



INTERFACE BETWEEN WORK AND FAMILY RESPONSIBILITIES: THE MID- LIFE FAMILY TRANSACTIONS PROJECT

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Abstract

The interdisciplinary Mid-Life Family Transactions Project examines the dynamics of family intra- and inter-generational transactions among individuals in the 40-54 year old age group, the "baby boomers" or "sandwich generation". As part of the overall Project of research, the current paper explores the relationships between individuals' work-related attitudes and experiences and their family transactions, including the amount of care and assistance they provide to family members. Contrary to some popular conceptions, the total amount of care-giving provided by 40-54 year olds to their children, parents, and spouses/partners was relatively low. Similarly, levels of care and assistance were not systematically related to satisfaction with the job and family, or to the amount of psychological strain experienced by respondents. However, there were linkages between work involvement, family involvement and the extent to which experiences in one domain generalized to those in the other. Some of the implications of these findings for further research on social support and policy relating to work-family interactions are highlighted

Keywords: *family transactions, family support, involvement, job-family conflict, job-family enhancement, stress.*

Demographic, social and economic changes within New Zealand society over the past ten years have had a considerable impact on the lives of New Zealanders, including their family lives, their employment, and recreational activities. For example, the structures of New Zealand families have changed markedly in the last decade, with more diverse relationships between parents, children and elders, resulting in increasingly complex transactions between family members and society at large (Jackson & Pool, 1994).

Furthermore, New Zealand's population is becoming increasingly characterized by cohorts of middle-aged individuals (Johnstone & Smith, 1996), a phenomenon now recognized by the media in its frequent coverage of issues relating to "baby-boomers" and the "sandwich generation" (Stirling, 1997), and by the business community in its targeting of this age group as a market niche. Research carried out in the Population Studies Centre at the University of Waikato under the Demographic Crossroads Programme shows that this middle-aged group (40-54 year olds), comprising the early baby boomers and hence the country's largest birth cohorts, is currently undergoing a "demographic squeeze" (Jackson & Pool, 1994, 1995).

The above changes have brought about a significant increase in the number of multi-generational families, at a time of life when mid-life individuals (and couples) need

to make provision for the onset of retirement, and may themselves have financial, health and other issues to contend with. Given this state of affairs, research focusing on the familial transactions which 40-54 year olds encounter, and the effects of these transactions on their personal well-being, is clearly important for the development of social and family policies, and for the provision of appropriate services and supports to these individuals and their dependents.

A further reason for studying mid-life families is the need to consider the family as a key delivery mechanism for policy based on "self-reliance" (Dalziel, 1991; Shipley, 1991). Consistent with government policy over the past decade, the individual is increasingly expected to be self-reliant, less dependent on the state for health and welfare services, and able to make provision for impending retirement. In addition, the family is being expected to assume the major responsibility for the support of its members, both young and old. Attitudes within the family toward these responsibilities, as well as more recent work on intra-family income exchanges (for example in Maori families, see Taiaapa, 1994), are an important component of this debate. Whether or not individuals and their families, particularly those falling within the "sandwich generation", have the capacity to meet these increasing demands is a critical social, economic and political issue (Abbott & Koopman-Boyden, 1994).

The Midlife Family Transactions Project, conducted by a multi-disciplinary team at the University of Waikato, and supported by the Foundation for Research, Science and Technology and Lottery Science Research funding, explores the within- and between-generation familial transactions which 40-54 year old New Zealanders are engaged in. The programme examines the nature of these transactions, particularly interdependencies, between midlife individuals and their spouses/partners, children (of both current and any previous relationships), and parents/grandparents. A major component of this research is its focus on care and support received by midlife individuals from their family, and the care and support they provide to other members of their family. It also considers the potential effects of these transactions on the individual's job, leisure and family relationships. The over-arching aim of this programme of research is to provide a comprehensive set of findings on a range of family transactions, along with the relationships between these transactions and other aspects of individuals' lives. It is hoped that this research will contribute to the enhancement of family functioning, as well as informing social policy relating to families, social services and employment practices. The conceptual 'model' of intra- and inter-generational transactions underpinning the Midlife Family Transactions Project is presented in Figure 1.

