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Professional and Personal Lives of Psychologists: Spillover, Family Functioning, and Life Satisfaction

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LOYOLA UNIVERSITY CHICAGO

PROFESSIONAL AND PERSONAL LIVES OF PSYCHOLOGISTS:
SPILLOVER, FAMILY FUNCTIONING, AND LIFE SATISFACTION

A DISSERTATION SUBMITTED TO
THE FACULTY OF THE GRADUATE SCHOOL
IN CANDIDACY FOR THE DEGREE OF
DOCTOR OF PHILOSOPHY

PROGRAM IN CLINICAL PSYCHOLOGY

BY

PEDJA STEVANOVIC

CHICAGO, IL

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ABSTRACT

Two-wave, longitudinal data from a national, web-based survey of doctoral psychologists was used to examine work life, spillover, family, and personal lives. A measure of spillover, Stressors and Enhancers for Psychologists, was also evaluated. Confirmatory factor analysis indicated two negatively correlated dimensions of work spillover: positive spillover termed family enhancers and negative spillover termed family stressors. This measure was significantly related to a widely used, more general measure of positive and negative spillover and demonstrated high temporal stability. Respondents reported a significantly higher incidence of family enhancers than family stressors at both data collection points. Consistent with previous research, the low incidence of family stressors suggested that stresses associated with professional work of psychology do not routinely spillover into professionals' family lives. Control and emotional exhaustion from work emerged as salient predictors of spillover; specifically, greater control was associated with higher incidence of stressors and lower incidence of enhancers, and greater emotional exhaustion was associated with lower incidence of enhancers. Furthermore, an increase in family enhancers decreased family dysfunction, whereas an increase in family stressors increased family dysfunction and decreased life satisfaction. Contrary to expectations, stressors and enhancers did not mediate the relationship between predictors from work and outcomes in personal life.

CHAPTER ONE

INTRODUCTION

The interface between work and family has been an increasingly popular topic in the academic and social arenas (Voydanoff, 2002). Over the last several decades, investigators from a variety of disciplines have carried out research that explored a number of relationships between work and family among a variety of professions (Parasurman & Greenhaus, 2002). The findings have often stressed the damaging consequences of an unhealthy balance between personal and professional lives from the perspective of role conflict theory (Stevanovic & Rupert, 2009). Unfortunately, limited attention has been given to the potentially beneficial effects of interrole participation and positive connections between work and family (Parasurman & Greenhaus, 2002).

Among numerous concepts that have been developed to explain the relationship between work and family domains, the model of spillover has emerged as one of the most comprehensive conceptual frameworks with empirical support from the work-family interface research (e.g., Barnett, Marshall, & Sayer, 1992; Brotheridge & Lee, 2005; Crouter, 1984; Staines, 1980). Grounded in ecological system and role theories, spillover proposes that experiences at work produce changes in the person's values, skills, behaviors, and affect that may have both positive and negative effects on one's functioning in other settings (Crouter, 1984; Staines, 1980). For instance, positive work

experiences may enhance a person's psychological and social functioning in ways that may make him or her more effective as a spouse or parent whereas negative work experiences may further stress family relationships (Crouter, 1984).

The unique nature of the psychological profession offers numerous opportunities for spillover among this group of professionals. The demands involved in dealing with intense therapeutic relationships require a special set of skills, values, and knowledge that could influence psychologists' functioning in personal domains. Additionally, psychologists face numerous challenges in their attempt to provide competent services that create stresses, but also result in many personal rewards. Despite the unique and intense nature of psychological work, little is known about its effects on the professionals' personal lives. The main goal of the present study was to explore how psychological clinical practice uniquely stresses and enhances the family lives of professional psychologists. The principles of the generalization model of spillover guided the current study.

Anecdotal literature and limited empirical investigations have suggested ways in which personal lives of psychologists might be influenced by the rewards and stresses of professional practice. A study of spillover among professional psychologists by Stevanovic and Rupert (2009) found that the process of spillover mediates the relationship between professional and personal lives of psychologists. The authors found that feelings of competence and achievement from work related to positive spillover and enhanced satisfaction with life in general. At the same time, emotional exhaustion at work spilled over in negative ways and led to lowered satisfaction with life.

The aims of the current study were to expand the work of Stevanovic and Rupert (2009) and further explore spillover between the professional and personal lives of psychologists via a longitudinal research design. The study had several specific goals: a) to evaluate a quantitative measure of family stressors and enhancers (i.e., negative and positive spillover); b) to assess ways in which being a psychologist enhances the practitioner's personal life or creates additional stress; c) to identify factors related to work spillover; d) to identify the effects of spillover on personal/family life, e) and to assess the role of stressors/enhancers as mediators between work factors (i.e., emotional exhaustion, hours worked, personal accomplishment, and control) and personal/family life (i.e., family functioning and life satisfaction).

The following literature review traces the ideological and empirical origins of spillover theory in the work-family interface literature. Because research on work-family issues with psychologists is very limited, the review will examine theory and research of spillover in the general occupational literature. Finally, a conceptual and empirical discussion of spillover for professional psychologists will narrow current study's interest to this group of professionals.

CHAPTER TWO

REVIEW OF THE LITERATURE ON WORK-FAMILY INTERFACE: THEORIES, CONCEPTS, AND RESEARCH

Work and family are central life domains (Brotheridge & Lee, 2005; van Steenbergen, Ellemers, & Mooijaart, 2007). Consequently, work and family issues have long been a focus of public and academic interest. Given their importance for personal development and general existence, these two life domains have been studied by many academic disciplines, including psychology and sociology. As the boundaries between traditional family life and work become more transparent, work-family issues will become increasingly important in the future (Grzywacz & Marks, 2000).

Traditionally, work and family have been viewed as separate spheres of life; investigators examined experiences of individuals in one domain separate from the experiences in the other (Brotheridge & Lee, 2005). However, the growing diversity of family structures represented in the workforce (e.g., dual-earner couples, single parents, blended families, employees with responsibilities for elder care, etc) has sparked an interest in the relationship between work and family (Parasurman & Greenhaus, 2002). In particular, women's entry into the work force in the 1960's and 1970's propelled social scientists into a study of "working mothers" (Beach, 1989; Perry-Jenkins, Repetti, & Crouter, 2000). These shifts in the family and work structures have led to a new line of research that has examined the interrelationship between these two important domains.

The past three decades have evidenced a dramatic explosion of interest in this line of research (e.g., Greenhaus, Collins, & Shaw, 2002; Jones, Burke, & Westman, 2006; Parasurman & Greenhaus, 2002). The interest is reflected in the ever-growing, multidisciplinary literature on “work-family interface.” As an illustration, a search term of “work family relationship” in PsychInfo database returned 2056 entries from 1978 to 2008, compared to only eight studies that had been published before 1978. This relatively young amalgamation of multidisciplinary perspectives on work-family issues has provided valuable insight into a variety of work-family issues. The investigations have supported a variety of relationships between experiences from the work domain (e.g., burnout, satisfaction with work, professional well-functioning, intentions to leave work, etc.) and the personal/family domains (e.g., life satisfaction, family relationships, family support, general health outcomes, etc.). A number of concepts have been developed in an attempt to conceptualize these relationships, including work-family conflict or interference, spillover, enrichment, enhancement, facilitation and many others (e.g., Greenhaus, Collins, & Shaw, 2002; Kelloway, Gottlieb, & Barham, 1999; Staines, 1980).

The initial research on work and family relationships had a largely negative focus. Work and family were viewed as domains competing for limited resources. The theorists from this tradition emphasized incompatible role demands and the finality of human resources (e.g., Netemeyer, Boles, & McMurrian, 1996). The notion was that multirole participation exerts increased demands for energy and time and thus depletes the limited resources, resulting in negative outcomes in both domains. Provided this logic, it was assumed that combining work and family roles inevitably resulted in distress in both

domains (Barnett & Gareis, 2006). Concepts such as work-family conflict and interference attempted to capture ways in which involvement in one domain limited or interfered with involvement in the other domain. The concept of work-family conflict has received much attention and strong empirical support. The research has evidenced a relationship between conflict and numerous outcomes in both family and work domains, including lowered job satisfaction, burnout, and turnover, as well as psychological distress and life and marital dissatisfaction (Netemeyer, Boles, & McMurrian, 1996).

On the other hand, a set of diverse findings challenged the idea of incompatibility of the two domains and suggested that there could be positive connections between work and family. Voydanoff (2002) reviewed an amalgam of findings that revealed beneficial effects of multirole participation. Concepts such as facilitation, enrichment, and spillover were developed to describe ways in which work could positively influence nonwork domains. Theorists from this tradition generally assumed that multiple roles may provide opportunities for additional resources (e.g., skills) and satisfactions that can facilitate one's functioning across roles.

The concept of spillover originally focused on positive qualities or experiences that spillover/transfer from work to family domains. However, the ongoing explorations of work-family interface offered evidence for both positive and negative effects of work on family. Given the evidence for both types of spillover, this conceptual framework has expanded to also include a transfer of negative qualities or experiences from work to family domains. To date, spillover is the only construct that encompasses both positive and negative interdomain influences. As such, it provides a broad framework for understanding both positive and negative aspects of the relationship between work and

family domains as well as for examining specific ways in which work may influence nonwork.

The present research used spillover as a framework for investigating the work-family relationship among professional psychologists. Although psychologists have been active in research on work-family interface for numerous other professions, little is known about how the unique nature of psychological work may influence family and personal lives (Stevanovic & Rupert, 2009). To provide background for the present research, the following sections will discuss theoretical foundations for the study of work and family relationships, the general literature on work-family relationships, the concept of spillover as defined and studied in the general occupational health literature, and the specific literature on characteristics of psychological work and work-family spillover among psychologists.

Relationships between the Individual, Work, and Family

Investigators have employed several theories to explain this interdomain influence. Ecological system theory and role theory have been the most influential thus far.

Bronfenbrenner's ecological theory. Urie Bronfenbrenner formulated ecological theory in the late 1970s and early 1980s during the nature vs. nurture debate. The debate aimed to distinguish influences of biology and environment on human development (Kaplan 1999). Ecological theory emphasizes the importance of environment. According to Kaplan's interpretation, the theory describes ways in which characteristics of the environment dictate behaviors and influence development of its participants. According to the theory, many different environments (e.g., work, family)

are systematically linked to each other by their mutual effects on each other and individuals who participate in them. Two particular environmental systems are of importance for the study of work and family relationships in the context of the current study: *microsystems* and *mesosystems*.

The *microsystem* is the direct interaction of the person and the immediate environment (Kaplan, 1999). The theory describes many different domains which all exert influences on one's development. Environment-bound rules, norms, resources, demands, and stresses dictate immediate behaviors of the person and provide distinct opportunities for development. For example, when the environment is resourceful, the influence is positive, such that it stimulates the development. In contrast, when the environment is stressful, the influence is negative and detrimental. As individuals develop new behaviors and values under these environmental influences (i.e., *microsystems*), they use them to facilitate their further interaction with any environment they may be occupying.

In his interpretation of the theory, Kaplan (1999) also stressed that the changes in one system can cause corresponding changes in other systems. An individual who participates in the different domains represents a link between them and is at least partially responsible for the transfer of influences between systems. This interrelationship between two or more systems is termed *mesosystem* (Kaplan, 1999). Several mechanisms of the relationship between work and family have been suggested in the context of the ecological theory (e.g., Greenhaus & Powell, 2006; Voydanoff, 2002). Voydanoff (2002) and Greenhaus and Powell (2006) outlined three approaches to the investigation of the linkages between work and family.

The first type consisted of independent or additive effects of work experiences and family experiences on general well being. Greenhaus and Powell's (2006) review of the relevant literature identified empirical support for this type of relationship.

According to these authors, research has evidenced that accumulation of benefits from family and work experiences had beneficial effects on physical and psychological well being. For instance, satisfaction with work and satisfaction with family have been found to have additive effects on individuals' happiness, life satisfaction, and perceived quality of life (Greenhaus & Powell, 2006).

The second type of the relationship was interactive or buffering. This model proposes that participation in both work and family roles can buffer distress in one of the two domains by employing the benefits and resources from the other domain. For example, Greenhaus and Powell (2006) observed findings which suggested that "the relationship between family stressors and impaired well being is weaker for the individuals who have more satisfying, high-quality work experiences" (p. 73). These findings suggest that resources from one domain may compensate for stresses in the other domain (Greenhaus & Powell, 2006).

The third is synergic or mediational mechanism that involves a transfer of experiences from one domain to the other. According to Greenhaus and Powell (2006), experiences in one domain affect experiences and outcomes in the other domain. Research has identified ways in which professional lives improve and hamper personal lives. For instance, Greenhaus and Powell (2006) reported a study that identified ways in which personal lives of a sample of managers enhanced their professional lives. In addition, Staines (1980) reviewed several studies that supported the transfer of behaviors

and affect from work to nonwork domain. For instance, emotional reactions to work experiences may be transferred to the nonwork domain, and thus effect functioning in that domain either positively or negatively depending on the qualitative characteristics of the emotional reaction.

In summary, ecological theory provides a strong, general theoretical framework for understanding work and family issues. This theory recognizes the influences of environments on individuals (microsystems), as well as the interconnectedness of the environments (mesosystems). In addition, several linking mechanisms have been proposed in the context of the theory. However, the exact nature of the relationship between the environments has not been fully explained by the ecological model. Role theory provides an alternative approach to understandings linkages between work and family domains.

Role theory. The dominant theoretical perspective used to explain the work-family interface has been role theory (e.g., Barnett & Gareis, 2006; Deutsch, 1985; Hansen, Hammer, & Colton, 2006; Katz & Kahn, 1978). Specifically, two competing perspectives within role theory have been frequently used in the literature to describe the relationship between work and family: the *scarcity hypothesis* (Hansen, Hammer, & Colton, 2006) or the negative approach (Staines, 1980), which is founded in the structural role theory framework, and the *enhancement hypothesis* (Hansen, Hammer, & Colton, 2006) or the positive approach (Staines, 1980), with its foundation in the interactional role theory framework.

Role theory is derived from the social psychological study of the effects of social conditions on human beings (Deutsch, 1985). Similar to ecological theory, role theory

has been used to describe how organized social structures influence behaviors and expectations for behaviors associated with these structures (Stryker, 1995). In formal professions, the roles people play are more functions of the work environment than of their own personality characteristics. The specific behaviors comprising the profession are often specified in written and coded presentations. For example, the “*Ethical Principles of Psychologists and Code of Conduct*” (APA, 2010) was designed by the American Psychological Association to provide guidelines related to professional psychologists’ competence, integrity, responsibility, and respect for people’s rights and dignity. It outlines standards and expectations for individuals in this social system. Simply, the Ethical Principles describe the role of professional psychologists. Psychologists achieve their roles through professional education programs that promote skills, knowledge, and values that are essential to performing the specific duties and meeting the standards required of professional psychologists.

Despite its designation of theory, it should be noted that role theory is considered a conceptual framework from which related hypotheses and theories have been developed (Stryker, 1995). Stryker distinguished two most important approaches within the global role theory framework, structural and interactional role theories. Work-family interface researchers have drawn theoretical premises from these two frameworks to describe the complicated relationships between the two domains.

Structural role theory stresses the stability in persons and social structures (Stryker, 1995). According to the theory, roles are essentially designed to resist new demands and expectations from larger social systems and maintain their original form. General homeostasis exists when there is a fit between the role and the demands from the

social structure. However, when the role and the demands are incompatible, stress occurs. The initial research on work-family interface, including work-family conflict, was founded in the structural role framework. This research stressed the fact that people participate in potentially conflicting social structures (i.e., work and family) with conflicting sets of role demands. As conflicting demands compete for finite resources, conflict ensues resulting in stress. This logic, derived from the structural role theory, is at the premise of the role conflict theory.

Unlike structural role theory, interactional role theory stresses human fluidity that allows change to occur in the context novel demands and rules of social structures (Stryker, 1995). Compared to the structural role theory, interactional theory emphasizes social processes, social change, and creativity more than structures, stability, and conformity (Stryker, 1995). According to this theory, people improvise and integrate different roles in order to achieve solutions and fulfill distinct demands of different social structures. The theory's focus on social and personal adaptability and fluidity is consistent with concepts such as spillover, enrichment, and facilitation (Hansen, Hammer, & Colton, 2006).

Role Conflict and Scarcity Hypothesis

The dominant approach to the investigation of the relationship between work and nonwork has been "role-conflict theory," also referred to in the literature as the "negative approach" (Staines, 1980) and the "scarcity hypothesis." It is termed the negative approach because it typically assumes negative or conflicted relationships between work and nonwork domains. The role conflict framework is founded on the stability of the roles assumed by the structural role theory and the finality of human energy from the

scarcity hypothesis. Goode formulated the scarcity hypothesis (Hansen, Hammer, & Colton, 2006). He proposed that individuals have limited personal resources such as time, energy, and commitment, which can be dedicated to different roles. Given the finality of this energy and inflexibility of roles, energy dedicated to one role depletes the resources available for the other role (Barnett & Gareis, 2006). It was further argued that strain is normal or inevitable given the conflicts resulting from competition for the resources between and within roles.

The concept of interrole conflict emerged in the literature in the 1980s when the number of married women in the labor force dramatically increased (Barnett & Gareis, 2006). Women's social role was traditionally bound by housework and child rearing whereas men's primary role was breadwinning (Barnett & Gareis, 2006; Perry-Jenkins, Repetti, & Crouter, 2000). Upon entering the workforce, women adopted an additional role of a worker. The conflict theory assumed that work and family were separate spheres with conflicting demands, which were in competition for resources (Barnett & Gareis, 2006). As women began to occupy these two social roles, it was believed that increased demands for time and energy would result in conflict and further deplete the resources. The conflict theory argued that the expansion of resources in the work sphere depletes the available resources for the home sphere and, thus, diminishes family role qualities. Many commentators feared the process threatened the quality of family structures. Consequently, they demanded more complete knowledge of these processes in an effort to prevent the negative effects and preserve families (Barnett & Gareis, 2006; Perry-Jenkins, Repetti, & Crouter, 2000).

According to the general interrole conflict framework, “participation in the work (family) role is made more difficult by virtue of participation in the family (work) role” (Greenhaus & Beutell, 1985, p. 77). Greenhaus and Beutell described three types of conflict: time-based, strain (energy)-based, behavior-based. According to Greenhaus and Beutell, strain-based conflict occurs when strain from participation in one role makes it difficult to fulfill the requirements of another role; behavioral conflict emerges when behaviors required in one role make it difficult to fulfill the requirements of another role; and time-based conflict occurs when time devoted to the requirements of one role makes it difficult to fulfill the requirements of another role.

More recent role conflict literature suggested a bidirectional nature of the conflict between work and family (e.g., Netemeyer, Boles, & McMurrin 1996; van Steenbergen, Ellemers, & Mooijaart, 2007). Work may conflict with family (WFC) and family may conflict with work (FWC). Investigations have evidenced relationships between WFC and FWC and outcomes such as job performance, absenteeism, turnover, involvement, job satisfaction, burnout, job tension, job-role ambiguity, self-efficacy, family conflict, stability, cohesion, and individual psychological and physical well being (Netemeyer, Boles, & McMurrin 1996; Voydanoff, 2002). Although there is evidence for both, researchers have observed a higher incidence of WFC than FWC (e.g., Netemeyer, Boles, & McMurrin 1996). This direction of the conflict was consistent with the findings from the general work-family interface research that suggested greater influence of work experiences on family lives than the reverse (Stains, 1980). As most individuals also feel families are more important than work (Allen, Herst, Burck, & Sutton, 2000), the majority of research on role conflict has focused on work conflicting with the family life.

