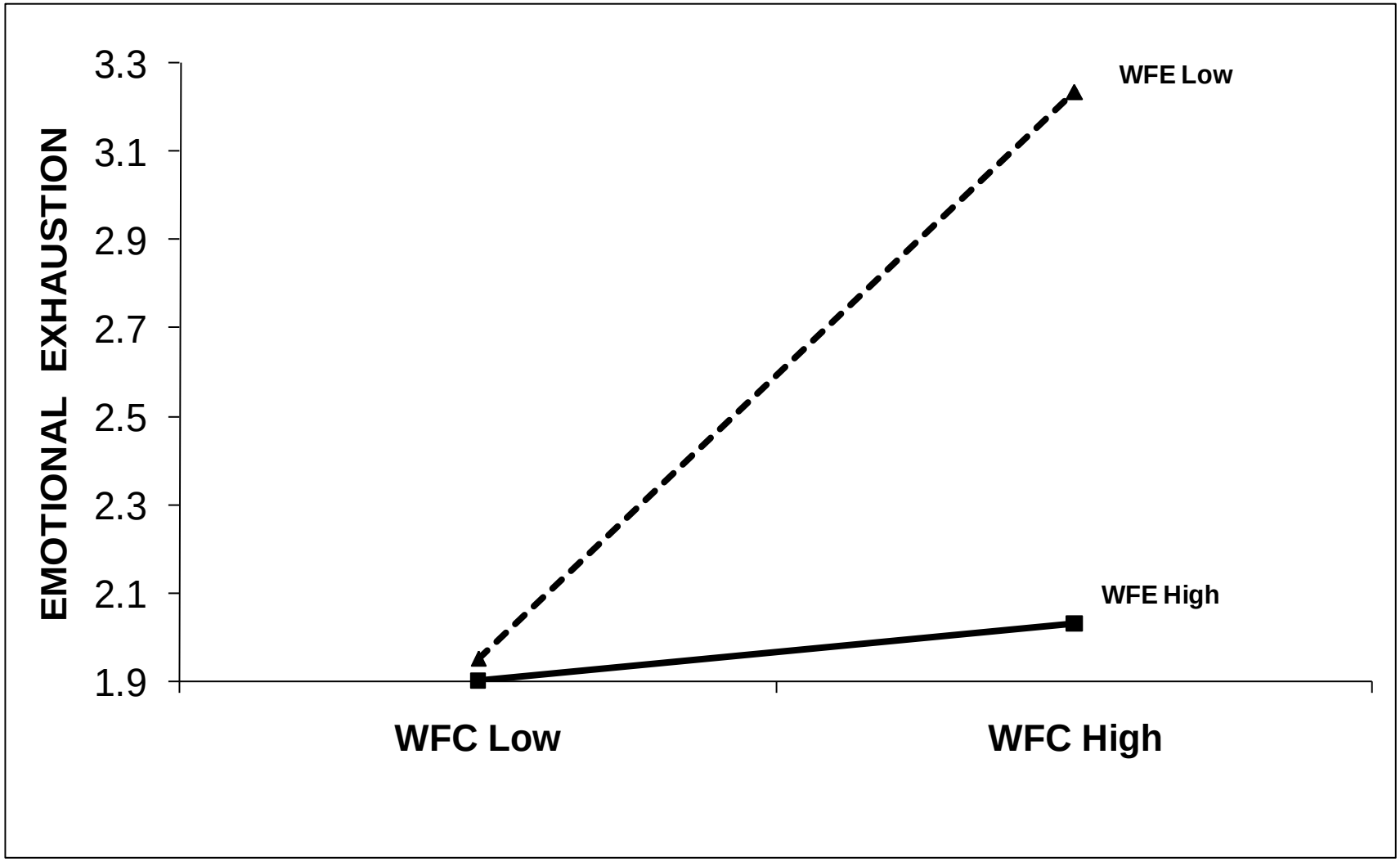


Figure 11. Interaction between WFC & WFE with Stress as Dependent Variable (Entrepreneurs)

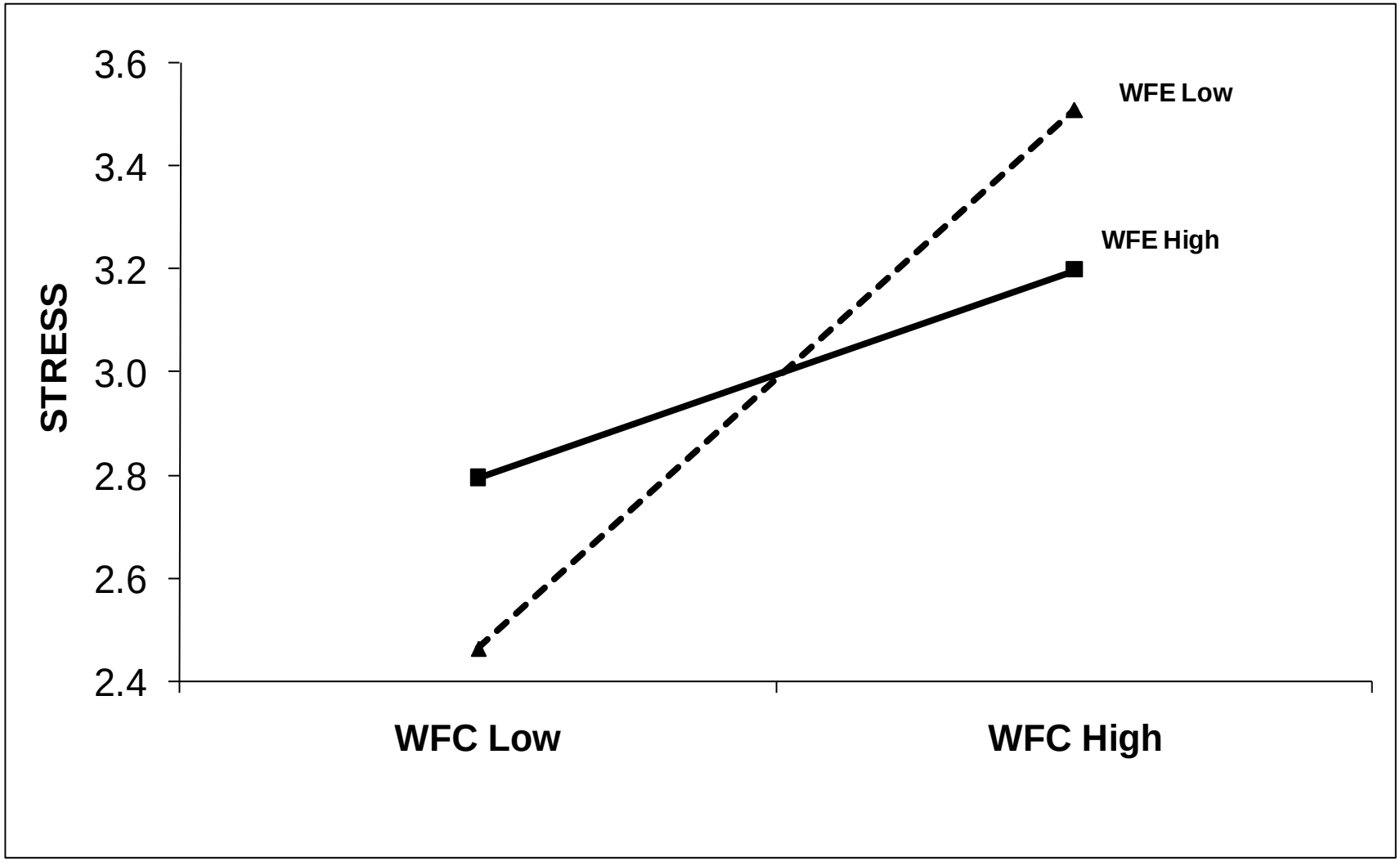
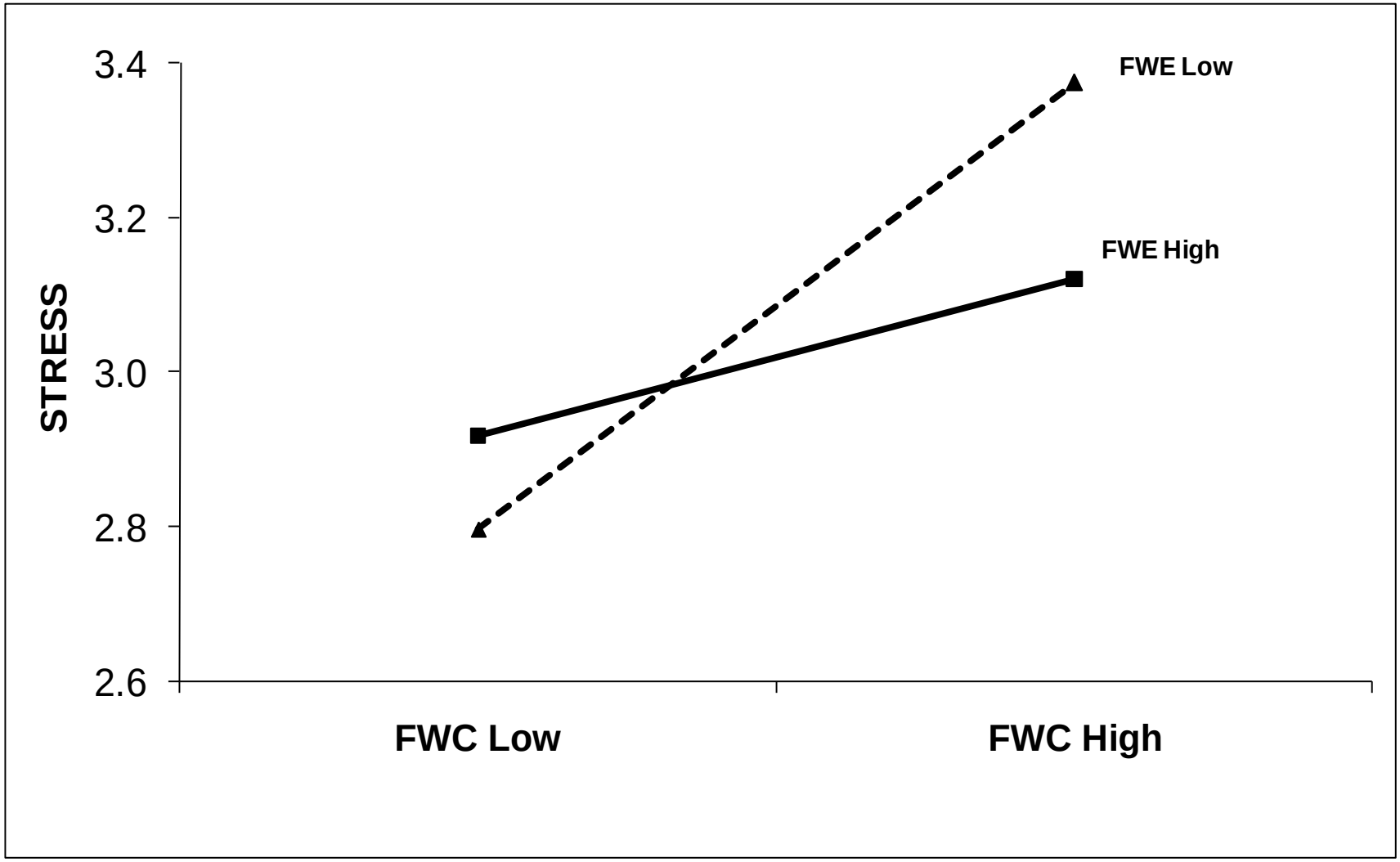


Figure 12. Interaction between FWC & FWE with Stress as Dependent Variable (Entrepreneurs)



Plotting the interaction terms for WFC and WFE towards anxiety (Figure 7) illustrates that at low levels of WFC, there is only a minor difference in anxiety irrespective of level of WFE. When WFC increases from low to high, there is an increase in anxiety amongst respondents with low levels of WFE, while those with high levels of WFE reported only a marginal increase in anxiety. Overall, this supports the effects of enrichment buffering conflict towards anxiety.

Figure 8 has the plots of the interaction terms for FWC and WFE towards anxiety and shows that at low levels of FWC, there is some difference in amongst respondents, with those with low WFE reporting higher levels of anxiety. When FWC increases to high, there is an increase in depression amongst respondents with low WFE but only a marginal increase amongst respondents with high WFE. Overall, this supports the effects of enrichment buffering conflict towards anxiety.

Plotting the interaction terms for FWC and FWE towards anxiety (Figure 9) illustrates that at low levels of FWC, there are some differences in anxiety amongst respondents, with those reporting low levels of FWE having greater anxiety. However, when FWC increases to high, respondents with high FWE report a marginal increase in anxiety while those with low FWE report a significant increase in anxiety. Overall, this supports the effects of enrichment buffering conflict towards anxiety.

Figure 10 has the plots of the interaction terms for WFC and WFE towards emotional exhaustion and shows that at low levels of WFC, there is a no difference amongst respondents, irrespective of level of WFE. However, when WFC increases to high, there is a major increase in emotional exhaustion amongst respondents with low WFE while those with high WFE report only a marginal increase. This supports the effects of enrichment buffering conflict towards emotional exhaustion.

Plotting the interaction terms for WFC and WFE towards stress (Figure 11) illustrates that at low levels of WFC, there are major differences in stress amongst respondents, with those reporting high levels of WFE having significantly higher levels of stress. When WFC increases to high, all respondents report an increase in stress, with those with high WFE reporting a significant weaker increase in stress compared to those with low WFE. Overall, this supports the effects of enrichment buffering conflict towards stress, specifically at high levels of WFE.

Finally, Figure 12 has the plots of the interaction terms for FWC and FWE towards stress. At low levels of FWC there are major differences in stress amongst respondents, with those reporting high levels of FWE having significantly higher levels of stress. When FWC increases to high, all respondents report an increase in stress, with those with high FWE reporting a significant weaker increase in stress compared to those with low FWE. Overall, this supports the effects of enrichment buffering conflict towards stress, specifically at high levels of FWE.

Overall, the models are all significant: anxiety (R^2 = .36, F = 4.166, p< .001), emotional exhaustion (R^2 = .50, F = 7.956, p< .001), and stress (R^2 = .57, F = 10.494, p< .001). Finally, the variance inflation factors (VIF) were examined for evidence of multicollinearity, which can be detected when the VIF values equal 10 or higher (Ryan, 1997). However, all the scores for the regressions were below 2.5, indicating no evidence of multicollinearity unduly influencing the regression estimates.

RESULTS *(Study 3)*

Descriptive statistics for all variables are shown in Table 10.

Table 10. Descriptive Statistics and Correlations

Variables	M	SD	1	2	3	4	5	6	7	8	9	10	11	12
Males														
1. WFC	2.7	.84	--											
2. FWC	2.2	.83	.38**	--										
3. WFE	3.0	.84	-.14*	-.05	--									
4. FWE	3.6	.80	-.11	-.18**	.33**	--								
5. Emotional Exhaustion	2.6	.84	.48**	.29**	-.19**	-.14*	--							
6. Cynicism	2.4	.95	.31**	.24**	-.31**	-.19**	.62**	--						
Females														
7. WFC	2.6	.89	.12*	.20**	.03	-.04	.13*	.05	--					
8. FWC	2.1	.78	.07	.25**	.06	-.04	.15*	.07	.46**	--				
9. WFE	3.2	.88	-.07	-.06	.13*	.08	-.09	.02	-.30**	-.03	--			
10. FWE	3.8	.73	.01	-.03	.05	.21**	.02	-.01	-.10	-.15*	.25**	--		
11. Emotional Exhaustion	2.6	.85	.10	.16**	-.03	-.01	.26**	.16*	.58**	.32**	-.33**	-.06	--	
12. Cynicism	2.3	.96	.07	.18**	.02	-.03	.16**	.11	.33**	.27**	-.44**	-.12	.61**	--

N=266, *p< .05, **p< .01

The mean scores show that males and females report below average levels for WFC (M=2.7 and 2.6) and even lower levels for FWC (M=2.2 and 2.1). Towards enrichment, WFE is at the midpoint for males and only slightly higher females (M=3.0 and 3.2). However, there are much higher levels of enrichment from the family domain (M=3.6 and 3.8). Analysis of the data using pair-sampled t-test found only one significant difference between males and females and that was towards FWE (t= -4.130, p< .001). Similarly, both males and females had below average levels of job burnout, although emotional exhaustion levels (both M=2.6) were higher than cynicism (M=2.4 and 2.3) for both males and females. Hence, between the two groups there is very little difference between the work-family interface and job burnout outcomes. Further analysis was conducted using pair-sampled t-test to test the strength of relationships between work and family domains and outcomes within the male and female samples. Males were found to have significantly higher WFC than FWC (t= 8.799, p< .001), and this was similar for females (t= 9.285, p< .001). However, towards enrichment these effects were the opposite, with males having significantly higher FWE than WFE (t= -9.210, p< .001) and similarly so for females (t= -10.765, p< .001). Towards outcomes, males had significantly higher levels of emotional exhaustion than cynicism (t= 5.151, p< .001) and this was similar for females (t= 5.970, p< .001).