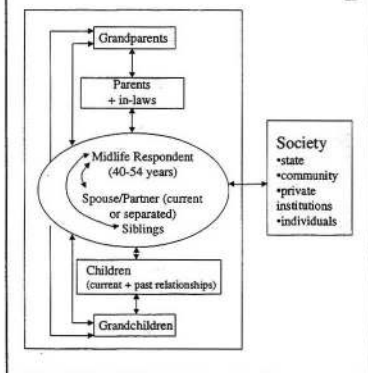
To achieve the above aims, a sample of 750 individuals aged 40-54 years (the target age group for mid-life individuals) was selected on a nationwide basis using area stratification according to population size (based on Statistics New Zealand 1991 Census figures). Data collection involved a combination of computer-assisted telephone interviewing and a mailback self-report questionnaire. This combined approach was designed to enable collection of detailed socio-demographic data on the characteristics of respondents and their families, including information on the composition and generational structure of New Zealand households, and the care and assistance received by respondents and provided by them to members of their family. Data on these issues were collected predominantly via the telephone interview. A companion self-report questionnaire was utilized to gather information relating to individuals' perceptions, judgements and attitudes concerning their leisure activities, interactions between family members in leisure pursuits, the respondents' overall well-being and quality of life. In addition, the questionnaire assessed specific variables relating to levels of job and family involvement and satisfaction, the interplay between job and family domains, and the degree of psychological stress or strain experienced by the respondent.

The latter issues are the focus of the present paper, which examines interrelationships between family transactions and job experiences, and the potential implications of these interrelationships for job and family satisfaction and the amount of stress reported by individuals in the sample. Considerable research has been conducted in recent years on the mutual influence which job and family experiences exert on each other, the potential conflict which may occur between demands from these two domains in life, and the consequences of this conflict for personal health and well-

being. For example, evidence indicates that conflict between job demands and family responsibilities poses serious problems for individuals and their families (O'Driscoll, 1996). However, there have been fewer investigations of the positive interplay between the job and family domains, where activities in one domain may enhance, rather than interfere with, the individual's commitments in the other. One aim of the Transactions project was to examine the psychological implications of both conflict and enhancement between paid employment and family responsibilities.

In addition to the above, this research project incorporated an investigation of the role which familial dependencies play in the job-family interaction. Specifically, this research investigated the number of different types of support provided to family members by individuals, and the potential relationships of this support to other work and family attributes. These other attributes (or variables) include satisfaction (with job and family), the amount of conflict experienced between the job and family domains, and the level of psychological strain an individual experiences. To date, these issues have not been explored in relation to the provision of support to other family members.

Figure 1. Intra, and intergenerational family transactions for mid-life individuals



Interplay between job and family experiences

Since 1977, when Rosabeth Kanter debunked the 'myth of separate worlds', growing interest and concern has been expressed in the interaction between job experiences and life off the job. As noted by Burke and Greenglass (1987), there are several reasons for the burgeoning literature on this topic. Changing family structures and orientations toward parenthood, greater participation by women in the workforce, increasing linkages between people's jobs/careers and their family lives, and changing work values and aspirations have highlighted the mutual influence between

job and off-the-job (especially family) experiences. Furthermore, various technological advances (eg. laptop computers, mobile telephones) have facilitated a blurring of boundaries between 'job' and 'off-job', such that many workers can no longer compartmentalize their job and off-job lives into distinct, non-overlapping areas (O'Driscoll, 1996; Wiley, 1991).

Given this scenario, it is not surprising that a person's involvement and experiences in one domain (eg. their job) can have a marked influence on the extent of involvement and experiences in the other (eg. family). This spillover effect (Zedeck & Mosier, 1990) can be positive or negative. Positive spillover occurs when individuals have favourable experiences in one domain which enhance their well-being and translate into positive benefits within the other domain. This has been referred to as an enhancement effect (Kirchmeyer, 1992).

In contrast, negative spillover exists when unfavourable experiences in one domain flow over into the other, causing dissatisfaction within the other domain and a decline in general well-being. This is referred to as inter-domain conflict (Greenhaus & Beutell, 1985; Jackson, Schwab & Schuler, 1985), and has been shown in numerous studies to have a significant negative impact on those who experience it (see Frone, Russell & Cooper, 1992; O'Driscoll, 1996). The fact that individuals have finite time and energy suggests that some degree of inter-domain conflict is inevitable when they have competing demands on their time and energy from two or more areas of life. Also, the conflict hypothesis suggests that the attitudes, values and behaviours required in one role may be incompatible with those needed in another. For example, in a work role successful job performance may require a person to be task-oriented, competitive and hard-driving, whereas these behaviours may be inappropriate in a family context.

Although, as discussed, conflict between domains may arise for a variety of reasons, research has focused predominantly on the extent to which time demands in job and family roles produce conflict between these domains. For example, Gutek, Searle and Klepa (1991) reported that the amount of time devoted to one's job can interfere with family commitments and responsibilities, perhaps more so than the converse. O'Driscoll, Ilgen and Hildreth (1992) also found that time devoted to work-related activities was a predictor of the extent of conflict or interference between a person's job and their off-the-job life, whereas off-job time demands did not show a corresponding interference effect with job responsibilities. Other researchers (eg. Kirchmeyer, 1992) have observed similar effects, suggesting that interference from the job is not the same as interference from off-job activities, and have also noted the need to examine possible differences between the experiences of men and women.