Although research has provided strong evidence for the importance of work-family conflict, alternative findings suggested that this concept does not fully capture the complexity of the relationship between work and family domains. For instance, Barnett and Gareis (2006) reviewed several studies in which men and women reported similar levels of work-family conflict. These results challenged the expectations that the conflict would be higher among women who were more intensely involved in the family role, in addition to the work role. Further, Voydanoff (2002) reviewed findings that women and men holding multiple roles had relatively high psychological well being whereas those holding only one of these roles had relatively low well being. In addition, several studies failed to provide support for the relationship between long work hours and negative outcomes (Barnett & Gareis, 2006). For example, findings suggested that more hours worked by men and women in full-time employed couples were related to lower distress (Barnett & Gareis, 2006). These findings indicated that the relationship between work and family is not always conflictual. Rather, consistent with the ecological theory and interactional role theory, individuals who participate in more than one domain may adapt to multiple roles with beneficial effects.

Positive Effects and Enhancement Hypothesis

An alternative approach to the work-family interface assumes positive or beneficial relationships between the two domains. Grounded in the ecological and interactional role theories, its main assumption rests on the premises that energy is expandable and roles are fluid (Barnett & Gareis, 2006). In contrast to the scarcity hypothesis, this assumption was termed the enhancement hypothesis. Generally, the enhancement hypothesis proposes that occupying multiple roles can be beneficial.

Theorists observed a number of processes that contribute to the beneficial effects of multiple roles: one may gain skills and knowledge in one role that can be used in another; a role may buffer the effects of failure in another; roles may provide individuals with a broader frame of reference from which to relate to others; multiple roles may increase the complexity of one's self-image and the availability of social support; roles can generate positive affect and energy that can be translated in another role, and they may provide multiple opportunities to experience success (Barnett & Gareis, 2006; Hansen, Hammer, & Colton, 2006; Voydanoff, 2002). Furthermore, the combined effect of these benefits facilitates one's functioning within roles, which leads to fewer negative and more positive outcomes.

Despite existing conceptualizations, the study of the enhancement hypothesis remains limited (Barnett & Gareis, 2006; Grzywacz & Marks, 2000; Hansen, Hammer, & Colton, 2006; Parasurman & Greenhaus, 2002). According to Barnett and Gareis (2006), two streams of existing research have provided initial support for the enhancement hypothesis. The first and simpler line of research has evidenced a relationship between the number of roles and positive outcomes, and the second has considered the relationship between role quality and quality-of-life outcomes.

Studies of the consequences of performing multiple roles primarily focused on the rewards associated with the professional role of married women with children and the roles of husband and father among men (Barnett & Gareis, 2006). Several research reviews on the consequences of employment among women evidenced support for the idea that adding the employee role to women's traditional role as wife and mother provided alternative satisfactions and resulted in additional resources and assistance (e.g.,

Barnett & Gareis, 2006; Perry-Jenkins, Repetti, & Crouter, 2000). These studies typically identified benefits of increased salary, utilization of talents, satisfactions with doing challenging work, additional social support, lowered distress, decreased depression, and greater well being. Similar findings have been reported for men who expanded their traditional occupational roles into the family roles of fathers and spouses. Barnett and Gareis's review suggested that men occupying these three roles simultaneously, often reported fewer psychological symptoms of distress and increased well being. Moreover, Barnett and Gareis also noted several studies that indicated that men rated their family roles as more salient to their well being than their occupational roles. Finally, both men's and women's participation in multiple roles was typically related to better family/marital functioning and satisfaction (Barnett & Gareis, 2006). Generally, these studies almost invariably indicated that holding multiple roles of spouse, parent, and paid worker enhances one's well being (Voydanoff, 2002). These findings are consistent with the interactional role theory's assumption about the synergic benefits of rewards across multiple roles for one's general functioning and well being.

The second line of research assessed the effects of role quality as a predictor of health and quality of life outcomes. For Barnett and Gareis (2006), subjective role quality is determined by domain factors. Consistent with ecological theory, Barnett and Gareis assumed that positive environmental factors enhance role quality whereas negative factors diminish it. The focus of the initial research was the effect of work-domain factors on the quality of occupational roles and general well being (Barnett & Gareis, 2006). Hazardous factors of the work domain that have been frequently observed in the literature included low-wage work, work-place discrimination, harassment, overload, and

person-work misfit (e.g., Barnett & Gareis 2006; Maslach, 2002). Exemplars of facilitative work factors often included enriched jobs, developmental opportunities, and supportive work environments (Wayne, Grzywacz, Carlson, & Kacmar, 2007). Factors such as marital satisfaction, family relationships, and family support were also identified as important family domain conditions (e.g., Ray & Miller, 1994; Voydanoff, 2002). In summary, this research identified a link between role qualities (e.g., spouse, parent, and worker) and individuals' general well being (Barnett & Gareis, 2006; Wayne, Grzywacz, Carlson, & Kacmar, 2007), and further demonstrated that factors that enhance functioning in one domain can also effect functioning in other life domains.

Currently, a variety of terms, including spillover, facilitation, and enhancement, are used to describe the benefits of participating in both work and family (Hansen, Hammer, & Colton, 2006). Often, these terms have been used interchangeably, and the distinctions between them are still not well understood. The following brief sections provide the conceptual definitions and overview differences and similarities between the constructs as they have been defined in the previous literature.

Work-family facilitation. A recent position paper by Wayne, Grzywacz, Carlson, and Kacmar (2007) offered a comprehensive explanation of work-family facilitation. The authors defined the term as “the extent to which an individual’s engagement in one life domain (i.e., work/family) provides gains (i.e., developmental, affective, capital, or efficiency) which contribute to enhanced functioning of another life domain (i.e., family/work)” (p. 64). According to the authors, (a) developmental gains included the acquisition of skills, knowledge, values, and perspectives; (b) affective gains included alterations in mood, attitude, confidence or other aspect of cognition; (c) capital

gains included the acquisition of economic, social or health assets; and (d) efficiency gains included the enhanced focus or attention induced by multiple role responsibilities. The authors posited that “facilitation occurs when the gains acquired in one domain are transferred to and subsequently enhance functioning of another domain” (p. 64). It is important to note that the definition of facilitation specifies the “system” as the functional unit of analysis. This specification is different from a more widespread individual level of analyses within other conceptual frameworks, such as enrichment and spillover. Work and family domains are considered systems comprised of interacting elements (i.e., individuals) that create subsystems such as marital dyad or parent-child dyad within family system and supervisor-supervisee dyad or work groups within work. Accordingly, facilitation occurs when the transfer of gains creates an improvement in system level functioning. For a more detailed description of work-family facilitation and the review of empirical evidence, see Wayne, Grzywacz, Carlson, and Kacmar (2007).

Work-family enrichment. Another term that has been used to describe the benefits of participating in work and family roles is work-family enrichment. Greenhaus and Powell (2006) defined “work-family enrichment as the extent to which experiences in one role improve the quality of life in the other role” (p. 72). According to their theory, the accumulation of resources from multiple roles enables the process of enrichment. The authors conceptualized a resource as an asset that may be utilized to solve a problem or cope with a challenging situation. Consistent with interactional role theory, resources are not role-bound. Instead, all resources may be used to fulfill demands of any role. The authors identified five types of resources that can be generated in a role: skills and perspectives (i.e., cognitive, interpersonal skills, coping skills, and

knowledge and wisdom derived from role experiences), psychological and physical resources (i.e., self-evaluations, personal hardiness, positive affect, and optimism), social and capital resources (i.e., influence and information), flexibility (e.g., timing, pace, and location), and material resources (e.g., money and gifts). Furthermore, Greenhaus and Powell described instrumental and affective paths to enrichment. The instrumental path described a direct transfer of resources between roles in a way that a higher performance in a role may influence positive performance in the other role. The affective path occurs when resources generated in one role promote positive affect in that role, which then produces higher performance in the second role and leads to positive affect in that role. Contrary to facilitation theory, the emphasis of the analysis in enrichment theory is the individual; enrichment theory emphasizes changes on the level of an individual (e.g., parent, spouse, and employee) as opposed to the system. For a review of the relevant literature, see Greenhaus and Powell (2006).

Spillover. Spillover is another term that has recently received significant attention within the investigations of the work-family interface (e.g., Hansen, Hammer, & Colton, 2006; Stevens, Minnotte, & Kiger, 2004). The origin of the spillover conceptualization is rooted in Sieber's (1974) idea of "personality enrichment." Sieber observed that the development of "skills, knowledge, and perspectives" in one role can also be applied effectively in another role. The work of Crouter (1984) and Staines (1980) crystallized the conceptual and empirical development of a general model of spillover. Staines offered the first systematic review of the early spillover literature supporting the validity of this concept, and Crouter detailed its conceptualization. Today, spillover is defined as a bidirectional transfer of positive and negative values, behaviors,

skills, and affects from one role to another. The concept of spillover provides a broad framework that captures both positive and negative ways that work and family may influence each other. As spillover is the focus of the current study, this concept will be discussed in more detail in the next section.

The Concept of Spillover

Siebert's (1974) original idea of spillover paralleled a novel development in the business industries around the United States and Europe when numerous companies began to advance employees' involvement in organizational decision making. A decade later, Crouter (1984) termed this novel work environment "participative work," and he contended that the participative work produces observable changes in adult development. According to Crouter, although the participative work was created to increase productivity at work and enhance work morale, these positive experiences further produced changes in the person's general attitudes, skills, ideas, and values. Crouter observed that these changes manifested themselves in other settings off the job, particularly in the family and community. Crouter used the Bronfenbrenner's ecological systems theory of human development to describe how the workplace environment enhanced individuals' development when it enables workers to learn new skills and broaden their perspective of the world. In the context of role theory, these changes represent the development of attitudes or schemas and scripts that inevitably carry over to other settings and other times. Taken together, a participative work environment promotes work role enhancement, which allows a transfer of novel skills, behaviors, and knowledge to family roles.

Staines (1980) further described spillover as a “fundamental similarity between what occurs in the occupational environment and what transpires elsewhere” (p.112). He argued for a direct positive relationship between work and family variables. For instance, high levels of engagement in work tasks theoretically results in corresponding high engagement in home tasks. This hypothesis was fundamentally different from the conflict theory, which predicted that high engagement at work diminished resources for high engagement at home. Staines’s (1980) review of the existing research offered support for spillover theory. He identified several studies that evidenced consistently positive relationships between subjective reactions to work and enhanced functioning in nonwork activities. Based on his review, integration of work skills and abilities into nonwork roles had a potential to improve the quality of nonwork roles, particularly functioning in one’s family.

Growing research interest, coupled with methodological advances, has contributed to an ongoing conceptual development of spillover. The most recent variants of spillover emphasize the “transfer” of specific affects, behaviors, skills, and values from the originating domain to the receiving domain (e.g., Hansen, Hammer, & Colton, 2006). Although this transfer may be bidirectional, the majority of attention has focused on positive or negative spillover from work to family.

Positive spillover. Initially, spillover was considered to be unidirectional transfer of rewarding elements from the originating domain to the receiving domain. What is considered “positive spillover” today was simply dubbed spillover initially. To counteract the focus on scarcity hypothesis, the majority of researchers solely considered the transfer of positive role qualities and their beneficial effects on the receiving domains.

For instance, Crouter (1984) emphasized the development of global intellectual functioning as a result of participation in complex work tasks. He observed the development of skills (e.g., interpersonal, communication, listening, and decision making skills) and attitude changes (e.g., self confidence, learning a value of trust, and responsibility) owing to the intellectual stimulation from work. This initial evidence for these positive effects of work on other areas of life motivated theorists' and researchers' continued exploration of new ways in which affect, skills, behaviors, and values can be transferred from work to family domains. Hansen, Hammer, and Colton (2006) recently identified additional examples of positive spillover including excitement, enthusiasm, happiness, multitasking, disciplinary styles, use of a communication device, autonomy, curiosity, consideration, and obedience. It should be noted that this review is not an exhaustive inventory of positive spillover; it only offers a few commonly encountered exemplars of the many different types of affect, skills, behaviors, and values that may spillover between roles to produce positive effects.

Negative spillover. Although positive spillover received consistent empirical support, some theorists wondered whether this unidimensional conceptual framework sufficiently captured the complexity of work-family relationship (e.g., Grzywacz & Marks, 2000; Small & Riley, 1990). Note that spillover theory was developed in the context of enhancement hypothesis to balance the overemphasis on negative consequences of participation in multiple roles. Consequently, spillover initially emphasized only enhancing aspects of work and family, such as the examples highlighted in the previous section. Ecological system theory, however, posited that domain influences may be both positive and negative based on the nature of the environmental

factors (Crouter, 1984). According to the theory, negative domain factors have negative effects on individual's development and on role quality. Furthermore, spillover theory stressed that these effects and role qualities were not domain-bound; instead, they occur in other domains (Staines, 1980). This logic suggests that negative work role qualities or experiences also have potential to be transferred between domains. This transfer of negative role qualities was considered negative spillover (e.g., Schulz, Cowan, Cowan, & Brennan, 2002; Small & Riley, 1990).

Multidimensional model of spillover. Following this logic, theorists proposed an expanded, multidimensional model of positive and negative spillover of affect, values, skills, and behaviors. This comprehensive model of work-family interface that considers a range of positive and negative interdomain influences is currently the most elaborate and complete model available to researchers (e.g., Barnett, Marshall, & Sayer, 1992; Brotheridge & Lee, 2005; Crouter, 1984). This model identifies four specific types of spillover: affective, values, skills, and behavior.

One form of spillover is affective or mood spillover in which affect from one domain spills over to the other domain. Staines (1980) stressed a fundamental similarity of affective experiences between domains. He argued that affective experience at work would be similar to one's affective experience at home. For instance, a negative reaction to stressful experiences from work tends to generalize to one's affective state at home so that the individual carries over the negative affect to home. Edwards and Rothbard (2005) further contended that the transferred mood affects the person's ability to fulfill the role demands of the other domain through cognitive and motivational processes. For instance, they suggested that the transfer of negative mood from the work to family

domain may inhibit problem-solving and reduce self efficacy in the family domain.

Although Edwards and Rothbard focused primarily on spillover of negative affect, it is also possible that positive affect from one domain may spillover and enhance abilities or the functioning in the other domain.

Another form of spillover is value spillover. Given that work and family are important socializing forces that influence what people consider valuable, individuals may actively strive for values consistency between work and family, or they may have unintentional transmissions of ingrained values between domains (Edwards & Rothbard, 2005). For example, employees in organizations that value control and structure may strive to create similar environment in their home lives. Specifically, psychologists who value empathy with their clients at work may be more inclined to be considerate of the needs of their own family members (Stevanovic & Rupert, 2009). If the values from the originating domain are compatible with the demands in receiving domain, this spillover is considered positive. Negative spillover occurs when there is a dissonance between transferred values and receiving demands.

The final two forms of spillover involve skills and their associated behaviors. Domain bound role demands promote development of certain skills and associated behaviors that over time develop in generalized knowledge structures or behavioral scripts (Edwards & Rothbard, 2005). Edwards and Rothbard noted that these skills and behaviors may then transfer between domains directly, via intentional interdomain application, or indirectly, via unintentional display of schemas and scripts. When skills and behaviors developed in one domain enhance the person's ability to meet the demands in other domains, they are considered positive spillover. For example, Crouter (1984)

showed that employees who learn participative management skills at work can transfer these skills to family situations. Similarly, psychologists who learn active listening skills may be better listeners with their spouse and children at home. On the other hand, when skills and behaviors developed in one domain interfere with one's functioning in other domains, they are considered negative spillover. For instance, psychologists' tendency to withhold their own subjective reactions may limit their involvement in the family relationships.

Research on spillover. Although spillover proposes reciprocal influence between the two domains, the research has typically explored the effects of work on family. In this regard, research has identified a number of factors related to spillover, including potential predictors from work domain and several personal characteristics and outcomes in family domains.

Numerous studies have shown that work-family spillover is associated with important variables in the family and personal domains. Small and Riley (1990) found evidence for a relationship between work spillover and the quality of marital relationship, parent child relationship, involvement in household responsibilities, and leisure activities. Grzywacz and Marks's (2000) data suggested that family disagreements were more common among employees who experience more negative spillover between work and family. Kinnunen, Feldt, Gerust, and Pulkkinen (2006) showed that positive work-spillover was associated with general well being in the family domain. Similarly, Hansen, Hammer, and Colton (2006) identified a relationship between positive spillover and greater family satisfaction, increased mental health, and overall well being of bank

employees. Brotheridge and Lee's (2005) data from a 474 Canadian government workers suggested a relationship between positive work-spillover and positive health outcomes.

A number of work characteristics have been found to influence work-family spillover. The previously discussed focus on the effects of participative work on worker's development has suggested its relationship to positive work spillover. Crouter's (1984) review of relevant research indicated that work factors such as freedom from close supervision, complexity of work, and diversity of work responsibilities may have positive effects on one's functioning in nonwork domains. Grzywacz and Marks (2000) further indicated that decision latitude facilitated development and was associated with less negative and more positive spillover between work and family. Similarly, Frone, Yardley, and Markel (1997) found that supervisor and co-worker support was associated with more positive and less negative work-spillover in a diverse group of employees.

On the other hand, Crouter (1994) noted that increased challenges of participative work, such as greater responsibility and the increased work hours, may be harmful for worker's development and result in negative spillover. Grzywacz and Marks's (2000) data on employed adults from the United States, and Kinnunen, Feldt, Gerust, and Pulkkinen's (2006) data from a diverse group of Finnish employees supported Crouter's concerns. These researchers found that long work-hours and additional job pressures presented risks for experiencing more negative work-spillover.

In addition to the work characteristics, affective reactions to work experiences have been related to spillover. Schulz, Cowan, Cowan, and Brennan (2004) explored daily changes in workday pace and end-of-the-workday mood in relation to withdrawn and angry marital behavior in husbands and wives from 42 couples over a three-day

period in a diary study. Their findings indicated that more negatively arousing workdays were linked with negative spillover in the form of angrier marital behavior for women and less angry, but more withdrawn behavior for men. Kinnunen, Feldt, Geurst, and Pulkkinen's (2006) data from Finnish employees indicated that exhaustion and psychological distress at work were associated with increased negative spillover. On the other hand, Hansen, Hammer, and Colton (2006) identified a relationship between greater job satisfaction and positive spillover.

Measurement of spillover. As the research on spillover advanced, increased attention has been dedicated to the development of quantitative measures of spillover. Initial assessment of spillover consisted of interviews about the ways in which participative work influences employees as individuals and how these changes affect their personal lives (Crouter, 1984). Today, there are several self report measures of spillover that are used in the work-family literature.

Two measures were developed to assess solely positive or negative work spillover. Hansen, Hammer, and Colton (2006) presented a multifaceted measure of positive work spillover that assessed affect-based, behavior-based, and value-based aspects of positive spillover. Small and Riley (1990), on the other hand, developed a measure of negative spillover focusing on four role contexts of home life: marital relationship, parent child relationship, leisure, and home management. Their respective factor analyses supported their proposed factor structures.

