

The Australian and New Zealand Journal of Organisational Psychology

<http://journals.cambridge.org/GRP>

Additional services for *The Australian and New Zealand Journal of Organisational Psychology*:

Email alerts: [Click here](#)
Subscriptions: [Click here](#)
Commercial reprints: [Click here](#)
Terms of use : [Click here](#)



Factors Influencing the Planning Undertaken by Women During Pregnancy for their Return to Work After Maternity Leave

Melissa Coulson, Helen Skouteris, Jeannette Milgrom, Andrew Noblet and Cheryl Dissanayake

The Australian and New Zealand Journal of Organisational Psychology / Volume 3 / April 2010, pp 1 - 12
DOI: 10.1375/ajop.3.1.1, Published online: 23 February 2012

Link to this article: http://journals.cambridge.org/abstract_S1835760100000102

How to cite this article:

Melissa Coulson, Helen Skouteris, Jeannette Milgrom, Andrew Noblet and Cheryl Dissanayake (2010). Factors Influencing the Planning Undertaken by Women During Pregnancy for their Return to Work After Maternity Leave. The Australian and New Zealand Journal of Organisational Psychology, 3, pp 1-12 doi:10.1375/ajop.3.1.1

Request Permissions : [Click here](#)



Factors Influencing the Planning Undertaken by Women During Pregnancy for their Return to Work After Maternity Leave

Melissa Coulson,¹ Helen Skouteris,² Jeannette Milgrom,³ Andrew Noblet⁴ and Cheryl Dissanayake¹

¹ School of Psychological Science, La Trobe University, Australia

² School of Psychology, Deakin University, Australia

³ School of Behavioural Science, The University of Melbourne, Australia

⁴ Deakin Business School, Deakin University, Australia

The planning women ($N = 199$) do during pregnancy for their return to work post birth and the factors that influence employment planning during late pregnancy were investigated in this study. The findings revealed three components of planning: Planning for Childcare, Planning with Partner, and Planning with Employer. Several factors emerged as consistent cross-sectional predictors of these components (work satisfaction, hours worked before commencing maternity leave, anticipated weeks of maternity leave and anticipated hours per week on the return to work). Anticipated support from family and friends, and from the workplace also predicted Planning with Partner and Planning with Employer, respectively. The theoretical and practical implications of these findings are discussed.

■ **Keywords:** maternity leave, pregnancy, planning, return to work

Over the last 5 decades, the rate of female employment has increased dramatically in Australia — in 1954 only 29% of Australian women aged 15 to 64 years were in paid employment, whereas in 2003 the rate had more than doubled to 61% (Campbell & Charlesworth, 2004). Moreover, recent data from the Longitudinal Study of Australian Children (Baxter, Gray, Alexander, Strazdins, & Bittman, 2007) reveals that it is not uncommon in Australia for women with young infants to participate in paid employment. Twenty-five per cent of women in this study were in paid employment when their infant was 3–5 months of age, while the rate of maternal employment when infants were 12 months or older was 49.6%. Indeed, similar rates of employment for women with young infants have been reported in other countries, including the United States (Hyde, Essex, Clark, Klein, & Byrd, 1996), the United Kingdom (Cousins & Tang, 2004; Robinson, Davey, & Murrells, 2003), Sweden, and the Netherlands (Cousins & Tang, 2004).

It is not surprising, therefore, that maternal employment has become an important topic for employers, women, and researchers (Brough, O'Driscoll, & Biggs, 2009; Skouteris, McNaught, & Dissanayake, 2007). While topics such as the impact of childbirth on work–family balance (Brough et al., 2009) and the differences between employed and unemployed mothers (Klein, Hyde, Essex, & Clark, 1998) have been examined, one topic that has been under-researched is that involving return-to-work processes. In particular, there is a lack of empirical data on the factors that hinder or facilitate the return to work after a period of maternity leave, and more specifically, a lack of studies that examine this prospectively. Cortese (2001) surveyed 67 registered

ADDRESS FOR CORRESPONDENCE: Dr Helen Skouteris, Senior Research Fellow, School of Psychology, Deakin University, 221 Burwood Highway, Burwood VIC 3125, Australia. Email: helen.skouteris@deakin.edu.au

nurses who worked in both the private and public sectors, and had either recently return to work from maternity leave, or were due to return to work within two months. The study examined the impact of demographic (e.g., age, hours worked before maternity leave, age of eldest child) and attitudinal variables (e.g., maternal versus nonmaternal childcare, work versus family) on whether participants returned to work for the same employer for greater than 20 hours per week after maternity leave. The results indicated that the best predictors of a return to work were: working greater hours prior to maternity leave; being younger; and having less traditional values regarding childcare and motherhood.

Houston and Marks (2003) conducted the only prospective study, to our knowledge, that examined the employment intentions of mothers-to-be in comparison to their actual employment status at 12 months post-partum. They recruited 412 first-time mothers-to-be during pregnancy; 20.4% indicated they would not return to paid employment after the birth of their baby, whereas 54% and 25.6% stated they would return to work part-time and full-time, respectively. Their results indicated that at 12-months post-partum the employment status of 14% of women in their sample who had intended to return to work did not do so and 10% who had intended to work full-time were instead working part-time. Of the women who had intended to return to work after their baby was born, only two factors differentiated those who did and those who did not return to work: their personal income and planning during pregnancy for their return to work. Planning during pregnancy, which has not been examined in other studies, was also the only factor that distinguished women who returned to work full-time, as they intended to do, from women who intended to work full-time but returned to work part-time. That is, women who had made fewer plans for their return to work were more likely to be working part-time as opposed to full-time as intended.

How a woman's intention to resume employment after the birth of her child may be related to her subsequent employment status might be explained by general planning theory. Arguably, the most well-known planning theory, the theory of planned behaviour (Ajzen, 1991) states that a person's intentions can be used to predict their behaviour. Ajzen (1991) proposed that the best predictor of one's behaviour is one's intention to complete said behaviour. However, the theory of planned behaviour ignores the influence of other factors in the relationship between intention and behaviour. Bagozzi (1992) argued that Ajzen's theory of planned behaviour is only useful in the prediction of behaviour for present-oriented intentions (a decision where one would act relatively immediately — e.g., planning to make a cup of coffee). In contrast with the theory of planned behaviour, Bagozzi's theory of self-regulation

states that with future-oriented intentions, where there is a considerable time delay between intention and behaviour (such as planning to return to work after the birth of a child), intention alone is less likely to be an accurate predictor of the behaviour. Bagozzi proposed that for future-oriented intentions, it is necessary for one to perform instrumental acts, such as planning, to fulfil the intention.