The extent to which individuals devote their time and energy to the performance of a specific role (eg. job and family roles) is, of course, just one indicator of their involvement in that role. Another important issue is the extent of emotional investment they make in the role. This is typi-

cally referred to as psychological involvement, and can lead to a preoccupation with the demands and responsibilities of a particular role, "even when physically attempting to fulfill the demands of a second role" (Frone et al., 1992, p.67). Most research on this form of involvement has focused on the implications of high levels of involvement in the job for engagement in roles outside work, such as marital functioning. Several studies have shown that high job involvement is frequently associated with job-family conflict (eg. Frone & Rice, 1987; Greenhaus et al., 1989; Wiley, 1987). However, Kirchmeyer (1992) found that high psychological involvement in the family was more associated with enhancement than with conflict between family and job. Kirchmeyer suggested that both the benefits and the burdens of specific roles, such as job and family, may become more accentuated with increasing levels of emotional investment, potentially leading to positive and negative spillover simultaneously.

In contrast with Kirchmeyer's findings, in a longitudinal study of over 1600 workers in the USA, Frone et al. (1992) found that psychological involvement in the family induced family—>job conflict, whereas high job involvement did not have a significant bearing on job—>family conflict. This apparent discrepancy might be due to the very high levels of family involvement reported by respondents in Frone et al.'s study, whereas levels of job involvement were comparatively low.

The findings of the research summarized above suggest that it is important to simultaneously examine individuals' commitments and responsibilities in both job and family domains, as well as looking more closely at the nature of those commitments, especially within the family domain. The Transactions project was developed to extend findings from previous studies, by exploring the kinds of intra- and inter-generational transactions which individuals are engaged in, and which have a bearing on their attitudes and well-being. As noted earlier, this research focuses specifically on individuals falling within the 40-54 age group, the 'baby boomers'. Although there has been a considerable amount of empirical research on job-family conflict and enhancement in the population at large, no previous studies have specifically examined the experiences of 40-54 year olds in respect of the interplay between job and family conflict and enhancement. It might be anticipated, for instance, that individuals in this age group are typically no longer burdened with the demands of pre-school children, but do have to contend with the pressures and responsibilities associated with having teenagers and young adults in the household. In addition, given the increasing move away from a universal welfare system and the emphasis currently given by the New Zealand government to individual self-reliance and independence, it could be expected that 40-54 year olds also face the possibility of having to provide care and assistance for older family members, including parents and (in some cases) grandparents. For this reason, this cohort have been referred to as the "sandwich generation" (Jackson & Pool, 1994).

This paper presents data on the types of care and assistance

Table 1. Types of support provided across all family members

Type of Support	Mean	SD
Emotional support	2.1	2.08
Financial support and guidance	1.6	1.23
Sustenance support	1.2	1.20
Transport	0.7	1.09
Maintenance support	0.4	0.73
General care and assistance	0.3	0.70
Health care and assistance	0.2	0.66

Notes: N = 503

Total possible score for each type of support equals 4

which individuals in the 40-54 age group provide to other members of their immediate family, as an index of intra- and inter-generational support. A major aim of the analyses presented here was to determine (a) the level of various types of support which New Zealanders are providing to their family, particularly during this period of decline in the availability of support services from governmental and other agencies, (b) the extent to which individuals in this country are experiencing either conflict or enhancement (or both) between their employment and their family responsibilities, and (c) the possible relationship between these familial transactions and individuals' attitudes (to both their job and their family) and their affective experiences, especially the degree of psychological strain resulting from the pressures and demands associated with caring for other people.

Method

Data for the Transactions project were collected via a survey conducted from May-September 1997 of 750 individuals, selected on a nationwide basis using area stratification according to population size. A combination of a computer-assisted telephone interview and a mailback self-report questionnaire was used to obtain information on issues of interest. Further specific details on the methodology used in this research can be obtained from the authors.

Sample

Five hundred and three respondents (205 males, 298 females) from the total sample of 750 in the Transactions project completed a mailback questionnaire which focused on the major variables of interest in this component of our research. The average age of these respondents was 46.5 years (SD = 4.23). Educational attainment ranged from no educational qualifications at all (117, 23.3%), secondary schooling (216, 66.2%), tertiary education (107, 21.3%), to university degrees (60, 11.9%). A range of ethnic groups was represented in the sample. Although the vast majority (374, 82.3%) were New Zealand European/Pakeha, 40 persons (8.0%) identified themselves as Maori, and there were smaller numbers of Pacific Islanders, Asians, and other ethnic groups.