The most popular comprehensive measure of spillover was developed by Grzywacz and Marks (2000), who utilized ecological systems theory to develop an expanded conceptualization of work-family spillover. They proposed a four-dimensional

measure of spillover that examined negative spillover from work to family, negative spillover from family to work, positive spillover from work to family, and positive spillover from family to work. An exploratory factor analyses supported their multidimensional conceptualization of spillover. Building on their work, Kinnunen, Feldt, Gerust, and Pulkkinen (2006) found support among a sample of Finish employees for their novel four-dimensional measure.

Taken together, the research suggests that spillover from work to family has implications for quality of personal and family life (i.e., family functioning and satisfaction), and offers some insight into work (e.g., hours worked) and personal factors (e.g., affective reactions, gender) that may influence spillover. However, this research is limited in several ways. Specifically, it is primarily correlational and cross-sectional in nature; thus it is impossible to draw causal conclusions about predictors and outcomes of spillover. Furthermore, measure development is practically in its infancy, and only a couple of comprehensive assessment instruments are currently available to researchers. Further longitudinal research and additional measurement advances are necessary for a better understanding of the process of spillover.

Spillover among Professional Psychologists

The unique nature of psychological practice presents a particularly strong potential for work spillover among this group of professionals. Many aspects of psychologists' professional work such as emotionally intense therapeutic relationships with clients (Guy, 1987), knowledge of behavioral change (Zur, 1994), enhanced interpersonal skills (Stevanovic & Rupert, 2009), and strict ethical/legal standards of practice (Stevanovic & Rupert, 2004) have clear potential for the transfer of affective

experiences, behaviors, interpersonal skills, and unique values from psychologists' professional practice to their personal lives (e.g., Guy, 1987). Ironically, spillover among this group of professionals has remained largely unexplored (e.g., Stevanovic & Rupert; 2009; Zur, 1994). The overarching goal of the current study is to explore how the unique nature of psychological profession spills over into practitioners' family lives and to examine factors that relate to spillover.

Although research specifically examining spillover among psychologists is limited, several bodies of literature offer insight into ways in which the work of psychologists may influence their personal and professional lives. The literatures on professional rewards and stresses and burnout suggest the potential for both positive and negative affective spillover. Furthermore, the literatures on professional development and professional training and practice suggest multiple ways in which the knowledge, skills, behaviors, and values from work may spillover into personal domains and affect them both positively and negatively.

Rewards, hazards, and burnout. Much has been written about the demanding work of clinical psychologists (Guy, 1987; Mahoney, 1998). This professional endeavor is fraught with many hazards that challenge and transform the therapist's personality throughout the entire course of their careers. At the same time, professional rewards of clinical work stimulate feelings of effectiveness and personal growth. A body of literature on occupational rewards and hazards provides insight into the frustrations and satisfactions associated with the psychotherapeutic practice, and sheds light on the potential for both positive and negative affective spillover.

It must be acknowledged at the outset that the majority of psychologists typically report more rewards/satisfactions from their professional work than hazards, and they are generally satisfied with their professional lives (e.g., Burton, 1975; Guy, 1989; Kramen-Kahn & Hansen, 1998; Stevanovic & Rupert, 2004). Surveys of psychologists have found that commonly reported rewards include increased self-knowledge, challenge of work, intellectual stimulation, continued learning, promoting growth, helping others, personal enrichment/fulfillment, emotional growth, feeling as respected and competent professional, and sense of intimacy with clients (e.g., Burton, 1975; Farber, 1983; Guy, 1987; Kramen-Kahn & Hansen, 1998; Stevanovic & Rupert, 2004). These rewards may lead to a sense of accomplishment and positive feelings that may positively influence psychologists' functioning in other domains.

On the other hand, a host of research findings and anecdotal literature in this domain has identified numerous stresses associated with this work. Most frequently reported hazards of clinical work included economic uncertainties, professional conflicts, time pressures, lack of control over own practice, need to control emotions, isolation, omnipotent wishes, struggles with professional identity, personal depletion, and sense of responsibilities for clients (Bermak, 1977, Freudenberger & Robbins, 1979; Guy, 1987; Hellman, Morrison, & Abramowitz, 1987; Kramen-Kahn & Hansen, 1998, Stevanovic & Rupert, 2004). In his elaborate account of *Personal Life of Psychotherapist*, Guy (1987) expressed a particular concern with "physical and psychic" forms of isolation imposed by clinical work. According to Guy, physical isolation may separate the psychotherapist from the events and interactions of everyday life, deprive her/him from environmental stimulation, and isolate him/her from colleagues, family, and friends. It may also impose

physical inactivity, which can lead to fatigue. These work hazards have the potential to spillover from work to family domains of psychologists. In addition, the emotional depletion from these stresses may leave therapists burned out and unable to meet the demands of her or his professional and personal roles (Freudenberger & Robinson, 1979).

Burnout is a syndrome of emotional exhaustion, depersonalization, and reduced personal accomplishment that can occur among individuals who work with people in some capacity (Maslach & Jackson, 1981). The term burnout has been widely used to refer to negative cognitive and emotional reactions to the ongoing work-related stresses and emotional demands encountered daily by professional psychologists. A number of personal and work-related factors have been positively or negatively associated with burnout among clinical psychologists, including work setting control, support, hours worked, negative client behaviors, personal resources (e.g., coping strategies, career sustaining behaviors), age, professional experience, and work-family conflict (e.g., Rupert & Morgan, 2005; Rupert & Kent, 2007; Rupert, Stevanovic, & Hunley, 2008).

Research on burnout among psychologists has elucidated many personal consequences of the emotional exhaustion and decreased feelings of personal accomplishment at work. Farber's (1990) review of the burnout literature suggested that personal costs of burnout include physical complaints, drug and alcohol abuse, insomnia, depression, interpersonal problems, and irritability outside of office. Guy (1987) emphasized the relational problems associated with burnout. He noted that difficulty relating satisfactorily with patients and colleagues at work, owing to burnout, often leads to deteriorating quality of one's relationship with family and friends outside of work. He described that psychologists suffering from burnout often experience loss of

pleasure in their personal relationships, which may lead to increased conflict, withdrawal, and isolation at home. Similarly, Maslach (1976) noted that if the stresses are not effectively resolved at work, they spillover to home and cause dysfunction within one's family life.

Professional skills and behaviors. Preparation for the demands of psychological work involves an intensive academic coursework, practical experience, and supervision which focuses on development of internal processing and awareness, as well as the acquisition of skills and knowledge. Perplexing, inspiring, and humbling experiences involved in professional training promote self knowledge, human relatedness, compassion, philosophical thinking, survival, coping skills, ethics, and understanding of one's own lifespan development (e.g., Freudenberger, 1987; Mahoney, 1998; Zur, 1994). The resulting professional is a developed social being who possesses knowledge and values and has the necessary skills and desire to help others, all of which have potential to influence psychologists' functioning in nonwork domains. An effective clinician has an understanding of lifespan psychological development; she or he has a capacity for emotional intimacy and compassion and social skills to connect with others on the deepest levels of human existence (Mahoney, 1998). In addition, findings from the literature typically indicate that being helpful and involved with others helps therapists to grow and develop personally in ways that benefit their professional and personal lives (Farber, 1983). Clinical psychologists often report that their involvement in intense therapeutic relationships tends to amplify their emotional lives and result in increased self-awareness, life knowledge, spirituality, tolerance, and appreciation for human relationships and life in general (Radek & Mahoney, 2000).

Several surveys of psychologists and their families have suggested that the resulting expertise in emotional, cognitive, and behavioral domains can greatly enhance psychologists' family lives. Practicing psychologists reported that their clinical experiences positively influenced their marriages (Guy, 1987). Farber's (1983) survey of psychologists indicated that psychologists feel more self-assured, assertive, introspective, and sensitive with their families and friends as a consequence of their intense experiences with their clients. Golden and Farber's (1998) interviews with psychologists' children showed that these professionals acquire skills and values at work that help them deal effectively with their children. Specifically, the reports of the children suggested that their psychologist parents are skilled in handling crisis and emotionally laden situations, are available to help, and can avail themselves of professional judgment, knowledge, objectivity, and restraint.

On the other hand, the demands of psychological work may foster the development of a professional detachment and expertise that could have the potential for negative spillover. Several prominent factors of clinical practice may have a negative impact on the life and relationships of practicing psychologists, including isolation, the need to respect client's confidentiality, the emotional intensity of therapeutic relationships, and a sense of omnipotence or uninhibited psychological mindedness (Burton, 1975; Coster & Schwebel, 1997; Cray & Cray, 1997; Farber, 1983; Golden & Farber, 1998; Guy, 1987; Kramen-Kahn & Hansen, 1998; Marmor, 1953; Stevanovic & Rupert, 2004; Zur, 1994).

Marmor (1953) stressed that the praise and awe the therapist receives from clients at work may foster the therapist's unconscious arrogance and grandiosity. Coupled with

presumed knowledge and skills, these attributes may lead therapists to be arrogant, dogmatic, intrusive, and controlling when relating to their significant others. Guy (1987) described ways in which isolation could dictate the psychologist's one-way intimacy, promote the practiced pattern of withholding personal information, heighten emotional control, and prevent sharing one's own personal needs and concerns. When transferred outside of the office, these characteristics of professional work have the potential to hinder the clinician's interpersonal functioning by causing him or her to be more distant and withdrawn. This way of relating within the family may lead to decreased communication, misunderstandings, and disconnect (Cray & Cray, 1997; Guy, 1987). Psychologists in Farber's survey (1983) felt that uncontrolled psychological mindedness in their personal lives could turn a therapist into a constant examiner, who is incapable of spontaneity and a natural affective interaction with his or her family members. Several studies have determined that the emotional intensity involved in therapeutic relationships with clients, particularly long interactions with difficult clients, can decrease the clinician's display of affect at home (e.g., Burton, 1975; Farber, 1983). Consequently, the therapists are faced with the task of dividing limited resources of time and energy between work and family (Guy, 1987).

Taken together, the literatures on burnout, professional rewards and hazards, and professional development offer many ideas about how psychological work may spillover into the personal and family lives of practicing psychologists. Further, several surveys of psychologists have supported these ideas by identifying both positive and negative effects of clinical work on personal functioning. There is a small body of research that

has focused specifically on describing this work to family spillover among mental health professionals.

Empirical Evaluation of Work Spillover among Mental Health Professionals

Four studies have explored the impact of work on family lives of mental health professionals. A series of three studies has gathered information about ways that the work of family therapists influenced their family lives. In addition, Stevanovic and Rupert (2009) recently sought to describe family stressors and enhancers (i.e., negative and positive spillover) associated with general psychological practice, and to assess spillover as an underlying mechanism of relationship between professional and personal lives of psychologists.

Wetchler and Piercy (1986) conducted an initial investigation of marital and family lives of family therapists after observing a high rate of marital and family distress among mental health professionals. To investigate possible stressors and enhancers that contribute to this clinical picture, they conducted the first study of spillover among family therapists. To operationalize spillover, Wetchler and Piercy developed lists of potential enhancers and stressors and asked 110 respondents to check and rank the ways in which being a family therapist uniquely strengthened and uniquely stressed their marital/ family lives. Positive spillover was operationalized through family enhancers and negative spillover through family stressors. Both male and female respondents reported more enhancers than stressors. In addition, older therapists reported an increased number of family enhancers pertaining to parenting and sex role flexibility and understanding. Greater number of stressors was related to increased work hours. In particular, those professionals who worked longer hours reported difficulty listening to their spouse/family

and increased likelihood to look for problems where none existed. Generally, little time and energy left for one's own marriage/family was the most notable stressor. Acceptance of one's own part in marital/family problems, development of communication skills, and greater appreciation of one's own marital family strengths were identified as the strongest enhancers.

Duncan and Durden (1990) extended the initial investigation in a subsequent survey of 44 Indiana marriage and family therapists (therapists, educators, and researchers) and their spouses. These participants most frequently checked enhancers such as greater ability to communicate effectively and greater acceptance of their own part in marital family problems. Most frequently checked stressors were little time and energy left for their own marriage/family and setting unrealistic standards for marriages and families. Family therapists and their spouses showed considerable agreement about what they perceived to be the most stressful and enhancing elements of professional practice. They also agreed that their family lives were more enhanced than stressed because of the therapists' work. There were no differences across gender, work settings, age, income level, and number of hours worked per week.

The third study of family therapists, conducted by Duncan and Goddard (1993), further extended this line of research by assessing the extent to which "the number and/or presence of particular work-related marital/family life enhancers/stressors are associated with levels of marital quality and family life satisfaction" (p.435). The data from 362 Southeastern Council on Family Relations members indicated that the number and kind of stressors were negatively correlated to marital quality, while enhancers were positively correlated with the marital quality and family life satisfaction of professionals and their

spouses. In addition, these respondents also reported more enhancers than stressors. Similar to the two previous studies, Duncan and Goddard observed a parallel pattern of agreement between the family professionals and their spouses in term of stressors and enhancers. They organized the results from all three studies into common “clusters” of work-related enhancers and stressors that spill over into the marital/family lives of family professionals and their spouses. The cluster of enhancers included greater communication skills, greater appreciation of personal marital/family strengths, greater sensitivity to each other’s needs, greater acceptance of one’s own part in marital/family problems, and greater awareness of family problems as normal, although stressful. The cluster of stressors included having little time/energy left for one’s own family, setting unrealistic standards for marital/family life, being concerned over job security, having difficulty switching roles from a family professional to a family member, and developing personally beyond the spouse/family (Duncan & Goddard, 1993). Finally, these authors also reported that the experience of stressors and enhancers was independent of gender and work setting.

The only examination of spillover specifically among professional psychologists was carried out by Stevanovic and Rupert (2009). These authors assessed work to family spillover, life satisfaction, and family support among 485 professional psychologists. They utilized previous work on family professionals to develop a measure of work spillover for psychologists in order to describe positive and negative work spillover (i.e., stressors and enhancers) associated with general practice of psychology and assess a mediational model of spillover as an underlying mechanism of the relationship between professional and personal lives of professional psychologists.

Stevanovic and Rupert (2009) adopted and edited Wetchler and Piercy's (1986) initial instrument in an attempt to create a measure of spillover for professional psychologists. Several items were adopted from the research by Wetchler and Piercy (1986), and other items were derived from the literature on occupational hazards and rewards for professional psychologists and from personal observations/experiences of practicing psychologists. Using the terminology from the three studies of the family therapists, the authors designated family enhancers as the most prominent work-related rewards or skills that translate positively in psychologists' family lives (e.g., "I am sensitive to my family's needs") and family stressors as the most prominent work-related stresses or skills that spillover negatively (e.g., "I am intrusive and controlling when relating to my family"). In addition, a Likert-type scale was used to expand the previous check-list format and provide a more sensitive assessment of spillover frequency and to allow more sophisticated statistical analyses (Stevanovic & Rupert, 2009). A confirmatory factor analyses (CFA) supported the hypothesized oblique, two factor solution, which suggested that stressors and enhancers among this group of professionals are best conceptualized as separate, negatively correlated dimensions of work spillover.

Consistent with findings from the preceding studies, the psychologists from Stevanovic and Rupert's (2009) sample reported a significantly higher incidence of positive spillover (i.e., family enhancers) than negative spillover (i.e., family stressors). The results also supported a mediating role of spillover in the relationship between work and family domains. On the positive side, a sense of personal accomplishment at work (i.e., positive affect) was associated with increased family enhancers, which appeared to lead to greater family support and life satisfaction. On the negative side, emotional

exhaustion at work (i.e., negative affect) was associated with more family stressors, which appeared to lead to less family support and life satisfaction. The results did not indicate any gender and work setting differences in the experience of spillover. Increased age was, however, related to a higher incidence of family enhancers.

Stevanovic and Rupert's (2009) results represented a first step in measuring spillover among psychologists and offered initial insight into the views of professional psychologists regarding spillover from work to family life and factors that relate to spillover. Despite the general merit of this study, its scope and methodology were limited in several ways. First, the study used a measure of spillover which was constructed specifically for that study and thus lacked reliability and validity data. Although the initial factor analysis provided support for its utility, further research is necessary to evaluate this measure. Second, the study examined only a limited number of variables. Particularly in terms of potential predictors of spillover, the study demonstrated that one's attitudes and feelings about work, in the form of exhaustion or a sense of personal accomplishment, spilled over into family life and family functioning. Research on spillover with other populations, however, has suggested that work factors such as hours worked and control, as well as personal factors may also be important predictors of spillover. Further research is necessary to provide a more comprehensive understanding of factors that influence spillover. Finally, like most of the research in this area, this study was cross-sectional in nature. As a result, causal conclusions about predictors or outcomes of spillover cannot be drawn.

The Current Study

The current project was an extension of Stevanovic and Rupert's (2009) study of spillover among professional psychologists. Like the Stevanovic and Rupert study, the current project was theory and hypotheses driven and it included a nation-wide sample of professional psychologists. In addition, several important methodological and conceptual changes were incorporated. The current study was the first longitudinal examination of spillover among psychologists that gathered data at two waves (Time 1 and Time 2) to examine a larger number of potential predictors of spillover from work and outcomes from personal life. In order to better understand the mechanism of the relationship between work and family domains among this group of professionals, the mediational role of spillover in specific relationships between work and personal lives was examined with this longitudinal data. The specific objectives and hypotheses of the present study are outlined below.

Measure evaluation. Stevanovic and Rupert (2009) developed the first measure of general work spillover for professional psychologists for the purpose of their study. The confirmatory factor analysis supported the hypothesized 2-oblique factor model, suggesting two inversely related dimensions of spillover, positive (i.e., enhancers) and negative (i.e., stressors). The current study attempted to evaluate the existing measure and examine its validity and reliability. Time 1 data was used to examine the construct validity of the measure. A two-oblique-factor structure was tested via confirmatory factor analysis. Additionally, construct validity was examined by relating the scores on Stressors and Enhancers for Psychologists to a widely used measure of Positive and

Negative Spillover by Grzywacz and Marks (2000). The following hypotheses were tested.

Hypothesis 1: The measure of Stressors and Enhancers for Psychologists was expected to yield two oblique factors of stressors and enhancers that are negatively correlated at Time 1.

Hypothesis 2: Scores on the Stressors factor were expected to be positively related to scores on Negative Work-Family Spillover and negatively related to scores on Positive Work-Family Spillover at Time 1.

Hypothesis 3: Scores on the Enhancers factor were expected to be negatively related to scores on Negative Work-Family Spillover and positively related to scores on Positive Work-Family Spillover at Time 1.

Finally, reliability testing utilized Time 1 and Time 2 data to assess the test-retest temporal stability of the measure. It should be noted that the measure was expected to have a modest temporal stability because spillover is expected to be dependent in part on variables from work domain.

Experience of spillover. Previous studies of spillover among professional psychologists have consistently found higher incidence of positive than negative spillover. The current study examined the occurrence of stressors and enhancers among the prospective samples of psychologists at both time points and it identified the most frequent stressors and enhancers. The following hypothesis was examined.

Hypothesis 4: Psychologists would report enhancers more frequently than stressors at both Time 1 and Time 2.