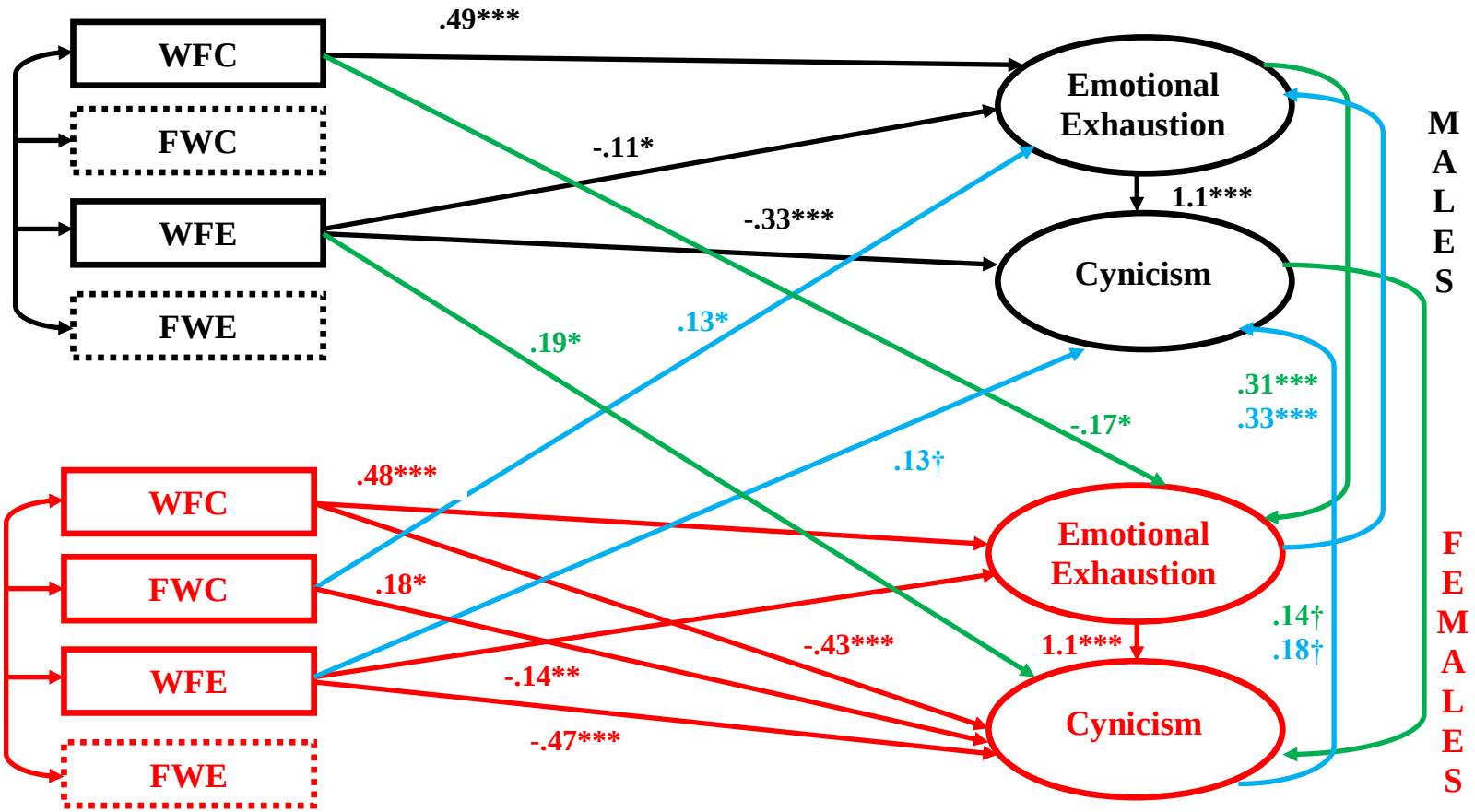
Towards correlations, male WFC was significantly correlated with male FWC (r= .38, p< .01), male WFE (r= -.14, p< .05), male emotional exhaustion (r= .48, p< .01), male cynicism (r= .31, p< .01), and female WFC (r= .12, p< .05). Male FWC was significantly correlated with male FWE (r= -.18, p< .01), male emotional exhaustion (r= .29, p< .01), male cynicism (r= .24, p< .01), female WFC (r= .20, p< .01), female FWC (r= .25, p< .01), and female emotional exhaustion (r= .16, p< .01) and female cynicism (r= .18, p< .01). Male WFE was significantly correlated with male FWE (r= .33, p< .01), male emotional exhaustion (r= -.19, p< .01), male cynicism (r= -.31, p< .01), and female WFE (r= .13, p< .05). Male FWE was significantly correlated with male emotional exhaustion (r= -.14, p< .05), male cynicism (r= -.19, p< .01), and female FWE (r= .21, p< .01). Male emotional exhaustion was significantly correlated with male cynicism (r= .62, p< .01), female WFC (r= .13, p< .05), female FWC (r= .15, p< .05) and female

emotional exhaustion (r= .26, p< .01) and female cynicism (r= .16, p< .01). Male cynicism was significantly correlated with female emotional exhaustion only (r= .16, p< .01). Female WFC was significantly correlated with female FWC (r= .46, p< .01), female WFE (r= -.30, p< .01), female emotional exhaustion (r= .58, p< .01), and female cynicism (r= .33, p< .01). Female FWC was significantly correlated with female FWE (r= -.15, p< .05), female emotional exhaustion (r= .32, p< .01), and female cynicism (r= .27, p< .01). Female WFE was significantly correlated with female FWE (r= .25, p< .01), female emotional exhaustion (r= -.33, p< .01), and female cynicism (r= -.44, p< .01). Finally, female emotional exhaustion was significantly correlated with male cynicism (r= .61, p< .01).

Goodness of Fit of Proposed Model

The result of the prediction model in SEM is shown in Figure 14.

Figure 14. Crossover Effects Model towards Job Burnout



Key: Black lines=males, Red lines=females, Green lines=male crossover to females, Blue lines=female crossover to males

Overall, the prediction model fits the data well: CFI = .95, RMSEA = 0.05 (LO 90 = 0.04 and HI 90 = 0.05), and SRMR = 0.0450. Due to the large number of relationships tested (see Figure 13), only significant relationships are shown in Figure 14. For direct effects, towards male emotional exhaustion, significant path coefficients are = 0.49 for male WFE ($p < .001$) and -0.11 for male WFE ($p < .05$). Towards male cynicism, the significant path coefficient is -0.33 for male WFE ($p < .001$), and 1.1 for male emotional exhaustion ($p < .001$). Towards female emotional exhaustion, significant path coefficients are = 0.48 for female WFC ($p < .001$) and -0.14 for female WFE ($p < .01$) and towards female cynicism, significant path coefficients are = -0.43 for female WFC ($p < .001$), 0.18 for female FWC ($p < .05$), -0.47 for female WFE ($p < .001$), and 1.1 for female emotional exhaustion ($p < .001$). Overall, there is support for Hypotheses 17a(males) and 18a (females) regarding WFC influencing emotional exhaustion. While there is no support for Hypothesis 17b (male) there is for Hypothesis 18b (female) regarding WFC influencing cynicism. Similarly, there is support for Hypotheses 21a and 21b (males) and 22a and 22b (females) regarding WFE negatively influencing emotional exhaustion and cynicism. However, Hypotheses relating to family-work conflict and family-work enrichment were not supported.

For crossover effects, the two effects that were counter to those expected. Male WFC was significantly associated with female emotional exhaustion, with a path coefficient of -0.17 ($p < .05$). It was expected that conflict crossover effects would be detrimental to the partner by increasing job burnout not reducing it. Similarly, male WFE was significantly associated with female cynicism, with a path coefficient of 0.19 ($p < .05$). It was expected that enrichment crossover effects would benefit the spouse by reducing job burnout not enhancing it. The effects were mixed for female crossover effects to males, with one effect in the opposite direction and the other as expected. Female FWC was significantly associated with male cynicism, with a path coefficient of 0.13 ($p < .05$). It was expected that conflict crossover effects would be detrimental to the partner by increasing job burnout and this was supported. However, female WFE was significantly associated with male cynicism, with a path coefficient of 0.13 ($p < .01$). It was expected that enrichment crossover effects would benefit the spouse by reducing

job burnout not enhancing it. Overall, there is only slight support for cross-over effects between the work-family interface dimensions towards partners job burnout dimensions, although clearly there are a number of significant effects, which are just counter to the theory. Finally, there is evidence of crossover effects between job burnout dimensions between both male and female partners. Male emotional exhaustion was significantly linked to female emotional exhaustion, with a significant and positive relationship found (path coefficient = .31, $p < .001$), while female emotional exhaustion was significantly linked to male emotional exhaustion, with a significant and positive relationship found (path coefficient = .33, $p < .001$). Similarly, male cynicism was significantly linked to female cynicism, with a significant and positive relationship found (path coefficient = .14, $p < .1$), and female cynicism was significantly linked to male cynicism, with a significant and positive relationship found (path coefficient = .18, $p < .1$). Overall, these findings provide support for Hypotheses 29a and 29b and Hypotheses 30a and 30b.

CHAPTER 9

DISCUSSION

Study 1: Employee Sample

The first study was undertaken to answer appeals for a renewed focus on moderation effects in the established conflict and enrichment literature. As such, the exploration of interaction effects between work and family conflict and enrichment dimensions towards mental health outcomes, and in particular testing the buffering effects of enrichment on conflict, are highly important. Consistent with prior research and the current hypotheses, greater work-family and family-work conflict was significantly and positively correlated to anxiety, depression, emotional exhaustion and cynicism. In addition, work-family enrichment was significantly and negatively correlated to anxiety, depression, cynicism and emotional exhaustion, as was family-work enrichment except towards emotional exhaustion. For both conflict and enrichment, the Pearson's correlations r values were all greater for work-family dimensions than family-work dimensions towards mental health outcomes, highlighting that dimensions occurring in the workplace are more salient than those based in the home.

Overall, the results of Study 1 yielded significant findings. Strong support was found for work-family conflict positively influencing mental health outcomes and work-family enrichment negatively influencing mental health outcomes. Of particular interest, especially given the work-family literatures focus on conflict and enrichment bi-directionally (work to family and family to work), was the lack of family-work enrichment influencing outcomes, while family-work conflict was only significantly related to depression and cynicism. Consequently, strong support for work-family based dimensions was found, with limited family-work dimension influences. Strong support was found for the buffering effects of work-family enrichment on work-family conflict towards all mental health outcomes (anxiety, depression, emotional exhaustion, and cynicism). Furthermore,

consistent interaction effects were found, and these will be discussed in more detail below, between both dimensions of enrichment (work-family and family-work) with both dimensions of conflict (work-family and family-work). Significantly, enrichment was found to consistently buffer various dimensions of family-work conflict which suggests that employees who have enrichment in their lives may be able to attenuate the negative effects of conflict originating in the family role.

These results have significant implications at the theoretical and practical level for organizations to mitigate the effects of stress and strain produced in the workplace on the individual. This is important at the organizational level in terms of acting to attenuate heightened levels of depression, anxiety, emotional exhaustion and cynicism. Findings of the study have shown support for the role of conflict variables (namely WFC and FWC) influencing anxiety, depression, emotional exhaustion and cynicism. Furthermore, strong support has been found for the effects of enrichment buffering conflict toward anxiety, depression, emotional exhaustion and cynicism. This further substantiates the nature of the relationship among these variables and most importantly their influence on the employees. These findings are conducive of the theoretical underpinnings of the conflict and enrichment literatures and as such provide support for the general notion that elevated and/or prolonged levels of both family-work and work-family conflict can have detrimental effects on the mental health and psychological well-being of an individual, while high levels of enrichment, specifically work-family enrichment, can lead to benefits of improved mental health.

Moderation Effects

The work-family enrichment literature has argued that enrichment may be able to buffer the influence that conflict has on outcomes, although to date this has been seldom tested. The present study found a number of significant and consistent interaction effects. Most notably consistent findings for interaction effects between FWC and FWE were found towards all outcomes: anxiety, depression, cynicism and emotional exhaustion. This is of interest as it provides evidence to substantiate the effects of conflict and enrichment in terms of mental health

outcomes. Essentially there was consensus in the data that enrichment was found to consistently buffer various aspects of work-family conflict. This evidence of buffering provides a source of confirmation of the positive interdependencies resulting from participation in multiple roles. That is to say, that an individual can compensate for dissatisfaction in one role by seeking gratification through other roles. Moreover, different resources can act as buffers for conflict. As such, the family unit can be a source of love, support, self esteem, self efficacy, emotional empathy, understanding, and social-capital resources related to interpersonal relationships at home (Greenhaus & Powell, 2006). These types of resources can provide an individual with emotional sustenance which in effect can act to buffer negative experiences from other roles. An individual's sensitivity to types of resources that act as a buffer for conflict aligns with findings in the literature on resource theory which states that levels of concreteness and particularism of resources can be credited for the disposition of resource exchange, a person's satisfaction of the exchange, and the environment of the exchange (Rettig & Leichtentritt, 1999). These factors contribute to the buffering process and as such influence the level of enrichment experienced by the individual.

It is important to note that resources such as money, skills and perspectives, psychological and physical resources, and social-capital resources (Greenhaus & Powell, 2006) can be generated in some form and to some degree from the workplace and transferred to the family, whereas symbolic resources such as love can be generated in the home which can in turn reduce the negative effects of work-family conflict. The resulting findings suggest that high levels of resources can buffer the negative impact of work-family and family-work conflict on mental health. This suggests that employees who are experiencing work-family conflict may be less likely to experience mental health outcomes such as depression, anxiety, cynicism and emotional exhaustion if they are experiencing greater enrichment from their family role or, to a lesser extent, their work role. Further to this, material, psychological, physical and social-capital resources accumulated through participation in multiple roles can also help to buffer negative experiences which in turn can help to manage conflict.

The following section deals explicitly with the significant enrichment effects on conflict towards each outcome.

Enrichment Moderating Conflict towards Anxiety

Based on analysis of the literature we expected to find that anxiety was influenced by the interaction between evaluation of internal and external resources (Lazarus & Folkman, 1984). This was found to be true in the context of this study with reference to the effect of enrichment buffering conflict towards feelings of anxiety. Most notably from the data it was evident that there was only modest difference in anxiety regardless of the corresponding level of FWE. In spite of this there was comprehensive evidence that as FWC increased from low to high there was a definitive increase in anxiety for all respondents. Of most interest however, respondents with increased levels of FWE reported a considerably smaller increase in anxiety compared to respondents with low levels of FWE. From this we can see that increased conflict can lead to increased anxiety. However, this relationship is moderated by the presence of enrichment in which case an enriched individual can buffer feelings of anxiety with enrichment from other roles.

Enrichment Moderating Conflict towards Depression

From the literature it was evident that depression was one of the most commonly and widely experienced manifestation of mental health issues (Ramsey, 1995; Gray, 2008). Furthermore, an argument has been formulated in the literature that causes of depression are either exogenous or endogenous in origin, and as such situational factors which can be tied to vocational or family based duties can affect the relative saturation of depressive symptoms (Gray, 2008). Analysis of the data showed that at low levels of FWC individual's with corresponding low levels of FWE reported higher levels of depression. Interestingly however, when FWC increases to high, subsequent levels of depression also increased but a significantly weaker increase in depression was reported for those with high levels of FWE. From this it can be noted that enriched individuals can draw on various resources gained from participation in family roles to help deal with negative effect of conflict towards depression. As discussed earlier, intangible resource such as love, empathy, feeling of belonging or connectedness may help insulate a

person against feelings of depression. Furthermore, resources such as perspectives, psychological, physical resources, and social-capital resources (Greenhaus & Powell, 2006) generated in the family domain may also play an important part in buffering against conflict towards depression.

The literature has suggested that 50% of all adults will be affected by depression to some degree during their lifetime (Ramsey, 1995) and the implications of this cannot be ignored. In the workplace depressive symptoms may manifest as a lack of enthusiasm, frequent complaining, reduced productivity, aggressive behaviour, decreased career interest, absenteeism (Gray, 2008), low morale, lack of co-operation, health complaints, or drug and alcohol abuse (Johnson & Indvik, 1997). Depression may also influence an employee's relationships with co-workers, particularly where a person's job requires collaboration with others as these working relationships may become strained and more irritable (Johnson & Indvik, 1997). Likewise in the home environment a depressed person may withdraw from family life and have little drive or motivation to involve themselves to their full potential (Gray, 2008). From this it is evident that the effects of depression can be far reaching and extremely detrimental to an individual's performance in both family and work roles. However we find strong support for the effects of enrichment buffering conflict towards depression particularly where FWC is high. This is significant as again the role of enrichment is found to play a pivotal role in influencing levels of depression which has implications for the field of work-family research.