Thus, it appears that sufficient planning for the return to work, not simply intention to do so, is an important factor in the facilitation of a woman's return to work after the birth of her child; planning appears to impact on whether women return to work at all, and whether they return to work in the time fraction intended, as supported by the findings of Houston and Marks' (2003) study. In addition, Houston and Marks' findings revealed that women who anticipated less support in the work environment (by colleagues and employer) were more likely to not be working rather than working less than intended. They argued that employers should encourage mothers-to-be to plan for their return to work while pregnant, and to be actively involved in the planning process. Planning in advance may increase women's motivation to return, and make it easier to make arrangements for their return to work. For example, Houston and Marks suggested that employers could give women time off from work to source childcare, and managers could form return-to-work plans with employees.

A limitation of Houston and Marks' (2003) study was that only one question was asked in relation to planning: 'How far have you got with plans to return to work at the end of your maternity leave?' (p. 204). Women were asked to respond to this question with either: (1) 'I have no plan', (2) 'I have thought about how I will do this', or (3) 'I have a clear plan about how I will do this'. As such, the *type* of planning that women who responded to the third option had achieved was not revealed by their data. Interestingly, the two practical implications they outline in their discussion of planning, pertaining to action plans with line managers and time to source childcare, reveals that planning is not a monolithic process. Asking women about whether they have discussed their return to work after maternity leave with their partner and employer would contribute to our understanding of exactly what type of planning women do in preparation for this transition. Similarly, asking women about their plans for the care of their child once back at work and responsibilities for household duties may shed further light on the extent to which women plan for their return to work. Exploring the responses to such broader questions in relation to planning was the first aim of the current study. Specifically, we sought to describe in more detail what type of planning women do during pregnancy for their return to work post birth.

The second aim of the current study was to identify factors that influence employment planning during late pregnancy. As noted above, the act of planning is not a straightforward, monolithic, one-step process — a pregnant woman does not simply get up in the morning, decide ‘I plan to return to work after having the baby’ and then achieves that goal when the time comes. Scholnick and Friedman (1993) have argued in their process model of planning that a plan, itself, is the product of several processes and factors. They outline three initial steps that are involved in the act of planning: representation of the current environment, goal selection, and deciding to plan. While it was not the intention of this research to test the model of planning as described by Scholnick and Friedman specifically, we used their model as a guide to highlight the importance of considering planning from a multifactorial perspective. A model of proposed factors that are associated with planning during pregnancy is presented Figure 1. The rationale for inclusion of these factors in Figure 1 is presented henceforth.

In order to examine planning prospectively, we recruited only women who were pregnant (late pregnancy) and who intended to return to work within the first 12 months after the birth of their baby. In accordance with Houston and Marks’ (2003) study there were two further specific aspects of this goal: the

length of maternity leave as well as how many hours women were intending to work upon their return. Adopting a multifactorial perspective, we considered the representation of a woman’s current environment as including factors pertaining to the woman’s work and factors pertaining to the woman herself. With a paucity of research focused specifically on planning during pregnancy, we turned to the employment literature to source factors that are associated with the transition back to work post birth. Satisfaction with employment conditions has been shown to be important to both mothers and fathers (Brough et al., 2009), leading to higher levels of retention of women after maternity leave (Glass & Riley, 1998). Other studies have revealed a positive relationship between work satisfaction and employee retention in first-year public school teachers (Stockard & Lehman, 2004), hospitality industry employees (Smith, Gregory, & Cannon, 1996), nurses (Hegney, Rogers-Clark, Gorman, Baker, & McCarthy, 2001), and sales employees (Jones, Kantak, Futrell, & Johnston, 1996). Two further aspects of the current work environment may be associated with planning. Greater number of years with employer (work history; Callender, Millward, Lissenburgh, & Forth, 1997) and longer hours worked per week prior to taking maternity leave both been shown to be related positively to a greater likelihood of

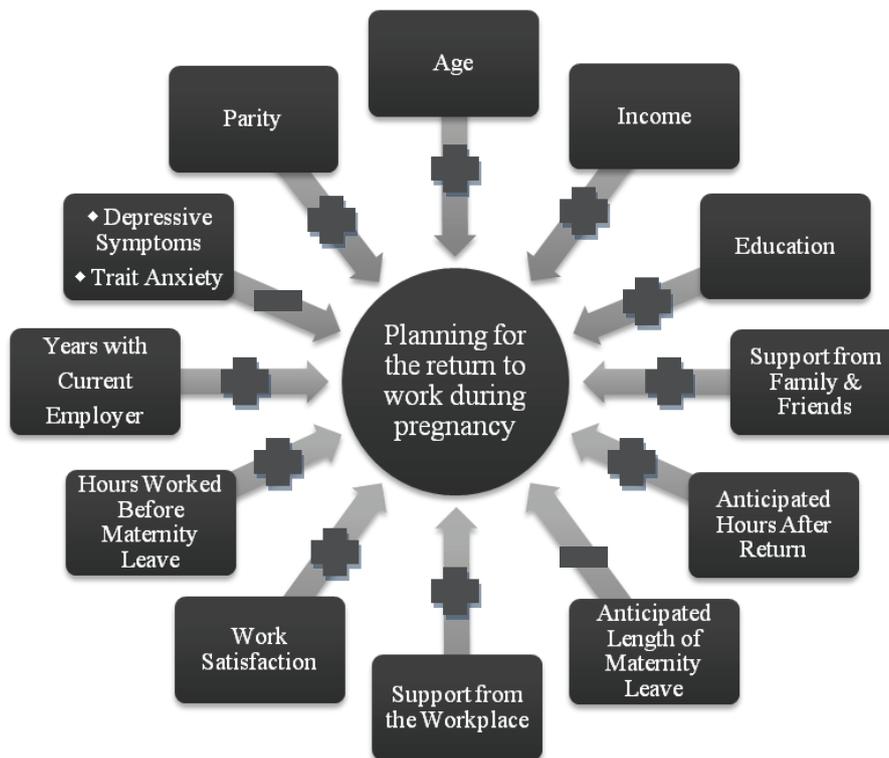


FIGURE 1

A model of proposed factors that are associated with planning during pregnancy (a plus sign (+) suggests a positive association and a subtraction sign (-) suggests a negative association between the respective variable and planning).

returning to work after maternity leave (Klerman & Leibowitz, 1994, 1999).