Work, spillover, and personal life. The current study used longitudinal data to examine stressors and enhancers as an underlying mechanism by which important variables from one's work domain (e.g. feelings of emotional exhaustion and hours worked) at Time 1 influence change from Time 1 to Time 2 in variables in the personal and family life (e.g. general satisfaction with life and family functioning). A conceptual mediational model of spillover (see Figure 1) was proposed to test this hypothesis. According to this model, variables from work domain influence outcomes in personal domain by inducing changes in spillover. Stevanovic and Rupert (2009) found that positive work variables increased family enhancers, which in turn improved the quality of personal life. On the other hand, negative work variables increased family stressors, which decreased the quality of personal life. The current analyses had the following goals: a) to test the relationship between variables from the work domain (i.e., emotional exhaustion, personal accomplishment, control, and hours worked) and family stressors and enhancers in order to identify salient predictors of spillover, b) to explore effects of spillover on personal life (i.e., family functioning and general life satisfaction), c) to assess the mediating role of spillover in the relationship between work and personal domain variables, and finally.

Predictors of spillover. Previous research has documented the relationship between spillover and numerous variables from the work domain, including work characteristics and reactions to work experiences. Number of hours worked and control over work responsibilities have often been regarded as two important work characteristics in the general occupational health literature. General spillover research has found a consistent relationship between greater hours and increased negative spillover among

various groups of professionals (e.g., Crouter, 1984; Grzywacz & Marks, 2000; Kinnunen, Feldt, Geurst, & Pulkkinen, 2006). On the other hand, control and freedom from supervision at work was often related to increased positive spillover (e.g., Crouter, 1984; Grzywacz & Marks, 2000).

Emotional exhaustion (EE) and a sense of personal accomplishment (PA) have been cited as the two salient affective reactions to psychologists' work experiences. Stevanovic and Rupert (2009) found that these affective reactions influenced psychologists' experience of spillover. Specifically, emotional exhaustion from work experiences was related to more family stressors whereas feeling of personal accomplishment at work was related to more family enhancers. Using longitudinal data, the present study examined hours worked, control, emotional exhaustion, and personal accomplishment as predictors of spillover to identify the most salient predictors of stressors and enhancers in the comprehensive model of spillover.

Hypothesis 5: It was hypothesized that positive work characteristics (i.e., control and personal accomplishment) at Time 1 would be positively related to increase in positive spillover (i.e., family enhancers) from Time 1 to Time 2.

Hypothesis 6: It was hypothesized that negative work characteristics (i.e., hours worked and emotional exhaustion) at Time 1 would be positively related to increase in negative spillover (family stressors) from Time 1 to Time 2.

Effects of spillover. Findings from the previous research identified effects of spillover on numerous elements of personal life. For instance, Stevanovic and Rupert (2009) found that the experience of stressors and enhancers among psychologists influenced levels of life satisfaction and family support. Additionally, spillover has been

consistently related to family well being and functioning among various groups of professionals (e.g., Grzywacz & Marks, 2000; Kinnunen, Feldt, Geurst, & Pulkkinen, 2006; Small & Riley, 1990). The current study explored the effects of spillover on psychologists' family functioning and general life satisfaction.

Hypothesis 7: It was hypothesized that increase in family enhancers would be positively related to an increase in life satisfaction and decrease in family dysfunction from Time 1 to Time 2.

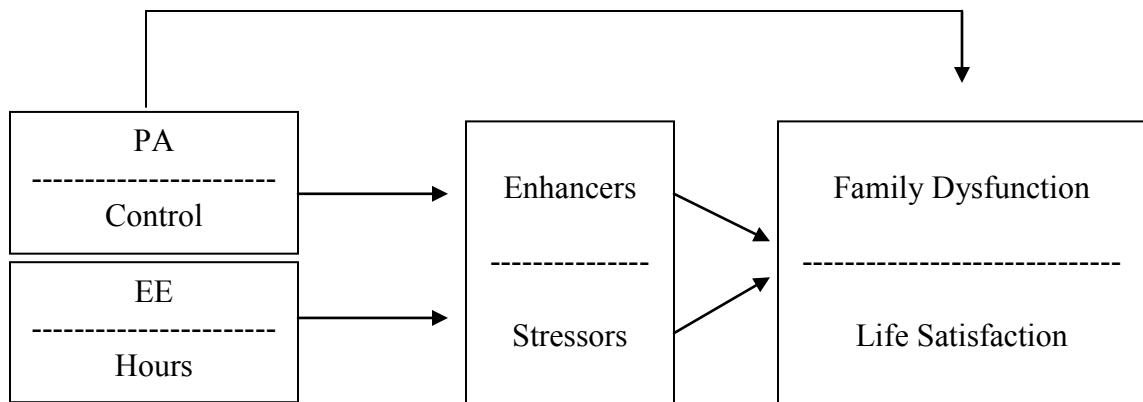
Hypothesis 8: It was hypothesized that increase in family stressors would be positively related to a decrease in life satisfaction and increase in family dysfunction from Time 1 to Time 2.

Mediational role of spillover. As noted previously, both family stressors and enhancers played significant roles in mediating the relationship between work and family domains in Stevanovic and Rupert's (2009) study. To extend the work of Stevanovic and Rupert, the present study used longitudinal data to test mediational role of spillover between several more work variables and outcomes in the personal life domain.

Mediation implies that apparent direct effects of predictors on outcome variables depend on indirect effects of mediators (Baron & Kenny, 1984). As can be seen in Figure 1, a number of mediations were possible given the number of predictor and outcome variables in the mediational model. In the current study, it was expected that positive work variables of personal accomplishment and control would increase enhancers, which would decrease family dysfunction and increase life satisfaction. On the other hand, it was expected that negative work variables of work demands would increase stressors,

which would increase family dysfunction and decrease life satisfaction. Analyses strategies are detailed in the Results section.

Figure 1. Mediational Model



CHAPTER THREE

METHOD

Participants

The current study used longitudinal data from a larger project examining work and family issues among professional psychologists conducted by the Professional Issues and Ethics Research Lab at Loyola University of Chicago. For the larger project, two separate random samples, one of 2000 and another of 1000 psychologists, were sent letters inviting them to participate in a longitudinal study of work and family issues among professional psychologists. Each sample was obtained from the National Register of Health Service Providers in Psychology and included psychologists who were licensed, engaged in clinical practice, and lived in continental USA.

Of the 3000 who were sent recruitment letters, 363 (12%) psychologists returned Interest Forms and provided e-mail addresses. All were invited to participate in Time 1 and Time 2 surveys. Of these, 221 completed the web-based survey (61%) at Time 1 and 223 completed the survey at Time 2 (62%). Respondents who completed Stressors and Enhancers for Psychologists (SEP) and Work-Family Spillover (WFS) at Time 1 were included in the analyses examining hypotheses related to the SEP measure. Only participants who responded at both time points were included in the analyses examining predictors and outcomes of spillover and mediational models. Thus, two samples were used in the present study: the Time 1 sample and the longitudinal sample.

Each is described in more detail below. In addition, listwise deletion was employed to manage missing data, which allowed number of participants to vary across the analyses.

Time 1 sample. Of 221 respondents at Time 1, demographic data was available for approximately 180 participants. The sample consisted of 74 men (33.5%) and 106 women (48.0%). Nearly all respondents were white ($n = 165$, or 74.7%). Most were married/partnered ($n = 147$, or 66.5%), primary wage earners ($n = 111$, or 50.2%), with children ($n = 130$, or 58.8%), and 33 (14.9%) had at least one child living at home. In terms of professional qualifications, the majority held Ph.D.'s ($n = 135$, or 61.1%). This was an experienced sample; the mean age 54.3 ($SD = 10.4$) and mean years of experience post licensure was 21.1 ($SD = 9.9$). The predominant theoretical orientations were cognitive-behavioral ($n = 55$, or 24.9%), eclectic ($n = 54$, or 24.4%), and psychodynamic ($n = 38$, or 17.2%). Most psychologists' primary work setting was solo private practice ($n = 73$, or 33%) and group private practice ($n = 42$, or 19%), with the remainder in agency, hospital, or institutional settings. Respondents spent approximately 41.3 ($SD = 14.8$) hours per week working, mostly in direct client contact ($M = 23.3$, $SD = 11.7$) and administrative work ($M = 10.3$, $SD = 8.7$).

Longitudinal sample. Although 223 psychologists completed the Time 2 survey, only those who also completed Time 1 were included in the longitudinal sample. The composition of this longitudinal sample paralleled the composition of the Time 1 sample. The longitudinal sample consisted of 64 men (38.1%) and 87 women (51.8%), with mean age of 54.4 ($SD = 10.5$), who were predominantly white ($n = 141$, or 83.9%), married/partnered ($n = 121$, or 72%), primary wage earners ($n = 95$, or 56.5%), with children ($n = 109$, or 64.9%). In terms of professional qualifications, this was an

experienced sample with 21.2 ($SD = 9.8$) mean years of experience post licensure; the majority held Ph.D.'s ($n = 115$, or 68.5%) and predominant theoretical orientations was cognitive-behavioral ($n = 48$, or 28.6%), eclectic ($n = 42$, or 25%), and psychodynamic ($n = 33$, or 19.6%). Most psychologists' primary work setting was solo private practice ($n = 63$, or 37.5%) and group private practice ($n = 34$, or 20.2%). Respondents spent approximately 42.5 ($SD = 14.6$) hours per week working, mostly in direct client contact ($M = 22.8$, $SD = 11.7$) and administrative work ($M = 10.6$, $SD = 8.7$).

To investigate if there were any differences between respondents who participated at both time points and those who only participated at Time 1 but not at Time 2, comparison analyses were conducted between these groups. These analyses tested whether there were any significant differences in demographic composition of Time 2 non-respondents and whether there were any significant differences on any major latent variables, including EE, Hours, Control, PA, Work-Family-Spillover, Life Satisfaction, and Family Functioning. When looking at t - and χ^2 tests, the only variable on which the two groups differed significantly was hours worked, $t(117) = -2.5$, $p > 0.05$. Those who completed surveys at both time points spent approximately 42.5 ($SD = 14.5$) per week working, and the participants who opted out from the second wave worked approximately 32.2 ($SD = 14.4$) hours per week. It is possible that the participants who worked more found the findings of the study more pertinent to their lifestyle, which made them more inclined to continue participation.

Procedure

For the initial contact, an informational letter, a pre-paid business envelope, and an Interest Form were sent to all psychologists in the two randomly selected samples.

The informational letter explained the purpose of the study and how individual participants were selected for this sample. It also explained the longitudinal methodology and asked volunteers to participate in both waves of data collection. Further, procedures for maintaining confidentiality through an online and university-based survey system were explained. The letter referred the psychologists to the laboratory's website for further details about the project. Psychologists who were interested in learning more about the project were asked to return an Interest Form and provide their e-mail addresses. Reminder postcards were sent in the mail two weeks following the initial contact.

For Time 1 data collection, the Opinio invitation list was composed with the participants' e-mail addresses ($N = 363$). Psychologists who had returned Interest Forms were first sent a prenotice e-mail through Opinio thanking them for their interest and alerting them that data collection would begin in a few weeks. The invitations were sent by Opinio via e-mail. This e-mail included a link to a detailed consent form and the web-based survey. Opinio sent reminder e-mail notes a couple of weeks later to those individuals who had not completed the survey.

Nearly all 363 participants who returned the Interest Form at Time 1 were also invited to participate at Time 2. Precisely, 358 invitations were sent because two participants asked not to be included and three were omitted because of faulty e-mail addresses. The Time 2 collection began approximately six months after the completion of the Time 1 wave. A pre-notice e-mail was sent to all participants who returned the Interest Forms. The second wave of data collection repeated the procedure outlined for

the first wave of data collection. Each data collection period lasted approximately one month.

Materials

On-line survey methodology was selected because it is a practical way to gather data on a variety and large number of participants in a longitudinal fashion. The university-based, on-line service Opinio provides confidentiality and convenience for the respondents and guarantees a standard format for gathering data while avoiding aspects of interviewer bias and experimenter effects.

Both Time 1 and Time 2 surveys incorporated several instruments which aimed to assess a range of variables related to work and family domains of professional psychologists. For the present study, data from the following instruments was used: Maslach Burnout Inventory – Human Services Survey (MBI-HSS), Stressors and Enhancers of Psychologists, McMaster Family Assessment Device FAD-GF, Satisfaction With Life Scale, Psychologist Burnout Inventory – Revised (PBI-R), Work-Family Spillover and fourteen demographic questions.

Maslach Burnout Inventory – Human Services Survey (MBI-HSS) (Maslach, Jackson, & Leiter, 1996). The MBI-HSS was designed to measure three hypothetical aspects of the burnout syndrome in the human services professionals. The emotional exhaustion (EE) subscale assesses feelings of being emotionally overextended and exhausted by one's work; the depersonalization (DP) subscale measures an unfeeling and impersonal response toward recipients of one's service, care, treatment, or instruction; and the personal accomplishment (PA) subscale assesses feelings of competence and successful achievement in one's work with people (Maslach, Jackson, & Leiter, 1996).

This is a self-report, questionnaire that requires participants to rate the frequency of feelings related to each item using a 7-point scale (0 = never; 6 = every day). Burnout is conceptualized as a continuous variable, ranging from low to moderate to high. A high degree of burnout is reflected in high scores on the EE (27 and over) and DP (13 and over) subscales and in low scores on the PA (0 – 31) subscale; an average degree of burnout is reflected in average scores on the three subscales, EE (17 – 26), DP (7-12), PA (32 – 38); a low degree of burnout is reflected in low scores on the EE (0 – 16) and DP (0 – 6) and in high scores on the PA (39 and over). This is the most widely used measure of burnout available in the relevant literature. Rich psychometric data support the reliability and validity of the three subscales. The review of the psychometric data is available in the *Maslach Burnout Inventory Manual* (Maslach, Jackson, & Leiter, 1996). Generally, it supports the three factors structure with strong item consistencies, good test-retest reliability, and convergent and discriminant validity.

For the present study, total scores on emotional exhaustion and personal accomplishment subscales at Time 1 ($\alpha = .91$) and Time 2 ($\alpha = .92$) were used to represent negative and positive affective reactions to psychologists' work experiences. The respondents reported low levels of burnout at both time points, as indicated by low scores on EE (Time 1: $M = 16.2$, $SD = 9.6$; Time 2: $M = 16.5$, $SD = 5.5$) and high scores on PA (Time 1: $M = 42.3$, $SD = 10.0$; Time 2: $M = 42.1$, $SD = 4.8$).

Stressors and Enhancers for Psychologists (SEP) (Stevanovic & Rupert, 2009). To assess positive and negative spillover, the measure of Stressors and Enhancers of Psychologists was adopted and slightly edited from the work of Stevanovic and Rupert (2009). The original measure was developed by Stevanovic and Rupert (2009) to

operationalize work to family spillover for professional psychologists. Stevanovic and Rupert (2009) adopted and edited several items from the research by Wetchler and Piercy (1986) on work spillover for the family therapists. They derived other items from the literature on occupational hazards and rewards for professional psychologists and personal experiences of the effects of professional practice of psychology on practitioners' family lives. The most prominent work-related rewards that translate positively into psychologists' family lives (e.g., elements of psychological mindedness and interpersonal skills) were designated as family enhancers. Work-related hazards/stresses (e.g., withdrawal, lack of spontaneity, and intrusiveness) that translate negatively in family lives were designated as family stressors for professional psychologists (Stevanovic & Rupert, 2009). The original measure contained lists of ten family stressors and ten family enhancers, randomly combined in a 20-item list. This self-report questionnaire required participants to rate the frequency of ten stressors and ten enhancers on a 7-point scale (0 = never; 3 = sometimes; 6 = all the time). The confirmatory factor analyses supported the hypothesized 2-Factor-Oblique model, with 19 items loading in their predesignated clusters. One enhancer showed a poor factor loading and was omitted from the final measure. The internal consistency of the factors (α) was .80 for the stressors and .77 for the enhancers.

Towards strengthening the content validity of the measure, the current study solicited additional suggestions by experts to refine the existing items and generate new items in order to provide a more comprehensive assessment instrument. The final assessment instrument contained twenty items: ten stressors and ten enhancers.

In the current study, family stressors associated with professional work of psychology constitute negative spillover; conversely, family enhancers constitute positive spillover. The breakdown of the twenty items into two categories (stressors and enhancers) can be found in Appendix A. The ratings of ten stressors were combined into a single category score to represent negative spillover. The same was done with ten enhancers to represent positive spillover. Spillover is conceptualized as a continuous variable. Low negative spillover is characterized by low combined score on ten stressors, and high negative spillover is characterized by high combined score on ten stressors. On the other hand, low positive spillover is characterized by low combined score on ten enhancers, and high positive spillover is characterized by high combined score on ten enhancers. Because this study was designed to evaluate the measure, further information about factor structure with the current sample is presented in the Results.

McMaster Family Assessment Device: FAD-GF (MMFF: FAD-GF) (Miller, Epstein, Bishop, & Keithner, 1985). Family functioning was assessed with the FAD-GF of the McMaster model of healthy family functioning. This is a 12-item, self-report questionnaire that asks respondents to indicate on a 4-point scale (1 = strongly disagree, 4 = strongly agree) the degree to which they feel each statement (e.g., “We don’t get along together”) describes their family (see Appendix B). The scale is constructed so that higher scores indicate greater family dysfunction.

The scale was originally designed to measure “health and normality” of the family based on the McMaster model of family functioning (Epstein, Bishop, Ryan, Miller, & Keithner, 1993). The model considers six dimensions of functioning that have the greatest influence on the emotional and physical health or problems of family members

based on findings from the research on normal families: “problems solving,” “communication,” “roles,” “affective responsiveness,” “affective involvement,” and “behavioral control” (Epstein, Bishop, Ryan, Miller, & Keithner, 1993). The full assessment instrument was developed and initially used in the clinical arena to distinguish between effective and dysfunctional families. Normative data and cut-off scores have been created to aid the interpretation of the full scale (Edwards & Clarke, 2005).

The FAD-GF has gradually been introduced into the research arena where it is currently widely used in a range of family studies. The measure has displayed a strong test-retest reliability, and convergent and discriminant validity, and internal consistency (e.g., Edwards & Clarke, 2005; Miller et al., 1992). Miller et al.’s review of psychometric characteristics indicated that the measure’s 1-week test-retest reliability coefficient ranged from 0.66 – 0.76 across several different studies. In addition, the measure displayed a theoretically predicted pattern of correlations with the Locke-Wallace Marital Satisfaction Scale, the Family Concept Q Sort, and the FACES-II. Edwards and Clarke reported the internal consistency of the FAD-GF of 0.88-0.90 over three phases of measurement.

For the present study, the total scores were computed for all participants to represent the global index of family dysfunction at both time points, Time 1 ($\alpha = 0.88$) and Time 2 ($\alpha = 0.81$). The participants reported low level of family dysfunction at both time points as indicated by low scores on this measure (Time 1: $M = 18.3$, $SD = 4.8$; Time 2: $M = 20.1$, $SD = 4.1$).

Satisfaction With Life Scale (Pavot, Diener, Colvin, & Sandvik, 1991).

