The transmission of work-related attitudes: A social learning analysis

Deirdre O'Shea and Melrona Kirrane.

DCU Business School,

Dublin City University,

Dublin 9,

Ireland.

Running Head: Transmission of work-related attitudes

ABSTRACT

Purpose and aims: Within the research on work/family balance and conflict, very little research has focused on the effects that various types of dual and single earner family environments may have on the early development of attitudes towards work and family amongst. Drawing on Social Learning Theory, this research provides data that serves as a first step towards addressing this gap. The study focuses on personal and social background factors as potential channels for the transmission of work related attitudes in young adults. The study examines the extent to which gender, parental job type, job status, and education, as well as school experience, influence the development of attitudes towards work and family life.

Method: The study comprised a quantitative (questionnaire based) survey with a sample of 782 final year undergraduate students attending various third level institutions in Ireland and the USA.

Results: The results indicated that individuals who had grown up in traditional mixed families, had more positive attitudes towards balancing work and home roles than did those who had grown up in traditional single earner families. Father's educational level also emerged as a significant factor in the career-family attitudes of the participants. In addition, the number of children in the family, and more specifically, the number of boys in the family were found to negatively predict attitudes towards managing the career-family interface, while the number of girls in the family was a positive predictor. These work-family attitudes were found to further differ depending on school experience.

Research limitations/implications: The results of this research indicate that young people have developed attitudes towards managing the work/family interface on entering the workforce, which they acquire through a social learning process. Limitations included the cross-sectional nature of the design and future longitudinal research is needed. We also suggest that the field will benefit from further research using typologies of dual and single earner families.

Practical Implications: Organizations and managers need to be aware of the well developed attitudes of new entrants in order to address early issues of psychological contract and person-organizational fit, which have an impact on career success and career management.

Originality and value of paper: These findings break new ground on the role of social learning on the formation of attitudes towards managing the work-family interface. Such attitudes proceed to inform behavioral patterns and decisions in the harmonious management of the two domains.

Keywords: work-family attitudes, dual-careers, social learning theory, transmission of attitudes.
Classification: Research Paper

INTRODUCTION

Dual earner families and the impact of such a context on personal and professional lives has emerged as a vibrant area of research over the years and much is known concerning the effect of dual earners on a range of personal and professional consequences among such couples (e.g. Matthews, del Priore, Acitelli & Barnes-Farrell, 2006). It is also well-documented that parental employment has a significant impact on the attitude formation process of children (Barling & Kelloway, 1999). What is less clear is whether children's experience of dual-earner parenting has any impact on those children's' attitudes towards managing the many challenges of the dual earner context. Although early work of Stephen and Corder, (1985) and Kain Knaub, (1986) suggested that being part of a dual earner family did have an influence on children's attitudes towards career and family, given the significant changes in the patterns of parental employment in the intervening years, it is now appropriate to assess the extent of such influence in contemporary society. Given the central role of work-family balance/conflict in employees' experience of career satisfaction (Martins, Eddleston & Veiga, 2002), and the corporate imperative of attracting and retaining high quality organizational talent, further insight into how such processes can be generated and enhanced is to be welcomed.

This research takes a social learning or social cognitive perspective on the development of attitudes towards managing the career-family interface. Social Learning theory (SLT; Bandura, 1977, 1986) emphasizes the prominent roles played by vicarious, symbolic and self-regulatory processes in psychological functioning and has made a valuable contribution towards enhancing our understanding of human behavior. There are three key characteristics of Social Learning theory:

1. It recognizes that human behavior is particularly influenced by observation
2. There is a renewed emphasis on symbolic functions as a means of analyzing thoughts
3. It assigns a central role to self-regulatory processes – people are not simple reactors to external influences, but they select, organize and transform the stimuli that impinge upon them. Furthermore, through self-generated inducements and consequences they exercise some influence over their own behavior.

In this way SLT explains human behavior in terms of a continuous reciprocal interaction between cognitive, behavioral and environmental determinants.

Managing Expectations of New Entrants to the Workforce.

The present research aims to highlight the various social learning paths through which new entrants to the workforce have developed attitudes in relation to managing the career-family interface. Being cognizant of such well developed attitudes of new entrants is an important consideration for managers and organizations. A breach in the expectations of new entrants which have been based on their pre-established attitudes (in the present research, more specifically, their attitudes towards managing the career family interface) has implications for establishing person-organization fit at an early stage in one's career. It is a widely accepted theoretical perspective that human behavior is a result of an interaction between an individual and their environment. This interactionist perspective has given rise to a number of conceptions of person–environment fit, which can be defined as "the compatibility between an individual and a particular work environment that occurs when their characteristics are well matched" (Kristof-Brown, Zimmerman & Johnson, 2005, p.281). People develop perceptions of fit over time, and these perceptions drive individual behavior and choices (Cable & DeRue, 2002; Verquer, Behr & Wagner, 2003).

This concept of person–environment fit (P-E fit) has developed in such a way to become a fundamental concept in the fields of organizational behavior, organizational psychology, and human resource management (Edwards, 2006). We propose that the attitudes which new entrants have developed with regard to managing the work family interface prior to entry to the workforce is important with regard to the early establishment of fit between the young worker and their early career.

Insert Figure 1 here

In 2004, Caldwell, Herold & Fedor proposed that certain elements of fit are dynamic and change over time. They concluded that person-team fit, which they conceptualized as values congruence, is generally stable over time, whereas person-role fit is a dynamic construct. A more recent paper by Wingreen & Blanton (2007) proposes a dynamic model of P-O fit (see Figure 1). In fact Wingreen & Blanton refer to their model as one of P-O fitting, precisely because it refers to organizational fit "as an ongoing process of adaptation" (Wingreen & Blanton, 2007, p.631). Organizations need to adapt their strategies in order to attract new entrants and one aspect of this is that they view the organization or position as meeting their expectations with regard to balancing work life and home life. Schneider's (1987) Attraction-Selection-Attrition (ASA) model is the root of much of the interest in the concept of person-organization (P-O) fit. Schneider's fundamental proposition is that people and organizations are attracted to one another

based on their similarity. More specifically, people are attracted to firms with values and behavioral norms that they view as important and to firms that provide opportunities for goal attainment (Chatman, 1989; Pervin, 1989). If organizations do not appear to fulfill the expectations of new workers, it follows that these new entrants are less likely to be attracted to positions in such an organization. This line of reasoning is further corroborated by Lent, Brown and Hackett (1994) who proposed a social cognitive framework for understanding career development, suggesting that personal agency is an important variable in the career development process. More recently, Ballout (2007) suggested that both employers and employees may benefit from integrating different types of fit into the psychological contract because each type will impact aspects of career success. The present study examines the factors that have influenced that development of attitudes towards managing the work-family interface from a social learning perspective. These attitudes, in turn, may impact the individual's psychological contract and the fit experienced.

The Development of Work-Related Attitudes

At the level of the microsystem, Bronfenbrenner (1979, 1986) suggested that a child's development can be influenced by family, school, peers, and childcare among others. The unique role of parents in influencing the learning and development of their children has been well-established (Baruch and Barnett, 1986). As models for learning (see Bandura, 1977, p. 23), parents command great attention and exert strong modeling influences in the lives of their children. Such influence has been identified in children's behavioral repertoires in the absence of models and long after the behavior has been observed. The extent of influence is mediated by the extent to which a child understands and is able to imitate behavior. These processes rely on whether the child (a) attends to the model, (b) remembers the model's behavior, (c) is motivated to perform the behavior, and (d) has the requisite skills to perform the behavior (Bandura, 1977). These processes are captured by Social Cognitive theory (SCT; Bandura, 1986, 1989; Wood & Bandura, 1989), an extension of Social Learning theory. SCT predicts the existence of a cyclical process that includes a component of cognitive concept matching; a motivation process that regulates the focus of concept matching; and a behavior production process that is responsible for the performance of accompanying behaviors.

SLT and SCT inform much of the literature on the influence of socialization in the development of attitudes. Previous research (Feij, 1998; Sanders et al, 1998; Maccoby, 1992) has established that the socialization process is one of the main sources of work attitudes. This includes factors such as family structure and process, parental employment history, parental roles

and cultural and religious upbringing, as well as educational institutions, the mass media and part-time jobs. Furthermore, there is strong evidence to suggest that children develop work values and attitudes at an early age (e.g. Keller et al, 1992; Kelloway & Harvey, 1999; Kirkpatrick-Johnson, 2002; Loughlin & Barling, 2001; Taylor, 1997) and that once acquired, such attitudes are relatively stable over time (Staw & Ross, 1985). Children form a surprisingly sophisticated mental framework of work in those early years, and so are well prepared to assimilate a great deal of value laden information about work as they enter their teenage years and beyond (Bowes & Goodnow, 1996; Dickinson & Emler, 1992; Ferreira et al., 2007).

In line with social learning theory, such attitude formation comes about in no small part due to children observing and modeling (i.e. vicarious experience; Bandura, 1977) their own parents' responses and reactions to work and employment, with children's perceptions of parental work attitudes and experiences being reported to shape the development of their own work beliefs and attitudes (Barling, Dupre & Hepburn, 1998). It has also been suggested that school, peers, early employment and education are major forces of influence in the development of work-related attitudes (Kirkpatrick Johnson & Elder, 2002; Loughlin & Barling, 1998).

Thus, socialization into the world of work does not begin when individuals assume their first full-time job. New entrants to the workforce have engaged in a lengthy social learning process or in 'anticipatory socialization processes' (Feij, 1998; p 208), and have well-established attitudes, values and aspirations which will continually inform decisions and patterns of behavior concerning their future career paths.

Dual-earner and single-earner families

Work and family represent two of the most central realms of adult life (Frone, Russell & Cooper, 1992) and have become extensively researched areas. Research continues to suggest that the male breadwinner/ female housewife model is declining across Europe as a result of rising female employment rates, changing family structures, and increasing demands for a flexible and inclusive labor market (Covin & Brush, 1993/4; Larsen, 2004; Ryckman & Houston, 2003; Simon & Landis, 1989). Indeed in Finland, women participate in the work force at almost the same rate as men, resulting in the majority of Finnish families being dual-earner or dual career (Kinnunen & Muano, 2001). In line with this change in behavior, attitudes towards work and family life have changed dramatically in the last number of decades. While early research (Machung, 1989) identified a preference for traditional sex-typed stereotypes, research since then has indicated that attitudes towards work and family are becoming more egalitarian and are breaking away from the traditional roles assigned to men and women (Covin & Brush, 1993/4;

Simon & Landis, 1989). More recently, Ryckman and Houston (2003) found that men and women possess similarly individualistic values and concluded that women, like men, see having a career as a central goal and equally important.

Career-family attitudes, defined as the pattern of preferences individuals have for trade-offs among a broad spectrum of work and family issues, represent the tendencies and intentions of workforce participants towards issues surrounding work/life balance and work/family conflict (Sanders et al, 1998). Previous research has indicated that gender differences with regard to how individuals approach their career are substantially smaller among men and women who reject traditional notions about husbands and wives roles within families (Beutell & Greenhaus, 1982; Bielby and Bielby; 1992; Greenhaus & Beutell, 1985; McGowan and Hart; 1992).

In recent years, the dual split between dual earner and single earner families has been shown to be limited in its ability to predict differences in attitudes towards career and family (e.g. see Parke, 2004). A number of researchers have suggested more elaborate typologies of dual career families (e.g. Kinnunen & Mauno, 2001; Raley, Mattingly & Bianchi, 2006), breadwinner conceptualizations (Warren, 2007) and women's working patterns (Higgins, Duxbury & Johnson, 2000). Drawing on these previous conceptualizations, the present research used job status (part-time or full-time) and job type (career, earner or homemaker) to group participants into three categories of dual-income families and one type of single income families. Dual-income families were classed as either dual- career/dual-earner, traditional mixed income families or status-reversed mixed-families, while, traditional single earner families were defined as those in which the father was employed full-time, while the mother was engaged as a full-time homemaker. The distinction between full-time/part-time employment, and career and earner positions was shown to be important for women by Higgins, Duxbury, and Johnson (2000), and the present research expands on this conceptualization by including men also in the development of the typology of families. The typology is described in more detail in the methodology section.