In relation to the woman herself, we were unable to identify research that has explored the relationship between maternal psychopathology (depressive symptoms and anxiety) and the likelihood of returning to work after maternity leave. The dearth of prior research in this area is surprising given that depressive symptoms during pregnancy are relatively common, with estimates ranging from 10% to 25% of women experiencing depression at this time (Bonari et al., 2004; Field et al., 2004; Milgrom et al., 2008). Klein, Hyde, Essex, and Clark (1998) found that a longer maternity leave is associated with poor mental health. It is possible that women who are experiencing higher levels of depressive symptoms and anxiety during pregnancy may plan less for their return to work than women who are experiencing no such symptoms or lower levels. Moreover, demographic variables pertaining to women that increase the cost of leaving the workforce, such as an older age, higher family income and higher level of education attained, have been shown to be associated positively with the successful return to work after the birth of a baby (Callender et al., 1997; Desai & Waite, 1991; Klerman & Leibowitz, 1994). Interestingly, many studies regarding the return to work after maternity leave, and employed mothers in general, include only first-time mothers (e.g., Desai & Waite, 1991; Gjerdingen & Chaloner, 1994; Houston & Marks, 2003). In this study, we have included both first-time mothers, and multiparous mothers, in order to gain better insight into the planning for the return to work done by both new mothers-to-be and mothers expecting a second or subsequent child. It is possible that women who have already returned to work after maternity leave may plan more for their anticipated return whilst pregnant.

While the return to work is the overall goal for women, it is not possible to achieve this goal if women have not planned for two important factors: the date of their return to work and hence the end of maternity leave, and the hours they will work upon their return to work if they are free to decide this. In relation to a woman's decision to plan, support from her partner, family and friends may also be important factors to consider. In a study with Australian mothers, Harrison and Ungerer (2002) found that women who were employed within 5 months of having a baby were more likely to report feeling supported by friends and family members than women who had not returned to work by 12 months post birth. Workplace support, and supportive relationships in the workplace have also been shown to be significant facilitators of women's return to work after maternity leave (Houston & Marks, 2003).

In short, the second aim of our study was to identify factors that are associated with planning during late pregnancy for the return to work. Based on previous research findings, we hypothesised that older participant age, greater family income, higher education, multiparity, increased work satisfaction, greater number of years with employer, greater hours worked per week prior to taking maternity leave, greater anticipated hours worked upon return to work, greater anticipated support from family and friends, and greater anticipated support from the workplace would predict greater amount of planning done for the return to work during pregnancy. Additionally, increased maternal psychopathology and greater anticipated weeks of maternity leave were hypothesised to have a negative relationship with planning (see Figure 1). We recruited employed women through pregnancy who intended to return to work within 12 months of having their babies, after which time in Australia they are legally expected to return to work or resign from their position (unless alternate arrangements have been made with their employer).

Method

Participants

Pregnant Australian women ($N = 199$) who were intending to return to work within the first 12 months post birth participated in this study via a self-completed questionnaire. All participants were required to be employed to be eligible for the study, although they may have already commenced maternity leave prior to recruitment. An additional 19 women agreed to take part in the study but when sent the first questionnaire they did not return it. Participants were recruited using a variety of methods, such as flyers handed out at parenting expos (11.6%, $n = 23$), emails sent via mailing lists (43.2%, $n = 86$), advertisements in parenting websites and magazines (12.1%, $n = 24$) and in local newspapers (11.6%, $n = 23$). Given that only women who were interested in our study volunteered to take part, a response rate could not be determined. The mean age of participants was 32.6 years ($SD = 4.0$, range = 22 to 41 years), with a mean gestation of 32 weeks ($SD = 5$ weeks). The majority of women were either married (82.4%, $n = 164$), or in a de facto relationship (15.6%, $n = 31$). The participants were primarily born in Australia (80.1%, $n = 125$), as were the participants' mothers (64.7%, $n = 101$) and fathers (57.1%, $n = 89$), with English being the main language spoken at home for the majority (98.7%, $n = 154$); data regarding ethnicity was only available from 160 participants, as the remaining participants did not respond to these questions.

Most of the women, 63.5% ($n = 125$) had completed an undergraduate or postgraduate university

degree, and 65.8% ($n = 129$) reported working in occupations classified as 'Managers and Administrators' (e.g., general manager, school principal, human resource manager), and 'Professionals' (e.g., medical doctor, architect, primary/secondary school teacher) based on the Australian Standard Classification of Occupations Second Edition (ASCO; Australian Bureau of Statistics, 1997). ASCO classifies occupations based on the skill level and the skill specialisation required, and is used by the Australian Bureau of Statistics in all censuses and surveys. The 2006 Australian census indicated that 32.7% of employed women over the age of 15 years were employed in jobs classified as 'Managers and Administrators' and 'Professionals' (Australian Bureau of Statistics, 2008). Tenure in the current job and hours worked per week prior to the commencement of maternity leave varied greatly — mean tenure was 4.62 years ($SD = 3.13$, range = .3 to 18 years), and mean hours worked per week was 37.48 ($SD = 8.96$, range = 8 to 60 hours).

Just over half of the sample (52.3%, $n = 103$) reported their annual family income as being over AUD \$100,000, with 10.2% ($n = 20$) reporting an annual family income of less than \$60,000. Family income was reported on a scale, with 1 representing 'less than \$20,000', 2 representing '\$20,000 to \$39,999', 3 representing '\$40,000 to \$59,999' and so on until 6 representing 'over \$100,000'. Median family income in Australia in 2006 (when most of the data were collected) was \$1,171 per week, equating to an annual family income of \$60,892 (Australian Bureau of Statistics, 2008). Most of the participants were expecting their first child (71.4%, $n = 142$), with 23.1% ($n = 46$) expecting their second child. The proposed length of maternity leave ranged from 6 to 52 weeks ($M = 36.63$ weeks, $SD = 14.34$), with the proposed hours per week to be worked upon return to work ranging from 4 to 60 hours ($M = 25.93$, $SD = 9.94$).