Respondents' satisfaction with life was assessed by the Satisfaction With Life Scale (SWLS). This is a self-report, questionnaire that asks respondents to rate the extent of their agreement with the five statements (e.g., "I am satisfied with my life") about their life satisfaction using a 7-point scale (1 = strongly disagree; 7 = strongly agree) (see Appendix C). Scores on the SWLS are interpreted in terms of overall life satisfaction, low indicating dissatisfaction with life and high scores indicating satisfaction with life. For example, the author designated a score of 20 to represent a neutral point on the scale, the point at which the respondent is about equally satisfied and dissatisfied; scores between 21 and 25 represent slightly satisfied respondents, and scores between 15 and 19 represent slightly dissatisfied respondents; scores between 26 and 30 are characteristic of extreme satisfaction, and scores from 5 and 9 are indicative of being extremely dissatisfied. Extensive data has yielded strong convergent and discriminant validity, a one-factor structure, and reliability, sensitivity, and temporal stability of the SWLS (Pavot & Diener, 1993; Pavot, Diener, & Suh, 1998; Pavot, Diener, Colvin, & Sandvik, 1991). For instance, Pavot and Diener reported a coefficient alpha of 0.87 for the scale and a 2-month test-retest stability coefficient of 0.82. Their review of construct validity studies suggested positive correlations between the SWLS and numerous measures of subjective well being and life satisfaction. In addition, the SWLS has been shown to be negatively correlated with clinical measures of distress, including depression ($r = -0.55$), anxiety ($r = -0.54$), and general psychological distress ($r = -0.55$) (Pavot & Diener, 1993).

For the present study, the total scores were computed for all participants to represent the general satisfaction with life at both time points, Time 1 ($\alpha = 0.85$) and

Time 2 ($\alpha = 0.79$). The participants reported high satisfaction with life at both time points as indicated by high scores on the measure (Time 1: $M = 27.1$, $SD = 5.2$; Time 2: $M = 27.2$, $SD = 5.3$).

Psychologist Burnout Inventory – Revised (PBI-R) (Rupert, Morgan, Bryant, & Hunley, 2008). The PBI-R, a revision of an earlier assessment instrument developed by Ackerley, Burnell, Holder, and Kurdek (1988), measures four factors related to burnout: control (4 items assessing control over work activities, schedule, and decisions), overinvolvement (3 items assessing feelings of responsibility for and spending time thinking about or dealing with clients), support (4 items assessing emotional and instrumental support from colleagues), and negative client behaviors (4 items assessing the experience of aggressive, threatening, or suicidal behavior). The research has demonstrated the relationship of these factors to indices of burnout (e.g., Rupert, Morgan Bryant & Hunley, 2008; Rupert & Kent, 2007). The revised version asks the respondents to rate the frequency of 15 practice activities, working conditions, and client behaviors on a 7-point scale (0 = never, 6 = every day) (see Appendix D). Recent data on internal consistency indicated the following coefficients: overinvolvement (0.49), Control (0.69), support (0.77), and negative clientele (0.70) (Rupert, Stevanovic, & Hunley, 2009).

For the purpose of the present study, the total score on the control subscale was used to represent one of the work factors of psychologists at both time points, Time 1 ($\alpha = 0.84$) and Time 2 ($\alpha = 0.79$). At both time points, the participants reported to have substantiate control over their work responsibilities as indicated by high scores on this measure (Time 1: $M = 21.3$, $SD = 4.1$; Time 2: $M = 21.4$, $SD = 3.7$).

Work-Family Spillover (WFS) (Grzywacz & Marks, 2000). Work-Family Spillover is a 12-item measure that was used to assess four dimensions of general spillover between the two domains: negative spillover from work to family (e.g., “Your job reduces the effort you can give to activities at home.”), positive spillover from work to family (e.g., “The things you do at work make you a more interesting person at home”), negative spillover from family to work (e.g., “Activities and chores at home prevent you from getting the amount of sleep you need to do your job well”), and positive spillover from family to work (e.g., “Your home life helps you relax and feel ready for the next day’s work”) (see Appendix E). To complete the measure, the respondents are asked to rate on the 5-point scale (1 = never, 5 = all of the time) how often they experienced each item during the past year.

Exploratory factor analysis by Grzywacz and Marks (2000) supported the hypothesized factor structure and yielded good item reliabilities: negative spillover from work to family ($\alpha = 0.83$), positive spillover from work to family ($\alpha = 0.73$), negative spillover from family to work ($\alpha = 0.80$), and positive spillover from family to work ($\alpha = 0.70$). They found that factors related significantly to global measures of physical and mental health, life satisfaction, and marital quality, and no gender differences were detected. For further information about measure development and psychometric information see Grzywacz and Marks (2000). WFS is one of the most frequently used assessment instruments in the spillover research (Kinnunen, Feldt, Gerust, & Pulkkinen, 2006).

The current study used only scores from the positive ($\alpha = 0.84$) and negative ($\alpha = 0.80$) work-family spillover subscales at Time 1 to assess the construct validity of the

Family Stressors and Enhancers of Psychologists. Total scores were computed for each subscale, and higher scores represented greater incidence of spillover. The mean rating of negative spillover at Time 1 was 10.5 ($SD = 2.3$) and Time 2 was 8.2 ($SD = 2.2$); the mean rating of positive spillover at Time 1 was 11.2 ($SD = 2.4$) and Time 2 was 10.3 ($SD = 2.2$).

Demographic information. Demographic information was gathered with 14 questions about personal (e.g., gender, age, marital status, number of children, and ethnic background) and professional characteristics (e.g., income, experience, specialty area, theoretical orientation, credentials, hours work and type of work, and work settings) of the participants.

CHAPTER FOUR

RESULTS

The general aim of the current study was to expand the work of Stevanovic and Rupert (2009) and further explore spillover between the professional and personal lives of psychologists via a longitudinal research design. The study had several specific goals: a) to evaluate a quantitative measure of family stressors and enhancers (i.e., positive and negative spillover); b) to describe ways in which being a psychologist enhances the practitioner's family life or creates additional stress; c) to identify factors related to work-family spillover; d) to identify the effects of spillover on personal/family life, e) and to assess the role of stressors/enhancers as mediators between work factors (i.e., Emotional Exhaustion, Hours Worked, Personal Accomplishment, and Control) and personal/family life variables (i.e., Family Functioning and Life Satisfaction).

Measure Evaluation

Factor structure of the SEP. The factor structure of the spillover measure at Time 1 was examined using confirmatory factor analysis via LISREL 8. Following the required CFA procedure, the user specified which items were expected to load on which factors, how these factors intercorrelate, and the relations among unique-error terms for their observed indicators. In this multidimensional model, items were forced to have a single loading, factors were standardized, and unique errors were considered independent.

The Stressors and Enhancers for Psychologists (SEP) measure was developed to assess the two types of spillover from work to family lives of psychologists. SEP's hypothesis, theoretical background, and previous analyses of the measure determined the appropriateness of CFA for the current analysis. Hypothesis 1 predicted that the Confirmatory Factor Analysis would yield two negatively correlated factors, which would represent two types of work spillover for psychologists, negative (stressors) and positive (enhancers). In addition, CFA was used to compare three possible competing models. Model 1 was a single-factor model hypothesizing a general spillover factor; Model 2 was a two factor-model hypothesizing oblique positive and negative spillover factors, and Model 3 was a two-factor model hypothesizing orthogonal positive and negative spillover.

The following four measures of goodness of fit were used to assess CFA models in the current study: (1) the ratio of chi-square to degrees of freedom (χ^2/df), which decreases and approaches zero as the fit of the given model improves, (2) the root mean square error of approximation (RMSEA; i.e. a measure of the average difference between the predicted and observed item covariances for particular model) which approaches zero and decreases as the fit of the model improves, and (3) comparative fit index (CFI) and (4) non-normed fit index (NNFI), which indicate an adequate fit when greater than .90.

Although the cutoff values indicated above are helpful in providing a minimum level of fit, in CFA the fit of a model is generally interpreted relative to competing models (Bryant & Baxter, 1997). Consequently, CFA in the current study was used to evaluate the goodness-of-fit of the unidimensional model and the two multidimensional models. Table 1 presents the results of these analyses.

Although none of the three models met all the criteria for adequate fit, the 2-Factor-Oblique Model revealed the best fit to the observed data. Allowing the two factors to intercorrelate significantly improved the model's fit from Model 1, $\Delta df = 1$, $\Delta\chi^2 = 189.1$, $p < .001$, and Model 2, $\Delta df = 1$, $\Delta\chi^2 = 16.1$, $p < .01$, with the majority of fit indices suggesting an adequate fit. Inspection of the inter-factor correlations from the oblique CFA solution revealed that stressors and enhancers are negatively correlated, $r = -0.45$, $p < .01$.

Chi-square statistics for all three models were significant, although the chi-square value was the lowest for the 2-Factor-Oblique Model. Of greater concern, chi-square to degrees of freedom ratios were relatively small, with the ratio for 2-Factor-Oblique Model lower than the ratio for any other model. Further, the 2-Factor-Oblique Model performed better with regard to the other fit indices, including RMSEA, CFI, and NNFI (see Table 1).

Table 2 presents the standardized factor loadings for the individual SEP items with the 2-Factor-Oblique Model, as well as the reliability for the item loading on each factor. Note that all individual SEPs load adequately to their designated factors and yield satisfactory reliabilities of .73 and .82 for stressors and enhancers, respectively (Tabachnik & Fidell, 2001). Taken together, the findings from the Confirmatory Factor Analyses supported Hypothesis 1 that the measure of Stressors and Enhancers for Psychologists would be composed of two negatively correlated factors representing positive and negative spillover. Average scores on these two factors were used in the following analyses to represent positive and negative spillover for participating psychologists.

Table 1 Goodness-of-Fit for Various Factor Models of the Stressors and Enhancers

Factor Model	Measures of Relative Fit					
	χ^2	<i>df</i>	χ^2/df	<i>RMSEA</i>	<i>CFI</i>	<i>NNFI</i>
1 global factor	557.4	170	3.3	0.115	0.812	0.790
2 orthogonal factors	384.8	170	2.3	0.085	0.873	0.858
2 oblique factors	368.7	169	2.2	0.083	0.886	0.872

Note: χ^2 = chi-square test statistic, *df* = degrees of freedom, χ^2/df = ratio of chi-square to degrees of freedom, *RMSEA* = root mean square error of approximation, *CFI* = the comparative fit index, *NNFI* = the non-normed fit index.

Table 2 Completely Standardized Factor Loadings for the 2-Factor Oblique Model

Item	Stressors	Enhancers
Item 1 [Needs]		0.31
Item 2 [Accepting]		0.40
Item 3 [Time/Energy]	0.45	
Item 4 [Tolerant]		0.51
Item 5 [Reward]	0.49	
Item 6 [Unrealistic]	0.81	
Item 7 [Resent]	0.64	
Item 8 [Support/Intimate]		0.64
Item 9 [Switch roles]	0.62	
Item 10 [Solve/Prevent]		0.45
Item 11 [Withdraw]	0.55	
Item 12 [Problems]	0.57	
Item 13 [Expect]	0.73	
Item 14 [Intrusive]	0.68	
Item 15 [Communicate]		0.61
Item 16 [Respect]		0.54
Item 17 [Acknowledge]	0.44	
Item 18 [Appreciation]		0.58
Item 19 [Better person]		0.66
Item 20 [Monitoring]		0.72
α	0.73	0.82

Note: α = Cronbach's alpha statistic for each factor total score

Construct validity. To examine the construct validity, multiple regressions were used to assess the relationship between scores on Stressors and Enhancers for Psychologists and a widely used measure of Work-Family Spillover (WFS) by Grzywacz and Marks (2000) at Time 1. It was expected that family stressors would relate positively to negative WFS and negatively to positive WFS (Hypothesis 2) and that family enhancers would relate negatively to negative WFS and positively to positive WFS (Hypothesis 3). Results indicated significant positive relationships between family stressors and negative WFS, $F(1, 176) = 40.14, \beta = 0.43, p < 0.001$, but nonsignificant inverse relationship between family stressors and positive WFS, $F(1, 176) = 0.03, \beta = -0.1, p > 0.05$. On the other hand, the family enhancers were significantly inversely related to negative WFS, $F(1, 176) = 8.70, \beta = -0.22, p < 0.005$, and significantly positively related to positive WFS, $F(1, 176) = 25.33, \beta = 0.36, p < 0.001$. These findings partially support Hypothesis 2 and fully support Hypothesis 3. Overall, they provide evidence supporting the construct validity of the measure.

Reliability: Temporal stability. Temporal stability of the SEP measure was assessed with the Pearson Product-Moment Correlation coefficient r between family enhancers at Time1 and Time 2 as well as family stressors at Time 1 and Time 2. The results indicated significant correlations between Time 1 and Time 2 scores for both family enhancers, $r(132) = 0.68, p > 0.001$, and family stressors, $r(137) = 0.74, p > 0.001$. The high temporal stability supports the test-retest reliability of the measure.

Experience of Stressors and Enhancers

To test the hypothesis that professional psychologists experience more family enhancers than stressors, two dependent sample t -tests were conducted using data from

Time 1 and Time 2. Results indicated that the average rating of occurrence of family enhancers was significantly higher than the rating of family stressors, $t(173) = 38.59$, $p < .001$ at Time 1, as well as at Time 2, $t(123) = 37.51$, $p > 0.001$. Thus, the findings supported Hypothesis 4 that professional psychologists more frequently experience positive spillover than negative spillover in their family lives.

Ratings for individual items at Time 1 were also examined to provide additional insight into the negative and positive spillover from psychological work to the family lives of psychologists. Respondents rated how frequently stressors and enhancers occurred in their family lives on a 7-point scale (0 = Never, 3 = Sometimes, 6 = All the time). Table 3 reports means and standard deviations for the 10 stressors and Table 5 reports means and standard deviations for the 10 enhancers. As can be seen in Table 4, all 10 stressors had a mean rating less than two, suggesting that they occurred very rarely. The most frequently occurring stressor was having little time/energy left for one's own family, followed by family's expectation for answers, setting unrealistic standards for one's own family, and withdrawing and distancing. Looking for problems that do not exist was the lowest ranked stressor that occurred almost never. As shown in Table 4, nine enhancers had a mean rating above 4, suggesting that they occurred almost all the time. The most frequently occurring enhancers were having appreciation for family's strengths, being able to create supportive relationships, family respect for professional expertise, and being sensitive to the feelings and needs of the family. The lowest occurring (i.e., sometimes) enhancer was the ability to prevent or resolve family's problems.

Table 3 Ratings of Family Stressors

Stressors	M	SD
Little time/energy left for family	1.89	1.39
Family expects all the answers	1.75	1.59
Set unrealistic standards	1.55	1.33
I withdraw/distance myself	1.52	1.27
Professional work more rewarding than family	1.51	1.34
Family resents time/energy I give others	1.43	1.38
Difficulty acknowledging my own family's problems	1.27	1.10
I am intrusive and controlling	1.19	1.26
Difficulty switching roles	1.11	1.15
Looking for problems that do not exist	.81	.95

Note: Items were rated based on a seven-point Likert type scale which ranged from 0 (*Never*) to 6 (*All the time*)

Table 4 Ratings of Family Enhancers

Enhancers	M	SD
Appreciation and awareness of my family's strengths	5.07	.92
Create supportive/intimate relationship	4.98	1.04
Family respects my expertise	4.92	1.15
Sensitive to the feelings and needs of my family	4.84	.68
Accepting my own part in my family's problems	4.71	.76
Communicate effectively with my family	4.54	.91
I am tolerant of my family's problems	4.47	1.03
I deal effectively with my personal issues	4.40	.89
Monitor myself in interaction with family	4.39	1.11
Solve/prevent family problems	3.19	1.29

Note: Items were rated based on a seven-point Likert type scale which ranged from 0 (*Never*) to 6 (*All the time*)

Work, Spillover, and Personal Life

Intercorrelations between the key variables. Before testing hypotheses related to predictors and outcomes of spillover, preliminary analyses were conducted to assess the general relationships among variables included in the analyses. Table 5 contains means and standard deviations of these variables. Pearson Product-Moment Correlation coefficients (r) among work characteristics, spillover, and personal domain outcomes are

presented in Table 6. The results revealed many significant correlations and for the most part, they are consistent with the expected pattern of relationships among predictor and outcomes variables and spillover. It is of particular note that all Time 1 and Time 2 measures are all highly correlated. As discussed previously, this suggests high temporal stability of the measures involved in the analyses. In addition, the predictor variables from the work domain at Time 1 were significantly correlated. Specifically, the two positive characteristics of work (personal accomplishment and control) were directly correlated with each other, as were the two negative work characteristics (emotional exhaustion and hours). Finally, the two outcome measures at Time 2, life satisfaction and family dysfunction were inversely related.

Table 5 Descriptive Statistics of the Key Variables in the Model

Variable List	Time 1: M (SD)	Time 2: M (SD)
Emotional Exhaustion (EE)	16.2 (9.6)	16.5 (5.5)
Personal Accomplishment (PA)	42.3 (10.0)	42.1 (4.8)
Enhancers	45.3 (6.1)	45.1 (5.6)
Stressors	14.6 (7.1)	14.2 (7.3)
Family Dysfunction	18.3 (4.8)	20.1 (4.1)
Life Satisfaction	27.1 (5.2)	27.2 (5.3)
Control	21.3 (4.1)	21.4 (3.7)
Positive WFS	11.2 (2.4)	10.3 (2.2)
Negative WFS	10.5 (2.3)	8.2 (2.2)
Hours	40.9 (14.1)	38.2 (13.4)

Predictors of spillover. Based on previous research, four variables from the work domain were identified as potential predictors of spillover. Specifically, it was expected that control and personal accomplishment would predict increase in family enhancers (positive spillover) over time and that hours worked and emotional exhaustion would predict family stressors (negative spillover) over time. Two separate multiple regression analyses examined the relationship between these work variables and change in enhancers and stressors from Time 1 to Time 2. The two regression models were constructed with blocks of five independent variables (IVs) including the four predictors and stressors/enhancers at Time 1. All four predictors were included simultaneously to account for their individual contribution to the change in spillover when controlling for the effects of other competing three predictors in each model. Similarly, stressors/enhancers at Time 1 were also included in the model to control for its effects on stressors/enhancers at Time 2. This statistical procedure produced β coefficients that are unique to each individual variable (see Table 7). This conservative strategy was chosen because it gives an equal opportunity to each variable to account for its unique effect on the dependent variables (DV), stressors and enhancers.

Hypotheses 5 predicted that the positive work variables of control and personal accomplishment would be related to enhancers (positive spillover) while Hypothesis 6 predicted that the negative variables of hours worked and emotional exhaustion would be related to stressors (negative spillover). Neither hypothesis was supported by the current findings. Contrary to expectations, control and personal accomplishment at work did not predict an increase in family enhancers. Instead, the results indicated that control was inversely related to family enhancers, $t(119) = -2.42, p < 0.05, \beta = -0.17$; in other words,

greater control predicted a decrease in enhancers from Time 1 to Time 2. Further, emotional exhaustion was inversely related to enhancers, $t(119) = -1.96, p = 0.05, \beta = -.14$; more emotional exhaustion predicted decreased enhancers. Contrary to expectations, negative work variables did not predict increases in family stressors. Instead, the results indicated that control was positively related to family stressors, $t(130) = 2.55, p < 0.05, \beta = .16$; more perception of control over work responsibilities at Time 1 related to increased family stressors from Time 1 to Time 2.