A total 304 (60.4%) of this sample indicated that they were in paid employment, 43.5% fulltime and 16.9% part-time. A further 87 (17.3%) reported that they were self-employed or in a family business, 7 (1.4%) were studying, and 55 (10.9%) said they were unemployed. Of those in employment, the average number of hours worked per week was reported as 39.9, with a high standard deviation (SD = 17.84) reflecting considerable variation in working hours. In addition to these hours at work, employed respondents indicated that they spent on average 22 minutes per day (SD = 24.28) commuting to and from work.

Measures

As noted above, with one exception (the amount of support provided to family members), the critical variables for this component of the Transactions Project were assessed via a mailback questionnaire. Measures of specific variables reported in this paper are described below.

Intra- and inter-generational types of support. A series of questions in the telephone interview asked respondents whether they provided emotional support, financial advice and support, practical support around the home, assistance with transport, health care, and general personal support to their partner/spouse, children/stepchildren, parents/grandparents and any other relatives. Small numbers of 'other relatives' were mentioned by respondents, hence these were omitted from further analysis. The types of support were coded into seven categories, and the respondent was assigned a score of zero or one for each category (type) of support. For analysis purposes, two overall support scores were calculated. The first of these (labelled here as total support) was computed by summing across the seven categories for each person the respondent provided care and assistance to. Hence each respondent received a score from 0-7 for partner/spouse support, child support, and parent/grandparent support, and total support reflected the total number of different types of care and assistance provided to all of the individuals they mentioned during the interview.

The second support score derived was for each of the seven categories or types of care and assistance separately. For example, the amount of emotional support given to all dependents was computed by summing the emotional support scores for each of the three categories of target person (dependents) mentioned above. This same calculation was performed for all types of care and assistance, to yield seven separate support scores. Here these will be referred to by their specific label (emotional support, financial advice and support, practical maintenance support, practical sustenance support, transport, health and personal support, and general care).

The remaining variables described below were assessed in the mailback questionnaire. Where several items or statements were used to assess a variable, the average score across those items was generated to provide an overall score for those variable. For each measure which had a continuous response scale (eg. scores ranging from 1 to 7),

Table 2. Total number of types of support provided to specific family members

	Spouse/Partner			Family Member/Child/Stepchild ^a			Parent/Gdparent		
	Mean	SD	N	Mean	SD	N	Mean	SD	N
Respondents									
Males	2.5	1.28	169	4.1	3.14	169	1.5	1.74	168
Females	2.2	1.30	207	4.0	2.87	249	1.5	1.60	250
40-44 years	2.4	1.34	142	4.8	3.44	147	1.7	1.89	168
45-49 years	2.4	1.35	139	3.9	3.42	147	1.5	1.58	151
50-54 years	2.2	1.14	95	3.4	2.58	125	1.2	1.28	99
Has health problems	2.6	1.21	97	2.3	3.11	133	1.8	1.67	129
No health problems	2.3	1.32	280	3.3	3.26	289	1.4	1.64	293
Living with family member	2.6	1.12	316	4.9	3.01	252	1.8	1.34	12
Not living with Family member	1.0	1.38	60	3.6	2.12	131	2.4	1.51	260
Family member^b									
Has health problems	2.9	1.26	61	1.7	1.05	164	.6	.88	350
No health problems	2.2	1.28	314	1.4	1.12	1002	.5	.84	492
Living with respondent (full-time)	2.6	1.12	316	2.0	1.10	512	1.5	1.51	12
Living with respondent (part-time) ^c	-	-	-	1.9	.92	39	-	-	-
Not living with respondent	1.0	1.38	60	1.0	.94	625	.6	.84	830

Note: Total possible support to each person equals 7

^a Children/stepchildren from current relationship; ^b Numbers vary due to the presence of multiple family members in some cases;

^c No spouses/partners or parents/grandparents living part-time with respondents

Cronbach's alpha coefficient was used to determine the consistency of responses across items within that measure. High internal consistency supports the combination of items into a single overall score for that variable.

Time devoted to job and family. The amount of time which respondents spent on their job and in their family was assessed by asking them to indicate the number of waking hours they had devoted to each area over the past seven days.

Domain involvement. To gauge levels of psychological involvement in the job and family, participants in the study were asked to respond to five statements (items) developed by Frone et al. (1995). These items reflected the extent to which the job or family is important to the person, and were responded to on a 7-point agree/disagree scale. Total job involvement and family involvement scores were deter-

mined by averaging responses across the five items for each domain. Internal consistencies were .86 for job involvement and .75 for family involvement, indicating that participants' responses to all of the five items were reasonably uniform, and hence that the items could be combined to yield a single involvement score for each domain.