Measures

Demographic and other information. Participants reported their age, parity, gestation, education, marital status, annual household income, years of employment with current employer, employment status (hours worked per week), weeks of planned maternity leave (paid and unpaid), and anticipated number of hours worked upon returning to work after maternity leave.

Depressive and anxiety symptoms. Participants were administered the Edinburgh Post Natal Depression scale (EPND; Cox, 1994; Cox, Holden, & Sagovsky, 1987) to assess the level of depressive symptoms, which, while designed for use in the post-partum period, is also suitable for use in pregnancy (Cox, 1994). Cronbach's alpha, with 9 items instead of 10 (excluding the question regarding self-harm), for the current sample was $\alpha = 0.83$.

The 20-item trait subscale of the State-Trait Anxiety Inventory (STAI; Spielberger, 1983) was used to assess how women 'generally feel'. This subscale has demonstrated good construct validity and test-retest reliability (Spielberger, 1983) and has been used to measure anxiety during pregnancy (Hart & McMahon, 2006). Cronbach's alpha for the current sample was 0.91.

Planning done during pregnancy for the return to work. The amount of planning done by participants during pregnancy for the return to work was measured using a questionnaire developed for this study. The questionnaire consists of eight items regarding planning activities that a woman could complete during pregnancy for her return to work, such as 'I have talked to my partner about when I would like to return to work after maternity leave, and how many hours and days I would like to work' and 'I have organised who would care for our child while I am at work (e.g., my partner, a babysitter)'. Items were rated as 0 = *No, not at all*; 1 = *Did some of, or kind of did this*, and 2 = *Yes, did this completely*, with Cronbach's $\alpha = 0.74$. We developed the items for the planning questionnaire based on informal qualitative discussions with colleagues from the University who had previously been on maternity leave. The items were not pretested, and analyses indicated that the scale was both internally consistent and did not have multicollinearity with any of the other scales included in the study.

Work satisfaction. Participant's work satisfaction was measured using the Minnesota Satisfaction Questionnaire-Short Form (MSQ; Weiss, Dawis, England, & Lofquist, 1967), a 20-item scale which addresses various aspects of an employee's satisfaction with their job, such remuneration, how their supervisor interacts with his/her employees, and how their colleagues get along. Responses are given on a Likert scale from 1 ('*Very dissatisfied*') to 5 ('*Very satisfied*'). The MSQ has been used in many studies, and is regarded as one of the most reliable and valid measures of work satisfaction (Ozyurt, Hayran, & Sur, 2006; VanVoorhis & Levinson, 2005; Welbourne, Eggerth, Hartley, Andrew, & Sanchez, 2007). Cronbach's alpha for the current sample was 0.89.

Anticipated support from the family and social group, and the workplace. Participants were asked to specify the amount of support they expected they would receive from their family and social group (their partner, parents and in-laws, and other family and friends), and their workplace (their employer, and colleagues). Items were rated on a Likert scale from 0 (*Untrue*) to 4 (*True*). This scale was based on the measures used by Houston and Marks (2003) and made a distinction between physical support and emotional support. For example, 'After the baby is born, I

think my partner will give me enough physical support, such as taking care of the baby, or helping with errands and household chores' and 'After the baby is born, I think my partner will give me enough emotional support, such as listening to my concerns, or being there for me'. The questionnaire contained 10 items in total, one question regarding physical support and one regarding emotional support, for each source of support. Cronbach's alphas for the family and social group items were 0.70, and for the workplace items was 0.85.

Procedure

Following university ethics approval, pregnant women were recruited from advertisements placed at prenatal exercise class venues, in a university newsletter, and on pregnancy websites, and from flyers left in obstetricians' waiting rooms. Advertisements invited pregnant women to participate in a study on the transition back to work after maternity leave. Women who were interested in participating contacted the researchers by telephone or email; at this point, prospective participants were screened to ensure that only women who were currently pregnant and who intended to return to work within the first 12 months post-birth were recruited. Prospective participants were informed of

the general nature of the study, but were naïve to the specific hypotheses of the overall study. While participants were recruited at any stage during pregnancy, the questionnaire package was only sent to participants for completion once they had reached the third trimester of pregnancy. This time point in pregnancy was chosen to ensure that women had sufficient opportunity to consider issues such as returning to work, sources of support, and childcare. Participants were sent the questionnaire pack by post, which included a reply-paid envelope for participants to return their completed questionnaire.

Results

All variables were normally distributed with the exception of Years with Current Employer, Work Satisfaction, Maximum Weeks of Maternity Leave, and Hours Worked Before Maternity Leave. Transformations, as suggested by Pallant (2005), were successful in normalising these data (logarithm for Years with Current Employer, and reflection then square root for the remaining variables).

Types of Planning Done During Pregnancy

The percentages of women who had done each planning activity, along with means and standard deviations, are

TABLE 1

Mean, Standard Deviation, Percentage of Participants' Answers and Factor Loadings for Each Item in the 'Planning During Pregnancy' Questionnaire

	Mean (SD) ^a	Answered 'No, not at all' (%)	Answered 'Did some of, or kind of did this' (%)	Answered 'Yes, did this completely' (%)	Planning for childcare (rotated Eigenvalue = 1.99)	Planning with Partner (rotated Eigenvalue = 1.72)	Planning with Employer (rotated Eigenvalue = 1.67)
1. Talked to partner about length of leave and hours/days upon return	1.73 (.49)	2	23.1	74.9	.07	.60 ^b	.45
2. Talked to employer about length of leave	1.66 (.60)	6.5	21.1	72.4	.12	-.03	.85 ^b
3. Talked to employer about hours/days upon return	1.19 (.79)	23.6	33.7	42.7	.18	.11	.81 ^b
4. Organised childcare	1.13 (.69)	17.9	51	31.1	.70 ^b	-.08	.24
5. Organised back-up for childcare if original arrangement fell through	.40 (.63)	68.3	23.6	8	.77 ^b	.21	.17
6. Organised occasional back-up childcare	.48 (.69)	63.3	25.6	11.1	.76 ^b	.39	.03
7. Talked to partner about organising family chores	.82 (.70)	34.8	48	17.2	.11	.85 ^b	.00
8. Talked to partner about organising childcare in an emergency	.45 (.67)	65.3	24.6	10.1	.54	.66 ^b	-.10