Table 7 Results of Multiple Regression Analyses Predicting Stressors and Enhancers

Predictors	Enhancers				Stressors			
	B	SE	<i>p</i>	β	B	SE	<i>p</i>	β
EE	-.079	.041	.053	-.140	.076	.050	.131	.101*
Hours	.030	.028	.282	-.073	-.030	.033	.368	-.054
PA	.049	.082	.551	.042	-.143	.094	.130	-.096
Control	-.225	.093	.017	-.167*	.291	.114	.012	.160*
Enhancers T1	.605	.061	.000	.666**	-----	-----	-----	-----
Stressors T1	-----	-----	-----	-----	.743	.064	.000	.714**

Note: * stands for $p < .05$ and ** stands for $p < .01$

Effects of spillover. Two hypotheses examined the effects of spillover on personal and family lives. Hypothesis 7 predicted that an increase in family enhancers would relate to increased life satisfaction and decreased family dysfunction while

Hypothesis 8 predicted that increase in family stressors would relate to decreased in life satisfaction and increased family dysfunction from Time 1 to Time 2. Two multiple regression analyses were conducted to test these hypotheses, one with life satisfaction at Time 2 as the outcome variable and one with family dysfunction at Time 2 as the outcome variable. Independent variables (IVs) included all potential predictors of each outcome variable simultaneously to assess individual contributions of change in family enhancers and stressors on change in family dysfunction and life satisfaction while controlling for the effects of other potential predictors.

The independent variables were entered in the model in two separate blocks. The first block was composed of four predictor variables from the work domain at Time 1 and the outcome variable at Time 1. The second block included enhancers and stressors spillover at Time 1 and Time 2. This stepwise procedure was used to accomplish two goals. First, when the initial block of predictor variables from the work domain at Time 1 was entered into the model, it produced β coefficients that represent direct effects of these predictors from work on the outcome variables in the personal domain. The outcome variable at Time 1 was also included in this block to control for its effects on the Time 2 outcome variable. These paths provided a test of the direct effects of predictors on outcome necessary for testing the mediational role of spillover and are thus discussed in the next subsection of the results. Second, when the second block of variables that included enhancers and stressors at Time 1 and Time 2 was entered, it produced path β coefficients that represent the unique effects of each type of spillover after accounting for all effects of other potential influences on the outcome variables. Enhancers and stressors at Time 1 were included as independent variables to control for their effects on the

outcome variable. The β coefficients of enhancers /stressors at Time 2 represented the relationship between changes in enhancers/stressors and the outcome variables (see Table 8).

The following three significant effects emerged from this analysis. The results partially support hypothesis 7 as family enhancers inversely related to family dysfunction, $t(116) = -5.15, p < 0.001, \beta = -.400$; an increase in family enhancers decreased family dysfunction. Hypothesis 8 was fully supported as family stressors positively related to family dysfunction, $t(116) = 2.17, p < 0.05, \beta = .184$; an increase in family stressors increased family dysfunction. Further, family stressors negatively related to life satisfaction, $t(118) = -3.43, p < 0.005, \beta = -.275$: an increase in family stressors decreased life satisfaction.

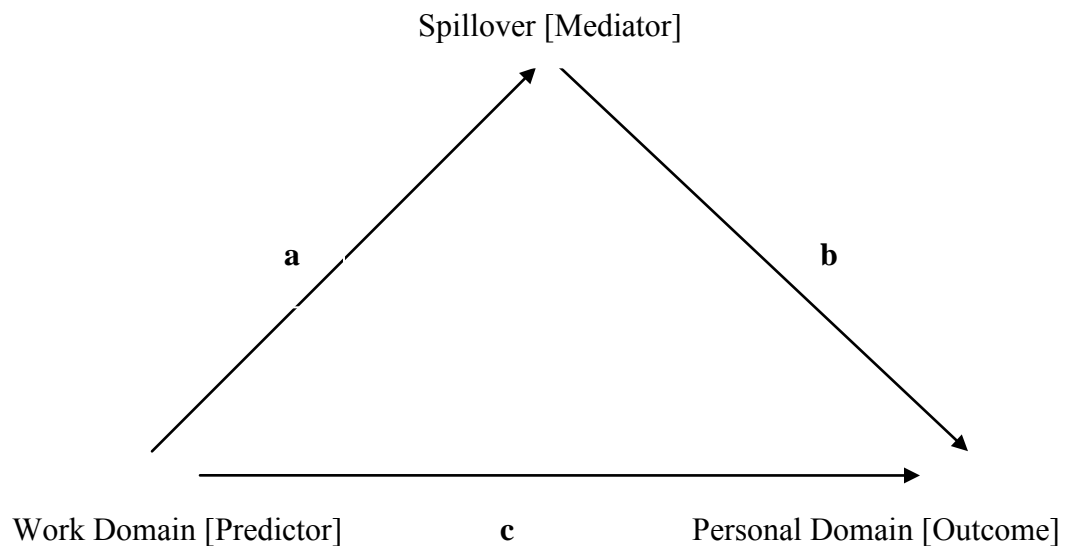
Table 8 Results of Multiple Regression Analyses Predicting Outcome Variables

Predictors	FamF T2				LifeSaT T2			
	B	SE	<i>p</i>	β	B	SE	<i>p</i>	β
Model 1								
EE	.066	.030	.029	.156*	-.096	.036	.009	-.166**
Hours	.050	.021	.019	.159*	.016	.024	.515	.038
PA	-.122	.061	.048	-.138*	.010	.078	.893	.008
Control	.108	.068	.119	.107	-.078	.083	.348	-.058
FamF	.508	.054	.000	.622**	-----	-----	-----	-----
LifeSat	-----	----	----	-----	.785	.065	.000	.760**
Model 2								
Enhancers	.224	.062	.000	.323**	-.121	.070	.087	-.130
Enhancers T2	-.304	.059	.000	-.400**	.117	.079	.142	.114
Stressors	.028	.050	.581	.048	.077	.066	.241	.095
Stressors T2	.105	.048	.032	.184*	-.214	.062	.001	-.275**
FamF	.454	.067	.000	.556**	-----	-----	-----	-----
LifeSat	-----	-----	-----	----	.725	.067	.000	.701**

Note. Model 1 lists coefficients for direct paths from predictors to outcome variables; Model 2 lists path coefficients for paths from mediators to outcome variables after controlling for the effects of the four predictor variables. Also * stands for $p < .05$ and ** stands for $p < .01$

Mediational role of spillover. It was expected that variables from one's work domain (i.e., EE, hours, PA, and control) at Time 1 influence spillover, which then influences outcome variables in the personal and family lives (i.e. family dysfunction and life satisfaction) of professional psychologists. In other words, it was expected that associations between the work domain and personal life domain of professional psychologists would be mediated by spillover. This general mediational model is depicted in Figure 2.

Figure 2. Hypothesized Relationship among Work, Spillover, and Family



Guided by recommendations of Baron and Kenny (1986) and Holmbeck (2002, 1997), three statistical preconditions were examined to conclude that there is support for the entire mediational model. First, the *predictor* from the work domain must be significantly associated with the *outcome* from the personal domain (path c). Second, the

predictor from the work domain must be significantly associated with the *mediator* (path a). Third, the impact of the *predictor* on the *outcome* variable must be significantly smaller after controlling for the effects of the *mediator* on the *outcome* variable (path b). The degree to which the effect is reduced reflects the potency of the mediator (Baron & Kenny, 1987; Holmbeck, 1997). The significance of the drop was assessed with post-hoc probing via Sobel test (1988). Sobel's significance test includes an equation that determines the estimated error of the indirect effect, as reviewed by Holmbeck (1997). Finally, the strength of the mediation was assessed based on recommendations from Holmbeck (2002) who suggested that the ratio between indirect effect ($a \times b$) and total effect (c) yields a percentage of the path between the predictor and the outcome accounted by the moderator. The findings from previous analyses were used to identify significant path coefficients necessary to satisfy the statistical preconditions for inferring mediations.

Based on the findings from Stevanovic and Rupert (2009), enhancers were expected to mediate relationship between positive work variables and personal/family outcomes and stressors were expected to mediate relationship between negative work variables and personal/family outcomes. Previous analyses did not find the predicted relationship between positive work variables and enhancers and negative work variables and stressors; thus, the key paths in the model were not supported and the necessary preconditions were not met. However, results from previous analyses suggested other possible pathways.

As already noted, the first step of the regression analyses conducted to assess the effects of spillover produced coefficients that represented direct effects of work variables

on personal outcomes. These results revealed three significant direct effects of variables from the work domain at Time 1 and the two outcome variables (see Table 8): EE at Time 1 was significantly related to increase in family dysfunction from Time 1 to Time 2, $t(116) = 2.21, p < 0.05, \beta = .156$; EE at Time 1 was significantly related to decrease in life satisfaction from Time 1 to Time 2, $t(113) = -2.64, p < 0.05, \beta = -.166$, and hours worked at Time 1 was significantly related to increase in family dysfunction from Time 1 to Time 2, $t(116) = 2.37, p < 0.05, \beta = .159$. Furthermore, EE also significantly related to family enhancers (path a); hours worked, however, did not relate to either enhancers or stressors. Thus, the combinations of significant direct paths c and a warranted further analysis of the indirect effects for the two following mediations:

1) *EE* → *Enhancers* → *Family Dysfunction*. First, the significant relationship between EE and family dysfunction (“c” path in Figure 2) satisfied precondition 1; EE at Time 1 was significantly related to increase in family dysfunction from Time 1 to Time 2, $t(116) = 2.21, p < 0.05, \beta = .156$. Second, the significant relationship between EE and family enhancers (“a” path in Figure 2) satisfied precondition 2; EE at Time 1 was also significantly related to decrease in family enhancers from Time 1 to Time 2, $t(119) = -1.96, p = 0.05, \beta = -.14$. However, the third condition that the relationship between EE and family dysfunction (“c” path in Figure 2) would be significantly attenuated after controlling for the effects of the family enhancers on family dysfunction was not satisfied. Sobel’s significance test indicated that the degree to which the effect was reduced (the change in the regression coefficients) was nonsignificant, $Z = 1.77, p = .077$. Thus, the results did not indicate that family enhancers mediated the relationship between EE and family dysfunction.

2) *EE* → *Enhancers* → *Life Satisfaction*. First, the significant relationship between *EE* and life satisfaction (“c” path in Figure 2) satisfied precondition 1; *EE* at Time 1 was significantly related to decrease in life satisfaction from Time 1 to Time 2, $t(113) = -2.64, p < 0.05, \beta = -.166$. Second, the significant relationship between *EE* and family enhancers (“a” path in Figure 2) satisfied precondition 2; *EE* at Time 1 was also significantly related to decrease in family enhancers from Time 1 to Time 2, $t(119) = -1.96, p = 0.05, \beta = -.14$. However, the third condition that the relationship between *EE* and life satisfaction (“c” path in Figure 2) would be significantly attenuated after controlling for the effects of the family enhancers on the life satisfaction was not satisfied. Sobel’s significance test indicated that the degree to which the effect was reduced (the change in the regression coefficients) was nonsignificant, $Z = -1.16, p = .245$. Thus, the results did not indicate that family enhancers mediated the relationship between *EE* and life satisfaction.

Post-Hoc Power Analysis

Post-hoc power analysis was carried out to help explain the findings in the previous analyses. The power refers to a probability of correctly rejecting the null hypothesis. In other words, power determines a probability of detecting an effect of predictor variable on the outcome variable. Power depends on designated α levels, sample size N , and effect size. In the current study, the listwise deletion allowed the sample size of participants to vary across the analyses. Approximately 117 participants were included in each analysis and the ascertained effect sizes of the independent variables clustered around .30; in other words independent variables explained approximately 30% of the variance in the dependent variables among 117 respondents.

According to Cohen (1989), this is a relatively small effect size for social science research (see Cohen, 1989 for definition of effect sizes). A power analysis program was used to determine power in the current study based on 117 participants, assumed two-tailed α of .05, and estimated effect size of 30%. The estimated power for this effect size and the current sample size was approximately 80%, which is considered to be sufficient. This finding suggests that the current sample size of 117 can ascertain a relatively small effect size of .30 with 80% power. Further power analysis suggested that the current sample size of 117 participants has 30% power to detect a small effect size of 1%. A considerably larger sample size of approximately 380 participants is needed to ascertain potentially small effect size of 1% with 80%. Consequently, it should be noted that the sample size of 117 had relatively little power for detecting potentially small effect sizes.

CHAPTER FIVE

DISCUSSION

Many professional groups, lay people, and investigators from a variety of disciplines have recognized that a healthy work family balance improves the quality of personal lives and enhances professional productivity. Psychologists have contributed their scholarly ideas, scientific research, and clinical work to help other professionals improve the relationship between their personal and professional lives. Unfortunately, psychologists have given little attention to the relationship between psychological work and their own personal and family lives.

In an attempt to shed light on work-family interface among this group of professionals, Stevanovic and Rupert (2009) conducted an initial exploration of spillover between professional and personal lives of psychologists. Their findings provided empirical support for both positive and negative spillover from work to family, conceptualized as family enhancers and stressors. The results also revealed a higher incidence of enhancers than stressors and supported the mediating role of spillover in the relationship between professional and personal lives of professional psychologists.

The current project is an extension of Stevanovic and Rupert's (2009) study of spillover among professional psychologists. It employed a two-phase longitudinal design to examine predictors and outcomes of work from work to family domains and, the mediational role of spillover between variables in these two domains. Specific aims of the

current study were: a) to evaluate a quantitative measure of family stressors and enhancers (i.e., positive and negative spillover); b) to assess ways in which being a psychologist enhances family life or creates additional stress; c) to identify factors related to work spillover; d) to identify the effects of spillover on personal/family life, and e) to assess the role of stressors/enhancers as mediators between work factors (i.e., Emotional Exhaustion Hours Worked, Personal Accomplishment, and Control) and personal/family life (i.e., Family Functioning and Life Satisfaction).

Consistent with Stevanovic and Rupert's (2009) findings, confirmatory factor analysis (CFA) provided empirical support for the two types of the work spillover, family enhancers and stressors. The Stressors and Enhancers for Psychologists (SEP) significantly related to a widely used measure of Positive and Negative Spillover by Grzywacz and Marks (2000). In addition, longitudinal data provided support for the measure's temporal stability. Respondents generally reported higher incidence of enhancers than stressors at both time points. Several work factors emerged as salient predictors of spillover in the current data; emotional exhaustion at work and control over work responsibilities reduced the incidence of enhancers, and control also increased the incidence of family stressors. Furthermore, work spillover had effects on variables in the personal domain; enhancers decreased family dysfunction whereas stressors contributed to greater family dysfunction and diminished satisfaction with life. The longitudinal data did not support the mediating role of spillover in the relationship between work and family variables. In fact, the current data showed limited direct effects of work variables on family and life outcomes; only emotional exhaustion at work directly contributed to

changes in personal life by decreasing satisfaction with life and increasing family dysfunction. These findings are discussed in more detail below.

The Measure of Stressors and Enhancers

Staines (1980) was among the first to discuss the concept of spillover. He believed professional experiences change a person's attitudes, skills, ideas, principles, and values, which then manifest themselves in the personal domain through the process of spillover. According to Staines, work spillover is the transfer of these qualities or experiences from work to family domain. The concept of spillover provides a uniquely elaborate and complete model of the work-family interface because it considers a range of positive and negative interdomain influences (e.g., Barnett, Marshall, & Sayer, 1992; Brotheridge & Lee, 2005; Crouter, 1984). Consequently, spillover has received much attention in the general work-family literature. In the field of psychology, there has been much discussion about the impact of psychological work on the personal development and life of psychologists. However, a lack of specific measurement methods has restricted quantitative research on work-family interface of professional psychologists (Stevanovic & Rupert, 2009).

A major goal of the current study was to further evaluate a measure of spillover specifically geared toward psychological work. This measure, termed Stressors and Enhancers for Psychologists (SEP), was initially developed and used by Stevanovic and Rupert (2009). Derived from earlier research with family therapists (Wetchler & Piercy, 1986), it consisted of 10 items describing ways in which psychological training and work may enhance the family lives of psychologists and 10 items describing ways in which it may stress or adversely affect their lives. Stevanovic and Rupert (2009) adopted and

edited the measure to describe positive and negative work spillover associated with psychological work. The current study examined the validity and reliability of this measure.

Overall, the present findings support the usefulness of this measure for describing specific ways in which psychological work influences family life. Consistent with Stevanovic and Rupert's (2009) study, confirmatory factor analysis indicated that two negatively correlated factors provided the best fit for the current data. In addition, all proposed stressors and enhancers clustered within their respective groups and each explained a sufficient amount of variance in its factor. Further, in terms of validity, Family Stressors and Enhancers for Psychologists related to a widely used and well validated measure of Positive and Negative Spillover by Grzywacz and Marks (2000). Family Stressors were positively related to Negative Work-Family Spillover, and the Family Enhancers were inversely related to Negative Work-Family Spillover and positively related to Positive Work-Family Spillover.

The final two-factor model corresponds with the two types of spillover. The moderate negative correlation of the two factors is consistent with the findings from the general literature (Grzywacz & Marks, 2000; Frone, Yardley, & Markel, 1997; Netemeyer, Boles, & McMurrin, 1996) and continues to show that stressors and enhancers are separate, negatively correlated dimensions of work spillover for professional psychologists. The results indicate that more enhancers predict fewer stressors. However, the magnitude of the correlation also indicates that the stressors and enhancers co-occur and thus they represent a distinct phenomenon with potentially unique determinants and outcomes. Finally, it should be noted that although the data

supports a two-factor solution, the indices of fit also suggest room for improvement. Further research might use the findings of the present study to strengthen this measure.

The longitudinal data provided an opportunity to test temporal stability of the measure. The analyses indicated unexpectedly high temporal stability and support the test-retest reliability of the measure. However, the measure was expected to have a modest temporal stability because spillover was believed to change as a function of varying experiences from the work domain. In fact, the respondents reported little change from Time 1 to Time 2 on all variables, including variables from work domain as well as variables in the personal domain and spillover. These findings suggest that spillover, along with its expected antecedents and outcomes, remained relatively stable over time. Several explanations for the high temporal stability of measure might be possible.

First, given the respondent's age and years of professional experience, it is possible that the respondents in the current study had established stable work and family environments which provided little opportunity for change that would affect the incidence of spillover. Second, the effect of work elements on spillover may be delayed, and the time lag between the two data collections may not have been long enough to capture the significant change in spillover or in work environment conditions. Unfortunately, there is no comparable longitudinal research that addresses temporal effects and the issues of change in spillover over time. Finally and perhaps most importantly, of the four types of spillover, the items on the present measure appear to tap primarily into attitudes, skills, and values that may result from a combination of personal traits (e.g., I am intrusive and controlling; I am tolerant of my family's problems) and professional training (e.g., I look for problems that do not exist; I am sensitive to my

family's needs). These types of spillover, may be less sensitive to day to day work experiences than affect or mood spillover which was not well represented by items on the measure. The current measure of stressors and enhancers is different from existing measures of general spillover as it is specifically geared to psychological work and thus was developed to focus on the transfer of unique skills, attitudes, and knowledge related to this type of work. Further refinement of this measure might attempt to incorporate items that relate to affect or mood transfer which might be more sensitive to ongoing work experiences.