Enrichment Moderating Conflict towards Emotional Exhaustion

The literature suggested that emotional exhaustion is characterised by a feeling of lack of energy and depleted emotional resources which can implicate the state of a person's mental health (Posig & Kickul, 2004). In addition to this, work overload and unattainable work-role expectations are factors linked with conflict theory which can heighten feelings of emotional exhaustion (Kahn, 1978). From analysis of the data it is clear that at lower levels of FWC significant differences in emotional exhaustion were evident. Again the role of enrichment was important in moderating this relationship as at high levels of FWE and low levels of FWC,

there was found to be higher corresponding levels of emotional exhaustion. This interesting effect may indicate that higher quality family relationships are indicative of a stronger sense of belonging to the family unit which in effect influences emotional sustenance. Moreover, experiences of enrichment generated in roles outside of the workplace may act as buffers for negative experiences of other roles. Yet of greater consequence, when FWC increased to high, respondent's who reported high levels of FWE had a subsequent decrease in level of emotional exhaustion, whereas low FWE reported heightened levels of emotional exhaustion. This perhaps could be explained by the effect that resources such as love and support may have in providing emotional sustenance. Overall these results support the effects of enrichment buffering conflict towards emotional exhaustion.

Enrichment Moderating Conflict towards Cynicism

The situational attribution perspective on cynicism discussed in the literature (Maslach et al., 1996) identified the concept as an explicit construct in which societal, employment, institutional and organizational change factors are influential in engendering cynicism (Qian & Daniels, 2008). As such the interaction terms for WFC and FWE showed that at low levels of WFC respondents with low FWE had subsequent higher levels of cynicism, while those with high FWE had significantly lower levels of cynicism. However, when WFC increased to high, this was mirrored with increased cynicism for all respondents, while those with higher FWE showed greater increases in levels of cynicism comparatively to those with low levels of FWE. However, it is notable that individuals with high FWE had overall lower levels of cynicism than respondents with low FWE. The effects of WFE on FWC were slightly different, with significantly lower levels of cynicism held by employees with high FWE at all levels of FWC, supporting the buffering effects. Similarly, the effects of FWE on FWC show similar levels of cynicism when conflict is low, but when FWC increases to high, respondents with high FWE reported a significantly slighter increase in cynicism than respondents with low FWE.

Overall, this provides evidence of the role of enrichment in alleviating the effect of conflict on mental health outcomes, and more specifically cynicism. In the home environment cynicism can effect interactions with family members and shape a person's general demeanour and perspective. Cynicism has also been linked with increased beliefs of unfairness, feelings of distrust, decreased commitment (to family or work responsibilities), decreased job/life satisfaction and feelings of alienation (Andersson & Bateman, 1997; Watt & Piotrowski, 2008). In addition to this a cynical employee is likely to be significantly less engaged at work, experience increased absenteeism and overall role performance (Wanous et al., 2000). Generally, cynicism in the workplace is deemed to be of a destructive nature to the organization (Andersson & Bateman, 1997). However, some theorists challenge this notion and note the positive aspects of the construct. As such, some credit cynicism as a motivational factor (Qian & Daniels, 2008) and others argue that a cynical employee has a more realistic perspective on potential issues and challenges facing an organization (Watt & Piotrowski, 2008; Foy, 1985). Whatever the influence cynicism may have on other workplace outcomes, the present study shows that cynicism can be detrimentally influenced by conflict in the home and workplace. Overall, the present study finds strong support for the effects of enrichment buffering conflict towards cynicism which is further reiterates the importance of enrichment in moderating cynicism.

Effects Sizes from Conflict and Enrichment

This section compares and contrasts the amounts of variance accounted for by the various dimensions of the work-family interface. The overall size effects of conflict and enrichment were significant for each of the four mental health outcomes. For anxiety, conflict predictors accounted for 13% and enrichment predictors 8% of variance respectively. From this we can see that while conflict is higher, both are significant in influencing resulting levels of anxiety. For depression, conflict and enrichment predictors were an equal 10% which is of particular interest as it shows that both conflict and enrichment have an equal role in influencing depression (positively and negatively respectively). For emotional exhaustion, conflict predictors equalled 24% whereas enrichment a modest 4%. This is to say that conflict at the work-family interface can take a huge emotional

toll on an individual, and the role of enrichment in reducing this conflict is evident at a much more conservative level. Interesting findings were also evident for cynicism where conflict and enrichment predictors were a close 14% and 15% of the variance respectively. Interestingly, this suggests enrichment is far more powerful in reducing the cynicism dimension of job burnout than the emotional exhaustion dimension. Overall, these findings convey the role of enrichment in influencing outcomes of anxiety, depression, emotional exhaustion and cynicism. The interaction effects were significant and modest, with interactions towards anxiety and cynicism accounting for a sizeable 4% of additional variance over and above conflict and enrichment, and a more modest 2% towards depression and emotional exhaustion.

Implications for the Individual and the Organization

These findings have implications at the individual and firm level as increasing enrichment through sound work-family policies might act to attenuate the negative effects of conflict resulting from incompatibility of roles between the work and family domains. This provides further insight into the processes by which work and family roles are linked, which can help build strategies to ultimately increase enrichment in both work and family roles to buffer the effect of conflict in similar and opposite roles. From analysis of the literature we expected to find that increased conflict in the work and family domain would lead to poorer mental health outcomes, and we explored anxiety, depression, emotional exhaustion and cynicism as a broad overview of well-being. In addition to the direct and detrimental effects of conflict, we expected to find that enrichment from the work and family domains would have an additional direct effect, where enriched individuals were expected to experience less mental health issues. The study confirmed expectations through substantiating strong support for work-family and family-work conflict positively influencing mental health, and work-family and family-work enrichment negatively influencing mental health outcomes Overall, enrichment was found to consistently buffer some dimension of work-family conflict, which signified that employees who are enriched may be able to diminish the negative influences of their work and family roles. Furthermore, it is evident that when FWC is low individuals with low FWE experience higher anxiety, depression, emotional exhaustion and cynicism than

individuals with no FWE. This is interesting and is perhaps evidence of interaction within the family unit. However, most importantly, when FWC increases to high the role of enrichment becomes clear in that individuals with FWE had significantly lower anxiety, depression, emotional exhaustion and cynicism than individuals who had no enrichment. Overall, solid support was found in Study 1 of the influence of the work-family interface on mental health on a sample of random employees, with strong support found for buffering effects of enrichment on conflict.

Study 2: Entrepreneurs

There have been calls within the entrepreneurial literature for greater understanding of how the work-family interface influences entrepreneurs. As such, the present study takes on this challenge in attempting to gather new information on the processes by which work and family are linked, and how these experiences are unique for entrepreneurs. Based on an analysis of the literature, an understanding was gained of the distinct job demands and challenges placed on the entrepreneur. Prior research provided insight into the nature of the entrepreneurial career which is characterised by risk and reward, a trade-off which sees aspiring entrepreneurs gambling their job security in an uncertain environment for success, innovation, flexibility, and as a means to realising a more satisfying and challenging way of life. As such the notion of achieving success can result in pressure and stress in the quest to satisfy high expectations.

While Study 2 tested the effects on entrepreneurs, it also explored mental health differently by exploring anxiety, the job burnout dimension of emotional exhaustion, and including a measure of stress. The findings of the study showed that WFC and FWC were significantly correlated with anxiety, emotional exhaustion and stress. WFE was significantly correlated with all outcomes while FWE is significantly correlated with anxiety only. Similar to Study 1, we find that work-family dimensions are stronger than family-work dimensions, and in particular for Study 2, conflict dimensions appear have stronger correlations than enrichment dimensions. These findings reinforce the idea of conflict and enrichment in a family and work capacity influencing an individual's mental health. From this it can be generalised that conflict has detrimental outcomes for individuals and as positively influencing emotional exhaustion and stress, while enrichment appears likely to lower these mental health outcomes.

The entrepreneurial literature suggested that while entrepreneurs are likely to foster behaviours and attitudes such as hope, optimism, resilience and self efficacy, they may also suffer increased stress particularly where they are heavily invested, physically, mentally and monetarily to their business. The literature also suggested that these behaviours are closely linked to mental health outcomes as they influence individual behavioural tendencies (Avey et al., 2006). Research has

also shown that individuals with higher self efficacy (such as entrepreneurs) select more intellectually and physically challenging tasks, and are more focused and determined to achieve task completion in spite of circumstantial factors that may work against task completion (Avey et al., 2006). As such, the literature proposes that behavioural factors linked with many entrepreneurs can deem them less likely to experience emotional exhaustion, stress and anxiety associated with tasks at work due to higher task variation, stimulation and variation at work despite any perceived obstacles (Avey et al., 2006). As such, this self sustenance may be a factor in the relationship between conflict and outcomes of anxiety, emotional exhaustion and stress.

Further to this, Carver and Scheier (2003) suggested that individuals who are optimistic expect good things to happen to them which decrease the likelihood of cynical attitudes towards the workplace. This is because a positive attitude guides both cognitive and behavioural responses (much like a self fulfilling prophecy) whereby attending work is associated with positive outcomes such as earning recognition or the opportunity for new challenges (Rontondo, 2002; Lazarus & Folkman, 1984). Furthermore, emotional stability and resilience of entrepreneurs has been shown to have correlations with work-family enrichment and decreased levels of conflict (O'Driscoll, et al., 2004; Barnett & Hyde, 2001; Voydanoff, 2002; Menaghan, 1991). The present study showed that work-family conflict was the only consistent and reliable predictor of mental health outcomes for entrepreneurs, influencing all three outcomes. Importantly, family-work conflict was not a significant predictor of any outcomes, indicating that work-family dimension dominates the family-work dimension of conflict towards the mental health of entrepreneurs.

Furthermore, while enrichment has been strongly linked to positive mental health in the literature, support was found only from WFE towards anxiety, with non-significant effects towards emotional exhaustion and stress. Similarly, family-work enrichment was not significantly related to any mental health outcomes. This suggests that for this sample of business owners, the ability of enrichment to reduce mental health outcomes appears minimal. However, while little support

was found for the direct effects of enrichment, support was found for the concept of buffering, whereby greater enrichment was found to buffer conflict towards all three outcomes. From this it is evident that positive and enriching experiences in the workplace and home can help to buffer the effects of conflict for entrepreneurs, whether this conflict originates in the business or home.

The following section deals explicitly with the significant enrichment effects on conflict towards each outcome.

Enrichment Moderating Conflict towards Anxiety

Towards anxiety, significant interaction effects were found between three out of four interaction combinations, with similar effects for all outcomes. From the graphed interactions it is evident that at low levels of conflict (both WFC and FWC) there is a difference in reported levels of anxiety between respondents with high and low levels of enrichment (both WFE and FWE), although this difference is smaller with WFC than FWC. However, when conflict increases (both WFC and FWC) the effects are the same for all three interactions. Respondents with low levels of enrichment (both WFE and FWE) report strong increases in anxiety, while respondents with high levels of enrichment (both WFE and FWE) report very shallow increases in anxiety. This provides strong evidence of the effects of enrichment buffering conflict towards anxiety. The effects show that at low levels of conflict the buffering effects of enrichment are not fully evident until conflict increases and at such time individuals who can draw on greater experiences of enrichment can use such cognitive and practical experiences to help deal with discord at the work-family interface. Experiences of anxiety could be attributed to the climate of uncertainty that many entrepreneurs are involuntarily based in, particularly where the entrepreneur has risked a great deal to bring conception of a new idea into fruition as a viable business entity. However, it is important to note that as conflicts increase to high, those who were more enriched experienced a marginal increase in anxiety compared to those with low levels of enrichment. The collective findings of the interaction effects discussed above highlight the central role of enrichment in creating a means to alleviate anxiety related to conflict in the work and family domains for entrepreneurs.

Enrichment Moderating Conflict towards Emotional Exhaustion

Towards emotional exhaustion a significant interaction between WFC and WFE was found, and the interaction terms indicated that at low levels of WFC there was no difference in levels of emotional exhaustion regardless of the corresponding level of WFE. Again this could be attributed in part to the component of risk and uncertainty that comes with entrepreneurial endeavour, which itself could be linked to a degree of emotional exhaustion. Furthermore, a culture of long hours, less frequent visits to healthcare professionals (Duran-Whitney, 2004) may collaborate to deplete emotional resources. Moreover, the consequent stress caused by a poor fit between job demands and individual's capacity to complete required tasks in a timely fashion could also be a source of emotional exhaustion. This in time could lead to psychological harm and physiological strain for an entrepreneur (Maslach, 2003). However, as with anxiety, when WFC increases to high there is a significant increase in emotional exhaustion for individuals who also reported low levels of WFE, and those with high WFE reported only a marginal difference. From this we can see that again enrichment plays a pivotal role in moderating the relationship between conflict and the amount of emotional exhaustion experienced particularly when WFC is high.

Enrichment Moderating Conflict towards Stress

Significant interaction effects were found towards stress between WFC and WFE and FWC and FWE. From the graphed interactions, it is apparent that similar interaction effects are at play. Regarding the interaction between WFC and WFE, it showed that at low levels of WFC there were major differences between respondents, with individuals who reported high levels of WFE having significantly higher levels of stress than those with low WFE. This outcome was not expected as from the literature it was suggested that greater enrichment was likely to alleviate stress (Greenhaus & Powell, 2006). However, when WFC increases to high, all respondents reported and increase in stress and individuals with greater WFE had a significantly weaker increase in stress comparatively to those with low WFE. Again the commonplace of stress for an entrepreneur is worthy of mention, and perhaps a more enriching home life may place greater pressure on the entrepreneur to succeed and hence increases experiences of stress.

But as with anxiety and emotional exhaustion, when conflict increases, individuals with greater enrichment experience a significantly lower increase in stress than respondents who were less enriched. The effects of the interaction between FWC and FWE were similar, although there were only minor differences towards stress amongst respondents at low levels of FWC. When conflict levels increased to high, all respondents did report increased stress, although those with high FWE reported a considerably lower increase in stress. In light of this, these findings are evidence of enrichment buffering conflict towards stress, specifically at high levels of WFE and FWE.

For entrepreneurs it is evident that career characteristics such as greater freedom and increased flexibility that come with being your own boss can help manage demands between work and family roles. This may lead the entrepreneur to experience greater enrichment as interaction between work and family domains is appropriately managed. This can not only increase job and life satisfaction (Wong, et al., 2006) but also help contribute to sound mental health. This is a key aspect to note as emotional exhaustion, anxiety, and stress have all been linked to more serious mental health implications such as job burnout and depression (Haar, 2006). However, it is important to refer here to established entrepreneurial literature which maintains that across the general populus entrepreneurs and the self-employed have indicatively high levels of self-efficacy and lower levels of depression compared to their salaried and wage earning peers (Wong, et al., 2006). As such, the notion that entrepreneurs develop greater satisfaction from their work is widely represented (Scarborough & Zimmerer, 2000; Zimmerer & Scarborough, 1996; Willax, 1998). Furthermore, entrepreneurs may be regarded as more enriched than the general population as the drive to succeed in one's own venture can be portrayed as a parent-child metaphor in which the personal attachment to the enterprise can lead to greater freedom, flexibility and the opportunity for lucrative monetary compensation (Wong, et al., 2006). Accruing such resources, both tangible and intangible, can act as proficient tools for juggling demands of work and family roles. Thus the unique and distinct nature of the entrepreneurial career may in also itself contribute to greater enrichment which is a point of differentiation from the population samples of employees

(study one) and dual-earning couples (study three). This in turn can help to buffer conflict resulting from job and/or family demands.

Effects Sizes from Conflict and Enrichment

From the R^2 Change figures we can see the relative size effects of conflict and enrichment variables. Notably conflict variables accounted for significant amounts of variance towards anxiety which equated to 6%, whereas enrichment variables accounted for 8% of variance. As such, the effects of the work-family interface appear relatively even and minor towards anxiety amongst entrepreneurs. However, towards emotional exhaustion and stress conflict variables represented 34% and 17% of variance respectively, and by comparison there was no additional variance for enrichment variables. This was of interest as it shows that while conflict variables have a significant influence on an entrepreneur's anxiety, emotional exhaustion and stress enrichment was only significantly linked to anxiety. To relate this to the study sample of entrepreneurs perhaps this can be explained by the unique characteristics of the entrepreneurial career and lifestyle, such as increased freedom and flexibility compared with less malleable careers of salary and wage earners. This is to say that greater enrichment may alleviate feelings of anxiety, but levels of stress and emotional exhaustion may foster stronger internal links which are tied closely to success. The interaction effects were significant and strong, with interactions towards anxiety and stress accounting for a sizeable 7% of additional variance over and above conflict and enrichment, and a more modest 3% towards emotional exhaustion. Overall, solid support was found in Study 2 of the influence of the work-family interface on mental health on a sample of entrepreneurs, with particularly strong support found for the detrimental influence of work-family conflict. However, while enrichment held minor direct effects, there was strong support found for buffering effects of enrichment on conflict, supporting this influence on entrepreneurs and their mental health.