Note: ^a Range of scores for 'Planning During Pregnancy' Questionnaire = 0–2

^b Factor loading accepted for allocation to planning factors.

shown in Table 1. The majority of women (74.9%, $n = 149$) reported that they had completely discussed the length of their maternity leave, and the number of hours and days they would like to work, with only four women in the sample reporting that they had not discussed this at all with their partner. Similarly, the majority of women had completely discussed the proposed length of their maternity leave with their employer (72.4%, $n = 144$). Fewer women had made plans for alternative or back-up childcare, with 68.3 per cent ($n = 136$) and 63.3 per cent ($n = 126$) stating that they had not done any planning for such events.

Preliminary analyses confirmed the suitability of the data for factor analysis (Pallant, 2005). The eight items in the Planning During Pregnancy questionnaire were analysed using Principal Components Analysis (PCA), with a Varimax rotation. Three factors were derived explaining 67.21 % of the total variance; these factors were 'Planning for Childcare', 'Planning with Partner' and 'Planning with Employer'. Planning for Childcare included items 4, 5, 6 (Rotated Eigenvalue = 1.99; Cronbach alpha = .68). Planning with Partner included items 1, 7 and 8 (Rotated Eigenvalue = 1.72; Cronbach alpha = .64) and Planning with Employer included items 2 and 3 (Rotated Eigenvalue = 1.67; Cronbach alpha = .68; see Table 1). The reliability of the three factors was reasonable given that Cronbach alpha is sensitive to the number of items in a scale (i.e., higher alpha coefficients are more likely to be obtained with a greater number of items, see Cortina, 1993). Items were included in the factor to which it loaded most strongly.

The mean scores (and *SDs*) for the Planning with Partner, Planning with Employer, and Planning for Childcare subscales are presented in Table 2. The scores for these subscales were standardised and pair-wise *t* tests were conducted to assess differences between the means of the subscales; no statistically significant differences found (all *ps* > .05). Almost all women had completed at least some Planning with Partner (98 per cent, $n = 194$) and Planning with Employer (94%, $n = 187$). Fewer women, albeit still a majority, had completed at least some Planning for Childcare (84.7%, $n = 169$). As can be seen in Table 2, each of the three subscales were significantly correlated with each other.

Cross-Sectional Predictors of Planning During Pregnancy

Preliminary correlations among hypothesised predictor and outcome variables (see Table 2) revealed significant correlations between variables, but no multicollinearity. A series of three hierarchical regressions were performed to assess the concurrent prediction of the different aspects of planning (Planning for Childcare, Planning with Partner, and Planning with Employer). In Step 1, participant age, annual family income, participant edu-

cation level, parity, depressive symptoms, trait anxiety, work satisfaction, years with current employer and hours worked before birth were entered. The goal variables, anticipated weeks of maternity leave, anticipated hours on return, and anticipated support variables, were entered in Step 2.

For the Planning for Childcare subscale, the first step accounted for 12% of the variance, $F(9, 177) = 2.65$, $p = .01$, $R^2 = .12$; the addition of Step 2 added a further 9% to the prediction, $F\Delta(4, 173) = 4.76$, $p < .00$, $\Delta R^2 = .09$. As can be seen in Table 3, Participant Age was a significant predictor in Step 1 only, whereas Work Satisfaction was a significant predictor in both Steps 1 and 2. Hours Worked Before Maternity Leave, Anticipated Weeks of Maternity Leave, and Anticipated Hours per Week on Return were significant predictors in Step 2.

For Planning with Partner, the first step accounted for 5% of the variance, however this was not significant, $F(9, 177) = 1.00$, $p = .44$, $R^2 = .05$; Step 2 added 7% to the prediction, $F\Delta(4, 173) = 3.26$, $p = .01$, $\Delta R^2 = .07$. As displayed in Table 4, no variables emerged as significant predictors in Step 1. Anticipated Hours per Week on Return and Anticipated Support from Family and Friends emerged as a significant predictors of Planning with Partner in Step 2.

For Planning with Employer, Step 1 accounted for 12% of the variance, $F(9, 177) = 2.77$, $p = .005$, $\Delta R^2 = .12$, the addition of Step 2 accounted for an additional 9% of the variance, $F\Delta(4, 173) = 5.1$, $p = .001$, $\Delta R^2 = .09$. As shown in Table 5, Work Satisfaction was a significant predictor in Step 1 only. In Step 2, Anticipated Weeks of Maternity Leave, Anticipated Hours per Week on Return, and Anticipated Workplace Support significantly predicted Planning with Employer in Step 2.

Discussion

In the only previous prospective study found on women's return to work after maternity leave, Houston and Marks (2003) reported that planning was a vital factor in enabling women to return to work as they had intended. Their findings supported Bagozzi's (2002) theory of self-regulation, which states that acts such as planning are necessary for intentions to be fulfilled. The results of the current study indicate that women varied in the amounts of planning activities done during pregnancy according to the type of activity. For instance, most women reported that they had discussed the proposed length of their maternity leave with their partner and their employer, while few women reported that they had made arrangements for childcare in emergency situations. Additionally, the findings revealed three components of planning — Planning for Childcare, Planning with Partner, and Planning with Employer — with each of these components encompassing different

TABLE 2
Intercorrelations, Means, Standard Deviations and Score Range for Variables Included in the Regression Analyses