The preceding explanations will be revisited in the following discussion as they have important implications for understanding spillover. Statistically, however, it is important to mention now that the high temporal stability of spillover and other measures from work and personal domains permitted only small effect sizes. The absence of absolute change in independent variables suggests little change in the dependent variables. Furthermore, the power analysis indicated little likelihood of detecting a small effect size in the current study. Thus, the apparent absence of significant effects in current findings should be interpreted in the context of relatively small power.

Stressors and Enhancers

The initial research on work and family relationships among professional psychologists had a largely negative focus. Grounded in interrole conflict and scarcity hypotheses, the theorists emphasized stresses associated with psychotherapeutic work and their effects on psychologists' professional functioning and personal lives (e.g., Farber, 1983; Freudenberger, 1990; Hellman, Morrison, & Abramowitz, 1987). Despite the concerns, research on enhancers and stressors among psychologists and related

professionals indicate that psychologists report strikingly higher incidences of enhancers than stressors (Duncan & Durden, 1990; Duncan & Goddard, 1993; Farber, 1983; Stevanovic & Rupert, 2009; Wetchler & Piercy, 1986). In fact, the reports of stressors among professional psychologists are limited to almost “never” (e.g., Duncan & Goddard, 1993; Duncan & Durden, 1990; Stevanovic & Rupert, 2009; Wetchler & Piercy, 1986). On the other hand, psychologists report fairly frequent experiences of enhancers in day to day living. Consistent with these findings, the psychologists in the current study reported strikingly higher prevalence of enhancers than stressors at both time points. These findings form a trend suggesting that psychologists are able to avoid potentially negative influences of their work and its stresses and promote professional knowledge, skills, and positive attitudes at home to create a positive home environment and improve their own quality of life.

The respondents rated high incidence of virtually all family enhancers; nine of ten enhancers had ratings over four, which indicated that they were experienced almost “all the time.” Appreciation and awareness of one’s family’s strengths was the highest rated family enhancer. Psychologists’ perception of their family lives has likely been influenced by their professional training and experiences, leading them to be more sensitive to certain family life dimensions (Duncan & Durden, 1990). In addition, psychologists may attend to these strengths as they seek refuge within their families from daily stresses. Research has shown that a healthy family life is important for coping with professional and personal stresses and the emotional demands posed by psychological work (Stevanovic & Rupert, 2004). Attentiveness to family strengths may allow psychologists to cultivate them in order to enhance their family relationships. In fact,

creating supportive/intimate relationships was the second highest occurring family enhancer. It appears that psychologists view their knowledge, skills, and values as helpful in creating a healthy family environment.

Consistent with other studies of spillover among psychologists, little time/energy left for family was the most highly rated family stressor. Although this was the highest rated stressor, its incidence was limited to less than “sometimes.” All other stressors occur even less frequently, almost “never.” It must be noted, however, that this study measured professionals’ perceptions of themselves. Because many of the stressors represent very negative behaviors (e.g., being intrusive and controlling, withdrawing and distancing oneself, looking for problems that do not exist), psychologists may be reluctant to report, or even see themselves, as engaging in these types of behaviors with their family. Others’ perspectives on professionals’ behavior at home (e.g., spouses) may disagree with their perceptions of spillover. Nonetheless, it should be noted that previous research has indicated significant agreement between professionals and their spouses (Duncan & Durden, 1990; Duncan & Goddard, 1993) suggesting that the psychologists’ perceptions are fairly valid.

Generally, findings regarding enhancers and stressors suggest that professional psychologists develop knowledge, skills, and attitudes that either consciously or unconsciously influence their family lives, most frequently in very positive ways. Although it was believed that the development of these skills and attitudes may depend on work experiences, some theorists alternatively argued that development of these skills and attitudes might be influenced by some predetermined dispositions or personal characteristics. Farber (1983) and Guy (1987) believed that a unique set of personal

factors and life experiences predisposes a special group of individuals to the mental health profession. They further argued that subsequent lengthy periods of professional training and intense clinical experiences serve to reinforce these characteristics. Consequently, the potential for spillover is predetermined by the individual's existing predispositions, and the influence of professional training and work experiences over time. Viewed from this perspective, one would expect a much higher incidence of enhancers, particularly among experienced psychologists.

Work, Spillover, and Personal Life

Predictors of spillover. The overarching goal of the current study was to identify antecedents and outcomes of psychologists' work spillover. To understand how the unique nature of psychological work spills over into family lives, the current study aimed first to identify predictors of work to family spillover. Based on previous research, it was expected that control and a sense of personal accomplishment at work would be important resources that would stimulate positive spillover or family enhancers while hours worked and emotional exhaustion were viewed as demands that would increase negative spillover or family stressors. (e.g., Crouter, 1984; Grzywacz & Marks, 2000; Kinnunen, Feldt, Geurst, and Pulkkinen, 2006; Stevanovic & Rupert, 2009). The results were not, however, consistent with these expectations. Control and personal accomplishment at work did not increase family enhancers and hours worked and emotional exhaustion did not increase family stressors. Rather, emotional exhaustion appeared to impact family life by reducing the occurrence of family enhancers while control, conceptualized as a resource, not only reduced family enhancers but also increased family stressors.

The finding regarding the effects of emotional exhaustion and family enhancers, or positive spillover, is not entirely surprising. The fact that increased emotional exhaustion reduced the incidence of enhancers and had no effect on stressors may suggest that emotional exhaustion at work depletes the resources that could be dedicated to one's own family (e.g., Family Enhancers) without motivating Family Stressors. A psychologist may have little energy left to be sensitive, tolerant, communicative, and/or supportive after an emotionally draining day with clients while still being able to restrain from engaging in maladaptive behaviors. It should be noted, however, that the participants in the current sample generally reported mild levels of emotional exhaustion. It is possible that higher levels of emotional exhaustion (e.g., moderate and severe) not only deplete the resources for positive spillover, but also produce more negative spillover as well. Future research with more diverse sample of psychologists should examine how prolonged moderate and high levels of emotional exhaustion influence positive and negative spillover. Nonetheless, the current finding demonstrates that the effects of emotional exhaustion from the psychological work are not entirely contained within the office, but can also spillover into professionals' family life. It also provides additional support for the two distinctive factors of spillover.

The observed relationship of control and spillover, however, is more surprising and difficult to explain. Control over work responsibilities has typically been viewed as a positive resource that has often been found to relate to positive outcomes such as low burnout, high career satisfaction, low work-family conflict, and high levels of positive spillover (e.g., Farber & Heifetz, 1981; Maslach, 2002; Rupert & Morgan, 2005; Rupert, Stevanovic, & Hunley, 2009; Stevanovic & Rupert, 2009). Nonetheless, the findings

from the current study revealed the negative impact of control on spillover; higher levels of control related to decreased Family Enhancers and increased Family Stressors. Interestingly, in the present study, the pattern of bivariate correlations of control and other predictor variables from the work domain and outcome variables from personal life was consistent with the existing findings of control's positive effects. Control was positively related life satisfaction and negatively related to EE. It was not, however, significantly related to stressors and/or enhancers. It should be noted that no other studies have used a longitudinal methodology to examine control's influence on the change in this specific type of spillover for professional psychologists, so it is difficult to make any comparisons and to draw conclusions from this one finding with this small group of psychologists.

While we must be cautious about drawing conclusions, it is possible to speculate about many potential explanations for this finding. First, it may be that, over time, control that involves greater responsibility at work may cause some negative spillover. Crouter's (1984) review of several studies found that increased responsibilities associated with participative work may also have adverse effects on one's functioning in the nonwork domain. One of four items in the current measure of control is likely related to psychologists' sense of responsibility for the professional decisions: having control over decisions that affect the provision services likely comes with the sense of responsibility. Increased sense of responsibility for clients may become a significant work demand which could result in more negative spillover (i.e., stressors) over time. Alternatively, there may be other confounding variables that account for the observed relationship. It may be that individuals who seek more professional independence have a unique

personality predisposition to behaviors that are more consistent with family stressors and less consistent with family enhancers. For instance, domineering individuals may require a sense of control to navigate the professional challenges and demands of family life. Consequently, they will report more control at work while also being more intrusive and less tolerant with family at home. Finally, psychologists who report higher control may be more invested in their profession as opposed to family life. Further research is needed to replicate this finding and better understand the relationship of different types of control (e.g., control over scheduling, decisional control, etc.) to positive and negative spillover.

The effects of spillover. The existing literature has documented evidence of spillover's relationship to a range of variables from the personal/family domain for a variety of professionals. Studies have shown that work-family spillover is associated with the quality of family relationships (Grzywacz & Marks, 2000; Small & Riley, 1990), involvement in household responsibilities and leisure activities (Small & Riley, 1990), general well being in the family domain (Kinnunen, Feldt, Geurst, & Pulkkinen, 2006), family satisfaction (Hansen, Hammer, & Colton, 2006), mental and physical health (Brotheridge & Lee, 2005), and overall well being (Hansen, Hammer, & Colton, 2006). Specific to psychologists, Stevanovic and Rupert (2009) found that the experience of negative work spillover in the form of family stressors decreased life satisfaction and family support whereas the experience of positive spillover in the form of family enhancers increased levels of life satisfaction and family support.

The results of the current study were consistent with previous research regarding the enhancing effects of positive spillover and detrimental effects of negative spillover. An increase in experience of family enhancers was associated with decreased family

dysfunction, whereas an increase in family stressors resulted in decreased satisfaction with life and increased family dysfunction. It appears that psychological work may spillover and enhance family life in ways that reduce family dysfunction. On the other hand, although negative spillover or family stressors occur with much less frequency, they had even broader effects, increasing family dysfunction and decreasing life satisfaction. Such effects of work-spillover have important practical implications for psychologists' general well being and family functioning.

Although the current results suggest that the changes in spillover lead to changes in the personal and family domains, causal conclusions cannot be definitely drawn. Despite the longitudinal design, alternative explanations related to directionality of the relationships and potential confounding third variables must be considered. First, in terms of directionality, psychologists' reactions to the experiences in their personal lives may influence their perceptions of positive and negative spillover, especially when measured in terms of enhancers or stressors. For example, a psychologist who is experiencing family turmoil or dissatisfaction with life may perceive more family stressors and fewer family enhancers whereas a psychologist who is satisfied with the family and personal lives may perceive more family enhancers. Murstein and Mink (2004) found that therapists who report less marital adjustment tend to rate their professional skills lower than the therapist who report high levels of marital adjustment. These findings suggest that experiences from personal lives affect psychologists' perception of their professional functioning. It is possible that psychologists doubt their skills and scrutinize their behaviors when they experience problems in their personal lives. Moreover, family problems and dissatisfaction with life may deplete one's resources and change attitudes

and behaviors in ways that reduce the occurrence of enhancers and increase family stressors.

Whether it is a subjective perception or objective change in spillover, research has documented the bidirectional relationship between spillover and personal life. Grzywacz and Marks (2000) have found support for a multidimensional measure of bidirectional spillover that included positive and negative spillover from work to home and home to work. Their findings indicated that spillover and variables from personal life have a reciprocal relationship in which spillover affects variables from the family domain, while the variables from the family domain simultaneously affect spillover. Similarly, Frone, Yardley, and Markel (1997) also found support for an integrative model of work-family interface in which variables from the two domains simultaneously influence each other. Future research should consider such reciprocal model of spillover for professional psychologists.

Alternatively, as discussed previously, Guy (1987) argued that there are select personal characteristics that lead to becoming a psychologist and also affect one's ability to function as a professional psychologist and family member. Individuals who are generally curious, empathic, insightful, introspective, altruistic, tolerant, caring, and intimate are usually attracted to psychology and use these personal characteristics in their professional work with clients and personal relationships with friends and family. Thus, it is likely that these characteristic exist independent of professional experiences and are reflected in the reports of spillover. Research has suggested that personality traits may affect the experience of spillover for nonpsychologists. Grzywacz and Marks (2000) have provided preliminary findings of relationships between neuroticism, extraversion,

spillover, and elements from personal domain such as family functioning. Thus, spillover and its potential outcomes may be influenced by alternative variables such as personality characteristics. Additional research is needed to explore how these alternative variables affect psychologists functioning in personal and professional domains.

Mediational role of spillover. Despite existing evidence that clinical work is associated with changes in psychologists' personal lives, little is known about the mechanism of the relationship between these two domains. One of the main goals of this research project was to examine spillover as an underlying mechanism of the relationship between the professional work of psychology and the practitioner's personal lives. Toward this end, a model of spillover was proposed (see Figure 1) to capture a transfer of unique qualities and experiences from work to family and personal domains of psychologists (Staines, 1980). The model of spillover suggests a mediational process by which experiences from work influence spillover, and spillover then influences family and personal lives of professional psychologists.

Stevanovic and Rupert (2009) were the first to provide an empirical test of the mediational model of spillover for professional psychologists. Their cross-sectional data suggested that family stressors mediated the inverse relationship between feelings of emotional exhaustion at work and satisfaction with life and family support in the personal domain while family enhancers mediated the positive relationship between the feelings of personal accomplishment at work and satisfaction with life and family support in the personal domain. Because their study gathered data at only one point in time, casual conclusions could not be drawn. In an initial step toward establishing the directionality

and causality of these relationships, the current study gathered longitudinal data at two time points.

The present results were not consistent with the findings of Stevanovic and Rupert (2009). Emotional exhaustion and hours worked were the only two variables to relate to outcomes in the personal domain among this group of professionals. Greater number of hours spent at work was found to contribute to increased family dysfunction while emotional exhaustion from work related to increased family dysfunction and decreased satisfaction with life. This is consistent with the role conflict literature which found that greater demands at work may create stress and deplete resources that could be dedicated to functions in other domains. Emotional exhaustion, but not hours worked, also related to decreased enhancers. However, this type of positive spillover was not found to mediate the observed relationship between emotional exhaustion and either family dysfunction or life satisfaction. In fact, the current longitudinal data failed to identify a mediating role for spillover in the relationship between the work and personal lives of psychologists.

Some important methodological differences should be considered in order to understand the failure to replicate Stevanovic and Rupert's (2009) mediational findings. First, the current study employed longitudinal methodology. In an attempt to detect causal relationship within the proposed mediational model, the current study assessed the change in the variables over time. Given that the outcome variables were very stable over time, there was little change to be accounted for. This, in turn, limited the ability to find significant mediations. Second, the current approach to examining the mediational model was different. The previous study examined mediational models separately for the relationships between positive work factors, enhancers, and outcomes in the personal

domain as well as negative work factors, stressors, and personal outcomes. The current study examined all predictors, mediators, and outcomes simultaneously to assess unique individual effects and explore the intricate dynamics of the coexisting relationships between all salient variables. Combined with the small sample size, this conservative approach required fairly large effect sizes of individual components in the model to yield significant results.

Finally, it is possible that mediation was not found because the current measure of spillover does not fully capture ways in which work may influence family or personal life. The Stressors and Enhancers of Psychologists is a very specific measure of positive and negative spillover unique to professional work of psychologists. Edwards and Rothbard (2005) suggested considering specific affect, values, skills, and behaviors that have potential to transfer between work and personal lives when assessing spillover. As previously noted, the current measure does not fully assess all of these dimensions. A more comprehensive measure of spillover might have yielded different results

The current findings suggest that the relationship between professional and personal lives of psychologists is complex. To better understand this intricacy of the work/family interface, further considerations of additional processes and elements from work and family domains, as well as psychologists' personal characteristics, should be addressed in the future research.

Limitations of this Study and Directions for Future Research

The findings from the current study should be interpreted in the context of limitations related to the sample, measures, and longitudinal design. The first consideration relates to representativeness of the sample. The self-selective nature of

survey research combined with a low response rate and relatively small sample size raised concerns about the representativeness of the final sample. Given that the sample reported low levels of burnout, low levels of family dysfunction, and high satisfaction with life, perhaps only those individuals who were particularly satisfied with their professional and personal state had time and energy to complete the longitudinal surveys. It should be noted that the demographic composition of the current longitudinal sample is fairly consistent with the demographic composition of the APA members published in the latest survey on the APA website (APA, 2009). Similar to the current sample, the majority of the APA members are white (90%), hold Ph.D. (91%), have more than ten years of post-doctorate experience (71%), are in independent practice (37%), and are between ages of 45 and 59 (33%). Although men and women are fairly equally represented, there are slightly more women members (56%). Nonetheless, replication on larger, more representative and diverse samples is necessary to establish the external validity of the findings. In addition, further research with psychologists who are younger and less experienced might examine developmental issues related to spillover.

The small sample size also provided statistical limitations in the current study. Combined with the high temporal stability of the measures, the relatively small number of participants provided limited power to detect small effect sizes. The small power should be considered when interpreting the existing findings and the absence of predicted results. In addition, the small sample size precluded the use of SEM to evaluate a comprehensive model of spillover because ratio between the number of observations (i.e., participants) and variables in the model was smaller than mandated by the SEM's minimum condition.

Secondly, in terms of measures, the current set of outcome measures was fairly limited. This study included only measures of family dysfunction and satisfaction with life. Conclusions might be drawn with more certainty if future research used a more comprehensive set of outcome measures including marital quality, family life satisfaction, and measures of emotional wellbeing and physical health. Similarly, the future research should also address other predictor variables from the professional domain (e.g., satisfaction with work and years of experience) as well as personality variables that may influence spillover. A more comprehensive set of predictor and outcome variables should be evaluated using Structural Equation Modeling in order to explore the mechanism of the relationship between all important variables that may explain the intricate work-family interface among professional psychologists.

Further, as already noted, the measure of Stressors and Enhancers for Psychologists used to assess spillover in the present study is highly specific and yet to be fully evaluated. Although the current findings suggest that this measure has potential for describing ways in which psychological work may influence family life, they also point to potential limitations and suggest ways the measure might be improved. To strengthen the content and face validity of the measure, future work should consider additional evaluations by experts and population sampling. These methods of instrument development could generate new items to provide a more comprehensive assessment instrument and refine the measure to assess more fully the dimensions of affect, behaviors, skills, and values. Future research should also allow psychologists' spouses and children to complete the measure in order to provide more thorough and valid assessment of spillover. Finally, the highly specific nature of Stressors and Enhancers for

Psychologists may not be able to capture all aspects of professional spillover. To capture a wider range of professional spillover among psychologists, future research should combine the current measure with a more general measure of spillover.

Finally, a more expanded longitudinal design is necessary to evaluate the sensitivity of the measure and better understand the temporal mechanism of the relationship between variables in the model of work spillover. The two-wave longitudinal design could not adequately assess the mediational role of spillover, and may not have been sensitive to changes in spillover. At least three-waves with a more careful consideration for the timing of the effects would be more suitable to test the mediational model (Cole & Maxwell, 2003). Further research is also needed to understand the relationship between work experiences and spillover. In this regard, a diary study, which records daily reactions to work and home experiences, would allow a better understanding of immediate and delayed changes in aspects of spillover and their relation to outcomes in the personal domain. This approach would help to establish the directionality and temporal ordering of the effects, which would provide detailed picture of the mechanism of the relationship between work and personal lives of psychologists. In addition, reciprocal models of spillover that consider mutual co-occurring influences of work on personal life and vice versa should also be examined via longitudinal designs.