Study 3: Dual Earning Couples

The third study was developed in answer to calls within the work-family literature for greater understanding of the processes by which crossover effects influence experiences of conflict and enrichment for dual-earning couples. As such this study attempts to divulge the way in which work and family are inherently linked and how this impacts on mental health outcomes of job burnout (specifically emotional exhaustion and cynicism) towards the self and the partner. More specifically, there have been calls in the literature to widen the lens of measurement to move away from traditional gender roles and "homogenous and male-dominated professions" (Crossfield et al., 2005, p.213). As such this study focuses on dual-earning couples. Statistical analysis showed that between the two sample groups of male and females there was very little difference between the work-family interface and job burnout outcomes. Both males and females had levels of WFC that were below average, and lower levels for FWC. Towards enrichment, WFE for males was at the midpoint, and this was only slightly higher for females. Interestingly, there was overwhelming support that greater experiences of enrichment stemmed from the family domain rather than the workplace. From this we can see that both males and females experienced more enrichment from the family domain than vocational roles. This could be attributed to job type and job demands particularly where employees have little control or flexibility in relation to day to day in-role function. Comparatively to the population sample of entrepreneurs of study two, employees are less likely to experience the freedom and flexibility that many entrepreneurs are able to create, and hence seek enrichment from roles outside of the workplace such as the family domain. In this view employment can be viewed as a means to an end as opposed to an exciting and dynamic experience, and by contrast experiences in other roles may be comparatively more enjoyable or more enriching.

The results also showed that males and females were found to both have significantly higher WFC than FWC. Towards enrichment, both males and females had similarly higher FWE than WFE. Both groups also had significantly higher levels of emotional exhaustion than cynicism. However, one significant difference between males and females was towards FWE. Pair-sampled t-test

showed that on average females were found to have greater FWE than their male counterparts. This could be explained by the gender role perspective which as discussed earlier establishes that female and male experiences of role conflict and role ambiguity are different (Boles, Wood, & Johnson, 2003; Haar & Bardoel, 2008). These differences have been attributed in part to contrasting role perceptions of male and female employees (Boles et al., 2003), and society's historical perceptions of traditional male and female roles (Eagly, 1987). Theorists have suggested that women are likely to place more importance on family responsibilities as this role is likely to be more strongly linked to their social identity than men (Bem, 1993; Gutek, Searle, & Klepa, 1991). Despite this, overall there was relatively little difference between male and female work-family interface and job burnout outcomes.

Male and Female Correlations

There were strong similarities between males and females, although some telling differences. WFC and FWC were both significantly and positively correlated to emotional exhaustion and cynicism, with the work-family dimension larger than the family-work dimension. This was the same for both males and females. However, while WFE was significantly and negatively correlated to emotional exhaustion and cynicism for both males and females, only males FWE was significantly and negatively correlated to these outcomes, as females FWE was not. Similarly, work-family dimensions were higher than family-work dimensions. Overall, the split between males and females highlights that while females had significantly higher levels of FWE than males, this predictor was not significantly related to the job burnout dimensions for females.

Direct Effects

Structural equation modelling was used to test the direct effects of conflict and enrichment on job burnout dimensions. While family-work conflict and family-work enrichment were all significantly correlated with job burnout for male respondents, these measures were universally non-significant in the prediction model. As a result only the work-family predictor's were directly significant. Stemming from this we find support for WFC significantly influencing emotional

exhaustion for both males and WFE significantly and negatively influencing emotional exhaustion and cynicism for males. This shows that conflict was directly significant in three out of the four hypothesized directions. The direct effects for females also included effects from a -family-work dimension, which is distinct from the male respondents. WFC was significantly and positively linked to emotional exhaustion, although significantly and negatively linked to cynicism. This negative direction is against the original correlation ($r = .33$, $p < .01$) and suggests some type of suppression effect from the full model. Further exploration (not shown) indicates that the direct link between emotional exhaustion and cynicism is the key, as when this is removed the effect would return to significant and positive (not negative). However, this approach does weaken the model and produces a poorer fitting model. All other direct effects were as expected. FWC was significantly and positively linked to cynicism, while WFE was significantly and negatively linked to both emotional exhaustion and cynicism. Overall, there is strong evidence of increased work-family conflict adversely effecting mental health, and support for the effects of work-family enrichment alleviating negative effects of emotional exhaustion and cynicism for both males and females.

Crossover Effects

Results for the analysis of crossover effects were largely inconsistent with prior research and the current hypotheses. It was hypothesized that that enrichment crossover effects would help facilitate a reduction in job burnout for partner. However, for the results of this study this was not the case. What eventuated was evidence that WFE for both males and females was significantly associated with an increase in their spouse's cynicism. Significantly, this crossover effect of enrichment towards cynicism was consistent across both male and female respondents. One possible explanation may be the idea of *job envy* between partners (Koonce, 1998). The concept of job envy is based around the notion that it is common for individuals to look for standards by which to judge their work. Further to this, Koonce (1998) suggest that those in close proximity to an individual such as co-workers, peers and spouses can be used as a benchmark by which to make judgements about an individual's career. In this scenario the effect of one partner experiencing greater WFE enrichment than their spouse could

cultivate jealousy or pessimism which translates into feelings of cynicism. In other words if one partner is experiencing greater enrichment from their work and their spouse is not, the resulting cynicism may stem from a desire to have greater WFE in their own work. This type of cynical attitude towards a spouse's WFE consistently crossed over from male and females which was a highly salient aspect of the data. The idea of job envy may also reflect the changing state of society where traditional gender role stereotypes are broken down and as such both males and female expect more equality in their employment. As such, one partner may feel cynical that their spouse is evidently experiencing more enrichment, when their own time at work may lack enrichment or be more heavily dominated by conflict.

The second crossover effect was also inconsistent with prior research and the current hypotheses. Again we expected to find the positive effect of conflict crossing over to detrimentally influence a spouse by increasing their job burnout; however this was not substantiated in the data. Male WFC was significantly and negatively linked to females' emotional exhaustion, indicating that while a male may experience greater work-family conflict and personal emotional exhaustion; this crosses over towards their female partner and leaves them with less exhaustion. One reason for this might be the feedback and information shared from the partner (e.g. excessive workload and deadlines) allows the female partner to reframe their own work situation and thus realise, in the context of their partner, that they don't have it so bad, and thus leads to feelings of being less burnout. However, crossover effects from the female partner towards the male do not work in the same way. As expected, female FWC lead to feelings of higher emotional exhaustion amongst male partners, perhaps indicating a gender specific role effect, where conflict from the home also impacts detrimentally on the male partner, due in part because of their less experience in dealing with and reconciling family conflict.

Finally, there are a number of crossover effects between the various job burnout dimensions between partners. There were significant crossover effects between a male's emotional exhaustion and their partner's emotional exhaustion, and

similarly with cynicism. Unlike the work-family interface dimensions, these are in the expected directions. Consequently, a male who feels more exhausted and cynical about his work is also likely to influence their partner to be similarly burnout. Furthermore, these effects were in both directions, with females similarly influencing their male partners emotional exhaustion and cynicism when their own dimensions of job burnout where high. Westman et al. (2001) suggested that the absence of a significant pathway from a wife's burnout to her husbands indicates that females may be more empathetic to the emotional states of their husband's than vice versa. However, the present study finds strong support for the crossover effects from both males and females. The literature suggests that females are more emotionally sensitive to their partner's feelings than vice versa and as such males may be less practiced in dealing with their wives emotional exhaustion (Westman et al., 2001). As such, a female's emotional exhaustion may crossover to their spouse as males are less emotionally able to deal with their partner's emotional exhaustion and therefore crossover occurs.

In addition to this, when a female is emotionally exhausted she may have less capacity to support her husband which may explain the second crossover effect. However, the present study clearly shows that these partners are well attuned to their partners job burnout with similar levels of increases in job burnout dimensions between both males and females. Interestingly, emotional exhaustion is far greater in influencing partners than cynicism (path coefficients of .31 to .33 compared to .14 to .18), indicating that exhaustion is the stronger dimension for crossover effects. This aligns well with the literature (e.g. Maslach, 1978, 1982; Leiter & Maslach, 1988) and Posig and Kickul (2004) characterization of emotional exhaustion as feeling a lack of energy and depleted emotional resources. Clearly, a partner who comes home emotionally exhausted, burnout, and indicating fewer emotional resources to spare their partner, such as silence to inquires about work, are likely to induce a stronger reaction from partners than displaying cynicism towards the workplace and job. The major contribution from these effects is that it provides empirical evidence to support crossover effects between both males and females, which seldom occur in the literature. Further replication and re-testing is required to determine whether these effects are generalizable.

CHAPTER 10

CONCLUSIONS

Throughout this thesis the importance of issues at the work-family interface have been explored along with in-depth discussion of relevant phenomena and processes of conflict, enrichment, crossover and buffering. The importance of the interaction between these variables across the work-family interface has been well established. Mental health outcomes of anxiety, depression, job burnout (emotional exhaustion and cynicism), and stress have been explored across three samples. Sample populations of employees, entrepreneurs and dual earning couples have been investigated to strengthen our understanding of how phenomena at the work-family interface exist for these groups. Consistent across two samples we find strong support for the effects of enrichment buffering conflict towards mental health outcomes of anxiety, depression, emotional exhaustion and cynicism (in study one); and anxiety, emotional exhaustion and stress (in study two). In addition, study three found strong direct effects but limited evidence of conflict and enrichment crossing over between partners. However, support was found for job burnout dimensions crossing over for both males and females to their respective partners.

Overall, the present study reinforces the literature on enrichment and builds strong evidence towards the buffering effects of enrichment on conflict. It is evident that an individual can attempt to insulate themselves from negative effects of experiences in one role by seeking greater enrichment in other roles. This is an important aspect of the results as it generates greater theoretical understanding of operational phenomena in the work-family field. Further to this, the findings can aid organizations in attempting to discover ways to better manage their social capital. Policy to guide how a company manages its staff in terms of issues at the work-family interface is becomingly increasingly important as staff place more importance on balance between work and family roles. In addition, it is important

to recognise that that the quality of experiences in the work and family domain can be hinged on a person's emotional state and as such an individual may seek self-protective and self-resilient behaviors in attempting to find a functional balance between competing role demands. Moreover, understanding the nature of this phenomenon provides key tools in achieving more positive outcomes. In other words, the more we understand about issues at the work-family frontier the more equipped we are in establishing innovative and progressive strategies that work for employee and organization alike.

For employees the functional balance between work and family roles is individualistic by nature. In a broad sense, we find support for enrichment buffering the negative effects of conflict. This was found to translate into a mechanism which influenced experiences of anxiety, depression, emotional exhaustion and cynicism. Overall employees who were more enriched experienced less anxiety, depression, emotional exhaustion and cynicism than employees with lower enrichment and equally high amounts of conflict. While it is inevitable that most employees will experience some degree and some form of anxiety, depression, emotional exhaustion, cynicism and stress at some point throughout their working life, it is important that such experiences do not outweigh experiences of enrichment. While in many cases this can be easier said than done, it is important for employers and employees alike to be aware and take precautions against the onset of factors detrimental to mental health. This is especially so if the owner is also being influenced by the work-family interface, as found in study two with the sample of entrepreneurs. While it is normal and very common to experience conservative levels of anxiety, depressive symptoms, cynical attitudes or emotional depletion it is when these feelings are experienced in excess that more serious health concerns can set in (Haar, 2006). Personal and organizational strategies are the key to a functional balance between competing demands of work and family roles.

There are specific lessons from study two (entrepreneurs). The lifestyle of the entrepreneur and the level of uncertainty involved in startup of an entrepreneurial venture indicate that these individuals are likely to be faced with numerous

internal and external challenges. The entrepreneur risks financial well-being, career opportunities, personal conflict as well as physical and mental health. These stressors have been linked with a higher risk of occupational stress and mental health outcomes (Duran-Whitney, 2004). While stress can be defined as inducing negative behaviors such as decreased productivity and lowered sense of well being, it has also been shown that constructive stress may lead to a sense of challenge, satisfaction, creativity and increased productivity. While it may not be possible to drastically reduce the demands placed on entrepreneurs, it is possible change their coping mechanisms in terms of increasing their social support and resource networks. Additionally, the literature suggests that entrepreneurs report higher levels of job satisfaction than their salaried and wage earning peers. However it is worthy to note that there was very limited evidence of direct effects of enrichment in the entrepreneurs' sample, whereas this was significantly different in the sample of employees. While the needs and motivations specific to the entrepreneur differ from employees of organizations, findings from this study have shown that the buffering hypotheses are consistent for entrepreneurs and employees alike. Strong support has been established for the effects of enrichment buffering conflict towards anxiety, emotional exhaustion and stress.

Finally, there are specific lessons from study three (dual career couples). The nature of the relationship between spouses is unique from other social relationships in that shared partnership and interaction are governed (in most cases) by love and a sense commitment. The dynamics of this relationship suggest that individual experiences will interact to affect both parties. Despite the fact that little evidence was found for conflict and enrichment crossing over, support for job burnout dimensions crossing over to increase job burnout of the partners (for both males and females) was found and this adds new insights into the crossover effects and therefore is an area for future research. Furthermore, crossovers effects counter to that which were expected were found, and the concept of job envy was offered in explanation of these phenomena to provide new direction in the literature and thus is an area which also necessitates further research.

As discussed earlier, the population samples for the three studies are diverse and unique it was evident that experiences of conflict and enrichment for employees, entrepreneurs and dual-earning couples are indeed different. Although all findings did not confirm to all of the stated hypotheses the findings are valuable in that they provide insight into interaction between conflict and enrichment towards mental health outcomes at the work-family interface. As such, strong support was found for conflict being detrimental, while enrichment was useful although seldom stronger than conflict. However, strong consistent support was found for the buffering effects of enrichment on conflict, and furthermore, new directions in the crossover literature were uncovered which warrants further research.

LIMITATIONS

As is the nature of research, there are limitations within this study. Firstly, data from the surveys collected for all three studies was self reported. As such, we can only assume that all answers were a true and accurate representation of each individual's circumstance and experience. In addition, for the sample of couples there is always a possibility that respondents went against instructions and compared answers. Furthermore, our study focused on inter-gender relationships and therefore the generalisability of results to same-sex couples is unknown. Moreover, there is a growing recognition that wider cultural, social and political contexts may influence an individual's ideologies, perceptions and experiences of work and family domains (Lewis, 1997; Westman, 2002) and these were not examined here. For example, policy governing work-family issues may differ across countries and thus the cultural context may implicate our findings as they are based in New Zealand and therefore interpretation and generalisations to wider cultural groups need to be carried out with care. However, we believe that this limitation did not have a substantial effect on our results. Lastly, this study was cross-sectional by nature and thus longitudinal testing would further substantiate our findings. Despite these limitations, the method of the study is sound and therefore the findings of our research are useful in strengthening our understanding of issues at the work-family interface for employees, entrepreneurs and dual-earning couples. In particular, the consistent direct and indirect effects across multiple samples does provide greater security in the findings and associated interpretations.

PRACTICAL IMPLICATIONS

It has been argued theoretically and empirically that positive psychological capital can be more closely correlated to the state of an individual's mental health than both job and life satisfaction (Avey et al., 2006). From this we can see that an employee's state of mind in terms of their mental health is a strongly convincing reason to institute sound work-family policy to provide staff with appropriate resources to deal with conflict before their mental health is compromised. In addition to this, factors such as legitimacy of work-family issues, a culture of support or non-support for utilising work-family policies, and managerial commitment to staff well-being can impact on an individual's ability to cope with competing demands of work and family roles (Bardoel, 2003; Cramer & Pearce, 1990). An organization's stance on such issues may be shaped by ingrained behaviours and organizational culture which play a strong and influential role in developing employee behavioural norms. Collective behaviours are often learned within an organization and surface as unwritten codes of behaviour. This is part of the process of organizational learning which can either be an asset or of great detriment to a company.

The culture within an organization can very much dictate accepted modes of behaviour and develop situational norms. These informal rules and expectations are established within groups to regulate behaviour of their members. For this reason an organization which has formal policies in place to help staff manage competing demands within and between work and family roles, but does not openly support the use of these policies can create psychological stress for an employee. This psychological pressure can be attributed to behavioural norms within the work environment which may result in stress, depression, emotional exhaustion, anxiety, cynicism or job burnout for an employee (Duran-Whitney, 2004). Staff members are more likely to suffer stress particularly where demands are too great for their time and energy levels if they are part of a culture which accepts and supports this type of behaviour through non-support of policies to alleviate such tensions (McShane & Travaglione, 2005). Additionally, individuals who take an avoidance approach and ignore issues at the work-family interface

(which by function fails to address the root cause of the problem) are likely to experience greater burnout (Haar, 2006). It is important to note that as a person's ability to cope is contextualised by the capabilities of the individual (Rontondo et al., 2002), some strategies may be more useful than others when dealing with the specific stressors of work-family conflict. This is to say that some styles may work better with specific forms of conflict or with specific directional influences than others (Rontondo et al., 2002; Haar, 2006).

Further to this, an organization which nurtures and supports its employees not only increases productivity but fosters a desirable environment for employees to work in, thus reducing the risk of mental health outcomes. This view is paralleled by Markowich (2003) who offered the explanation that employees are more frequently absent, late to work, or disengage themselves from work tasks in order to separate themselves from stressful or dissatisfying circumstances. Additionally, a less stressful environment is increasingly productive particularly in the long term as overstressed employees tended to have higher levels of associated occupational stress (Duran-Whitney, 2004). This is largely because stressed; depressed, anxious, cynical or emotionally exhausted employees are likely to use unscheduled time off as a coping mechanism to temporarily withdraw from the stressful situation. Nonetheless, this is not always viewed as an undesirable situation as without this temporary alleviation, staff may reach more serious stages of fatigue and stress exhaustion which may lead to burnout and other stress related illnesses (Haar, 2006; Duran-Whitney, 2004; Vaughan & Hogg, 2005).