Gender and Work-Family Attitudes

It has been suggested that what most people call reality (regarding gender role norms) is essentially a consensus worldview that develops (and changes) through social interaction (Hare-Mustin & Marecek, 1990). Indeed the premises of social learning theory (SLT) serve as a useful paradigm for understanding the mechanics of the gender socialization process. Girls and boys learn much of what they need to know about being males and females by observing the behavior of other males and females who play influential roles in their lives. Indeed, gender role socialization has been heralded as a central developmental process during childhood (McHale,

Crouter & Tucker, 1999). According to Gender Schema theory (Bem, 1981) and Social Role theory (Eagly, 1987), male and female children are influenced from a very early age by cultural prescriptions about the traits and behaviors that are appropriate for them, leading them to learn distinctive social roles (McMahon & Patton, 1997; Parson & Bales, 1955).

A large body of evidence suggests significant gender differences in a number of work-related values and attitudes, such as job satisfaction, pay and rewards, appropriate employment and career aspirations (Barling & Kelloway, 1999; Brenner and Beutell, 1989; Gottfredson, 1996; Parker & Aldwin, 1994; Swanson & Gore, 2000). While international research has revealed less stereotypical perspectives on occupational roles for males and females (Heckhausen & Tomasik, 2002; Kirkpatrick Johnson, 2001; Kuol, 2002; Loughlin & Barling, 2001; Ryckman & Houston, 2003; Sanders, et al, 1998), in the Irish context, some research suggests that the role of breadwinner continues to be important to males' sense of identity (Brannen et al., 2002; Giles & Rea, 1999).

In consideration of the research cited above, the following hypothesis is forwarded:

Hypothesis 1: Males will exhibit more traditional attitudes towards managing the career- family interface than females.

Parental Employment History

It is well-documented that parental employment experiences significantly impact work-related attitudes of children (see Aschaffenburg & Maas, 1997; Brown, 2002; Dickinson & Emler, 1992; Dryler, 1998; Helwig, 1998; Kelloway, Catano & Carroll, 2000; Kelloway & Watts, 1994; Kinnunen & Mauno, 2001; Loughlin & Barling, 1998; Schoon & Parsons, 2002). Children learn about work directly from hearing their parents talk about work, and seeing parents leave for and arrive home from work (Bazyk, 2005); it has also been suggested that children learn equally as much about non-work, or unemployment, from observing their parents' involvement in such matters to varying degrees (Barling, Dupree & Hepburn, 1998; Lim & Loo, 2003).

In a study among male college students by Thorn & Gilbert (1998), support was found for the role of Social Learning Theory in the development of work-related attitudes amongs college students. Findings indicated that when fathers regularly engage in behaviors that are not in the domain of traditional masculinity ideology (in this case, household work); this has a strong impact on the learning of social role attitudes and expectations of their sons. Specifically, modeling of nontraditional or role sharing behavior by the parents was found to influence the development of sons' attitudes and expectations of a marital relationship with a more egalitarian role structure.

Interestingly, some research suggests that paternal and maternal employment may have differential effects on male and female children (Blau, 1998; Blau & Grossberg, 1992; Brooks-Gunn, Duncan & Aber, 1997, Lefebvre & Merrigan, 1999; Mayer, 1997; Ram, Abada & Hou, 2004). Indeed, Yi, Chang and Chang (2004) report that mothers in blue-collar work, or working as housewives may have a negative effect on Taiwanese teenagers' value of curiosity, while fathers in blue collar work are likely to produce a negative value of self-constraint on their children. Findings such as these have contributed to a lively field of research with solid conclusions yet to be drawn with respect to causality (Kulik, 2002; Togeby, 1995). As such, the following hypothesis is proposed:

Hyp. 2: Participants from dual-career families will show more positive attitudes towards managing the work-family interface than participants from mixed families (one parent in career job and another in an earner job). Furthermore, participants from any kind of dual-earner family will show more positive attitudes than participants from single earner families.

Parental Education and Managing the Work-Family Interface

Parents' educational attainment is a factor that recent research has identified as having a significant effect on the division of domestic labor (Larsen, 2004) whereby a more egalitarian division of household tasks exists in families where both parents have a high educational level, with more traditional division of domestic labor being found in less educated couples. Furthermore, there is evidence to suggest that level of education plays a role in developing more non-traditional gender-role ideologies and beliefs (Mason, Czaka and Arber, 1976; Tallichet and Willits, 1986; Thornton et al, 1983).

We suggest that through a process of social learning, children learn attitudes towards managing the work-family interface from their parents. Given the findings of previous research linking education to gender roles, it appears that parental educational levels are an important variable to examine in addition to parental employment. Previous research examining work-related attitudes (Ter Bogt et al, 2005) concluded that parental education is a significant factor in the development of a work ethic in children. Furthermore, higher levels of parental education have been found to underpin higher levels of persistence in aspirations of teaching careers (Mau, 2006).

In relation to the differential effects of paternal and maternal education levels and the development of work-related attitudes, Ali and Saunders (2006) found a significant correlation between fathers' educational level and college expectations, but did not find the relationship with

mothers' educational level to be significant. In contrast, Ex and Janssens (1998) concluded that higher levels of maternal education were related to non-traditional attitudes concerning gender-role amongst their daughters, and this is further corroborated in recent research by Ferreira et al (2007), who found that mother's and father's education were individually significant predictors of the probability of dropout in a sample of Portuguese school children, in that higher levels of parental education were associated with less school dropout.

It would appear that clarity is needed with regard to the role of parental education in the development of work-related attitudes. Indeed, the variations amongst the findings may be suggesting a complex process at work in the construction of social expectations based on gender. The present study investigates whether the educational level of both father's and mother's have an impact on career family attitudes, in an attempt to clarify the conflicting results from previous research.

Hyp. 3: Higher levels of parental education (father's and mother's) will be associated with more positive attitudes towards balancing career and family issues.

Family characteristics and managing the work-family interface

Classic research on the role of family characteristics and ensuing differences between boys and girls with regard to work values and attitudes concluded that family size and sex-composition effects of paternal involvement in child rearing and on child-rearing methods are heavily contingent on the sex of the child (Elder & Bowerman, 1963; Wijting, Arnold and Conrad, 1978).

More recently, Feij (1998) concluded that the work socialization process can be influenced by the structural characteristics of the family, such as size of the family and the order in which the child was born. Indeed, Steelman et al (2002) make the point that although familial structure is often seen primarily in terms of the relationship among adults, research on sibling configuration also flourishes. Sibling configuration, or sibling constellation, encompasses such features as the size of the sibling group, the ordinal position, child spacing and sex composition (ibid.). Three features, namely, the ordinal position (birth order), the size of the sibling group, and the gender of siblings, as well as interactions among these features enjoy considerable attention in the literature.

Birth order

Investigations concerning the impact of birth order on a range of individual characteristics has a long history (see Dreikus, 1958). Birth order theory suggests that children develop their behavioral patterns within the family structure and later transfer these to other situations and environments (Morales, 1994). Considerable research has been conducted with regard to the influence of birth order on personality and intelligence (Holmgren, Molander & Nilsson, 2006; Michalski & Shakelford, 2001, 2002; Paulhaus, Trapnell & Chen, 1999, Phillips et al, 1988; Saad, Gill & Nataarjan, 2005), as well as the impact of psychological birth order (see White et al, 1997), although there is little consensus on the nature of such relationships.

Limited research has been conducted which examines the effect of birth order on the development of work-related attitudes. However, there is some evidence to suggest that siblings are a further important source though which individuals vicariously learn attitudes. Research by McHale, Updegraff, Helm-Erkison and Crouter (2001) found that older (firstborn) siblings' gender role attitudes, gendered personality qualities, and gender-typed activities explained unique variance in secondborns' scores on these same measures two years later. They also found more evidence of secondborns' modeling of firstborns than the reverse, and more evidence of firstborns' modeling their parents. Brenner and Beutell (1989) considered the effect of birth order on attitudes towards females managers (sex role attitudes). Results indicated that firstborn males had the most negative attitudes towards women as managers, and firstborn females had the most positive attitudes towards women as managers. These results replicate those found in undergraduate students (Beutell, 1984). In an attempt to clarify such relationships in a contemporary sample the following non-directional hypothesis is proposed:

Hyp. 4: Place in family will predict participants' attitudes towards managing both a career and a family.

Size of sibling group

Family size has most often been associated with intellectual, personality and educational variables (Guy & Van Wey, 1999; Heer, 1985; Kuo & Houser, 1997; Powell & Steelman, 1990). Downey (1995) reports of a well-established inverse relationship between number of siblings and children's educational performance. However, in recent years, siblings, in addition to parents, have been posited as being agents of socialization. Real life experiences within the family occur, not only with the parent, but also with siblings (Lollis et al, 1999). In a review of previous research, Steelman et al (2002) report on consistent findings of a negative relationship between

the size of the sibling group and academic success in the United States and in Western Europe. This relationship has been found to persist regardless of education outcome (e.g. performance on standardized exams, grades in school, educational expectations and aspirations or educational attainment) (ibid.). It has been suggested that one explanation for these findings may be that the size of the sibling group shapes socialization practices, for example, increased bureaucratization, more autocratic parenting styles, greater focus on cooperation than competition and achievement, and heightened isolation that restricts children's knowledge of appropriate role behavior, and that these correspondingly affect academic ability and performance (Steelman et al, 2002). Whether such effects can be identified in relation to career success and attitudes towards managing such success has yet to be established. Given the exploratory nature of this aspect of the study, the following non-directional hypothesis is proposed:

Hyp. 5: The number of children in the family will predict participant's attitudes towards managing the career- family interface.

Sibling Gender

McHale, Crouter and Whiteman (2003) suggest that the gender constellation of the sibling group will determine whether a particular set of parents have the opportunity to treat a son and daughter differently in sex-typed ways. However, factors ranging from situational demands, to child characteristics, to parents dispositions help to determine whether they will, in fact, do so (ibid.). Conclusions regarding the effect of sibling gender have been mixed, but the prevailing view from US research is that the effects are smaller than those of size of sibling group (Steelman et al, 2002). Downey, Jackson and Powell (1994) found that as the relative number of sons versus daughters increases, mothers believe that children are at a disadvantage when both parents work outside the home. They interpret their findings as suggesting that generalized views on parenting are developed through maternal experiences in the family, and in turn, these experiences are shaped by the sex composition of the progeny.

McHale, Crouter and Whiteman (2003) suggest that social norms supporting the equal treatment of children by their parents may make parents with non-traditional attitudes towards gender roles work particularly hard to treat their daughters and sons as similarly as possible. Whether or not such contexts affect the development of work-related attitudes has yet to be examined and thus the following hypotheses are proposed:

Hyp. 6a: The number of boys in the family will predict attitudes towards managing both a career and a family.

Hyp. 6b: The number of girls in the family will predict attitudes towards managing both a career and a family.

School experience

Work values are dynamic and are responsive to the pathways young people take across the transition to adulthood (Kirkpatrick Johnson & Elder, 2002). School organization and processes have an impact on pupil achievement and development which is independent of between-school differences in pupil intake (Hannan, et al., 1996; Sammons, Hillman & Mortimore, 1995; Teddlie & Stringfield, 1993). Indeed, school experience has been cited as strongly influencing work-related attitudes and expectations, as well as the acquisition of norms in general (Ballen & Moles, 1994; Bronfenbrenner, 1979, 1986; Ketsetzis, Ryan & Adams, 1998; Pierce, Alfonso & Garrison, 1998).

One dominant theme in this research is the influence of single-sex and mixed-sex (co-educational community/comprehensive) schools on pupil development and achievement. It was first suggested by Dale (1969, 1971, 1974) in his 26-year long study of grammar schools in England that coeducational learning environments are happier, friendlier, more pleasant and gregarious than single sex schools. There is some debate as to the impact of such an environment on academic achievement (Schneider & Coutts, 1982) and an equally vibrant discussion concerning the impact of single-sex education on academic achievement persists in the literature (Beaton et al., 1996; Breen, 1986, 1995; Hannan, et al 1996; Jackson, 2002; Lynch, 1999; Marsh & Rowe, 1996; Rennie & Parker, 1998; Trickett & Birman, 2005; Young & Fisher, 1996).