Job-family enhancement. The extent to which respondents perceived enhancement between their job and family was gauged using five items derived from Kirchmeyer's (1992) measure of inter-domain enhancement. Using a 7-point agree/disagree response format, respondents were asked to what extent their job (family) enhanced their family (job), in areas such as support, rewards and privileges, provision of extra energy, and development of skills. Separate indices of job → family enhancement and family → job enhancement were derived. Total enhancement scores were computed by averaging across the five items in each

Table 3. Descriptive statistics for job and family variables and psychological strain

Variable	Mean	SD	Alpha
Hours on job per week	39.9	17.84	-
Time devoted to family per week	34.0	27.03	-
Job involvement ^a	5.5	2.02	.86
Family involvement ^a	6.4	1.03	.75
Job(Family enhancement) ^a	4.9	2.20	.78
Family(Job enhancement) ^a	5.4	1.64	.81
Job(Family conflict) ^b	3.8	2.44	.91
Family(Job conflict) ^b	2.8	1.84	.92
Job satisfaction ^a	6.0	1.10	.86
Family satisfaction ^a	5.9	1.06	.89
Psychological strain ^c	2.1	.59	.84

Note: N = 503
^a Response scale 1-7; ^b Response scale 1-6;
^c Response scale 0-5

subscale. Alpha coefficients of the two indices were .78 and .81 respectively, figures which are comparable to those obtained by Kirchmeyer.

Job-family conflict. Conflict between job and family domains was tapped via three items asking how often the job (family) interfered with family (job) activities, commitments and responsibilities, and prevented the person spending time in their family (job). These items were adapted from Frone (1996) and were responded to on a 6-point frequency scale (never - all the time). Again, separate indices of job → family conflict and family → job conflict were derived by averaging responses across the three items. Internal consistencies were .91 for job → family conflict and .92 for family → job conflict, again indicating a high degree of uniformity across items in the conflict measures.

Domain satisfaction. The amount of satisfaction which individuals experienced in their job and family life was measured via three items tapping overall satisfaction in each area. These three items, adapted from the Michigan Organizational Assessment Questionnaire (Seashore, Lawler, Mirvis & Cammann, 1982), were responded to on a 7-point agree/disagree scale. The three items were averaged to generate separate indices of overall satisfaction with the job and with the family. Alpha coefficients were .86 for job satisfaction and .89 for family satisfaction, indicating high internal consistency in these measures.

Psychological strain was measured by the 12-item version of the General Health Questionnaire (Banks et al, 1980), which examined respondents' feelings about the emotional and cognitive difficulties they have experienced over the

past 4-6 weeks, on a 5-point frequency scale. A total strain score was obtained by averaging responses across the twelve items; this index had an internal consistency of .84, supporting the derivation of a total strain score.

The mailback questionnaire was given to respondents at the time they were recruited to participate in the study. They were asked to complete the questionnaire and return it in a postage-paid envelope within seven days. Most respondents completed the questionnaire prior to their interview.

Results

The results will be outlined as follows:

- Types of support provided to family members
- Descriptive statistics (means and standard deviations) for all job and family variables, and for overall psychological strain
- Correlations between job and family variables and psychological strain

Provision of types of support to family members

The number of different types of support provided by respondents to all of the family members they mentioned during the interview is shown in Table 1. Emotional support (which had a mean of 2.1 on the 3-point index) was offered most, followed by financial support and guidance, and then sustenance. The other types of support were less extensively provided.

A breakdown of overall support given to various family members by different categories of respondent is given in Table 2. Analyses were conducted of differences between males and females, age cohorts, whether or not the respondent resided with the family member, whether or not the family member had some health or disability problem(s), and whether or not the respondent had a health problem. Differences in the total number of types of support provided to family members by males and females were examined via t-tests, which demonstrated that there were no statistically significant differences between men and women in respect of the number of supports they gave to their spouses/partners, children/stepchildren and parents/grandparents.

Analyses of variance were conducted to determine whether there were significant differences in the number of support types provided to various family members by respondents in the three different age groupings. A statistically significant difference was found only in respect of support provided to children and stepchildren, with decreasing support being given as age increased, $F(2,415) = 8.58, p < .01$. Support given to spouses/partners and parents/grandparents did not vary significantly with age of the respondent.