An individual's conflict and enrichment (as relevant to their work and family roles) impacts on a person's work, life and family satisfaction (Rice, Frone & McFarlin, 1992; Greenhaus & Powell, 2006). Typically those with greater enrichment in one or more roles are likely to experience greater satisfaction. This theoretical perspective was found to be empirically supported in the context of this study, with the exception of crossover effects between couples. Further to this, as described by Voydanoff (2001) experiences in the work role and experiences in the family role can have additive effects on an individual's well-being. This was found to be particularly true where work and family roles are of high quality (Bass et al., 2008). However, of most relevance to this study, results

and findings exemplified the concept of buffering towards mental health outcomes.

Overall, the family-work interface is an important issue for organizations to manage as it is an area of critical importance for employers and employees alike. Effective staff management is not only a key challenge facing managers today, but it can also double as a strategic tool in improving the quality of an organizations' workforce. Moreover, particularly in tough economic times and in the presence of the current financial crisis, employees can use sound organizational practice to encourage staff retention and entice top employees. The HR practitioner literature has largely centred on ways in which firms can effectively manage the situation through the creation of more flexible policies and procedures (Stoddard & Madsen, 2007). Such policies have been developed from the assumption that flexibility is an effective means of dealing with stress associated with WFC. Flexibility in the work domain empowers an individual to allocate more time to obligations of the family role, which thereby enhances performance in the family role (Greenhaus & Powell, 2006). Furthermore, individuals with greater flexibility in their family role are required to make fewer adjustments in the work schedule to accommodate family demands. In addition to this, flexibility to work on a project away from the office may allow a person greater freedom to make decisions to complete tasks at a time which fits in with demands of other roles (Stoddard & Madsen, 2007).

In sum, from the literature reviewed it can be seen that issues at the work-family interface are multifaceted and faced by organizations everywhere. It is evident that a person's mental health is a variable mix of individual characteristics and aptitudes of different components of psychological capital, coupled with environmental and situational controls within the work environment. Strong associations between job satisfaction, organizational commitment and organizational culture can be causally attributed to the state of an individual's mental health. In today's modern society, dealing with conflicts between demands of work and family roles is of growing importance to many employees. Ignoring these issues can among other things cause conflict in the home or conflict and

decreased productivity in the workplace. Areas for future research could look to explore the idea of job envy engendering crossover of work-family dimensions between couples, and should in all intentions and purposes attempt to remedy the discord between these findings, policy makers and organizational practices. It is this type of approach which will ultimately bring work-family research forward in practice.

CHAPTER 11

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Study 1 Data (Employees)

Table 1. Descriptive Statistics and Correlations

Variables	**M**	**SD**	**1**	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**
1. Hours Overtime	4.2	5.8	--									
2. Job Tenure	3.9	5.3	.15*	--								
3. WFC	2.5	.90	.14*	-.07	--							
4. FWC	2.1	.74	.06	-.02	.47**	--						
5. WFE	3.1	.81	-.02	.14*	-.20**	-.05	--					
6. FWE	3.7	.76	-.02	.10	-.04	-.05	.39**	--				
7. Anxiety	2.6	.68	.18**	-.10	.36**	.22**	-.38**	-.14*	--			
8. Depression	2.4	.68	-.02	-.17**	.31**	.24**	-.39**	-.15*	.59**	--		
9.Emotional Exhaustion	2.8	.86	.10	-.16**	.52**	.29**	-.29**	-.03	.50**	.53**	--	
10. Cynicism	2.5	1.0	-.03	-.19**	.34**	.33**	-.45**	-.17**	.39**	.64**	.64**	--

N=314, *p< .05, **p< .01

Table 2. Regression Coefficients for Anxiety

Variables	Models with Anxiety			
	Step 1 Controls	Step 2 Conflict Predictors	Step 3 Enrichment Predictors	Step 4 Interactions
Gender	-.06	-.06	-.04	-.03
Marital Status	-.00	.01	-.02	-.03
Parental Status	-.06	-.06	.02	.03
Hours Overtime	.19**	.13*	.13*	.14*
Job Tenure	-.10	-.07	-.07	-.09
WFC		.33***	.27***	.25***
FWC		.07	.06	.07
WFE			-.31***	-.30***
FWE			.04	.01
WFC × WFE				-.03
WFC × FWE				.07
FWC × WFE				.08
FWC × FWE				-.22***
R^2 change	.05*	.13***	.08***	.04*
Total R^2	.05	.18	.26	.29
Adjusted R^2	.03	.16	.23	.26
F Statistic	2.723*	8.007***	9.705***	7.868***

† p< .1, * p<.05, ** p<.01, *** p< .001. Standardized regression coefficients, all significance tests were single-tailed.

Table 3. Regression Coefficients for Depression

Variables	Models with Depression			
	Step 1 Controls	Step 2 Conflict Predictors	Step 3 Enrichment Predictors	Step 4 Interactions
Gender	-.04	-.05	-.02	-.02
Marital Status	-.01	.01	-.01	-.01
Parental Status	-.21*	-.21**	-.12	-.12
Hours Overtime	.02	-.03	-.03	-.03
Job Tenure	-.06	-.04	-.04	-.06
WFC		.25***	.18**	.18**
FWC		.12*	.11*	.10†
WFE			-.33***	-.33***
FWE			.01	-.00
WFC × WFE				.03
WFC × FWE				.03
FWC × WFE				.04
FWC × FWE				-.17**
R^2 change	.07**	.10***	.10***	.02†
Total R^2	.07	.16	.26	.28
Adjusted R^2	.05	.14	.23	.24
F Statistic	3.539**	7.110***	9.773***	7.384***

† p< .1, * p<.05, ** p<.01, *** p< .001. Standardized regression coefficients, all significance tests were single-tailed.

Table 4. Regression Coefficients for Emotional Exhaustion

Variables	Models with Emotional Exhaustion			
	Step 1 Controls	Step 2 Conflict Predictors	Step 3 Enrichment Predictors	Step 4 Interactions
Gender	.08	.07	.08	.08
Marital Status	.04	.03	.02	.02
Parental Status	-.21**	-.22**	-.17*	-.17*
Hours Overtime	.17**	.09	.09	.09
Job Tenure	-.09	-.05	-.05	-.06
WFC		.47***	.43***	.45***
FWC		.05	.05	.03
WFE			-.22***	-.24***
FWE			.08	.07
WFC × WFE				.08
WFC × FWE				.04
FWC × WFE				-.04
FWC × FWE				-.17**
R^2 change	.08**	.24***	.04**	.02†
Total R^2	.08	.32	.36	.39
Adjusted R^2	.06	.30	.34	.35
F Statistic	4.459**	17.260***	15.845***	11.941***

† p< .1, * p<.05, ** p<.01, *** p< .001. Standardized regression coefficients, all significance tests were single-tailed.

Table 5. Regression Coefficients for Cynicism

Variables	Models with Cynicism			
	Step 1 Controls	Step 2 Conflict Predictors	Step 3 Enrichment Predictors	Step 4 Interactions
Gender	.07	.06	.10	.10*
Marital Status	-.07	-.03	-.05	-.05
Parental Status	-.27**	-.28***	-.17*	-.17**
Hours Overtime	.03	-.02	-.03	-.01
Job Tenure	-.00	.01	.01	-.00
WFC		.22***	.13*	.16**
FWC		.22***	.21***	.18**
WFE			-.41***	-.41***
FWE			-.01	-.04
WFC × WFE				.07
WFC × FWE				.16**
FWC × WFE				-.11*
FWC × FWE				-.17**
R^2 change	.10***	.14***	.15***	.04**
Total R^2	.10	.23	.38	.42
Adjusted R^2	.08	.21	.36	.39
F Statistic	5.415***	10.969***	17.316***	13.728***

† p< .1, * p<.05, ** p<.01, *** p< .001. Standardized regression coefficients, all significance tests were single-tailed.

Figure 1. Interaction between FWC & FWE with Anxiety as Dependent Variable

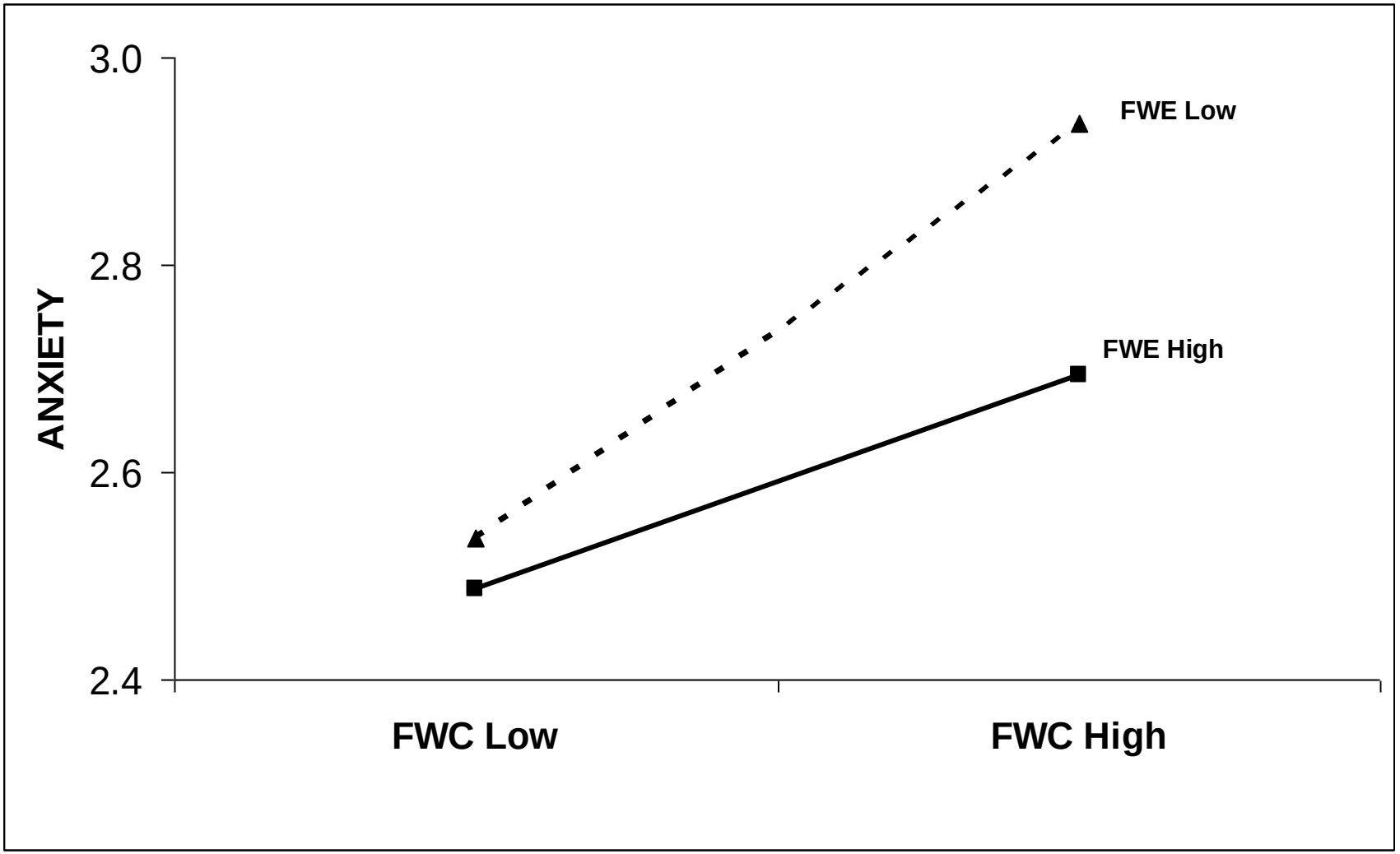


Figure 2. Interaction between FWC & FWE with Depression as Dependent Variable

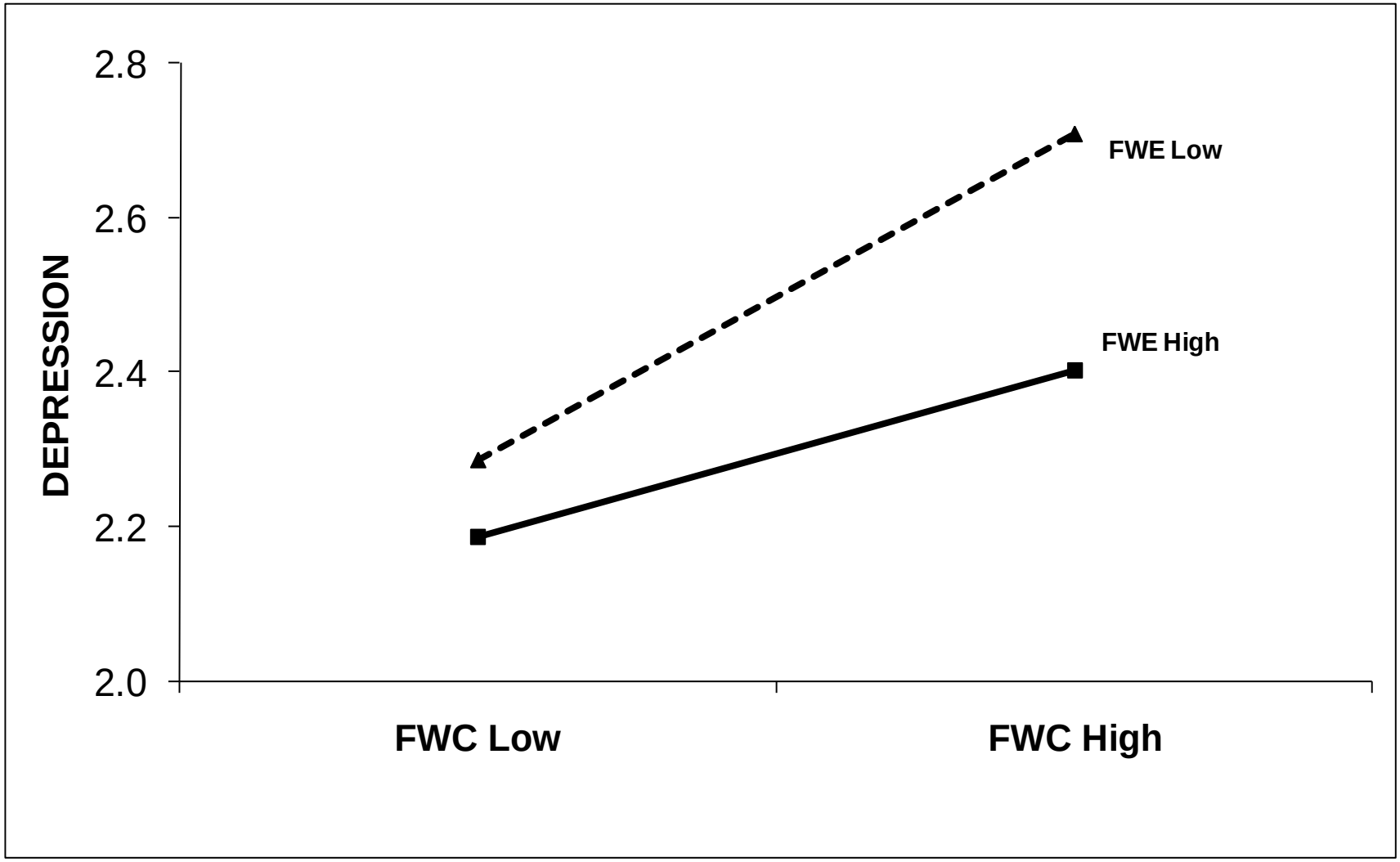


Figure 3. Interaction between WFC & FWE with Emotional Exhaustion as Dependent Variable