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
1 Planning for childcare subscale		.52b	.31b	-.8	.03	-.02	.17a	-.05	-.06	.25b	.05	-.13	-.24b	.12	.11	.17a
2 Planning with partner subscale			.19b	-.09	.03	-.07	.01	-.04	-.09	.14	.03	.04	-.06	.19b	.17a	.11
3 Planning with employer subscale				.11	.18a	.15a	.01	-.10	-.11	.32b	.15a	.06	-.17a	.17a	-.00	.32b
4 Participant age					.41b	.10	.23b	-.13a	-.12a	.10	.23b	-.06	-.04	.02	-.19b	.05
5 Annual family income						.17b	-.07	-.23b	-.20b	.25b	.10	.31b	-.09	.14a	-.03	.14a
6 Participant education level							-.19b	-.12	-.13a	.32b	-.07	.16b	.02	-.00	-.05	.09
7 Parity								-.02	.02	.04	.20b	-.47b	-.09	-.11	-.12	.05
8 Depressive symptoms									.70b	-.26b	-.03	.03	.05	.06	-.24b	-.25b
9 Trait anxiety										-.31b	-.03	-.03	-.05	.01	-.25b	-.32b
10 Work satisfaction											.16b	.03	.06	.03	.17b	.49b
11 Years with current employer												.07	-.11	.12	.01	.16b
12 Hours worked before maternity leave													-.05	.44b	-.04	-.05
13 Anticipated weeks of maternity leave														-.02	.04	-.01
14 Anticipated hours per week on return															-.21b	-.07
15 Anticipated support from family and friends																.26b
16 Anticipated workplace support																
Score range	0-6	0-6	0-4	22-41	1-6	1-5	1-4	0-27	0-80	0-100	3-17	15-52	6-52	4-50	0-20	0-16
M	2.01	2.99	2.85	32.6	5.21	3.78	1.36	7.32	37.69	75.53	4.59	37.4	36.44	25.71	18.58	10.17
SD	1.57	1.43	1.22	4.00	1.02	1.09	0.63	4.29	8.35	11.11	3.68	8.07	14.31	9.53	3.95	3.86

Note: ^a significant at .05; ^b significant at .01

TABLE 3

Summary of Hierarchical Regression Analysis for Variables Predicting Planning for Childcare Subscale

Variable	B	SE B	b
Step 1			
Participant age	-.07	.03	-.18 ^a
Annual family income	.14	.13	.09
Participant Education Level	-.07	.11	-.05
Parity	.35	.21	.14
Depressive symptoms	.01	.04	.03
Trait anxiety	-.04	.24	-.02
Work satisfaction	.34	.11	.25 ^b
Years with current employer	.10	.33	.02
Hours worked before maternity leave	-.17	.14	-.11
Step 2			
Participant age	-.06	.03	-.16
Annual family income	.18	.13	.12
Participant education level	-.03	.11	-.02
Parity	.26	.21	.11
Depressive symptoms	-.01	.04	-.01
Trait anxiety	.12	.23	.05
Work satisfaction	.26	.12	.19 ^a
Years with current employer	.13	.33	.03
Hours worked before maternity leave	-.34	.15	.21 ^a
Anticipated weeks of maternity leave	.16	.05	.21 ^b
Anticipated hours per week on return	.04	.01	.23 ^b
Anticipated support from family and friends	.04	.03	.11
Anticipated workplace support	.02	.03	.04

Note: R² = .12 for Step 1; ΔR² = .09 for Step 2.
^a significant at .05; ^b significant at .01

TABLE 4

Summary of Hierarchical Regression Analysis for Variables Predicting Planning with Partner Subscale

Variable	B	SE B	b
Step 1			
Participant age	-.05	.03	-.13
Annual family income	.06	.13	.04
Participant education level	-.15	.11	-.12
Parity	.07	.20	.03
Depressive symptoms	.01	.04	.03
Trait anxiety	-.17	.22	-.08
Work satisfaction	.19	.10	.15
Years with current employer	.04	.32	.01
Hours worked before maternity leave	.06	.13	.04
Step 2			
Participant age	-.03	.03	-.09
Annual family income	.07	.13	.05
Participant education level	-.10	.11	-.08
Parity	.07	.20	.03
Depressive symptoms	.01	.03	.03
Trait anxiety	-.07	.22	-.03
Work satisfaction	.12	.11	.10
Years with current employer	-.04	.31	-.01
Hours worked before maternity leave	-.09	.14	-.07
Anticipated weeks of maternity leave	-.03	.05	-.05
Anticipated hours per week on return	.04	.01	.26 ^b
Anticipated support from family and friends	.07	.03	.19 ^a
Anticipated workplace support	.01	.03	.03

Note: R² = .05 for Step 1; ΔR² = .07 for Step 2.
^a significant at .05; ^b significant at .01

TABLE 5

Summary of Hierarchical Regression Analysis for Variables Predicting Planning with Employer Subscale.

Variable	B	SE B	b
Step 1			
Participant age	.01	.03	.03
Annual family income	.10	.10	.09
Participant education level	.06	.09	.05
Parity	-.04	.16	-.02
Depressive symptoms	.00	.03	.00
Trait anxiety	-.01	.18	-.01
Work satisfaction	.27	.09	.26 ^b
Years with current employer	.36	.26	.11
Hours worked before maternity leave	.01	.11	.00
Step 2			
Participant age	.01	.03	.03
Annual family income	.11	.10	.10
Participant education level	.08	.09	.07
Parity	-.12	.16	-.06
Depressive symptoms	-.01	.03	-.04
Trait anxiety	.12	.18	.07
Work satisfaction	.15	.09	.14
Years with current employer	.34	.25	.10
Hours worked before maternity leave	-.10	.11	.08
Anticipated weeks of maternity leave	.10	.04	.18 ^a
Anticipated hours per week on return	.02	.01	.18 ^a
Anticipated support from family and friends	-.01	.02	-.04
Anticipated workplace support	.08	.03	.24 ^b

Note: $R^2 = .12$ for Step 1; $\Delta R^2 = .09$ for Step 2.^a significant at .05; ^b significant at .01

aspects of the planning that women may complete for their return to work after maternity leave. Interestingly, women were no more likely to complete one of the components of planning than any of the others. Our findings extend those reported by Houston and Marks, and suggest that, in accordance with Scholnick and Friedman's (1993) process model of planning, planning is not a simple, one-step event, but rather a process that is composed of multiple steps and activities.