Single and mixed sex school environments have been found to have different effects on male and female pupils (Drudy & Lynch, 1993; Kenway & Gough, 1998). For example, it has been found that girls are uncomfortable when they perceive their teachers as giving more attention to boys during mathematics lessons in mixed sex classrooms (Steinbeck & Gwizdala, 1995). Further, girls in mixed-sex schools were less likely to report teacher encouragement for post-secondary studies than were their counterparts in single-sex schools (Lynch, 1999; Smyth & Hannan, 2000). However evidence as to the enhanced impact of single or mixed sex schools is not conclusive (American Association of University Women, (AAUW) 1998; Mael, 1998; Woodward, Fergusson & Horwood, 2000).

Mixed-sex schooling has been identified as having some effect on gender role expectations. Boys in their final year of second level education boys were identified as having

less traditional views of work and family roles than their counterparts in single-sex schools (Hannan et al., 1996, Lynch, 1999). On the other hand, girls may experience some conflict in mixed-sex environments due to the more ambiguous and variable priorities which often characterize it. For instance, high achieving girls may be expected to be both "masculine" in their independence, autonomy and work dedication, and at the same time be "feminine" in their interaction with others, with the emphasis on gentleness, social emotional supportiveness and lower assertiveness (Hodson & Sullivan, 1990).

Taken together, these findings highlight the role of context in the development of girls and boys over the years of their second-level education. These contexts in turn are seen to influence their attitudinal development and academic achievement. Whether these differential experiences continue to impact their attitudes to managing the work-family interface has yet to be established. Thus the following hypothesis is examined:

Hyp. 7a: Participants who attended mixed-sex schools will show more positive attitudes towards managing the career-family interface.

Hyp. 7b: Males who attended a mixed-sex school and females who attended single-sex schools will show more positive attitudes towards managing the career-family interface than females who attended mixed-sex schools.

METHODOLOGY

This study focuses on personal and social background factors as potential channels for the transmission of work related attitudes in young adults. The study examined the extent to which gender, parental job status and job type, family background, and school experience influenced the development of attitudes towards managing work and family life. This research addresses these issues among 782 final year undergraduate students.

Method

884 final year undergraduate students from 9 third level institutes completed a pen-and-paper questionnaire which was administered during class time and took approximately 15 minutes to complete. The questionnaire was administered in each institution separately, and completed questionnaires were sent back to the primary source for analysis. 782 usable responses were returned (88.5%).

Measures

The Career Family Attitude Measure (Sanders, Lengnick-Hall, Lengnick-Hall, & Steele-Clapp, 1998) comprised the first section of the questionnaire. Sanders et al (1998) present this as a 56-item measure which was designed to be gender neutral. It assesses both what respondents expect for themselves as well as what they expect from their spouses in the realm of work-family issues (ibid.). Likert scores on each item in this measure ranged from 1 (strongly disagree) to 5 (strongly agree).

The authors of the CFAM indicated a six factor solution was the most appropriate fit to the data (the original six factors addressing six domains within the work-family interface, comprising: Family Focus, Balance, Career Focus, Dominance, Spousal Support and Independence). However, preliminary analysis of this data suggested that this factor structure does not provide a good fit to the data. Confirmatory factor analysis with varimax rotation was conducted to examine the underlying structure of the measure in the present sample. The assumptions for the analysis were met (KMO was above the required .6 at a value of .946; Bartlett's test of sphericity was significant, $p < .01$). Looking at the scree plot, suggested that no more than 4 factors be retained, which explained 42.00% of the variance. Examining the scree plot has been found to be more accurate and conservative than using the Kaiser criteria of retaining factors with an eigenvalue above 1, which indicated the retention of 11 possible factors (explaining 58.50% of the variance). However, on further examination of the items within each of the four possible factors and when reliability analysis was conducted, only Factor 1 had an alpha rating that was above the cut-off criteria of 0.7. Hence, a one-factor solution was retained, comprising 20 items, which explained 27.11% of the variance. The items comprising this factor, and their factor loadings, are presented in Table 1.

Insert Table 1 here

The 20-item solution was totaled to give an overall score, ranging from 20 to 100. Examination of the items comprising the 20-item scale suggests that high scores are indicative of positive attitudes towards balance and equity in relation to career and family. A high score indicates that one will be supportive of a spouse's career, and equally expect a spouse to be supportive of the respondent's career, by for example, sharing housework, sharing responsibility for raising children etc, and encouraging one another in terms of career and educational aspirations. A low score on this scale is indicative of less supportive attitudes towards career and family, whereby the individual does not expect to share housework and raising of children, and is

not concerned with equality in terms of career and salary between spouses. Hence, the total score on the 20-item one factor solution is indicative of attitudes towards managing the career-family interface scale.

To summarize, those with a high score on the 20-item Career-Family Interface Scale hold more non-traditional attitudes towards career and family life, where both partners are expected to be in employment and family and home-related chores are expected to be shared, while those with a low score hold more traditional attitudes. To test the concurrent validity of this 20-item Career-Family Interface measure, it was correlated with Kalin and Tilby's (1978) Sex-role ideology scale using a subsample of the participants (N = 263) for which scores were available on both measures. The sex-role ideology measure is a 30-item scale, in which half of the statements are phrased in a feminist direction and half are phrased in a traditional direction (Kalin & Tilby, 1978). The traditional items were reverse scored, so that high scores indicated a feminist or non-traditional gender-role, while low scores indicated a traditional gender role. Scores on each item were measured using a 5-point Likert scale, and the 30 items were totaled so that total scores ranged from 30 to 150. Results of Pearson product moment correlation indicated a moderate to strong (Cohen, 1988) positive relationship between scores on the 20-item career family interface scale and the sex-role ideology scale ($r = .502$; $N = 263$; $p < .01$). Hence, the 20-item career-family interface scale displays both internal consistency and concurrent validity.

The second section of the questionnaire was a demographics section. Participants were asked to report their *gender* (male = 1; female = 2), their *age* in years, and *the type of school* they attended (1 = single- sex; 2 = mixed-sex). They were also asked a series of questions relating to their *family background*. Respondents indicated their place in the family (first, second etc.), the number of children in the family, the number of boys in the family and the number of girls in the family.

Information regarding the participant's parents was also ascertained. Participants were asked to indicate their *parents' highest level of educational attainment* (1 = primary school to 8 = post-graduate) which were later collapsed into the four categories of primary education (1), second level education (2), third level education (3) and postgraduate (4). *Father's job status* was ascertained through responses to 4 questions: Is your father currently employed outside the home (1= yes; 2 = no); If no, has your father previously been employed outside the home (1 = yes; 2 = no); please indicate whether this previous employment was predominantly full-time of part-time (1 = predominantly full-time; 2 = predominantly part-time), and please indicate your father's current employment status by circling as appropriate (1= employed full-time; 2 = employed part-time; 3 = retired; 4 = unemployed). These questions were used to classify *father's job status* into

employed full-time (1), employed part-time (2) or not employed (3). In a similar vein, *mother's employment status* was ascertained through participants responses to 5 questions: Does your mother currently work outside the home (1 = yes; 2 = no); If yes, please indicate whether this is predominantly full-time or part time (1 = predominantly full-time; 2 = predominantly part-time); Did your mother work outside the home before she had children (1 = yes; 2 = no), if yes, please indicated the nature of this employment (1 = predominantly full-time; 2 = predominantly part – time), and Did your mother always work outside the home or has she resumed of late (1 = always worked; 2 = resumed work of late; 3 = not applicable). Answers to these questions were used to classify *mother's job status* into always worked full-time (1); always worked part-time (2); resumed working full-time of late (3); resumed working part-time of late (4) and not employed (5).

Mothers and father's main occupation (current or previous) was used to categorize their *job type*. Respondents answered an open-ended question in relation to their fathers and mothers current or previous main occupation. In line with previous research (Higgins, Duxbury & Johnson, 2000), *career positions* (1) were defined as managerial or professional positions, and *earner positions* (2) were those in clerical administrative, retail or production jobs. If a parent was not in employment, but had chosen to engage in home and family duties on a full-time basis, they were classified as a *home-maker* (3).

In order to create a typology of dual-earner families[1], parents job type and job status were considered. If both parents worked full time in a career position, the participant was classed as growing up in a *dual-career family*. Similarly, if both parents worked full time in an earner position, this was classed as a *dual-earner family*. *Mixed families* were defined as those where one partner occupies a career position and another is in an earner job. *Traditional mixed families* were defined as those in which the father was in a career position and the mother was in an earner position. This definition was qualified by examining the job status (part-time or full-time) of both the mother and father also. If for example, a mother occupied a career job type (e.g. a managerial or professional position), but did so on a part-time basis, while her husband worked full-time, we classed this as a traditional mixed-family. *Status reversed mixed families* were defined as those where the mother was in a career position, and the father was in an earner job. Once again, we qualified this by only including families where mothers were working full-time in a career position in this category. Finally, *single earner families* were divided into *traditional single earner families*, where the father was the sole breadwinner, and *status reversed single earner families*, where the mother was the sole bread winner.

---

[1] Our thanks to an anonymous reviewer for suggesting this typology

Sample

The sample comprised 782 final-year undergraduate students. The breakdown of participants by institute and course is given in Table 3. The mean age was 21.1 years with a Standard Deviation of 1.06 years. Of the total sample, 40.8% were male and 59.2% were female. With regard to their Second Level Education, 54.7% had attended a single-sex school, while 45.3% had attended a mixed-sex school. The majority of students were undertaking degrees in Business Studies (80%), such as Bachelor of Commerce/Business Studies, Bachelor of International Business, or Bachelor of Business and Marketing. The rest of the sample was equally divided between students taking degrees in Computing and Social Studies.

Table 2a shows the breakdown of the sample based on parental employment history and parental education. It is interesting to note the differences with regard to mothers and fathers employment status. While 71.1% of the participants' fathers are employed in career positions, only 44.8% of the participants' mothers are employed in career positions. In contrast, while 38.4% of mothers are classed as homemakers, no fathers are. Interestingly however, 90.2% of the sample report that their mothers worked before they had children. It is of note also that the educational qualifications received by both mothers and fathers appear to follow similar trends, with similar percentages of mothers and fathers attaining third level education, with slightly fewer mothers attaining postgraduate, and correspondingly more attaining second level education.

Insert Tables 2a and 2b here

Table 2b shows the percentage breakdown of participants based on the family typology. Over 18% of participants grew up in either a dual career or dual earner family, while 35.5% grew up in a traditional mixed family, with only 3.3% classified as status reversed mixed family. Following this trend, 37.0% of participants grew up in a traditional single earner family, with only a minute number (0.8%) growing up in a status reversed single earner family.

Table 3 outlines the family demographics in terms of place of participant in the family, number of children in the family, and number of boys and girls in the family. The majority of the sample indicated that there was between 2 and 4 children in the family, and between 1 and 2 boys and girls in the family. However, 14.1% of participants indicated that there were no boys in their family (i.e. they only had sisters), and 31.6% of the sample indicated that there was no girls in the family (i.e. they only had brothers).

Insert Table 3 here

RESULTS

To test Hypothesis 1 (*Males will exhibit more traditional attitudes towards career and family than females*), an independent t-test was used with the 20-item Career-Family Interface Scale as the dependent variable. No significant difference was found between males and females with regard to attitudes towards career and family, rejecting hypothesis 1. As a result, gender was not included as a control in later analyses.

To examine Hypothesis 2 (*Participants from dual-career families will show more positive attitudes towards managing the work-family interface than participants from mixed families (one parent in career job and another in an earner job). Furthermore, participants from any kind of dual-earner family will show more positive attitudes than participants from single earner families.*) a one-way ANOVA was used. The categories of dual-career and dual-earner were collapsed due to the small number of dual-earner families. Participants where neither parent was working and from status reversed single-earner families were also excluded due to extremely small numbers in each category. Levine's test for equality of error variances was not significant, indicating that the assumption of equality of variance across the groups was met. The results indicated that a significant difference existed between the different family types ($F = 3.451$; $df = 3, 711$; $p < .05$). The effect size ($\eta^2 = .014$) was small. As the N within each group differed, the Games-Howell post-hoc test was used to examine the differences between the groups. Post-hoc tests indicated that two of the family types differed significantly; the traditional mixed family and the traditional single earner family ($p < .05$). Looking at the means (see Table 4) suggests that those from traditional mixed families held more positive attitudes towards managing career and family than did those from traditional single earner families. Although the mean scores for the dual-career/dual-earner group and the status reversed mixed family group were only slightly lower than that of traditional single earner families they failed to reach significance with regard to the difference between them and the traditional single earner family group.