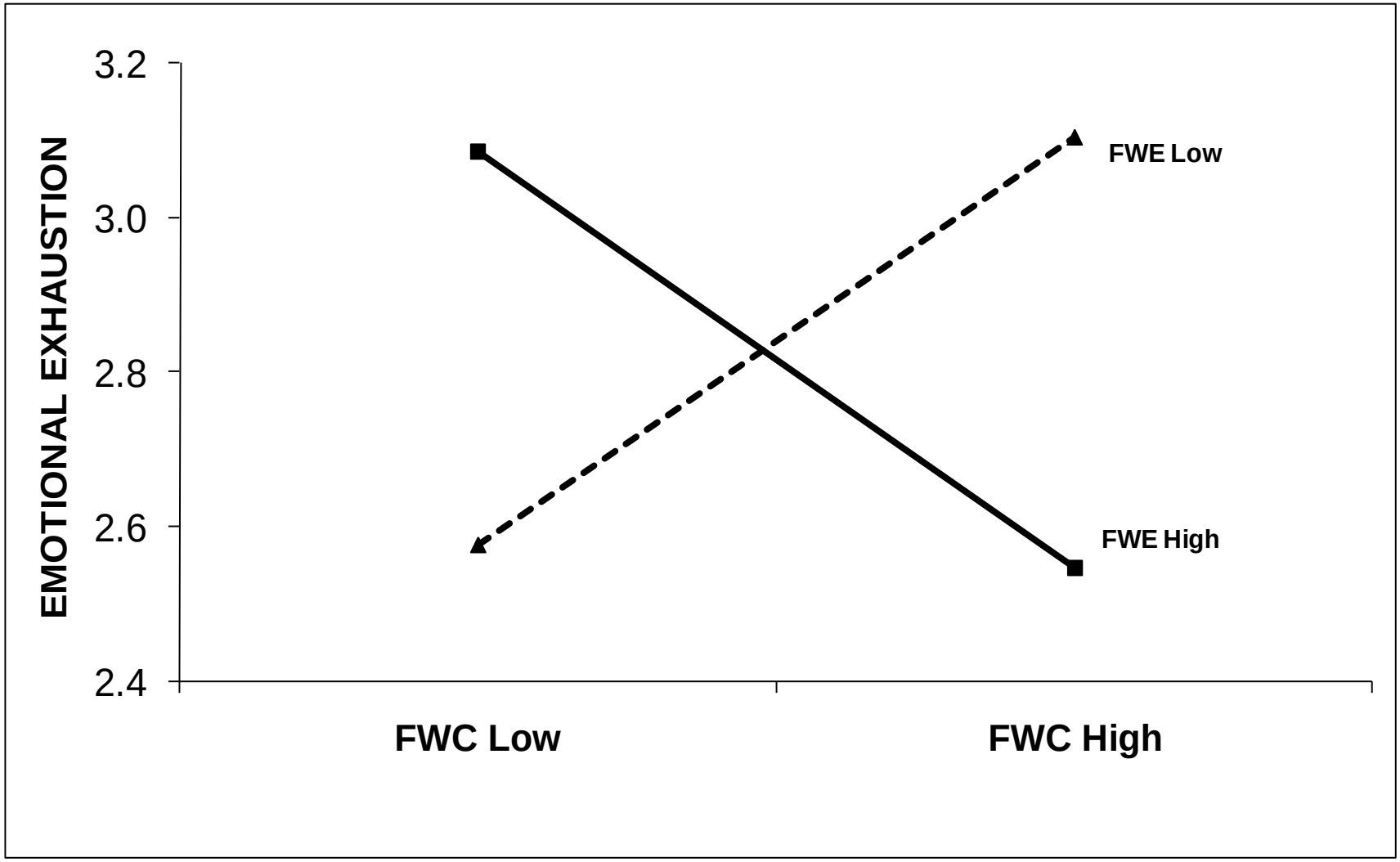


Figure 4. Interaction between WFC & FWE with Cynicism as Dependent Variable

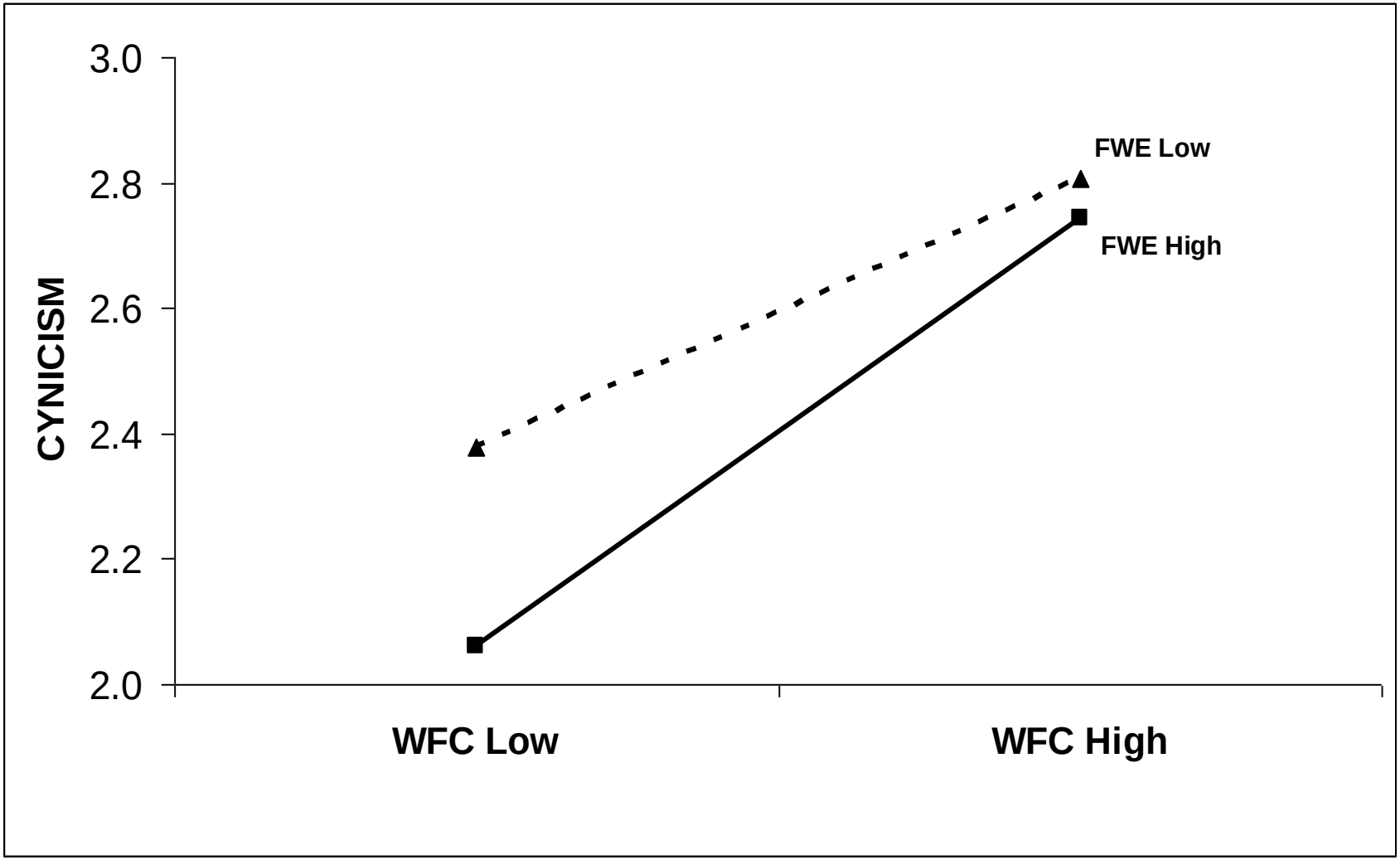


Figure 5. Interaction between FWC & WFE with Cynicism as Dependent Variable

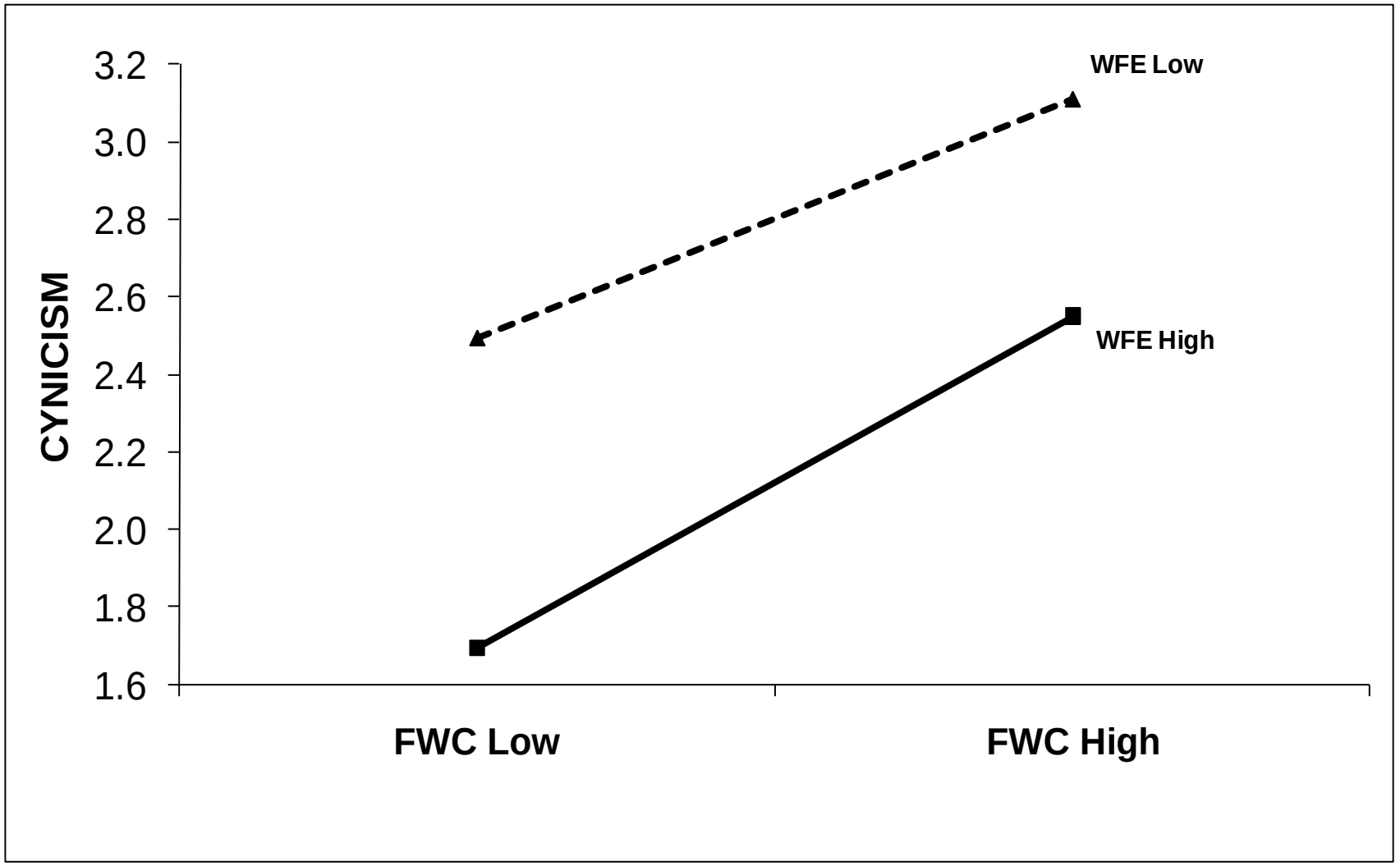
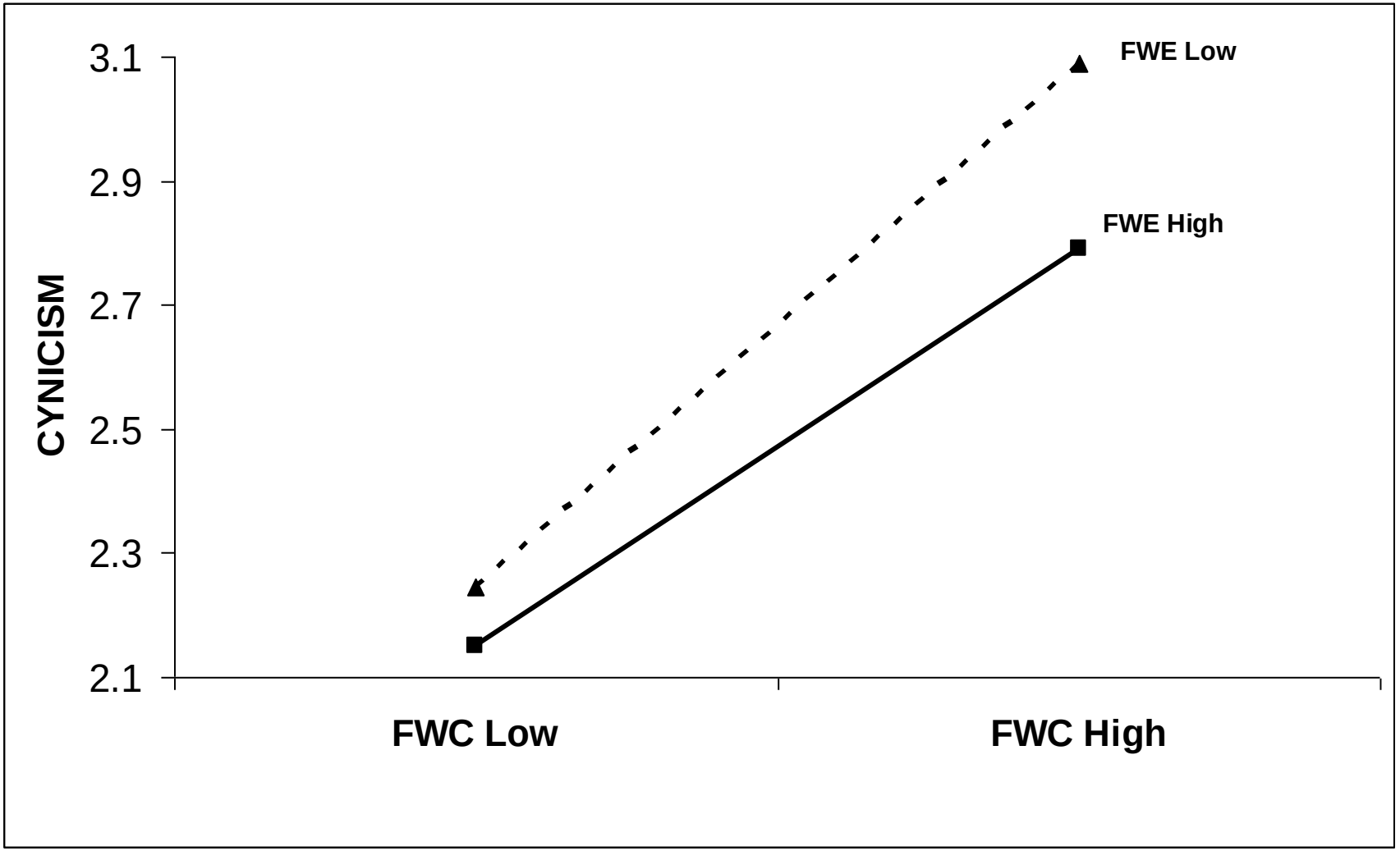


Figure 6. Interaction between FWC & FWE with Cynicism as Dependent Variable



Study 2 Data (Entrepreneurs)

Table 6. Descriptive Statistics and Correlations

Variables	**M**	**SD**	**1**	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**
1. Total Hours Worked	44.8	13.5	--									
2. Business Tenure	12.5	9.1	.13	--								
3. Firm Size	1.6	1.4	.16	.19*	--							
4. WFC	2.5	1.0	.40**	-.04	.03	--						
5. FWC	2.0	.81	.12	-.02	-.05	.57**	--					
6. WFE	3.4	.83	-.09	-.01	-.04	-.23**	-.18*	--				
7. FWE	3.7	.84	-.01	.00	.04	-.18*	-.23**	.64**	--			
8. Anxiety	2.7	.83	.35**	-.07	.06	.40**	.17*	-.38**	-.19*	--		
9.Emotional Exhaustion	2.5	1.1	.31**	-.02	.05	.65**	.37**	-.19*	-.13	.42**	--	
10. Stress	3.0	.79	.43**	.09	.22**	.57**	.29**	-.17*	-.06	.47**	.49**	--

N=114, *p< .05, **p< .01

Table 7. Regression Coefficients for Anxiety

Variables	Models with Anxiety			
	Step 1 Controls	Step 2 Conflict Predictors	Step 3 Enrichment Predictors	Step 4 Interactions
Gender	-.00	.01	.02	-.02
Marital Status	.01	.02	.02	-.01
Parental Status	.07	.07	.08	.14
Hours Worked	.37***	.24*	.23*	.22*
Business Tenure	-.14	-.12	-.13	-.19*
Firm Size	.01	.03	.01	-.01
WFC		.31**	.26*	.22*
FWC		-.08	-.07	-.05
WFE			-.33**	-.33**
FWE			.09	.11
WFC × WFE				-.17†
WFC × FWE				.10
FWC × WFE				-.18†
FWC × FWE				.19†
R^2 change	.15**	.06*	.08**	.07*
Total R^2	.15	.21	.29	.36
Adjusted R^2	.11	.15	.22	.27
F Statistic	3.400**	3.709**	4.368***	4.166***

†p< .1, *p<.05, **p<.01, ***p< .001. Standardized regression coefficients, all significance tests were single-tailed.

Table 8. Regression Coefficients for Emotional Exhaustion

Variables	Models with Emotional Exhaustion			
	Step 1 Controls	Step 2 Conflict Predictors	Step 3 Enrichment Predictors	Step 4 Interactions
Gender	.08	.13	.13	.12
Marital Status	-.02	-.02	-.02	-.02
Parental Status	-.08	-.10	-.10	-.12
Hours Worked	.38***	.09	.09	.09
Business Tenure	-.02	.03	.03	.04
Firm Size	-.04	.01	.01	.01
WFC		.65***	.65***	.67***
FWC		.01	.01	-.02
WFE			-.02	.01
FWE			.01	-.01
WFC × WFE				-.16†
WFC × FWE				-.07
FWC × WFE				.06
FWC × FWE				.06
R^2 change	.13**	.34***	.00	.03
Total R^2	.13	.47	.48	.50
Adjusted R^2	.09	.44	.43	.44
F Statistic	3.044**	13.085***	10.303***	7.956***

†p< .1, *p<.05, **p<.01, ***p< .001. Standardized regression coefficients, all significance tests were single-tailed.