A third analysis entailed comparison of the supports provided by respondents who lived with the family member versus those who did not. Significant differences between these groups were found for support given to spouses/partners, $t(377) = 9.59, p < .01$, and for support provided to

children/stepchildren, $t(381) = 4.62, p < .01$. In both cases, more types of support were provided to family members by respondents who lived with the family member than by those who were not. No significant difference, however, was obtained in respect of the supports given to parents/grandparents who resided and did not reside with the respondent, $t(270) = -1.26$.

Because several respondents mentioned caring for more than one child or stepchild, a further ANOVA was conducted for each child or stepchild separately, and differentiating between children/stepchildren who lived full-time and part-time with the respondent. Means and SD's for this analysis are presented in the bottom portion of Table 2. The analysis of variance confirmed the above finding - children/stepchildren living with the respondent received a greater number of different types of support than did those who were not living with the respondent, $F(2,1175) = 69.63, p < .001$.

The number of types of support given by respondents who had health problems compared with those who had no health problems were also compared using t-tests. In respect of support given to spouses/partners and children/stepchildren, there were no significant differences between those respondents who reported having health problems and those who did not. However, perhaps counter-intuitively, a greater number of types of support were provided to parents/grandparents by respondents who reported having major health problems versus those respondents who reported no health problems, $t(414) = 2.31, p < .05$.

Finally, comparisons were made of support given to family members with health problems versus those without health problems. The sample sizes for these analyses vary considerably, because some respondents had more than one family member in each category. Where respondents' spouse or partner had health problems, significantly more types of support were provided by the respondent, $t(376) = 3.48, p < .01$. No significant differences were observed between the amount of support provided to children/grandchildren and parents/grandparents who had or did not have health problems.

Job and family variables and psychological strain

Table 3 shows the mean scores and standard deviations for all the job and family variables assessed here, and for overall psychological strain. Alpha coefficients (indicating degree of internal consistency) are also shown where items were combined to derive a 'scale score'.

The data in Table 3 indicate that, on average, respondents estimated spending 39.9 hours per week in paid employment (or study), and 34.0 hours on family activities (including household chores and recreation). The relatively high standard deviations for these variables, however, illustrate considerable variation between respondents. For example, approximately 31% of the total sample reported working for more than 40 hours per week, while 38% indicated that they worked less than 20 hours per week. Similarly, 18% of respondents indicated that they devoted over 20 hours per week to family activities and responsibilities,

Table 4. Correlations between job and family variables and psychological strain

Variables	2	3	4	5	6	7	8	9	10	11
1. Job time	-.25*	.32*	-.03	.00	.02	.22*	.04	-.09	.01	-.11
2. Family time		.04	.16*	.07	.11	.12	.09	.05	.01	.03
3. Job involvement			.18*	.60*	.12*	.56*	.16*	.17*	.15*	.03
4. Family involvement				.08	.28*	.04	.23*	.19*	.29*	-.01
5. Job (Family enhancement)					.38*	.59*	.25*	.29*	.15*	.08
6. Family (Job enhancement)						.16*	.30*	.31*	.30*	-.09
7. Job (Family conflict)							.41*	.07	.02	.14*
8. Family (Job conflict)								.06	.05	.10
9. Job satisfaction									.66*	-.34*
10. Family satisfaction										-.31*
11. Psychological strain										

* $p < .01$

Decimal points omitted to save space.

whereas 44% suggested that they spent less than 10 hours per week on these activities.

Turning to reports of their job-related and family-related attitudes, levels of psychological involvement in the job were slight-moderate (mean = 5.5 on the 7-point response scale), whereas family involvement (mean = 6.4) was moderate-high. Similarly, respondents slightly agreed (mean = 4.9) that their jobs enhanced their family lives, and there was moderate-strong agreement (mean = 6.4) that family activities enhanced their job experiences. Conflict between job and family reflected a converse pattern. Respondents reported that they often experienced job → family conflict (mean = 3.8 on the 6-point scale), but only sometimes felt interference between their family activities and job responsibilities (mean = 2.8).

In this project three criterion variables were examined: job satisfaction, family satisfaction, and psychological strain. Levels of these variables are also shown in Table 3. Mean scores for job and family satisfaction were comparable, with moderate levels of satisfaction in both domains. Mean levels of psychological strain were relatively low (2.1 on the 5-point response continuum), with respondents on average indicating that they sometimes experienced symptoms of strain, such as being unhappy or depressed, being unable to face up to life's problems, and losing sleep due to worry.

Relationships between variables

To ascertain the associations between the number of types of support provided to family members and individuals' job and family attitudes and psychological strain, correlations were computed between support and these other variables. However, only one significant correlation emerged from these analyses, between support for one's spouse/partner and level of job satisfaction, and this relationship was negative ($r = -.14$). All other correlations between types of support and the family and job variables referred to above were close to zero.