Insert Table 4 here.

To further explore these potential parental employment differences, two one-way ANOVAs were conducted with the job type of the mother (always worked full-time, always worked part-time, resumed working of late, and not employed) and job status (career, earner,

homemaker) as the independent variables. In both analyses Levine's test was not significant. Results indicated a significant difference between the categories for both job type (F = 3.790; df = 3, 752; p < .01; η^2 = .015) and job status (F = 6.311; df = 2, 743; p < .01; η^2 = .017). Looking at the Games-Howell post-hoc tests for mothers job type, suggests that participants whose mothers have resumed work of late have more positive attitudes towards managing the career-family interface than participants whose mothers are not in employment (p <.05) (see Table 5). In addition, the difference between participants whose mother always worked part-time and those whose mother was not in employment approached significance. The Games-Howell post-hoc test for mothers job status indicated that participants whose mother was in an earner position indicated significantly more positive attitudes towards managing the work family interface than those who mother's were homemakers (p <.01) (see Table 5).

Insert Table 5 here.

To examine hypothesis 3 (*Higher levels of parental education (father's and mother's) will be associated with more positive attitudes towards balancing career and family issues*) two one-way ANCOVAs were conducted, with mother's and father's educational levels (primary, second level, third level or postgraduate) respectively entered as each of the independent variables. The 20-item Career Family Interface Measure was included as the dependent variable in each analysis. Family type was included as a potential covariate to control for any potential effect it may have.

In the first analysis, which examined the effects of father's educational level, Levine's test of equality of error variances was found to be significant, and so, the significance (p) value was set to the more stringent level of .01. The results indicated that participants career-family attitudes were found to differ significantly with regard to level of father's education (F = 8.551; df = 3, 650; p < .01; η^2 = .038). Family type did not significantly impact the results, so post-hoc analysis was conducted to examine the differences between each educational level in more detail. The Games-Howell post-hoc test was used, as this does not assume equal variances. Significant differences were found between all categories except second level and third level education. Means for each group are presented in Table 6. Figure 2 indicates that career-family attitudes become progressively more positive from primary level of father's education to postgraduate level of father's education.

Insert Table 6 here

Insert Figure 2 here

In the second analysis, which examined the effects of mother's educational level, the results indicated that participant's career-family interface attitudes did not significantly differ with regard to mother's level of education. However, as Figure 3 indicates, the general trend was similar to that of father's educational level, although non-significant in this case. Hence, hypothesis 3 was partially supported.

Insert Figure 3 here.

To test Hypotheses 4 through 6, which relate to the influence of family demographics (place in family, number of children in family, number of boys and number of girls in the family), multiple regression was employed. Means, standard deviations and correlations for the relevant variables are included in Table 7. As place in family was rank ordered, Spearman's correlation coefficients are presented. All other variables were ratio or interval scaled. Results of the correlational analysis indicated significant negative relationships between career-family attitude of the participant and number of children in the family ($\rho = -.140$; N = 758; p < .01) and number of boys in the family ($\rho = -.207$; N = 757; p < .01), and a significant positive relationship between career family attitude of the participant and number of girls in the family ($\rho = .420$; N = 756; p < .01). No significant relationship was found between the participants' career family interface attitude and their place in the family.

Insert Table 7 here.

Separate regression analyses were conducted for (i) place in family, (ii) number of children in the family and (iii) number of boys and number of girls in the family, to avoid issues of multicollinearity between the predictor variables. To control for any influence that family type may be having, it was dummy coded and entered as a control variable in the first step of each analysis. No breaches in the assumptions underlying regression were observed in the three analyses. Results of the first regression indicated that place in family did not significantly predict the participant's attitudes towards managing the career-family interface. Hence hypothesis 4 was rejected. However, in the second regression, number of children was found to significantly negatively predicted participants attitudes towards managing their career and family life (F =

4.482; df = 6, 749; p < .01), accounting for 15% of the total variance. Hence, hypothesis 5 was supported. In the third regression analysis, number of boys in the family was entered in the second step following the control variable and number of girls in the family was entered in the third step. The results indicated that the number of boys in the family significantly negatively predicted participants career family attitudes (F = 6.496; df = 5, 750; p < .01), while the number of girls in the family significantly positively predicted participants career family attitudes (F = 29.629; df = 6, 749; p <.01), respectively accounting for 2.7% and 15.0% of the variance. Hence, hypotheses 6a and 6b were also supported.

<u>Insert Table 8 and Table 9 here.</u>

To test hypothesis 7a *(Participants who attended mixed-sex schools will show more positive career-family attitudes)* an independent samples t-test was conducted. As Levine's test was significant, equal variances were not assumed. Results indicated a significant difference between those who attended single-sex (Mean = 64.20) and mixed sex schools (Mean = 69.59) with regard to their career family attitudes (t = -3.149; df = 638.87; p < .01). Looking at the means indicated that those who attended mixed sex schools showed more positive attitudes towards balancing the work-family interface than those who attended single-sex schools. Hence, hypothesis 7a was supported.

To expand on hypothesis 7a, hypothesis 7b (*Males who attended a mixed-sex school and females who attended single-sex schools will show more positive career-family attitudes than females who attended mixed-sex schools*) was examined using a 2x2 ANOVA. As Levine's test was significant, the significance level was set to the more stringent level of .01. Results indicated no significant interaction between gender and school type. Hence, hypothesis 7b was not supported.

DISCUSSION

Drawing on Social Learning Theory, the aim of this research was to investigate a range of pre-employment socialization factors that may have an effect on the development of attitudes towards managing the career-family interface. The researchers were particularly interested in closing the gap in the literature with respect to the role of dual parental employment on work-related attitudes amongst offspring. The results indicated that participants from traditional mixed families had significantly more positive attitudes towards balancing the demands of work and

home life, while those from traditional single-earner families were found to have more positive attitudes towards the more traditional breadwinner/homemaker roles. Given that the dual-career/dual-earner family and status reversed mixed family group also had mean score that were only slightly lower than the traditional mixed groups, it would appear that the traditional single earner family had the least positive attitudes towards managing the work-family interface, although not all differences between the groups were significant. Our results also indicated that the employment status of the mother is of particular importance in the development of work family attitudes. Both mother's job type and job status were found to be important in this regard; those with mother's in employment generally showing more positive attitudes towards managing the work-family interface. These results support our social learning hypotheses, and are in line with more general research suggesting that children learn about work from their parents (Barling, Dupree & Hepburn, 1998; Bazyk, 2005) and that parental employment experiences have an impact on work-related attitudes of children (e.g. Dickenson & Emler, 1992; Kelloway & Watts, 1994; Loughlin & Barling, 1998; Thorn & Gilbert, 1998). The present study furthers such research by indicating that the role played by both the mother and the father (whether traditional or non-traditional) has a significant impact on the development of attitudes towards managing work and family life. Our results indicated that regardless of the gender of the child, the employment status and job type of the mother was of particular importance determining the career family attitude of the participant.

Gender was not found to be a significant influence on attitudes towards the work-family interface. The results found indicate that earlier findings suggesting that the breadwinner role is still important to males' sense of identity (Giles & Rea, 1999; Brennan et al, 2002) may now be outdated. Myers and Booth (2002) suggest that gender differences in socialization effects explain in part why men's gender role ideology and behaviors lag behind those of women. We may now be observing that men's attitudes towards the importance of managing the work-family interface have 'caught-up' in a sense, and this may explain why no significant differences were found in the present study. Furthermore, previous research suggested that a sense of voluntarianism and permissibility pervades women's sense of career but not men's, in that women expect to interrupt their careers for several years of childrearing, (Machung, 1989). From the present results, it would appear that this trend is changing somewhat, where both young men and young women are interested in pursuing a career and so the emphasis on sharing and supporting their partner in both home and work life is becoming ever more important. Thus, our results add to the literature suggesting that the male breadwinner/female housewife model is declining across Europe (Larson, 2004; Ryckman & Houston, 2003).

With regard to parental education, father's educational level was found to have an effect on the participant's career-family attitude, while no significant effect was found for mother's educational level, although the trend was in the same direction. The results indicated attitudes towards managing the career-family interface become progressively more positive from the primary level of father's education through to the postgraduate level. This finding is in line with that of Ali and Saunders (2006) who found that father's educational level was more important than mother's educational level with regard to college expectations. Although we observed a similar trend for both fathers and mothers educational level, only father's education was found to be a significant predictor of career-family attitudes. The present findings also further previous research indicating that parents' educational level is associated with more equal division of domestic labor (Larson, 2004) and plays a role in developing more non-traditional gender-role ideology (Thornton et al, 1983). Our results suggest that children learn more egalitarian attitudes towards managing career and family in such households, and adds to the research by Ter Bogt et al (2005) indicating the higher levels of parental education are associated with the development of work ethic in children.

While place in family was not found to be a significant predictor of attitudes towards managing the work family interface, the number of children in the family did significantly negatively predict such attitudes, as did the number of boys in the family. In contrast, the number of girls in the family was found to significantly positively predict participants' attitudes towards managing career and family. These findings are in line with previous claims that the gender of siblings is more important than their mere presence in the socialization of gender roles (Myers & Booth, 2002). Theses findings also build on those of Kornreich et al (2003). In a study of 12-14 year old girls from New York City, they found that girls with older brothers endorsed stronger parenting values compared with girls with no older brothers. Furthermore, girls with older sisters placed less value on parenting compared with those without older sisters. The present research builds on this by looking at both males and females, and considering the extent to which such attitudes are formed just prior to entry into the workplace.

Parke (2004) suggests that the 'sibling subsystem' is an important source of socialization for children from a social learning perspective. One avenue of influence on children's development is their observation of parent interactions with siblings, which parallels the indirect influence that the observation of parent-parent interaction has on children (Parke, 2004). McHale, Crouter and Whiteman (2003) suggest that family experiences have a more important impact on gender development than has previously been believed, and suggest that future research needs to examine how family dynamics are linked to individual differences in girls' and

boys' gendered qualities and behaviors. The results of the present study move towards addressing this gap.

The work of Parke (2004) suggests that the findings of the present study in relation to sibling gender are indicative of an indirect social learning path between parent and child. Previous research (e.g. Ex & Janssens, 1998; Stewart & Barling, 1996) has found evidence to suggest that the effect of parental work experiences may be moderated by a number of other variables, so that the effect is indirect. Myers and Booth (2002) found evidence to suggest that parents' non-traditional gender ideologies exert only a limited direct effect in determining non-traditional attitudes in their daughters. Furthermore, McHale, Crouter and Whiteman (2003) suggest that social norms supporting the equal treatment of children by their parents may make parents with non-traditional attitudes towards gender roles work particularly hard to treat their daughters and sons as similarly as possible. This further corroborates the assertion that the effect of parental employment experience may be indirect. While the present research did control for any effects the family type may have, it would appear that future research would benefit from examining such indirect social learning paths in more detail. In addition, although there was a significant relationship between the measure of attitudes towards managing the career-family interface and a measure of sex-role ideology, future research will benefit from examining these links in more detail.

School experience was also found to have an affect on the development of work-family attitudes. Regardless of gender, participants who had attended a mixed-sex secondary school showed more favorable attitudes towards intending to manage the balance between career and family, and towards being supportive of their spouse or partner in doing the same. At a general level, this research is in line with Ter Bogt et al (2005) who found that school environment was important for the development of a work ethic, and with previous research showing that school experience influences work-related attitudes and expectations (Ballen & Moles, 1994; Bronfenbrenner, 1979, 1986; Ketsetzis, Ryan & Adams, 1998; Pierce, Alfonso & Garrison, 1998). This research furthers the results found in previous research suggesting that boys in mixed sex schools develop less traditional views of work and family roles (Hannan et al, 1996; Lynch, 1999). The replication of this finding for girls also furthers the debate with regard to the impact that mixed-sex schooling has on females. The present results did not indicate any differential effect of school experience for males and females, suggesting that the experience of attending mixed-sex schools is associated with the development of less traditional attitudes towards work and home roles in both males and females.