Table 9. Regression Coefficients for Stress

Variables	Models with Stress			
	Step 1 Controls	Step 2 Conflict Predictors	Step 3 Enrichment Predictors	Step 4 Interactions
Gender	-.21*	-.17*	-.17*	-.14*
Marital Status	-.04	-.04	-.04	-.03
Parental Status	.19*	.17*	.18*	.10
Hours Worked	.41***	.20*	.20*	.20**
Business Tenure	-.03	.01	.01	.09
Firm Size	.12	.16*	.16*	.15*
WFC		.47***	.46***	.45***
FWC		-.01	-.01	-.01
WFE			-.08	-.04
FWE			.05	.01
WFC × WFE				-.23**
WFC × FWE				.01
FWC × WFE				.08
FWC × FWE				-.21*
R^2 change	.32***	.17***	.00	.07**
Total R^2	.32	.49	.50	.57
Adjusted R^2	.29	.46	.45	.52
F Statistic	9.467***	14.176***	11.304***	10.494***

† p< .1, * p<.05, ** p<.01, *** p< .001. Standardized regression coefficients, all significance tests were single-tailed.

Figure 7. Interaction between WFC & WFE with Anxiety as Dependent Variable (Entrepreneurs)

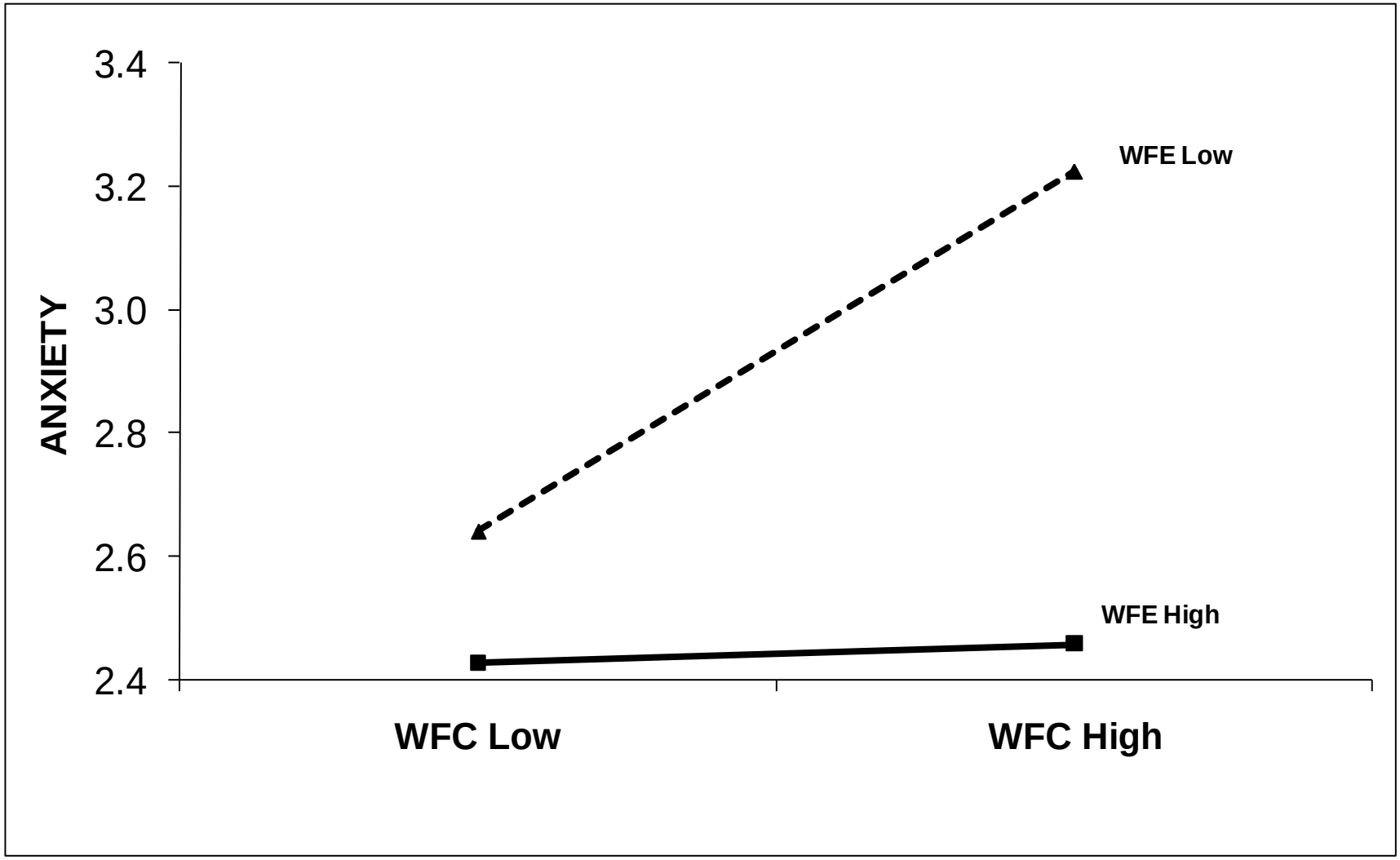


Figure 8. Interaction between FWC & WFE with Anxiety as Dependent Variable (Entrepreneurs)

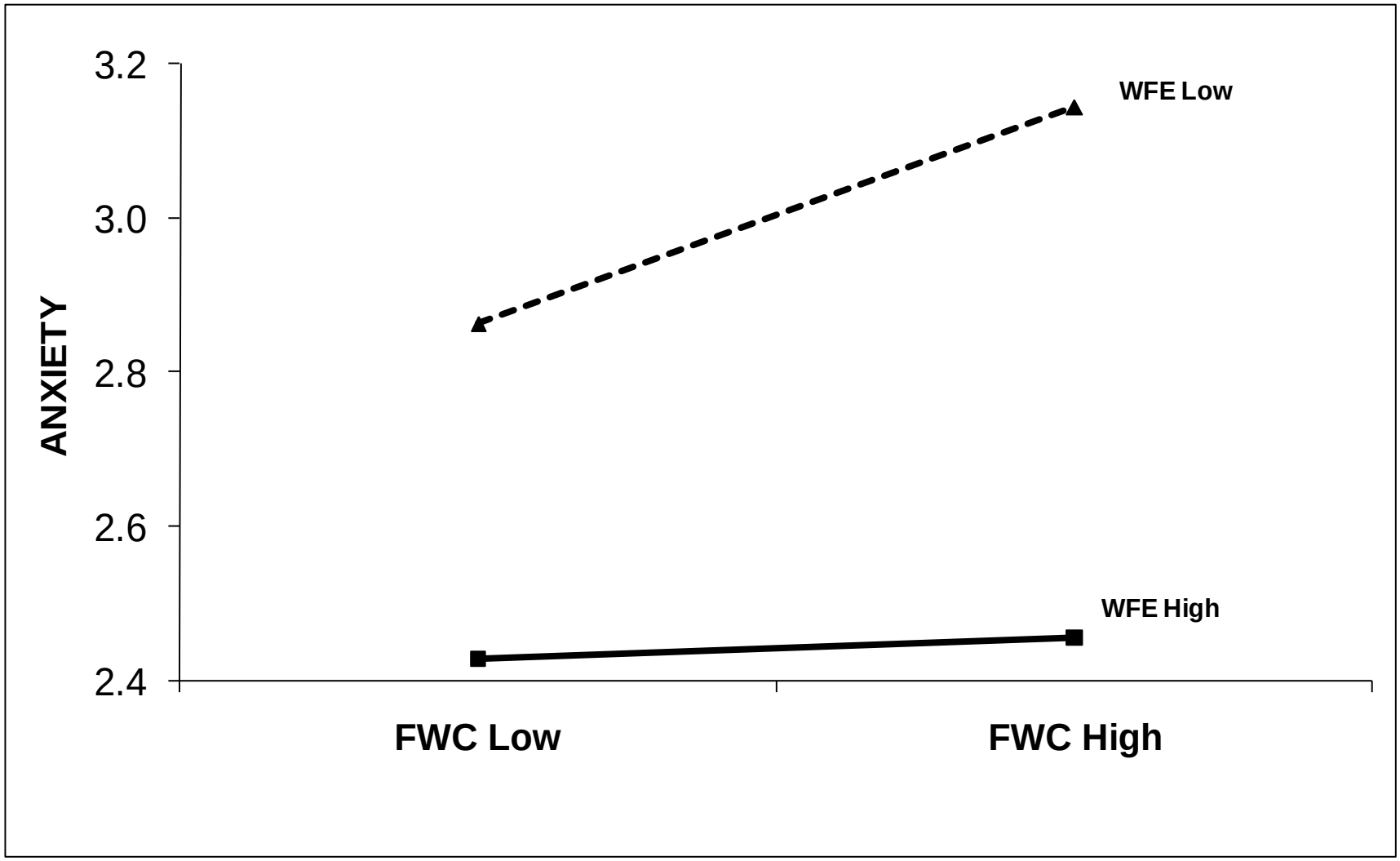


Figure 9. Interaction between FWC & FWE with Anxiety as Dependent Variable (Entrepreneurs)

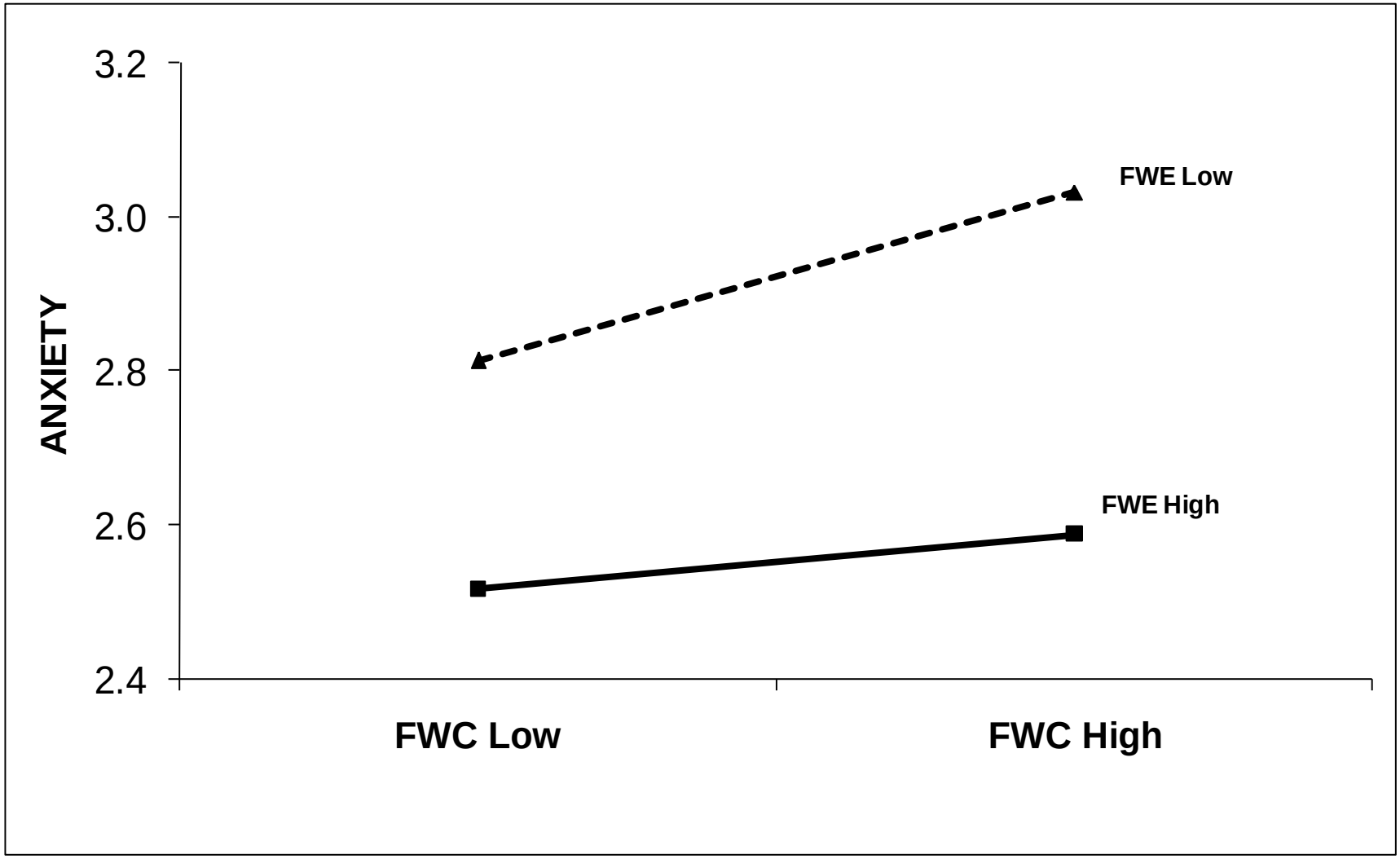


Figure 10. Interaction between WFC & WFE with Emotional Exhaustion as Dependent Variable (Entrepreneurs)

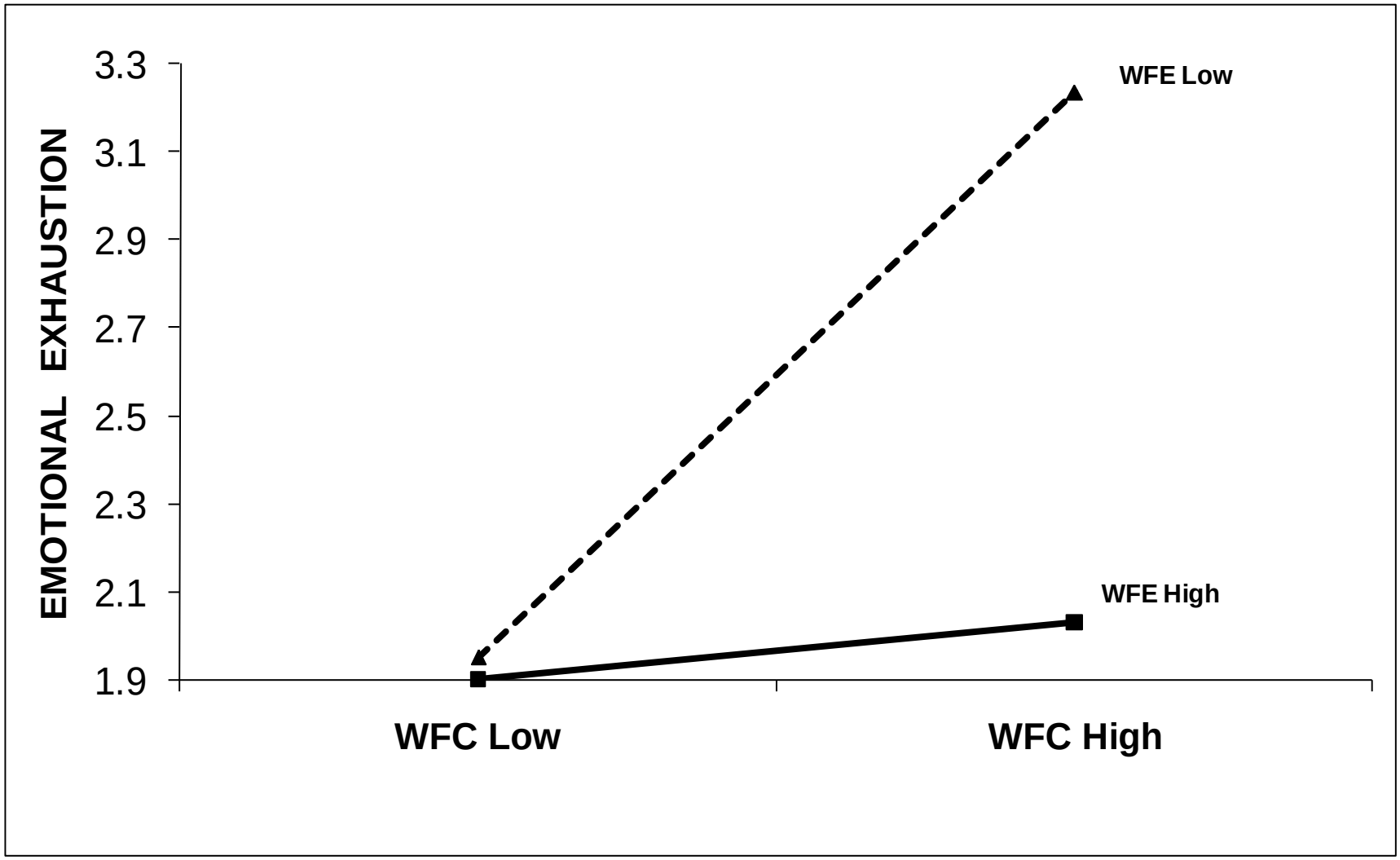


Figure 11. Interaction between WFC & WFE with Stress as Dependent Variable (Entrepreneurs)