Several factors emerged as consistent predictors of the three components of planning. In partial support of our hypotheses, women who had greater levels of work satisfaction anticipated that they would take fewer weeks of maternity leave and would work more hours per week upon their return to work were more likely to engage in greater amounts of planning for their return to work. Moreover, women who worked fewer hours before commencing maternity leave were also more likely to engage in greater amounts of planning. Given that planning is a predictor of women's return to work after maternity leave (Houston & Marks, 2003), these results support the notion that work satisfaction plays an important role in retaining employees, particularly following maternity leave (Glass & Riley, 1998). Anticipated support was also important, however, only in the related components, and not at all for Planning for Childcare. This expands on the findings of Houston

and Marks (2003), as it indicates that support may have a positive influence on whether a woman returns to work as she had intended, and also on the amount of planning she completes for her return. Additionally, the role of these factors in facilitating planning is consistent with the concept of planning as a process (Scholnick & Friedman, 1993).

Limitations

Our findings revealed that family income, age, and level of education attained did not predict, cross-sectionally, planning during pregnancy despite these demographic factors having been shown to be associated positively with the successful return to work after the birth of a baby (Callender et al., 1997; Desai & Waite, 1991; Klerman & Leibowitz, 1994). Given that personal income has been shown to be associated with returning to work after maternity leave (Houston & Marks, 2003), the exclusion of personal income is a limitation of our study; future studies should measure both personal and overall family income. However, as noted above, our findings suggest that planning for the return to work is a complex and multi-faceted process; personal income alone is not likely to be the only factor responsible for the women's return to work after maternity leave. Additionally, caution must be taken when comparing Australian data with data from other coun-

tries that do have statutory paid maternity leave entitlements. It would also be beneficial for future studies to examine a planning scale with a greater number of items. Despite the fact that at least two items are required to calculate Cronbach's alpha (Bland & Altman, 1997) and there appears to be no stipulated minimum number of items required (Parkerson, Broadhead, & Tse, 1990; Pettersen, Veenstra, Guldvog, & Kolstad, 2004), a two-item subscale is potentially less than optimal.

Additional methodological limitations of the present study include the fact that data were based on self-report and most, but not all, participants were tertiary educated with relatively high family incomes. Replication with a larger percentage of women from low socioeconomic groups and other methods that do not rely solely on self-reports (such as partner/employer reports) is needed. Furthermore, the method of recruitment did not permit calculation of a response rate and, as in most volunteer-based research, it is possible that women who self-selected to participate in the study were different from the general population. While women who volunteered to take part were informed simply that: 'The questionnaires include questions on your feelings about working, being a mother, and the support you receive from various people', it is possible that women who self-selected were women who do more planning to begin with. These limitations relating to sample selection need to be considered in future research. It is clear from the results of this study that further research into the factors that positively contribute to planning for the return to work after maternity leave, and for the return to work itself, are necessary. The women in the current study have agreed to be tracked during their first year postpartum. This prospective study, which is currently underway, further investigates the impact of planning, among other factors, on women's return to work after maternity leave.

Practical Implications

Given that planning has been shown to be an important predictor of whether a woman returns to work after the birth of her child, the identification of factors that predict planning is important. While women may have less control over some of the factors identified (for example the number of weeks maternity leave, and the anticipated number of hours to be worked per week upon the return to work), because these are likely to be influenced by other aspects of the environment, such as finances or role requirements, the findings of our study identified factors that may be under the control of a woman, her employer, her family and her friends. Family and friends of women who are pregnant should convey their intentions to support them, both physically and emotionally, after the birth.

Employers and women can work together to endeavour to increase work satisfaction, which was a consistent

positive predictor of planning. Of course, work satisfaction is influenced by numerous factors, and not just those relating to maternal employment; hence, employers need to consider strategies that encompass all aspects of work satisfaction. For instance, coaching employees to help resolve work or career issues (Rowold, 2008), and viewing employees as 'customers' by attempting to satisfy their needs and wants (Rust, Stewart, Miller, & Pielack, 1996) have been proposed as methods of increasing work satisfaction. More directly related to maternal employment, employers could introduce a 'return to work program' for women before they commence maternity leave, which could include processes to ensure both employee and employer cover as many aspects of the return to work as possible. While not all of the issues pertaining to the return to work after maternity leave are specific to the workplace, employers would be wise to not ignore these factors. The management and retention of talent are vital issues for organisations; consequently, developing more effective return to work planning processes, and creating more satisfying work environments that can increase employee retention are important activities for employers.

References

- Ajzen, I. (1991). The theory of planned behavior. *Organizational Behavior and Human Decision Processes*, 50, 179–211.
- Australian Bureau of Statistics (1997). *Australian Standard Classification of Occupations (ASCO)* (2nd ed.). Canberra, Australia: Australian Bureau of Statistics.
- Australian Bureau of Statistics (2008). *Census of Population and Housing (Australia: 2006)*. Canberra, Australia: Australian Bureau of Statistics.
- Bagozzi, R.P. (1992). The self-regulation of attitudes, intentions, and behavior. *Social Psychology Quarterly*, 55(2), 178–204.
- Baxter, J., Gray, M., Alexander, M., Strazdins, L., & Bittman, M. (2007). *Mothers and fathers with young children: Paid employment, caring and wellbeing*: Department of Families, Community Services and Indigenous Affairs, Australia.
- Bonari, L., Pinto, N., Ahn, E., Einarson, A., Steiner, M., & Koren, G. (2004). Perinatal risks of untreated depression during pregnancy. *Canadian Journal of Psychiatry*, 49(11), 726–735.
- Brough, P., O'Driscoll, M., & Biggs, A. (2009). Parental leave and work–family balance among employed parents following childbirth: an exploratory investigation in Australia and New Zealand. *K tuitui: New Zealand Journal of Social Sciences Online*, 4, 71–87.
- Callender, C., Millward, N., Lissenburgh, S., & Forth, J. (1997). Maternity rights and benefits in Britain 1996. *Department of Social Security Research Report No. 61*.
- Campbell, I., & Charlesworth, S. (2004). *Key work and family trends in Australia*. Melbourne, Australia: RMIT University, Centre for Applied Social Research.
- Cortese, D. (2001). *Factors influencing the return to work from maternity leave of Victorian Registered Nurses*. Unpublished Masters thesis, La Trobe University.