Limitations and directions for future research

The present study utilized a cross-sectional self-report questionnaire to elicit information about the work attitudes of participants, as well as information regarding their upbringing. One limitation of such an approach is that it is retrospective and may be subject to common method variance. Future research may consider a longitudinal design which tracks individuals from childhood to adulthood, and can provide more accurate information regarding the influence of such childhood influences. However, such research is labor intensive and time-consuming, and was not feasible in the present study. Alternatively, future research utilizing a cross-sectional approach to examine such socialization factors might employ a triangulation approach where adults (e.g. parents and teachers) in close regular contact with the participant as a child could be involved in corroborating the self-report questions relating to the participants upbringing. In particular, this might elicit more valuable information regarding questions relating to parental education and work. It appeared from the present study that a number of participants did not know their parents educational level in particular, or whether their mother had worked before she had children. By using information from other sources such as the participant's parents, such inaccuracies could be avoided.

Future research also needs to examine the psychometric properties of the Career Family Attitudes Measure. Our confirmatory factor analysis indicated that the six-factor 56-item structure does not provide a good fit to the data, and a revised 20-item, one factor structure provided a more reliable measure. This 20-item measure reflected attitudes towards managing the career-family interface. We were able to establish the concurrent validity of this measure in terms of its relationship to Kalin and Tilby's (1978) Sex Role Ideology Scale. However, future research needs to further examine the reliability and validity of this measure in more detail, and particularly in cross-cultural settings.

Further research is also needed with respect to family type. Although we used a cross-sectional design in this study, we were unable to establish a representative sample of status reversed single earner families. In addition, the number of participants in the status reversed mixed earner family group was very small, which was a limitation of the research. Although the ration of participants within each family type was largely consistent with population demographics, further research is needed on such minority family types. In addition, examining potential differences with single parent families was outside the scope of this study, and may make for valuable future studies.

Practical Implications and Conclusion

Overall, the results of this study are in line with international research suggesting that the mode of articulation of employment and family life is in transition (Crompton, 2004), whereby the stereotypical image of the male 'breadwinner' and female carer or housewife is fading. The findings from this research offer an extension of previous research in the area of how work-family attitudes are transmitted. By focusing on multiple socialization factors in childhood, the present research was able to distinguish between the influence of parental, family structure and school factors in the socialization of such attitudes. The major contribution that this research makes is in highlighting the role that paternal and maternal job type, job status, and education, as well as family structure and school experience plays in the development of attitudes towards managing the work-family interface. It seems clear that siblings are helping to shape one another's family environments by serving as models and reinforces of more or less sex-typing behaviors and by serving as sources of social comparison (McHale, Crouter & Tucker, 1999). Following recommendations for future research made by McHale, Crouter and Whiteman (2003), this research adds to the literature on the family's role in children's and adolescents gender development, and the complexities of the family socialization process. It also underscored the significance of further analysis of contextual and interactional issues on the development of work-family attitudes. Future research needs to further examine the role that other socialization factors can play in the development of such attitudes, as well as the indirect effects that parental employment may have on sibling interactions and choice of school type.

The findings of this study were consistent with a social learning perspective on how attitudes towards managing the career-family interface are acquired. We found evidence to suggest that the development of such attitudes are influenced by early socialization through parents, siblings and school experiences. The practical importance from a managerial perspective lies largely in the finding that such attitudes are developed prior to entry into the workforce, and are strongly influenced by sources other than the work environment. Kelloway and Harvey (1998) suggest that pre-employment learning can have an effect on the expression of organizational attitudes and behaviors, either (a) through direct expression as predictors of organizational behavior or (b) the early development of attitudes and beliefs can influence how individuals interpret their own experiences. Hence, the findings of the present research have relevance to the literature on the psychological contract and person-organization fit, particularly in relation to new entrants to the workforce. Sturges, Conway, Guest, and Liefooghe (2005) found some evidence to suggest that individual career management behavior is associated with the experience of career management help, which is related to fulfillment of the psychological

contract. Fulfillment of the psychological contract, in turn, is linked to organizational commitment and is associated with behaviors at work, such as absenteeism, turnover, and independent ratings of job performance (Sturges et al, 2005). Furthermore, research has also indicated that meeting employee's pre-joining expectations are likely to enhance commitment and other positive outcomes (Sturges, Guest, Mackenzie Davey, 2000; Sturges et al, 2005).

Organizations need to adapt their strategies in order to ensure that new entrants to the workforce are attracted to their particular company and see it as meeting their expectations with regard to managing the interface between work and non-work. As mentioned above, Schneider's (1987) Attraction-Selection-Attrition (ASA) proposes that people are attracted to firms with values and behavioral norms that they view as important and to firms that provide opportunities for goal attainment (Chatman, 1989; Pervin, 1989). If organizations do not appear to fulfill the expectations of new workers with regard to managing the work-family interface, it follows that these new entrants are less likely to be attracted to positions in such an organization.

REFERENCES

Ali, S. R. & Saunders, J. L. (2006). "College expectations of rural Appalachian youth: An exploration of Social Cognitive Career Theory factors". *The Career Development Quarterly, Vol. 55*, pp. 38-51.

American Association of University Women (1999). *Gender gaps: Where schools still fail our children*. American Association of University Women Educational Foundation, Washington, DC.

Aschaffenburg, K &Maas. I. (1997). "Cultural and educational careers: The dynamics of social reproduction." *American Sociological Review, Vol.* 62, pp. 573–87.

Ballen, J. & Moles, O. (1994, September). *Strong families, strong schools: Building community partnerships for learning*. U.S. Department of Education, Washington, DC.

Ballout, H. I. (2007). "Career success: The effects of human capital, person-environment fit and organizational support." *Journal of Managerial Psychology, Vol. 22, Issue 8*, pp. 741-765.

Bandura, A. (1977). *Social Learning Theory.* NJ: Prentice-Hall.

Bandura, A. (1986). *Social foundations of thought and action: A social cognitive theory.* Englewood Cliffs, NJ: Prentice Hall

Bandura, A. (1989). "Social cognitive theory of self-regulation." *Organisational Behaviour and Human Decision Processes*, *Vol. 50,* pp. 248-287

Baruch, G. K., & Barnett, R. C. (1986). "Father's participation in family work and children's sex role attitudes." *Child Development*, *Vol. 57,* pp. 1210-1223.

Barling, J., Dupre, K. E. & Hepburn, C. G. (1998). "Effects of Parents' Job Insecurity on Children's Work Beliefs and Attitudes". *Journal of Applied Psychology, Vol. 83, No.1:* pp. 112-118.

Barling, J. & Kelloway, E. K. (1999). "Introduction". In Barling. J. & Kelloway. E. K. (Eds.) *Young Workers: Varieties of Experiences.* Washington, DC: American Psychological Association.

Bazyk, S. (2005). "Exploring the development of meaningful work for children and youth in Western contexts". *Work, Vol. 24*, pp. 11-20.

Beaton, A., Mullis, I., Martin, M., Gonzalez, E., Kelly, D. & Smith, T. (1996). *Mathematics Achievement in the Middle School Years: IEA's Third International Mathematics and Science Study (TIMSS).* Chestnut Hill, MA: Boston College, TIMSS International Study Center.

Bem, S. L. (1981). *Bem Sex Role Inventory: Manual.* Palo Alto, CA: Consulting Psychologists Press, Inc.

Beutell, N. J. (1984). "Correlates of attitudes towards American women as managers." *The Journal of Social Psychology, 124*, pp.57-63.

Beutell, N. J. & Greenhaus, J. H. (1982). "Interrole conflict among married women: The influence of husband and wife characteristics on conflict and coping behavior." *Journal of Vocational Behavior*, 21, pp. 99-110.

Bielby, W. T. & Bielby, D. D. (1992). "I will follow him: Family ties, gender-role beliefs, and reluctance to relocate for a better job." *American Journal of Sociology, Vol. 97, Issue 5*, pp. 1241-1267.

Blau, F. D. (1998). "Trends in the Well-Being of American Women, 1970-1995." *Journal of Economic Literature* American Economic Association, *Vol. 36 No. 1,* pp. 112-165.

Blau, F.D. & Grossberg, A. J, (1992). "Maternal Labor Supply and Children's Cognitive Development." *The Review of Economics and Statistics*, *Vol. 74 No. 3*, pp. 474-81.

Bowes, J. M. & Goodnow, J. J. (1996). "Work for home, school, or labor force: The nature and sources of changes in understanding". *Psychological Bulletin, Vol. 120,* pp. 300-321.

Brannen, J., Lewis, S., Nilsen, A. & Smithson, J. (2002) (Eds.). *Young Europeans, Work and Family: Futures in Transition.* London: Routledge.

Breen, R. (1986). *Subject availability and student performance in the senior cycle of Irish post-primary schools.* ESRI General Research Series, Paper No. 129, Dublin.

Breen, R. (1995). "The persistence of class origin inequalities among school leavers in the Republic of Ireland, 198401993". *ESF Network on Transitions in Youth*, Working Paper.

Brenner, O. C. & Beutell, N. J. (1989). "The effect of birth order and gender on American managers' attitudes toward female managers". *The Journal of Social Psychology, Vol. 129, No. 1*, pp. 57-64.

Bronfenbrenner, U. (1979). *The ecology of human development: Experiments by nature and design.* Harvard University Press, Cambridge, MA.

Bronfenbrenner, U. (1986). "Ecology of the family as a context for human development". *Developmental Psychology*, *Vol. 22*, pp. 723-742.

Brooks-Gunn, J., Duncan, G. & Aber, J. L. (Eds.). (1997). *Neighborhood Poverty: Context and Consequences for Children.* Volumes I and II. Russell Sage, New York, NY.

Brown, D. (2002). "The role of work and cultural values in occupational choice, satisfaction, and success". *The Journal of Counseling and Development Vol.* 80, pp. 48–56.

Cable, D. M. & DeRue, D. S. (2002). "The convergent and discriminant validity of subjective fit perceptions." *Journal of Applied Psychology*, *Vol. 87, Issue 5,* pp. 875-884

Cable, D. M. & Parsons, C. K. (2001). "Socialization tactics and person-organisation fit." *Personnel Psychology*, *Vol. 54*, pp. 1-23

Caldwell, S. D.; Herold, D. M.; Fedor, D. B. (2004). "Toward an understanding of the relationships among organizational change, individual differences, and changes in person-

environment fit: A cross-level study." *Journal of Applied Psychology*, *Vol. 89, Issue 5,* pp. 868-882.

Chatman, J. A. (1989). "Improving interactiuonal organisational research: A model of person-organisation fit." *Academy of Management Review*, *Vol. 14*, pp. 333-349

Cohen, J. (1988). *Statistical power analysis for the behavioral sciences.* Hilsdale, NJ: Erlbaum.

Covin, T. J. & Brush, C. C. (1993/4). "Attitudes toward work-family issues: The human resource professional perspective". *Review of Business, Vol. 15 No. 2:* pp. 25-27.

Crompton, R. (2004). "Care responsibilities, occupational differences and the impact of promotion aspirations". *25th CEIES Seminar. Gender Statistics- Occupational Segregation: extent, causes and consequences*. Office for Official Publications of the European Communities, Luxembourg.

Dale, R. R. (1969). *Mixed or Single Sex School? A Research Study in Pupil-Teacher Relationships.* Routledge & Kegan Paul: London & New York.

Dale, R. R. (1971). *Mixed or Single Sex School? Vol. II: Some Social Aspects.* Routledge & Kegan Paul: London, New York.

Dale, R. R. (1974). *Mixed or Single Sex School? Vol. III: Attainment, Attitudes and Overview.* Routledge & Kegan Paul: London, New York.

Dickinson, J. & Emler, N. (1992). "Developing conceptions of work". In Hartley, J. F. & Stephenson, G. M. (Eds.), *Employment relations: The psychology of influence and control at work* (pp. 19-44). Blackwell, Cambridge, MA.

Downey, D. (1995). "When bigger is not better: Family size, parental resources and children's educational performance". *American Sociological Review, Vol. 60, No. 5*; pp. 746-761.

Downey, D. B., Jackson, P. B. & Powell, B. (1994). "Sons versus daughters: Sex composition of children and maternal views on socialization". *The Sociological Quarterly, Vol. 35, No. 1*, pp. 33-50.

Dreikus, R. (1958). *The Challenge of Parenthood.* Hawthorn Books, Scarborough, Ontario. Cited in Moralis (1994).

Drudy, S. & Lynch, K. (1993). *Schools and Society in Ireland.* Gill & McMillan, Dublin.