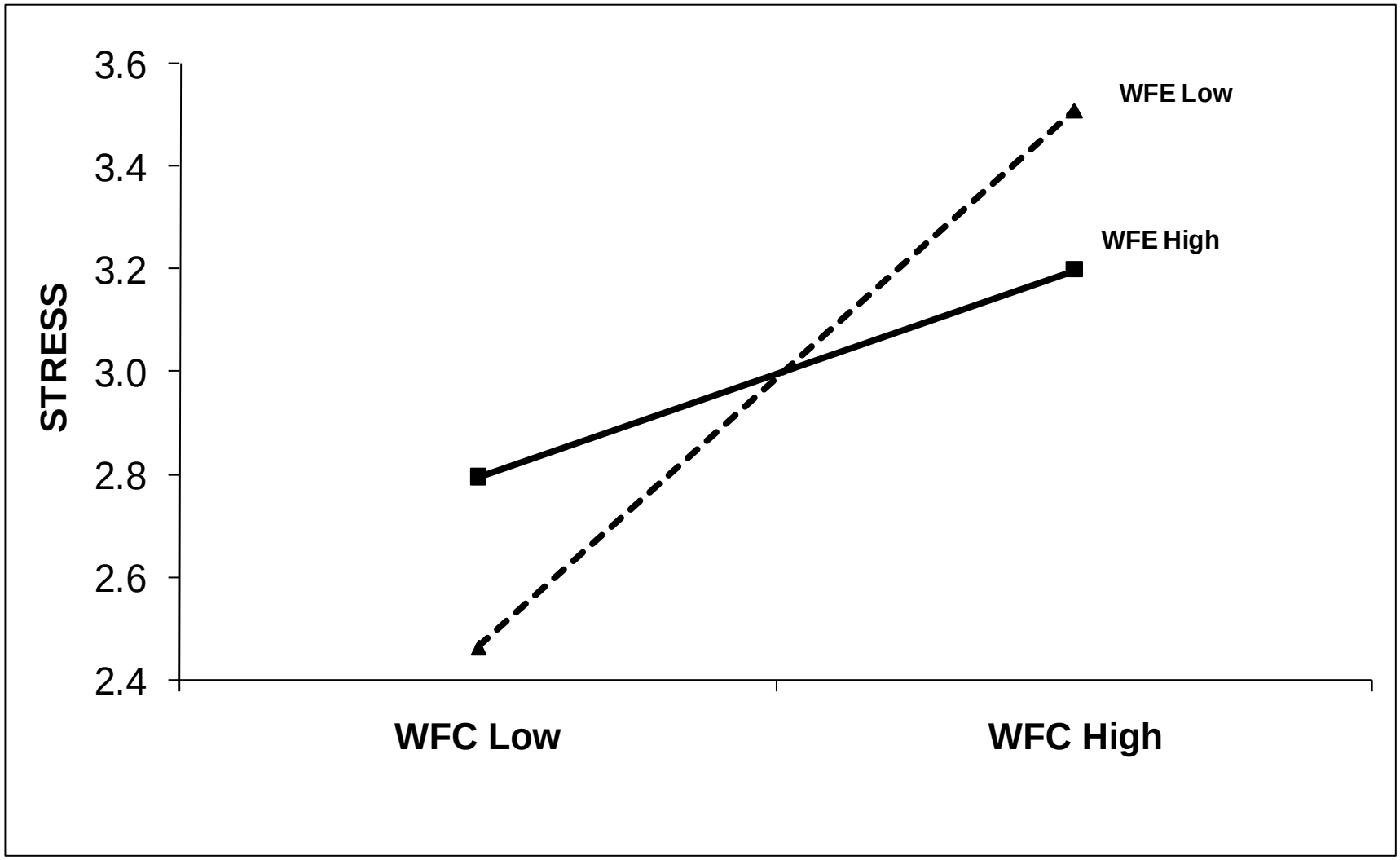


Figure 12. Interaction between FWC & FWE with Stress as Dependent Variable (Entrepreneurs)

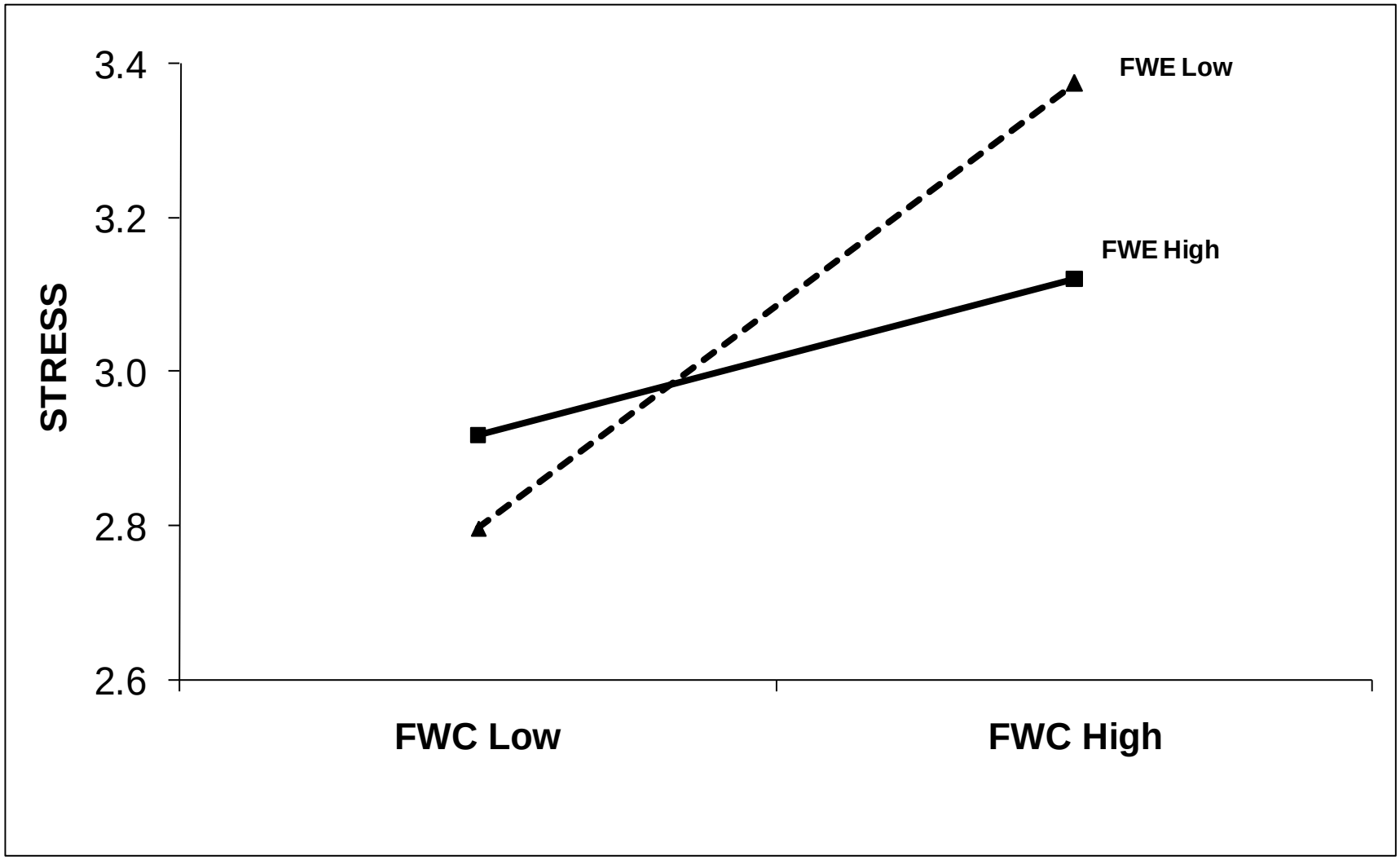
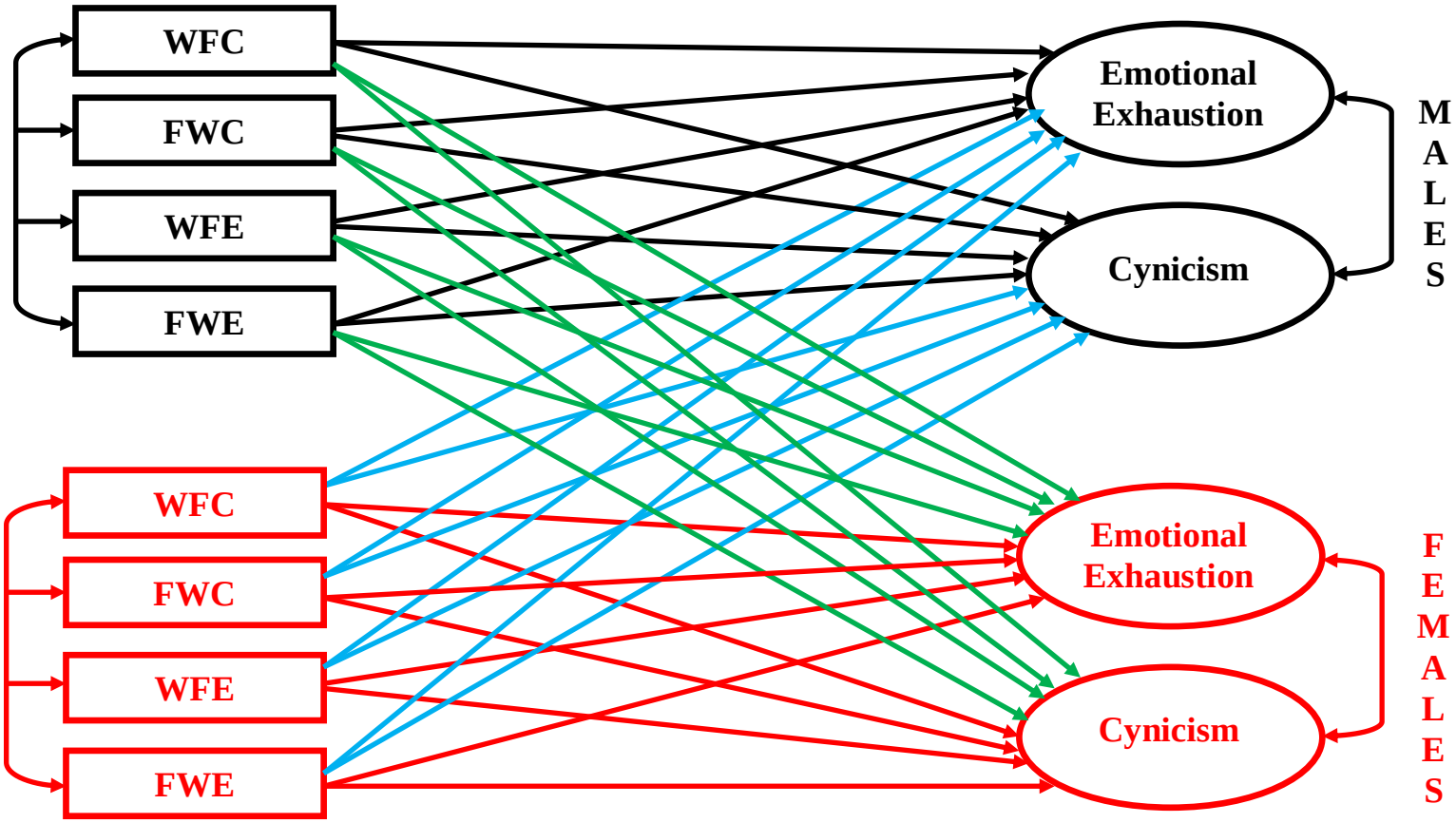


Figure 13. Predicted Crossover Effects Model towards Job Burnout



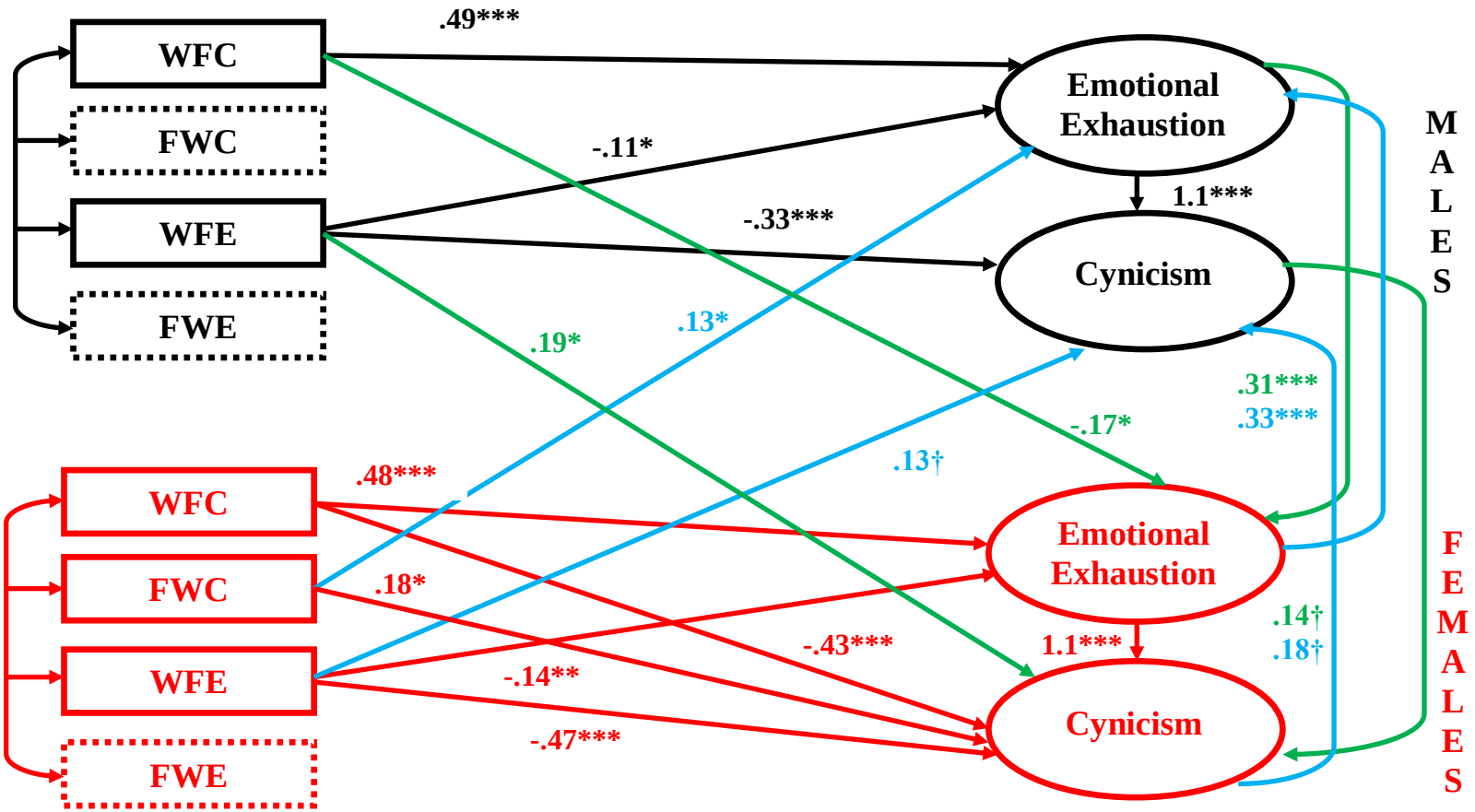
Key: Black lines=males, Red lines=females, Green lines=male crossover to females, Blue lines=female crossover to males

Table 10. Descriptive Statistics and Correlations

Variables	M	SD	1	2	3	4	5	6	7	8	9	10	11	12
Males														
1. WFC	2.7	.84	--											
2. FWC	2.2	.83	.38**	--										
3. WFE	3.0	.84	-.14*	-.05	--									
4. FWE	3.6	.80	-.11	-.18**	.33**	--								
5. Emotional Exhaustion	2.6	.84	.48**	.29**	-.19**	-.14*	--							
6. Cynicism	2.4	.95	.31**	.24**	-.31**	-.19**	.62**	--						
Females														
7. WFC	2.6	.89	.12*	.20**	.03	-.04	.13*	.05	--					
8. FWC	2.1	.78	.07	.25**	.06	-.04	.15*	.07	.46**	--				
9. WFE	3.2	.88	-.07	-.06	.13*	.08	-.09	.02	-.30**	-.03	--			
10. FWE	3.8	.73	.01	-.03	.05	.21**	.02	-.01	-.10	-.15*	.25**	--		
11. Emotional Exhaustion	2.6	.85	.10	.16**	-.03	-.01	.26**	.16*	.58**	.32**	-.33**	-.06	--	
12. Cynicism	2.3	.96	.07	.18**	.02	-.03	.16**	.11	.33**	.27**	-.44**	-.12	.61**	--

N=266, *p< .05, **p< .01

Figure 14. Crossover Effects Model towards Job Burnout



Key: Black lines=males, Red lines=females, Green lines=male crossover to females, Blue lines=female crossover to males