Implications

The current findings extend our understanding about how psychological training and work influence psychologists' lives in personal and family domains. Family Stressors and Enhancers were found to have significant influence on psychologists' functioning in the nonwork domains. Consequently, it is important that psychologists are aware of such

influences in order to maximize the enhancing aspects and prevent or minimize those aspects that are stress producing in order to improve the quality of life (Duncan & Durden, 1990; Wetchler & Piercy, 1986). Professional skills which are useful in practice with clients appear to also be beneficial at home. Effective communication, sensitivity, tolerance, acceptance, supportiveness, and introspection enhance family relationships and boost the quality of life. The findings further revealed the family stressors co-occur with the enhancers, but they are experienced at a markedly lower rate. Although the stressors are less frequent, they tend to be potent. Even infrequent stressors from the current study were found to increase family dysfunction and decrease general quality of life.

This information regarding stressors and enhancers has practical utility and implications for training and education. Training programs should use the current findings to raise trainees' awareness of occupational costs and rewards to their family and personal life. They should also promote strategies for maximizing enhancers or positive spillover and minimizing stressors or negative spillover. In addition, Duncan and Goddard (1993) believed that people outside of psychological profession may benefit from this type of research. As psychologists discover what part of their training and work has the greatest benefit in improving family relationships and general well being, this knowledge could be adapted to other professions. According to Duncan and Goddard, educational programs on building parenting strengths, understanding normal family process, solving problems, and developing interpersonal skills offered through existing employee assistance networks, "brown bag" seminars, and publications for lay audiences, are good ways of extending this information to other workers.

APPENDIX A:
STRESSORS AND ENHANCERS

Subscale	Items
Stressors	<p>I have little time/energy left for my own family.</p> <p>I find my professional work more rewarding than involvement with my own family.</p> <p>I set unrealistic standards for my family.</p> <p>I feel that my family resents the time and energy I give to others.</p> <p>I find it difficult to switch roles from a psychologist to a family member.</p> <p>I withdraw and distance myself emotionally from my family members.</p> <p>I look for problems that do not exist.</p> <p>I feel my family expects me to have all the answers.</p> <p>I am intrusive and controlling when relating to my family.</p> <p>I find it difficult to acknowledge my family's problems.</p>
Enhancers	<p>I am sensitive to the feelings and needs of my family members.</p> <p>I am accepting of my own part in my family's problems.</p> <p>I am tolerant of my family's problems.</p> <p>I feel more adept at monitoring myself in interactions with family.</p> <p>I am able to create supportive intimate relationships with my family.</p> <p>I am able to solve/prevent my family's problems.</p> <p>I communicate effectively with my family members.</p> <p>I feel that my family respects my expertise and work as a psychologist.</p> <p>I have an appreciation for my family's strengths.</p> <p>I deal effectively with my personal issues so I am a "better" family member.</p>

APPENDIX B:
MCMASTER FAMILY ASSESSMENT DEVICE

-
1. Planning family activities is difficult because we misunderstand each other.
 2. In time of crisis we can turn to each other.
 3. We cannot talk to each other about the sadness we feel.
 4. Individuals are accepted for what they are.
 5. We avoid discussing our fears and concerns.
 6. We can express feelings to each other.
 7. There are lots of bad feelings in the family.
 8. We feel accepted for what we are.
 9. Making decisions is a problem for our family.
 10. We are able to make decisions about how to solve a problem.
 11. We don't get along well together.
 12. We confide in each other.
-

APPENDIX C:
SATISFACTION WITH LIFE SCALE

-
1. In most ways my life is close to my ideal.
 2. The conditions of my life are excellent.
 3. I am satisfied with my life.
 4. So far I have gotten the important things I want in life.
 5. If I could live my life over, I would change almost nothing.
-

APPENDIX D:
PSYCHOLOGIST BURNOUT INVENTORY – R (CONTROL)

I have the opportunity to use my own initiative at work.
I have control over what I do and when I do it during the workday.
I am able to vary my work routine if I choose.
I have control over decisions that affect the services I provide.

APPENDIX E:
WORK-FAMILY SPILLOVER

Subscale	Items
Work-Family Positive Spillover	<p data-bbox="857 380 1406 447">The things you do at work help you deal with personal and practical issues at home.</p> <p data-bbox="857 489 1406 556">The things you do at work make you more interesting person at home.</p> <p data-bbox="857 598 1406 663">The skills you use on your job are useful for things you have to do at home.</p>
Work-Family Negative Spillover	<p data-bbox="857 743 1406 810">Your job makes you feel too tired to do the things that need attention at home.</p> <p data-bbox="857 852 1406 879">Stress at work makes you irritable at home.</p> <p data-bbox="857 921 1406 989">Job worries or problems distract you when you are at home.</p> <p data-bbox="857 1031 1406 1100">Your job reduces the effort you can give to activities at home.</p>

REFERENCES

- Ackerley, G. D., Burnell, J, Holder, D. C., & Kurdek, L. A. (1988). Burnout among licensed psychologists. *Professional Psychology: Research and Practice, 19*, 624-631.
- Allen, T. D., Herst, D. E., Bruck, C. S., & Sutton, M. (2000). Consequences associated with work-to-family conflict: A review and agenda for future research. *Journal of Occupational Health Psychology, 5*, 278-308.
- American Psychological Association. (2010). *Ethical Principles of Psychologists and Code of Conduct*. APA.
- American Psychological Association. (2009). *Current Major Field of APA Members by Membership Status*. Retrieved from <http://www.apa.org/ads/about/ad-demographics.pdf>.
- Barnett, R. C. & Gareis, K. C. (2006). Role perspectives on work and family. In M. Pitt-Catsouphes, E. E. Kossek, & S. Sweet. (Eds.) *The work and family handbook: Multi-disciplinary perspectives, methods, and approaches*. (pp. 209-221). Mahwah, NJ: Lawrence Erlbaum Associates Publishers.
- Barnett, R. C., Marshall, N. L., & Sayer, A. (1992). Positive-spillover effects from job to home: A closer look. *Women & Health, 19*, 13-49.
- Baron, R. M. & Kenny, D. A. (1986). The moderator-mediator variable distinction in social psychological research: Conceptual, strategic, and statistical considerations. *Journal of Personality and Social Psychology, 51*, 1173-1182.
- Beach, B. (1989). *Integrating Work and Family Life: The Home-Working Family*. New York, NY: State University of New York Press.
- Bermak, G. (1977). Do psychotherapists have special emotional problems. *The American Journal of Psychoanalysis, 37*, 141-146.
- Brotheridge, C. M. & Lee, R. T. (2005) Impact of work-family interface on general well-being: a replication and extension. *International Journal of Stress Management, 12*, 203-221.

- Bryant, F. B., & Baxter, J. W. (1997). The structure of positive and negative automatic cognition. *Cognition and Emotion, 11*, 225-258.
- Burton, A. (1975). Therapist satisfaction. *The American Journal of Psychoanalysis, 35*, 115-122.
- Cohen, J. (1989). *Statistical power analyses for behavioral sciences (2nd ed.)*. Hillsdale, NJ: Earlbaun.
- Cole, A. D. & Maxwell, E. S. (2003). Testing mediational models with longitudinal data: Questions and tips in the use of structural equation modeling. *Journal of Abnormal Psychology, 112*, 558-577.
- Coster, J. & Schwebel, M. (1998). Well-functioning in professional psychologists: As program heads see it. *Professional Psychology: Research and Practice, 29*, 284-292.
- Coster, J. S. & Schwebel, M. (1997). Well-functioning in professional psychologists. *Professional Psychology: Research and Practice, 28*, 5-13.
- Cray, C. & Cray, M. (1977). Stresses and rewards within the psychotherapist's family. *The American Journal of Psychoanalysis, 37*, 337-341.
- Crouter, A. C. (1984). Participative work as an influence on human development. *Journal of Applied Developmental Psychology, 5*, 71-90.
- Deutsch, C. J. (1985). A survey of therapists' personal problems and treatment. *Professional Psychology: Research and Practice, 16*, 305-315.
- Duncan, S. F. & Goddard, W. H. (1993). Stressors and enhancers in the marital/family life of family professionals and their spouses. *Family Relations, 42*, 434-441.
- Duncan, S. F. & Durden, D. S. (1990). Stressors and enhancers in the marital/family life of the family professionals. *Family Relations, 39*, 211-215.
- Edwards, B. & Clarke, V. (2005). The validity of the family relationship index as a screening tool for psychological risk in families of cancer patients. *Psycho-Oncology, 14*, 546-554.
- Edwards, J. R. & Rothbard, N. P. (2005). Work and family stress and well-being: An integrative model of person-environment fit within and between the work and family domains. In E. E. Kossek & S. J. Lambert. (Eds.). *Work and life integration: Organizational, cultural, and individual perspectives*. (pp. 211-242). New Jersey: Lawrence Erlbaum Associates.
- Epstein, N. B., Bishop, D., Ryan, C., Miller, I., & Keithner, G. I. (1993). The McMaster

- model: View of healthy family functioning. In F. Walsh. (Ed.). *Normal Family Processes*. (pp. 138-160). New York, NY: The Guilford Press.
- Farber, B. A. (1990). Burnout in psychotherapists: Incidence, types, and trends. *Psychotherapy in Private Practice*, 8, 35-44.
- Farber, B. A. (1983). The effects of psychotherapeutic practice upon psychotherapists. *Psychotherapy: Theory, Research, and Practice*, 20, 174-182.
- Farber, B. A. & Heifetz, L. J. (1981). The satisfactions and stresses of psychotherapeutic work: A factor analytic study. *Professional Psychology*, 12, 621-630.
- Freudenberger, H. J. (1990). Hazards of psychotherapeutic practice. *Psychotherapy in Private Practice*, 8, 31-34.
- Freudenberger, H. J. (1987). Forward. In J. D. Jr. Guy (Ed.). *The personal life of the psychotherapist*, (pp. vii, viii). New York, NY: Wiley.
- Freudenberger, H. J. & Robbins, A. (1979). The hazards of being psychoanalyst. *The Psychoanalytic Review*, 66, 275-296.
- Frone, M. R., Yardley, J. K., & Markel, K. S. (1997). Developing and testing an integrative model of the work-family interface. *Journal of Vocational Behavior*, 50, 145-167.
- Golden, V. & Farber, B. A. (1998). Therapists as parents: Is it good for the children?. *Professional Psychology: Research and Practice*, 29, 135-139.
- Greenhaus, J. H., & Beutell, N. J. (1985). Source of conflict between work and family roles. *Academy of Management Review*, 10, 76-88.
- Greenhaus, J. H., Collins, K. M., & Shaw, J. D. (2002). The relation between work-family balance and quality of life. *Journal of Vocational Behavior*, 63, 510-531.
- Greenhaus, J. H. & Powell, G. N. (2006). When work and family are allies: A theory of work-family enrichment. *Academy of Management Review*, 31, 72-92.
- Grzywacz, J. G. & Marks, N. F. (2000). Reconceptualizing the work-family interface: An ecological perspective on the correlates of positive and negative spillover between work and family. *Journal of Occupational Health Psychology*, 5, 111-126.
- Guy, J. D. Jr. (1987). *The personal life of the psychotherapist*. New York, NY: Wiley.
- Hellman, I. D., Morrison, T. L., & Abramowitz, S. I. (1987). Therapist experience and

the stresses of psychotherapeutic work. *Psychotherapy*, 24, 171-177.

- Hansen, G. C., Hammer, L. B., & Colton, C. L. (2006). Development and validation of a multidimensional scale of perceived work-family positive spillover. *Journal of Occupational Health Psychology*, 11, 249-265.
- Holmbeck, G. N. (2002). Post-hoc probing of significant moderational and mediational Effects in studies of pediatric populations. *Journal of Pediatric Psychology*, 27, 87-96.
- Holmbeck, G. N. (1997). Toward terminological, conceptual, and statistical clarity in the study of mediators and moderators: Examples from the child-clinical and pediatric psychology literatures. *Journal of Consulting and Clinical Psychology*, 65, 599-610.
- Howell, D. C. (2002). *Statistical methods for psychology*, (5th Ed.) CA: Duxbury.
- Jones, F., Burke, R. J., & Wesman, M. (2006). *Work-life balance: A psychological perspective*. New York, NY: Psychology Press.
- Kaplan, P. S. (1999). Perspectives on child and adolescent development. In P.S. Kaplan. (Ed.) *A Child's odyssey: Child and adolescent development*. (3rd ed. pp. 36-76) Belmont, CA: Wadsworth.
- Kelloway, K. E., Gottlieb, B. H., & Barham, L. (1999). The source, nature, and direction of work and family conflict: A longitudinal investigation. *Journal of Occupational Health Psychology*, 4, 337-346.
- Kinnunen, U., Feldt, T., Gerust, S., & Pulkkinen L. (2006). Types of work-family interface: Well-being correlates of negative and positive spillover between work and family life. *Scandinavian Journal of Psychology*, 47, 149-162.
- Kramen-Kahn, B. & Hansen, N. D. (1998). Rafting the rapids: Occupational hazards, rewards, and coping strategies of psychotherapists. *Professional Psychology: Research and Practice*, 29, 130-134.
- MacKinnon, D. P. & Dwyer, J. H. (1993). Estimating mediated effects in prevention studies. *Evaluation Review*, 17, 144-158.
- Mahoney, M. J. (1998). Essential themes in training of psychotherapists. *Psychotherapists in Private Practice*, 17, 43-59.
- Marmor, J. (1953). The feeling of superiority: an occupational hazard in the practice of psychotherapy. *American Journal of Psychiatry*, 110, 370-376.

- Maslach, C. (2002). Understanding burnout: Work and family issues. In D. F. Halpern & S. E. Murphy (Eds.). *From work-family balance to work-family interaction: Changing the metaphor*. (pp. 99-114). New Jersey, NY: Lawrence Erlbaum Associates.
- Maslach, C. (1976). Burned-out. *Human Behavior*, 5, 16-22.
- Maslach, C., Jackson, S. E., & Leiter, M. (1996). Using the MBI-Human Services Survey, In C. Maslach, S. E. Jackson, & M. Leiter. (Eds). *Maslach Burnout Inventory*, (2nd ed., pp. 3-19). California: Consulting Psychologists Press.
- Maslach, C. & Jackson, (1981). The measurement of the experienced burnout. *Journal of Occupational Behavior*, 2, 99-113.
- Miller, I. W., Epstein, N. B., Bishop, D. S., & Keithner, G. I. (1985). The McMaster family assessment device: Reliability and validity. *Journal of Marital and Family Therapy*, 11, 345-356.
- Murstein, I. B. & Mink, D (2004). Do psychotherapists have better marriages than nonpsychotherapists? Do therapeutic skills and experience relate to marriage adjustment?. *Psychotherapy: Theory, Research, Practice, Training*, 41, 292-300.
- Netemeyer, R. G., Boles, J. S., & McMurrian, R, (1996). Development and validation of work-family conflict and family-work conflict scales. *Journal of Applied Psychology*, 82, 400-410.
- Parasurman, S. & Greenhaus, J. H. (2002). Toward reducing some critical gaps in work-family research. *Human Resource Management Review*, 12, 299-312.
- Pavot, W. & Diener, E. C. (1993). Review of the Satisfaction with Life Scale. *Psychological Assessment*, 5, 164-172.
- Pavot, W., Diener, E. C., & Suh, E. (1998) The temporal Satisfaction with Life Scale. *Journal of Personality Assessment*, 70, 340-354.
- Pavot, W., Diener, E. C., Colvin, R. C., & Sandvik, E. (1991). Further validation of the Satisfaction with Life Scale: Evidence for the cross-method convergence of well-being measures. *Journal of Personality Assessment*, 57, 149-161.
- Perry-Jenkins, M., Repetti, R. L., & Crouter, A. C. (2000). Work and family in the 1990s. *Journal of Marriage and Family*, 62, 981-998.
- Radek, J. T. & Mahoney, M. J. (2000). Comparing the personal lives of psychotherapists and research psychologists. *Professional Psychology: Research and Practice*,

31, 82-84.

- Ray, M. & Miller, K. I. (1994). Social support, home/work stress, and burnout: Who can help?. *Journal of Applied Behavioral Science*, 30, 357-373.
- Rupert, P. A. & Kent, J. S. (2007). Gender and work setting differences in career sustaining behaviors and burnout among professional psychologists. *Professional Psychology: Research and Practice*, 38, 88-96.
- Rupert, P. A. & Morgan, D. J. (2005). Work setting and burnout among professional psychologists. *Professional Psychology: Research and Practice*, 36, 544-550.
- Rupert, P. A., Morgan, D. J., Bryant, F. B, Hunley, H. A. (2008). Measuring correlates of burnout among professional psychologists : A structural analysis. *Unpublished manuscript*.
- Rupert, P. A., Stevanovic, P., & Hunley, H. A. (2009) Work-family conflict and burnout among practicing psychologists. *Professional Psychology: Research and Practice*. 40, 54-61.
- Schulz, M. S., Cowan, P. A., Cowan, C. P., & Brennan, R. T. (2004). Coming home upset: Gender, marital satisfaction, and the daily spillover of workday experience into couple interactions. *Journal of Family Psychology*, 18, 250-263.
- Sieber, S. D. (1974). Toward a theory of role accumulation. *American Sociological Review*, 39, 567-578.
- Small, S. A. & Riley, D. (1990). Toward a multidimensional assessment of work spillover into family life. *Journal of Marriage and the Family*, 52, 51-61.
- Sobel, M. E. (1982) Asymptotic intervals for indirect effects in structural equation models. In S. Leinhardt. (Ed.). *Sociological methodology*. (pp. 290-392). San Francisco: Jossey-Bass.
- Staines, L. G. (1980). Spillover versus compensation: A review of the literature on the relationship between work and nonwork. *Human Relations*, 33, 111-129.
- Stevens, D. P., Minnotte, K. L., & Kiger, G. (2004). Differences in work-to-family and family-to-work spillover among professional and nonprofessional workers, *Sociological Spectrum*, 24, 535-551.
- Stevanovic, P. & Rupert, P. A. (2009). Work-family spillover and life satisfaction among professional psychologists. *Professional Psychology: Research and Practice*, 40. 61-68.

- Stevanovic, P. & Rupert, P. A. (2004). Career-sustaining behaviors, satisfactions, and stresses of professional psychologists. *Psychotherapy: Theory, Research, Practice, Training*, 41, 301-309.
- Stryker, S. (1995). The role theory. In A. S. R. Manstead & M. Hewstone. (Eds.). *The Blackwell Encyclopedia of Social Psychology*. (pp. 485-487). New York, NY: Wiley.
- Tabachnick, B. G. & Fidell, L. S. (2001). *Using multivariate statistic*, (4th ed.). MA: Allyn & Bacon.
- Van Steenbergen, E. F., Ellemers, N., & Mooijaart, A. (2007). How work and family can facilitate each other: distinct types of work-family facilitation and outcomes for women and men. *Journal of Occupational and Health Psychology*, 12, 297-300.
- Voydanoff, P. (2002). Linkages between the work-family interface and work, family, and individual outcomes. *Journal of Family Issues*, 23, 138-164.
- Wayne, J. H., Grzywacz, J. G., Carlson, D. S., & Kacmar, M. K. (2007). Work-family facilitation: A theoretical explanation and model of primary antecedents and consequences. *Human Resource Management Review*, 17, 63-76.
- Wetchler, J L. & Piercy, F. P. (1986). The marital/family life of the family therapist: Stressors and enhancers. *The American Journal of Family Therapy*, 14, 99-108.
- Zur, O. (1994). Psychotherapists and their families: the effect of clinical practice on individual and family dynamics. *Psychotherapy in Private Practice*, 13, 69-95.

VITA

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