Dryler, H. (1998). "Parental role models, gender and educational choice." *British Journal of Sociology*, Vol. *49, No. 3*, pp. 375-397.

Eagly, A. H. (1987). *Sex differences in social behavior: A social role interpretation*. Erlbaum, Hillsdale, NJ.

Edwards, J. R. (2006). The phenomenology of fit: linking the person and environment to the subjective experience of person-environment fit. *Journal of Applied Psychology, Vol. 91, Issue 4*, pp. 802-827.

Elder, G. H. & Bowerman, C. E. (1963). "Family structure and child-rearing practices: The effects of family size and sex composition". *American Sociological Review, Vol. 28, Issue 6*, pp. 891-905.

Ex. C. T. G. M. & Janssens, J. M. A. M. (1998). "Maternal influences on Daughters' Gender Role Attitudes". *Sex Roles, Vol. 38, No. 3/4,* pp. 171-185.

Feij, J.A. (1998). "Work Socialization of Young People." In Drenth, P. & de Wolff, C. (Eds.) *Handbook of Work and Organizational Psychology (2nd Ed.), Volume 3: Personnel Psychology.* Psychology Press Ltd, UK. (Ch. 10).

Ferreira, J. A., Santos, E. J. R., Fonseca, A. C. & Haase, R. F. (2007). "Early predictors of career development: A 10-year follow-up study. *Journal of Vocational Behavior, Vol. 70*, pp. 61-77.

Frone, M. R., Russell, M. & Cooper, M. L. (1992). "Antecedents and outcomes of work-family conflict: Testing a model of the work-family interface". *Journal of Applied Psychology, Vol. 77*, pp. 65-78.

Giles, M., & Rea, A. (1999). "Career self-efficacy: An application of the theory of planned behavior." *Journal of Occupational and Organizational Psychology*, Vol. *72 No. 3*, pp. 393-398.

Gottfredson, L. S. (1996). "Gottfredson's theory of circumscription and compromise". In D. Brown. & L. Brooks (Eds.), *Career choice and development (3rd Ed.)*, pp. 179-232. Jossey-Bass, San Francisco.

Greenhaus, J. H. & Beutell, N. J. (1985). „Sources of conflict between work and family roles." *Academy of Management Review, Vol. 10, No. 1*, pp. 76-88.

Guy, G. & Van Wey, L. K. (1999). "Sibship size and intellectual development: is the relationship causal?" *American Sociological Review, Vol. 64*, pp. 169-187.

Hannan, D. F., Smyth, E. McCulloch, J., O'Leary, R. & McMahon, D. (1996). *Co-Education and Gender Equality: Exam Performance, Stress and Personal Development.* General Research Series No. 169. ESRI/Oak Tree Press, Dublin.

Hare-Mustin, R. T. & Marecek. J. (1990). *Making a Difference: Psychology and the construction of gender*. Yale University Press, CT.

Heckhausen, J., & Tomasik, M. J. (2002). "Get an apprenticeship before school is out: How German adolescents adjust vocational aspirations when getting close to a developmental deadline." *Journal of Vocational Behavior*, Vol. *60*, pp. 199-219.

Heer, D. M. (1985). "Effects of Sibling Number on Child Outcome". *Annual Review of Sociology; Vol. 11*, pp. 27-47.

Helwig, C. (1998). "Children's Conceptions of Fair Government and Freedom of Speech." *Child Development*, Vol. *69 No. 2*, pp. 518-531.

Higgins, C., Duxbury, L. & Johnson, K. L. (2000). "Part-time work for women: Does it really help balance work and family?" *Human Resource Management, Vol. 39, No. 1*, pp. 17-32.

Hodson, R. & Sullivan, T. A (1990). *The Social Organization of Work*. Wadsworth Publishing Company, California.

Holmgren, S., Molander, B. & Nilsson, L. G. (2006). "Intelligence and executive functioning in adult age: Effects of sibship size and birth order". *European Journal of Cognitive Psychology, Vol. 18 No. 1,* pp. 138-158.

Jackson, C. (2002). "Can Single-Sex Classes in Co-Educational Schools Enhance the Learning Experiences of Girls and/or Boys? An Exploration of Pupils' Perceptions." *British Educational Research Journal, Vol. 28, No.1*, pp. 37-48.

Kain Knaub, P. (1986). "Growing up in a dual-career family: The children's perceptions". *Family Relations, Vol. 35, No. 3*, pp. 431-437.

Kalin, R. & Tilby, P. J. (1978). "Development and validation of a sex-role ideology scale". *Psychological Reports, Vol. 42*, pp. 731-738.

Keller, L. M., Bouchard, T. J. Jr., Arvey, R. D., Segal, N. L. & Dawis, R. V. (1992). "Work Values: Genetic and Environmental Influences". *Journal of Applied Psychology, Vol. 77, No. 1,* pp. 79-88.

Kelloway, E. K., Catano, V. M., Carroll, A. E. (2000). "Psychological involvement in the union." Canadian Journal of Behavioral Science, *Vol. 32*, pp.163-7.

Kelloway, E. K. & Harvey, S. (1999). "Learning to Work: The Development of Work Beliefs". In J. Barling. & E. K. Kelloway (Eds.), *Young Workers: Varieties of Experiences.* American Psychological Association, Washington, DC.

Kelloway, E. K., & Watts, L. (1994). "Pre-Employment Predictors of Union Attitudes: Replication and Extension." *Journal of Applied Psychology, Vol. 79*, pp. 631-634.

Kenway, J., & Gough, A. (1998). "Gender and science education in schools: A review 'with attitude". *Studies in Science Education*, *Vol. 31*, pp. 1-30.

Ketsetzis, M. Ryan, B. A. & Adams, G. R. (1998). "Family Processes. Parent-Child Interactions and Child Characteristics Influencing School-Based Social Adjustment". *Journal of Marriage and the Family*, *Vol. 60*, pp. 374-387.

Kinnunen, U. & Mauno, S. (2001). "Dual-career families in Finland: Differences between and within families in relation to work and family experiences". *Community, Work and Family, Vol. 4 No. 1,* pp. 87-107.

Kirkpatrick-Johnson, M. (2002). "Social Origins, Adolescent Experiences, and Work Value Trajectories during the Transition to Adulthood". *Social Forces, Vol. 80, No. 4,* pp. 1307-1341.

Kirkpatrick-Johnson, M. & Elder, G. H. Jr. (2002). "Educational Pathways and Work Value Trajectories". *Sociological Perspectives, Vol. 45, No.2,* 113-138.

Kornreich, J. L. Hearn, K. D., Rodiguez, G. & O'Sullivan, L. F. (2003). "Sibling influence, gender roles, and the sexual socialization of urban adolescent girls". *The Journal of Sex Research, Vol. 40, No. 1*, pp. 101-110.

Kristof, A. L. (1996). "Person-organization fit: An integrative review of its conceptualization, measurement and implications." *Personnel Psychology, Vol. 49*, pp. 1-49.

Kristof-Brown, A. L., Zimmermad, R. D. & Johnson, E. C (2005). "Consequences of individuals' fit at work: a meta-analysis of person-job, person-organization, person-group, and person-supervisor fit." *Personnel Psychology, Vol. 58, No. 2*, pp. 281–342.

Kulik, L. (2002). "The Impact of Social Background on Gender-Role Ideology: Parents' Versus Children's Attitudes." *Journal of Family Issues*, *Vol. 23, No. 1*, pp. 53-73.

Kuo, H. H. D. & Hauser, R. M. (1997). "How does size of sibship matter? Family configuration and family effects on educational attainment". *Social Science Research; Vol. 26 Issue: March*, pp. 69-94.

Kuol, N. (2002). "Work values and work attitudes: An exploratory investigation among Irish university students." *Paper presented at the annual conference of the Irish Academy of Management*, Limerick, September.

Larsen, T. P. (2004). "Work and care strategies of European families: Similarities or national differences?" *Social Policy and Administration, Vol. 38, No. 6*, pp. 654-677.

Lefebvre, P & Merrigan, P. (1999). "Family Background, Family Income, Maternal Work and Child Development*." Applied Research Bulletin, Fall*, Human Resource Development Canada.

Lent, R. W., Brown, S. D. & Hackett, G. (1994). "Toward a unifying cognitive theory of career and academic interest, choice and performance." *Journal of Vocational Behavior, Vol. 45*, pp. 79-122.

Lim, V. K. G. & Loo, G. L. (2003). "Effects of parental job insecurity and parenting behaviors on youth's self-efficacy and work attitudes". *Journal of Vocational Behavior, Vol.63,* pp. 86-98.

Lollis, S., Van Engen, G., Burns, L. & Nowack, K. (1999). "Sibling Socialization of moral orientation: "Share with me!" "No, it's mine!" *Journal of Moral Education, Vol. 28, No. 3*; pp. 339-357.

Loughlin, C. & Barling, J. (2001). "Young workers' work values, attitudes, and behaviors". *Journal of Occupational and Organizational Psychology, Vol. 74,* pp. 543-558.

Loughlin, C. & Barling, J. (1998). "Teenagers' part-time employment and their work-related attitudes and aspirations". *Journal of Organizational Behavior, Vol. 19,* pp. 197-207.

Lynch, K. (1999). *Equality in Education*. Gill & McMillan, Dublin

Maccoby, E. E. (1992). "The role of parents in the socialization of children: An historical overview". *Developmental Psychology, Vol. 2, No. 6*, pp. 1006-1017.

Machung, A. (1989). "Talking career, thinking job: Gender differences in career and family expectations of Berkeley seniors". *Feminist Studies, Vol. 15 No. 1,* pp. 35-58.

Mael, F.A. (1998) "Single-Sex and Coeducational Schooling: Relationships to Socio-emotional and Academic Development". *Review of Educational Research Vol. 68, No. 2,* pp. 101-29.

Marsh, H. W. and Rowe, K. (1996) "The effects of single-sex and mixed-sex mathematics classes within a coeducational school: A re-analysis". *Australian Journal of Education*, *Vol. 40,* pp. 147-162.

Martins, L. L., Eddleston, K. A. & Veiga, J. F. (2002). "Moderators of the relationship between work-family conflict and career satisfaction". *Academy of Management Journal, Vol. 45, No.2,* pp. 399-409.

Matthews, R. A., Del Piore, R. E., Acitelli, L. K. & Barnes-Farrell, J. L. (2006). "Work-to relationship conflict: Crossover effects in dual-earner couples. *Journal of Occupational Health Psychology, Vol. 11, No 3*, pp. 228-240.

Mau, W. C. J. (2006). "Factors influencing high school students to persist in aspirations of teaching careers". *Journal of Career Development, Vol. 32, No.3*, pp. 234-249.

Mayer, S. (1997). *What Money Can't Buy: Family Income and Children's Life Chances.* Cambridge: Harvard University Press.

McGowan, K. R.**,** & Hart, L. E. (1992). "Exploring the contribution of gender identity to differences in career experiences." *Psychological Reports*, *Vol. 70*, pp. 723-737.

McHale, S., Crouter, A. C. & Tucker, C. J. (1999). "Family context and gender role socialization in middle childhood: Comparing girls to boys and sisters to brothers". *Child Development, Vol. 70, No. 4*, pp. 990-1004.

McHale, S. M., Crouter, A. C. & Whiteman, S. D. (2003). "The family contexts of gender development in childhood and adolescence." *Social Development, Vol. 12, No. 1*, pp. 125-148.

McHale, S., Updegraff, K., Helms-Erikson, H. & Crouter, A. (2001). "Sibling influences on gender development in middle childhood and early adolescence: A longitudinal study". *Developmental Psychology, Vol. 37*, pp. 115-125.

McMahon, M., & Patton, W. (1997). "Gender differences in children's and adolescents' perceptions of influences on their career development". *School Counselor, Vol. 44*, pp. 368-376.

Michalski, R. L. & Shakelford, T. K. (2002). "An attempted replication of the relationships between birth order and personality". *Journal of Research in Personality, Vol. 36*, pp. 182-188.

Michalski, R. L. & Shakelford, T. K. (2001). "Methodology, birth order, and personality". *American Psychologist, June/July*, pp. 520-521.

Moralis, C. A. (1994). "Birth Order Theory: A case for cooperative learning". *Journal of Instructional Psychology, Vol. 21, No. 3*, pp. 246-249.

Myers, S. M. & Booth, A. (2002). "Forerunners of change in non-traditional gender ideology." *Social Psychology Quarterly, Vol. 65, No. 1*, pp. 18-37.