- Cortina, J. (1993). What is coefficient alpha? An examination of theory and applications. *Journal of Applied Psychology*, 78, 98–104.
- Cousins, C.R., & Tang, N. (2004). Working time and work and family conflict in the Netherlands, Sweden and the UK. *Work, Employment and Society*, 18(3), 531–549.
- Cox, J. (1994). Origins and development of the 10-item Edinburgh postnatal depression scale. In J. Cox & J. Holden (Eds.), *Perinatal psychiatry: Use and misuse of the Edinburgh postnatal depression scale*. London: Gaskell.
- Cox, J., Holden, J., & Sagovsky, R. (1987). Detection of postnatal depression: Development of the Edinburgh postnatal depression scale. *British Journal of Psychiatry*, 150, 782–786.
- Desai, S., & Waite, L.J. (1991). Women employment during pregnancy and after the 1st birth: Occupational characteristics and work commitment. *American Sociological Review*, 56(4), 551–566.
- Field, T., Diego, M., Dieter, J., Hernandez-Rief, M., Schanberg, S., Kuhn, C., et al. (2004). Prenatal depression effects on the foetus and the newborn. *Infant Behavior & Development*, 27(2), 216–229.
- Gjerdingen, D., & Chaloner, K. (1994). The relationship of women's postpartum mental health to employment, childbirth, and social support. *Journal of Family Practice*, 38(5), 465–472.
- Glass, J., & Riley, L. (1998). Family responsive policies and employee retention following childbirth. *Social Forces*, 76(4), 1401–1435.
- Harrison, L.J., & Ungerer, J.A. (2002). Maternal employment and infant–mother attachment security at 12 months postpartum. *Developmental Psychology*, 38(5), 758–773.
- Hart, R., & McMahon, C.A. (2006). Mood state and psychological adjustment to pregnancy. *Archives of Women's Mental Health*, 9(6), 329–337.
- Hegney, D., Rogers-Clark, C., Gorman, D., Baker, S., & McCarthy, A. (2001). *Factors influencing the recruitment and retention of nurses in rural and remote areas in Queensland*. Toowoomba, Australia: University of Southern Queensland.
- Houston, D., & Marks, G. (2003). The role of planning and workplace support in returning to work after maternity leave. *British Journal of Industrial Relations*, 41(2), 197–214.
- Hyde, J., Essex, M., Clark, R., Klein, M., & Byrd, J. (1996). Parental leave: Policy and research. *Journal of Social Issues*, 52(3), 91–109.
- Jones, E., Kantak, D.M., Futrell, C.M., & Johnston, M.W. (1996). Leader behavior, work-attitudes, and turnover of sales people: An integrative study. *Journal of Personal Selling and Sales Management*, 16(2), 13–23.
- Klein, M., Hyde, J., Essex, M., & Clark, R. (1998). Maternity leave, role quality, work involvement, and mental health one year after delivery. *Psychology of Women Quarterly*, 22, 239–266.
- Klerman, J.A., & Leibowitz, A. (1994). The work–employment distinction among new mothers. *Journal of Human Resources*, 29(2), 277–303.
- Klerman, J.A., & Leibowitz, A. (1999). Job continuity among new mothers. *Demography*, 36(2), 145–155.
- Milgrom, J., Gemmill, A., Bilszta, J., Hayes, B., Barnett, B., Brooks, J., et al. (2008). Antenatal risk factors for postnatal depression: A large prospective study. *Journal of Affective Disorders*, 108, 147–157.
- Ozyurt, A., Hayran, O., & Sur, H. (2006). Predictors of burnout and job satisfaction among Turkish physicians. *QJM-An International Journal of Medicine*, 99(3), 161–169.
- Pallant, J.F. (2005). *SPSS survival manual* (2nd edition ed.). Sydney, Australia: Allen & Unwin.
- Parkerson, Jr., G., Broadhead, W., & Tse, C. (1990). The Duke Health Profile: A 17-Item Measure of Health and Dysfunction. *Medical Care*, 28 (11), 1056–1072.
- Petterson, K., Veenstra, M., Guldvog, B., & Kolstad, A. (2004). The Patient Experiences Questionnaire: Development, validity and reliability. *International Journal for Quality in Health Care*, 16 (6), 453–463.
- Robinson, S., Davey, B., & Murrells, T. (2003). Family-friendly policies: General nurses' preferences and experiences. *Journal of Health Organization and Management*, 17(6), 422–437.
- Rowold, J. (2008). Multiple effects of human resource development interventions. *Journal of European Industrial Training*, 32(1), 32–44.
- Rust, R., Stewart, G., Miller, H., & Pielack, D. (1996). The satisfaction and retention of frontline employees: A customer satisfaction measurement approach. *International Journal of Service Industry Management*, 7(5), 62–80.
- Scholnick, E.K., & Friedman, S.L. (1993). Planning in context: Developmental and situational considerations. *International Journal Of Behavioral Development*, 16(2), 145–167.
- Skouteris, H., McNaught, S., & Dissanayake, C. (2007). Mothers' transition back to work and infants' transition to child care: Does work-based child care make a difference? *Child Care in Practice*, 13(1), 33–47.
- Smith, K., Gregory, S., & Cannon, D. (1996). Becoming an employer of choice: Assessing commitment in the hospitality workplace. *International Journal of Contemporary Hospitality Management*, 8(6), 3–9.
- Spielberger, C. (1983). *Manual for the state-trait anxiety inventory (form y)*. Palo Alto, CA: Consulting Psychologists Press.
- Stockard, J., & Lehman, M.B. (2004). Influences on the satisfaction and retention of 1st-year teachers: The importance of effective school management. *Educational Administration Quarterly*, 40(5), 742–771.
- VanVoorhis, R.W., & Levinson, E.M. (2005). Job satisfaction among school psychologists: A meta-analysis. *School Psychology Quarterly*, 21(1), 77–90.
- Weiss, D.J., Dawis, R.V., England, G.W., & Lofquist, L.H. (1967). *Manual for the Minnesota Satisfaction Questionnaire*. Minneapolis: University of Minnesota, Industrial Relation Center.
- Welbourne, J.L., Eggerth, D., Hartley, T.A., Andrew, M.E., & Sanchez, F. (2007). Coping strategies in the workplace: Relationships with attributional style and job satisfaction. *Journal of Vocational Behavior*, 70(2), 312–325.