Relationships between job and family variables, and psychological strain, are displayed in Table 4. The amounts of time which individuals reported devoting to their job and their family were significantly and negatively correlated ($-.25$), indicating a negative association between these variables. The amount of time spent on the job was positively linked with psychological involvement in the job (.32) and also with the amount of conflict between the job and family (.22). Family time correlated positively with family involvement (.16). There were no other significant correlations between job and family time with other variables.

Looking at the three criterion variables, job satisfaction was significantly associated in a positive direction with job involvement (.17), family involvement (.19), and both job → family and family → job enhancement (r 's of .29 and .31 respectively). These findings demonstrate a positive spillover effect between individuals' family experiences and their levels of job satisfaction. Family satisfaction was also linked with higher levels of involvement in the job

(.15) and family (.19), and with both forms of enhancement (r 's of .15 and .30 respectively), again indicating a positive spillover between the job and family domains. This was also supported by the strong correlation (.66) between job satisfaction and family satisfaction.

Psychological strain, on the other hand, did not display consistent relationships with other variables, with the exception of job → family conflict, which was positively correlated with strain (.14), and the two satisfaction indices, which were both negatively related to strain ($-.34$ and $-.31$), as would be expected.

Discussion

The present data are cross-sectional and correlational, hence inferences about causality cannot be drawn. Nevertheless, they illustrate themes that are highly relevant to New Zealanders in the mid-life period, particularly the interaction between their job/career and family activities. The number of types of support provided by individuals in the 40-54 age group to members of their family have not been previously examined in this country, so the current findings are important for social policies relating to both childcare and elder-care. They also highlight issues to be explored further in research, including more detailed exploration of the association between care-giving and other salient variables, such as satisfaction and well-being.

Building upon previous research on the impact of time demands from both job and family responsibilities (eg. Gutek et al, 1991; O'Driscoll et al, 1992), it was anticipated that individuals who reported greater responsibility for caring for members of their family would experience more conflict between their job and family lives and greater levels of psychological strain. The present data did not confirm this expectation, with the correlations between types of support and the other variables investigated here were almost uniformly close to zero. There was also a lack of relationship between the types of support provided to family members and other key variables in the study.

While these results were not anticipated, and would seem to run counter to conventional wisdom on the familial responsibilities of mid-life individuals and to some previous research (Stein et al, 1998), they are consistent with a study conducted by Loomis and Booth (1995) in the USA. In a 12-year longitudinal study of married persons, Loomis and Booth also found relatively low levels of 'multi-generational' care-giving, and non-significant correlations between this care-giving and the well-being of care-givers. These investigators concluded that "multigenerational caregiving responsibilities do not have a significant effect on well-being for either daughters or sons" (p. 143).

One critical difference between the Loomis and Booth study and data collected in the Transactions project is that the present focus was on the provision of types of support, rather than the actual amount of support or the intensity of support given to family members. It is evident from the present data that simply providing a greater number of various kinds

of support has little bearing on family and job variables. This does not imply, however, that individuals who give more support to family members will be unaffected by the amount of care and assistance they provide. Further research is needed to tease out differential consequences of levels of support provided, as well as the intensity of care and assistance required by the recipient. In the context of the current research, it was not possible to explore these issues.

Also of interest in the present context were differences between various groups of respondents in terms of the types of support given to different targets. Comparison of the mean scores in Table 2 illustrates that, again contrary to popular conceptions, there were no significant differences between males and females in this regard. It is possible, of course, that males and females may interpret their own support behaviours somewhat differently, and they may show differential tendencies to inflate the amount of time spent on care-giving to family members. The data collection procedures used in this project did not permit a check the validity of respondents' reports, hence this explanation cannot be tested in the present data, although it has been discussed by other investigators (eg. Kalleberg & Rosenfeld, 1990). Further investigation of the social construction of care-giving is needed to explore in more detail male and female definitions and understanding of care and assistance.

Other comparisons between the means shown in Table 2 indicate that the reported provision of support to children and grandchildren decreased with age. This is not unexpected. As noted earlier, it was anticipated that the child-rearing responsibilities of parents in the mid-life phase shift toward care for teenagers rather than younger children. By the time parents achieve the age of 50, clearly there is a decline in the overall responsibility for children, even older children. Interestingly, care-giving to spouses/partners and to parents/grandparents remained relatively constant across age groups within the sample, suggesting that the type of support given to these family members does not vary substantially with age.

Of further interest is the overall lack of relationship between support and whether or not the family member has health problems. The only significant difference emerging from these analyses was for spouses/partners with and without health problems, where the former received more different types of support. There were no significant differences for children/stepchildren and parents/grandparents who had health problems and those who did not. Again, this does not imply that these people received less support, but simply that the kinds of support provided did not vary substantially.