Parke, R. D. (2004). "Development in the family." *Annual Review of Psychology, Vol. 55*, pp. 365-399.

Parker, R. A. & Aldwin, C. M. (1994). "Desiring Careers but Loving Families: Period, Cohort, and Gender Effects in Career and Family Orientations". In G. P. Keita & J. J. Hurrell Jr. (Eds.) *Job Stress in a Changing Workforce: Investigating Gender, Diversity, and Family Issues*. American Psychological Association.

Parson, T. & Bales, R. F. (1955). *Family, Socialization and Interaction*. Free Press, Glencoe, IL.

Paulhaus, D. L., Trapnell, P. D. & Chen, D. (1999). "Birth order effects on personality and achievement within families". *Psychological Science, Vol. 10, No. 6*, pp.482-488.

Pervin, L. A. (1989). "Persons, situations, interactions: The history of a controversy and a discussion of theoretical models." *Academy of Management Review*, *Vol. 14*, pp. 350-360.

Phillips, A. S., Bedeian, A. G., Mossholder, K. W. & Touliatos, J. (1988). "Birth order and selected work-related variables". *Individual Psychology, Vol. 44, No. 4*, pp. 492-499.

Pierce, S., Alfonso, E., Garrison, M. E. B (1998). "Examining proximal processes in young children's home environments: A preliminary report". *Family & Consumer Sciences Research Journal*, *Vol. 27 No. 1*, pp. 3-34.

Powell, B. & Steelman, L. C. (1990). "Beyond sibship size: sibling density, sex composition, and educational outcomes". *Social Forces, Vol. 69, No .1*, 181-206.

Raley, S. B., Mattingly, M. J. & Bianchi, S. M. (2006). "How dual are dual-income couples? Documenting change from 1970 to 2001." *Journal of Marriage and the Family, Vol. 68, No. 1*, pp. 11-28.

Ram, B., Abada, T. & Hou, F. (2004). "The Effects of Early Maternal Employment in Children's Cognitive Outcomes: The Canadian Experience." *Paper presented at the Annual meeting of the Population Association of America*, Boston, April 1-3.

Rennie, L. J., & Parker, L. H., (1998). "Equitable measurement of achievement in physics: high school students' responses to assessment tasks in different formats and contexts". *Journal of Women and Minorities in Science and Engineering, Vol. 4 No. 2,* pp. 113-127.

Ryckman, R. M.**,** & Houston, D. M. (2003). "Value priorities in American and British female and male university students." *Journal of Social Psychology, Vol. 143 No. 1,* pp. 127-138**.**

Saad, G., Gill, T. & Nataraajan, R. (2005). "Are laterborns more innovative and nonconforming consumers than firstborns? A Darwinian perspective." *Journal of Business Research, Vol. 58*, pp. 902-909.

Sammons, P., Hillman, J. and Mortimore, P. (1995) "Key Characteristics of Effective Schools: A review of school effectiveness research." A report by the *Institute of Education for the Office for Standards in Education*.

Sanders, M. M., Lengnick-Hall, M. L., Lengnick-Hall, C. & Steele-Clapp, L. (1998). "Love and work: career-family attitudes of new entrants into the labor force." *Journal of Organizational Behavior, Vol. 19,* pp. 603-619.

Schneider, B. (1987). "The people make the place." *Personnel Psychology*, *Vol. 40,* pp. 437-453

Schneider, F. W. and Coutts L. M. (1982) "The high school environment: A comparison of coeducational and single-sex schools". *Journal of Educational Psychology Vol.* 74, pp. 898–906.

Schoon, I. & Parsons, S. (2002). "Teenage aspirations for future careers and occupational outcomes." *Journal of Vocational Behavior*, *Vol. 60*, pp. 262-288.

Simon, R. J. & Landis, J. M. (1989). "The polls- A report: Women's and men's attitudes about a woman's place and role." *Public Opinion Quarterly, Vol. 55*, pp. 265-276.

Smyth, E. & Hannan, C. (2000) "Education and Inequality". In B. Nolan, P. O'Connell & C. T. Whelan (Eds.), *Bust to Boom: The Irish Experience of Growth and Inequality*, Dublin: IPA and ESRI

Staw, B. M. & Ross, J. (1985). "Stability in the midst of change: A dispositional approach to job attitudes". *Journal of Applied Psychology, Vol. 70 No. 3,* pp. 469-480.

Steelman, L. C., Powell, B., Werum, R. & Carter, S. (2002). "Reconsidering the effects of sibling configuration: Recent advances and challenges." *Annual Review of Sociology, Vol. 28*; 243-269.

Steinbeck, M. & Gwizdala, J. (1995) "Gender differences in mathematics attitudes of secondary school students". *School Science and Mathematics. Vol. 95 No. 1*, pp. 36-42.

Stephen, C. W. & Corder, J. (1985). "The effects of dual-career families on adolescents' sex-role attitudes, work and family plans, and choices of important others. *Journal of Marriage and the Family, Vol. 47, No. 4*, pp. 921-929.

Stewart, W. & Barling, J. (1996). "Father's work experiences effects children's behaviors via job-related affect and parenting behaviors." *Journal of Organizational Behavior, Vol. 17*, pp. 221-232.

Sturges, J., Conway, N., Guest, D. & Liefooghe, A. (2005). "Managing the career deal: The psychological contract as a framework for understanding career management, organizational commitment and work behavior." *Journal of Organizational Behavior, Vol. 26*, pp.821-838.

Sturges, J, Guest, D. & Mackenzie Davey, K. (2000). "Who's in charge? Graduate's attitudes to and experiences of career management and their relationship to organizational commitment." *European Journal of Work and Organizational Psychology, Vol. 9, Issue 3*, pp. 351-370.

Swanson, J. L. & Gore, Jr., P. A. (2000). "Advances in Vocational Psychology Theory and Research." In S. D. Brown & R. W. Lent (Eds.), *Handbook of Counseling Psychology* (3rd Ed.). New York, NY: John Wiley & Sons, Inc.

Tabachnick, B. G. & Fidell, L. S. (2007). *Using Multivariate Statistics (5th Ed.).* Allyn & Bacon, Boston, MA.

Taylor, B. A. (1997). "The influence of adolescent employment experience on the development of a work ethic." *Dissertation Abstracts International Section A: Humanities & Social Sciences, Vol. 57 No. 10-A,* pp. 4459.

Teddlie, C., & Stringfield, S. (1993). *Schools make a difference: Lessons learned from a 10-year study of school effects.* Teachers College Press, New York, NY.

Ter Bogt, T., Raaijmakers, Q. & van Wel, F. (2005). "Socialization and development of work ethic among adolescents and young adults". *Journal of Vocational Behavior, Vol. 66*, pp. 420-437.

Thorn, B. L & Gilbert, L. A. (1998). "Antecedents of work and family role expectations of college men." *Journal of Family Psychology, Vol. 12, No. 2*, 259-267

Thornton, A., Alwin, D. F. & Camburn, D. (1983). "Causes and consequences of sex-role attitudes and attitude change." *American Sociological Review, Vol. 48*, pp. 211-227.

Togeby, L. (1995). "Feminist Attitudes: Social Interests or Political Ideology?" *Women in Politics*, *Vol. 15*, pp. 39-61.

Trickett, E. J., & Birman, D. (2005). "Acculturation, school context, and school outcomes: A differentiated example from refugee adolescents from the former Soviet Union". *Psychology in the Schools*, *Vol. 42, No. 1*, pp. 27-38.

Verquer, M. L., Beehr, T. A. & Wagner, S. H. (2003). „A meta-analysis of relations between person-organization fit and work attitudes." *Journal of Vocational Behavior*, *Vol. 63, No. 3*, pp. 473-489

Warren, T. (2007). "Conceptualising breadwinning work." *Work, Employment and Society, Vol. 21, No. 2*, pp. 317-336.

White, J., Campbell, L., Stewart, A., Davies, M. & Pilkington, L. (1997). "The relationship of psychological birth order to career interests". *Individual Psychology, Vol. 53 No. 1*, pp. 89-104.

Wingreen, S. C. & Blanton, J. E. (2007). "A social cognitive interpretation of person-organization fitting: The maintenance and development of professional competency." *Human Resource Management*, *Vol. 46, No. 4,* pp. 631-650

Witjing, J., Arnold, C. & Conrad, K. (1978). "Generational differences in work values between parents and children and between boys and girls across grade levels 6,9,10 and 12. *Journal of Vocational Behavior, Vol. 12*, pp. 245-260.

Wood, R. & Bandura, A. (1989). "Social cognitive theory of organizational management." *Academy of Management Review*, *Vol. 14*, pp. 361-384

Woodward, L. J., Fergusson, D. M. and Horwood, L. J. (2000) "Effects of single-sex and co-educational schooling on children's academic attainment". *Australian Journal of Education, Vol.* 43 *No. 2,* pp. 142-156.

Yi, C. C., Chang, C. F. & Chang, Y. H. (2004). "The intergenerational transmission of family values: A comparison of teenagers and parents in Taiwan". *Journal of Comparative Family Studies, Vol. 35 No. 4*, pp. 523-545.

Young, D. J. and Fisher, D. L. (1996). "School effectiveness research in rural schools". *Proceedings Western Australian Institute for Educational Research Forum.*

Figure 1: A dynamic model of P-O fitting (Wingreen & Blanton, 2007). Reproduced with permission by Stephen C. Wingreen and John Wiley & Sons, Inc.
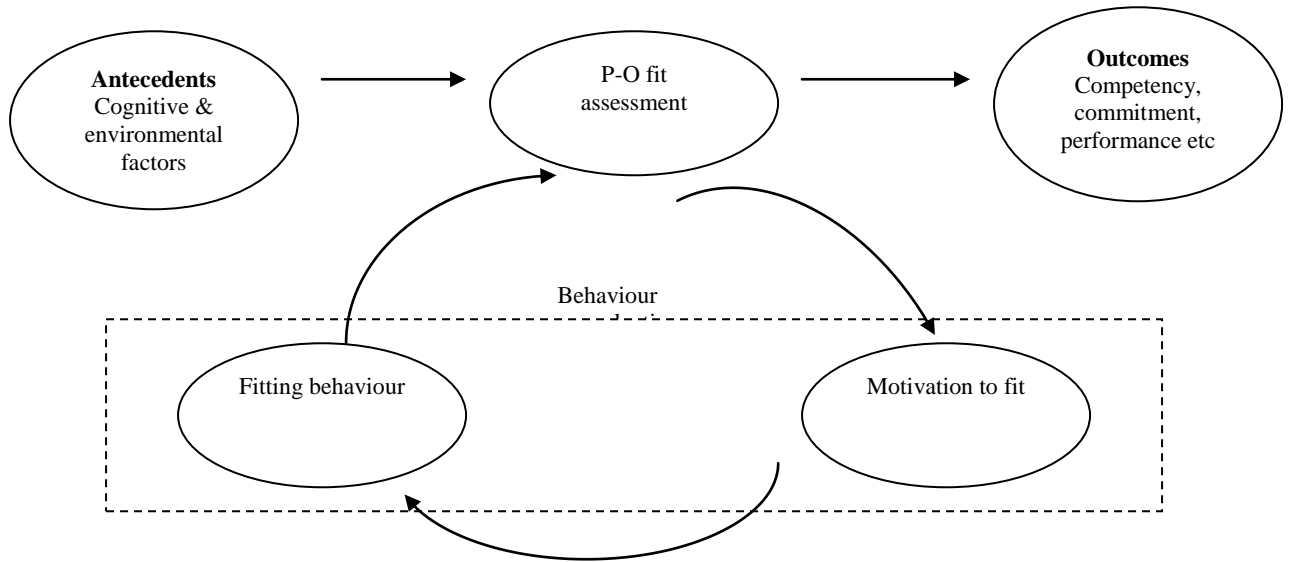
Table 1. Factor Loadings (Confirmatory Factor Analysis with Varimax Rotation) for the One-Factor Solution of the Career-Family Interface Scale.

Item	Factor Loading
14. If my spouse works outside the home, I will help somewhat with the housework	.903
42. My spouse's career is more important than mine **(Reverse Scored)**	.862
15. I do not expect to have a career **(Reverse Scored)**	.860
47. If both my spouse and I are employed, I expect housework to be a jointly shared responsibility	.857
36. Weekends will be a time for me to relax, watch T.V. etc., and I expect my spouse to keep distractions (i.e. visitors, children, family/household jobs to minimum) **(Reverse Scored)**	.849
44. I intend to encourage my spouse to fully develop his or her career.	.846
8. I would like for my spouse to make most of the financial decisions regardless of who makes the most money **(Reverse Scored)**	.830
9. I expect my spouse to be mostly responsible for raising our children regardless of whether or not my spouse is employed **(Reverse Scored)**	.807
45. Weekends will be a time for my spouse to relax, watch TV etc., and I expect to keep distractions to a minimum **(Reverse Scored)**	.806
1. I would like for my spouse and me to have the same level of education	.782
13. It would bother me if my spouse makes more money than me. **(Reverse Scored)**	.721
37. I expect my spouse and I to share responsibility for raising our children	.718
39. I don't care whether my spouse or I make the most money	.711
51. Garden work and DIY tasks will be mainly done by my spouse **(Reverse Scored)**	.704
16. My career and my spouse's career will be equally important	.693
21. I would like to occasionally go out in the evening without my spouse	.677
52. I expect my spouse to occasionally go out in the evening without me.	.661
35. If my spouse gets an excellent job offer elsewhere, I will move to the new place	.631
54. I would like to have more education than my spouse **(Reverse Scored)**	.601
2. I expect to go as far as I can in my career and expect encouragement from my spouse.	.587
Cronbach alpha for 20 items:	**.964**

Table 2a: Breakdown of the Sample by parental employment and education.

	Father			**Mother**	
	% (N)			**% (N)**	
Job Type			*Job Type*		
Career	71.1%	(561)	Career	44.8%	(350)
Earner	19.1%	(149)	Earner	15.0%	(117)
Homemaker	0%		Homemaker	38.4%	(300)
Unknown	9.2%	(72)	Unknown	1.9%	(15)
Job Status			*Job Status*		
Full-time	89.6%	(701)	Always worked Full-time	21.1%	(165)
Part-time	3.3%	(26)	Always worked Part-time	12.8%	(100)
Not Employed	1.9%	(15)	Resumed working full-time of late	10.2%	(80)
Unknown	5.1%	(40)	Resumed working part-time of late	16.9%	(132)
			Not employed	38.4%	(300)
			Unknown	0.6%	(5)
Education			*Education*		
Primary	11.3%	(88)	Primary	5.8%	(45)
Second level	39.4%	(308)	Second level	47.8%	(374)
Third Level	26.5%	(207)	Third Level	27.5%	(215)
Postgraduate	11.1%	(87)	Postgraduate	7.0%	(55)
Unknown	11.8%	(92)	Unknown	11.9%	(93)

Table 2b: Breakdown of the Sample by Family Type.

Family Typology	**% (N)**	
Dual Career	17.0%	(133)
Dual Earner	1.3%	(10)
Traditional mixed	35.5%	(278)
Status Revered mixed	3.3%	(26)
Traditional single earner	37.0%	(289)
Status revered single earner	0.8%	(6)
Neither parent employed	0.4%	(3)
Unknown	4.7%	(37)

Table 3. Family demographics [% (N)]

	0	1	2	3	4	5	6+	Unknown
Place in Family	N/A	32.4 (253)	29.5 (321)	19.1 (149)	9.8 (77)	5.8 (45)	3.1 (24)	0.4 (3)
Number of Children in family	N/A	3.6 (28)	20.1 (157)	32.1 (251)	22.5 (176)	13.2 (103)	8.2 (64)	0.4 (3)
Number of Boys in the family	14.1 (110)	32.7 (256)	28.0 (219)	15.6 (122)	5.8 (45)	2.4 (19)	0.9 (7)	0.4 (3)
Number of girls in the family	31.6 (247)	32.6 (255)	22.3 (174)	9.0 (70)	3.2 (25)	0.6 (5)	0.1 (1)	0.6 (5)

Table 4. Mean scores on the 20-item Career-Family Interface Scale for Family Type

Family Type	Mean	Standard Deviation
Dual career/dual earner	63.94	22.58
Traditional Mixed Family	65.32	22.73
Status Reversed Mixed Family	69.68	22.56
Traditional single earner	60.01	21.97

Table 5. Mean scores and Standard Deviation on the 20-item Career-Family Interface Scale for Mother's Job Status and Job Type.

Mother's Job Type	Mean	Standard Deviation
Always worked full-time	65.27	22.56
Always worked part-time	62.82	22.65
Resumed working of late	65.82	22.88
Not employed	59.67	21.93

Mother's Job Status	Mean	Standard Deviation
Career	63.57	22.89
Earner	68.33	21.66
Homemaker	59.82	22.02

Table 6. Mean scores on the 20-item Career-Family Interface Scale for Father's educational level.

Father's Educational level	Mean	Standard Deviation
Primary Education	55.38	21.86
Second level Education	63.37	22.89
Third Level Education	65.28	21.90
Postgraduate	72.67	20.16

Figure 2. Differences in participants' attitudes towards managing the career-family interface based on Father's Educational Level.
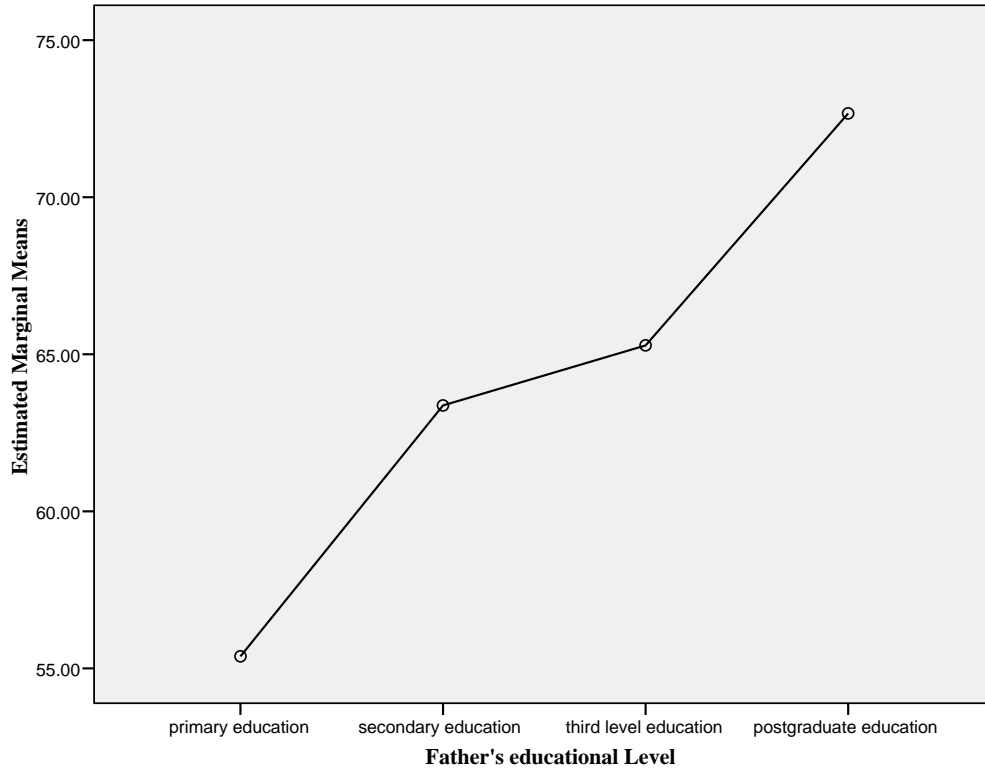
O'Shea & Kirrane

Figure 3. Differences in participants' attitudes towards managing the career-family interface based on Mother's Educational Level.
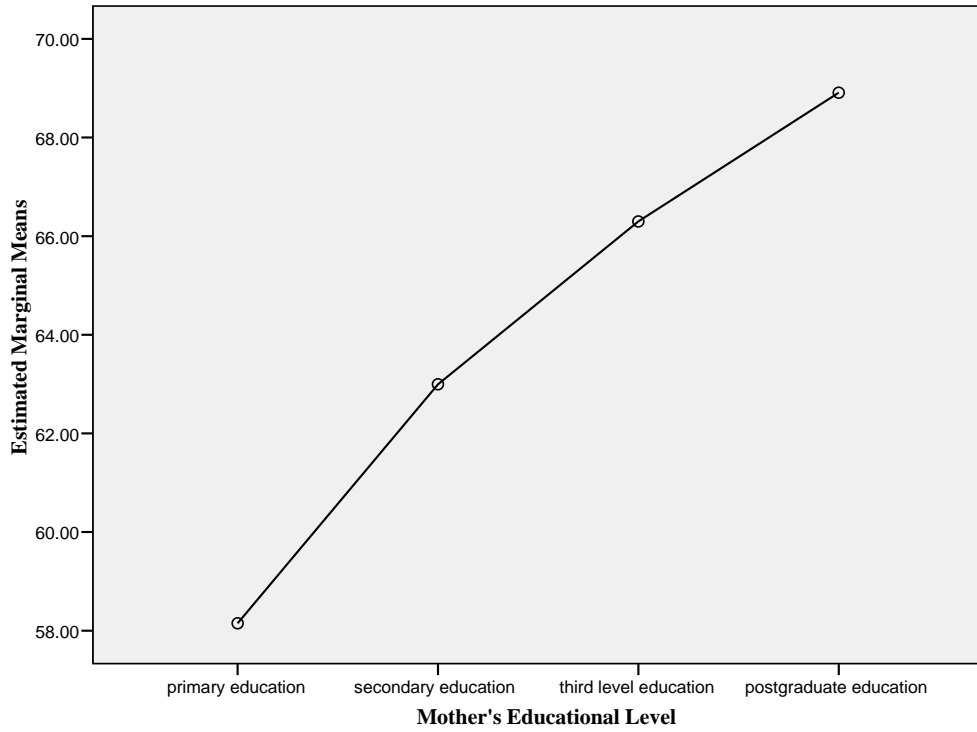
Table 7. Spearman's Correlations, means and standard deviations for attitude towards managing the career-family interface and family demographic variables.

	Mean	SD	1.	2.	3.	4.
1. Career-Family Interface Attitude	62.90	22.55				
2. Place in Family	2.39	1.43	-.023			
3. Number of children in family	3.53	1.45	-.140***	.553***		
4. Number of Boys in family	1.78	1.28	-.207***	.320***	.600***	
5. Number of girls in family	1.21	1.13	.420***	.421***	.347***	-.206***

* Significant at the .05 level
** Significant at the .01 level
*** Significant at the .001 level

Table 8. Regression results for the effects of family type, number of children in family on attitude towards managing the career-family interface.

	Model 1		Model 2	
	β	t	β	t
Step 1: Family Type				
Dual career/ dual earner (Dummy 1)	-.807	-.417	-1.203	-.624
Traditional mixed (Dummy 2)	.596	.356	.893	.536
Status reversed mixed (Dummy 3)	4.975	1.409	4.025	1.144
Traditional single earner (Dummy 4)	-4.802	-2.885**	-3.748	-2.230*
Step 2: Place in Family			-.126	-3.425**
F	2.755*		4.482**	
ΔF			11.732**	
ΔR^2	.014*		.015**	
Adjusted R^2	.009*		.023*	

* Significant at the .05 level
** Significant at the .01 level

Table 9. Regression results for the effects of family type and number of boys and girls in the family on attitude towards managing the career-family interface.

	Model 1		Model 2		Model 3	
	β	t	β	t	β	t
Step 1: Family Type						
Dual career/ dual earner (Dummy 1)	-.807	-.416	-1.197	-.624	-.367	-.208
Traditional mixed (Dummy 2)	.596	.355	.550	.332	-1.046	-.685
Status reversed mixed (Dummy 3)	4.975	1.407	4.696	1.345	7.655	2.379*
Traditional single earner (Dummy 4)	-4.802	-2.881**	-4.082	-2.471*	-6.277	-4.105**
Step 2: Number of boys in the family			-.166	-4.604**	-.096	-2.852**
Step 3: Number of girls in the family					.397	11.803**
F	2.748*		6.496**		29.629**	
ΔF			21.194**		139.30**	
ΔR^2	.014*		.027**		.150**	
Adjusted R^2	.009*		.035**		.185**	

* Significant at the .05 level
** Significant at the .01 level