A final comparison of interest was between situations where a family member lived with the respondent and those who did not live with the respondent. For spouses/partners and children/stepchildren, a greater variety of forms of care and assistance was reported when the respondent lived with the family member, although there was no difference between

children/stepchildren who lived full-time versus part-time with their care-giver. The results for parents/grandparents appear, at first glance to be contradictory. When the respondent was the unit of analysis, a t-test indicated no significant difference in the number of types of support which respondents gave to parent(s) or grandparent(s) living with them compared with those who did not live with them. However, when the dependent variable was support received by each family member, parents/grandparents living with the respondent received a greater variety of forms of support than those living apart from the respondent.

Clearly respondents who do not reside with their parents or grandparents may still be responsible for care-giving, and may even consider that they provide more care when the target person lives 'independently', although the nature of this care would seem to vary considerably from that which is given when they reside together. From a social policy perspective, it cannot be assumed that elderly individuals residing separately from their children are not in need of care from their family members, but it is evident that individuals who take care of their parents or grandparents in their home may be offering a wider range of care and assistance.

Relationships among job and family variables, and strain

The present investigation extended earlier studies of the interplay between job and family domains by simultaneously exploring the 'burdens' and 'benefits' of multiple roles. Looking firstly at the 'burdens', from previous research findings (eg. O'Driscoll et al, 1992) it was predicted that individuals experiencing greater amounts of conflict or interference between their job and their family lives would report less satisfaction (in both areas) and high levels of psychological strain. This hypothesis was only partially supported. Conflict between job demands and familial responsibilities was significantly associated with higher strain, but was not related to satisfaction levels. Family \rightarrow job conflict was not related to either satisfaction or strain. Hence, although there was also a significant negative relationship between satisfaction (with both the job and family) and strain, it cannot be concluded that job \rightarrow family conflict or family \rightarrow job conflict were systematically linked with these variables.

One potential explanation for these findings lies with the relatively low levels of conflict, especially family \rightarrow job conflict, reported by respondents in this study (see Table 3). It would appear that members of this sample did not perceive high degrees of interference between their job and family domains. By this stage of their lives perhaps the demands of familial responsibilities have begun to lighten, conflict issues may have been largely resolved, or individuals may have developed effective coping strategies for dealing with any potential conflict between their job and family responsibilities.

It is also of interest to note the significant relationships between involvement (in job and family) and enhancement

between the two domains, as well as the sizeable correlations between inter-domain enhancement and conflict. Job involvement was strongly and positively associated with enhancement between the job and family; similarly, family involvement showed a significant relationship with family → job enhancement. These findings suggest a spillover or generalization effect between the two domains, such that involvement in one area of life has positive benefits for the other. These benefits might include getting support in one sphere (eg. the family) to deal with difficulties in the other, developing skills that can be utilized in the other domain, and being 'energized' by the pleasures and rewards in one area to tackle challenges in the other. Along with the significant correlation between job and family satisfaction, the present data indicate that this positive spillover occurred in both directions, although the size of the correlations suggests that there was more spillover from job to family than vice versa.

Conclusion

It is evident from the correlations between enhancement and conflict variables that both pluses and minuses arise from involvement in multiple roles. The present findings mirror those obtained by Kirchmeyer (1992) in her study of professional women. In the current project, which is the first to simultaneously examine both enhancement and conflict in a national sample of New Zealanders, individuals who reported high levels of enhancement between their job and family also tended to report more inter-domain conflict. This suggests that both 'benefits' and 'burdens' can accrue from simultaneously holding a job and having family responsibilities. It would appear, however, that in the present sample of New Zealanders the benefits outweighed the burdens, since both job → family and family → job enhancement were linked with higher satisfaction levels in both domains.

Future research

The preliminary data obtained from the Mid-Life Family Transactions Project suggest the need to examine in greater detail the dynamics of both intra and inter-generational family transactions for individuals in the mid life period, and the importance of multi-disciplinary approaches to this area of investigation. Further exploration of dependency transactions is needed to increase our understanding of the dynamics of these relationships in the family context, and to ascertain the extent to which mid-life individuals are confronted with demands from both younger and older family members. In addition, more research is needed on the economic, physical, psychological and social impact which such transactions have on people in this phase of life.

Finally, the social policy implications of the "demographic squeeze" (Jackson and Pool, 1994, 1995) are only just beginning to be considered and understood by researchers and policy makers. More comprehensive, longitudinal investigations of family transactions, particularly those which entail a dependency on family members, are required to inform critical policy decisions in this area.

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