Post-retirement work: The individual determinants of paid and volunteer work

Barbara Griffin* and Beryl Hesketh
The University of Western Sydney, Australia

This research investigates the prediction of post-retirement work. Unlike prior research, we examined both paid and volunteer post-retirement work, showing the similarities and differences in their prediction. Using multinomial logistic regression analysis, a framework based on image theory was tested, which included evaluations of pre-retirement work, attitudes to retirement, behavioural style and demographics, and used to predict both intentions to work in retirement in a pre-retiree sample \((N = 987)\) and actual work in retirement in a sample of retirees \((N = 725)\). Both volunteer and paid post-retirement work were strongly related to people’s evaluation of their pre-retirement work and for pre-retirees, a proactive style of behaviour was also predictive. However, gender, health and retirement satisfaction more related to volunteer work and education to paid work.

Large numbers of Baby Boomers are heading towards retirement – retirements that might be quite different from that of previous generations due to changing social, health and economic conditions. One difference apparent from current trends is the likelihood that involvement in post-retirement work will become increasingly important (Weckerle & Shultz, 1999). Part-time or casual work in retirement, often referred to as ‘bridge employment’, is thought to have a number of key individual, organizational and societal benefits. For individuals, it helps provide time structure and additional finance, and is associated with psychological well-being (Herzog, House, & Morgan, 1991) and adjustment to retirement (Feldman, 1994), all of which may be especially important because greater life expectancy and the tendency for early retirement mean longer periods of time now being spent in retirement (Shultz, 2003). Organizations face increasing skills shortage so that they will benefit from being able to draw on a pool of skilled and experienced workers (Hansson, DeKoekkoek, Neece, & Paterson, 1997; Talaga & Beehr, 1995). At a broader societal level, bridge employment will result in fewer people having financial dependence on social security which has the potential for significant economic benefit. The financial implications of post-retirement work are particularly salient in light of research which suggests that few of those currently facing...
retirement have enough savings to sustain their current standard of living (Taylor & Doverspike, 2003).

Given the benefits of engaging in some work activity post-retirement, it is somewhat surprising that very little research has investigated the factors that influence the decision to engage in such employment. Retirement is a significant stage of life and decisions related to retirement are complex and likely to involve a variety of factors (Bidewell, Griffin, & Hesketh, 2006). Feldman (1994) suggests that image theory (Mitchell, Rediker, & Beach, 1986) provides a useful framework for understanding decisions related to retirement. Image theory describes how people make the major decisions that affect their lives, proposing a set of ‘images’ as the basic elements that inform choices on future courses of action. The trajectory image is the preferred course of action or future outcome, goals and events that one thinks is appropriate and wants to achieve. In the current study, the trajectory image is the dependent variable: engagement in post-retirement work. The trajectory image is informed by the self-image, which consists of beliefs and values concerning one’s current circumstances, the projected image, which includes the person’s affective attitudes to the anticipated future state, and the action image which comprises the plans, tactics and behaviour that will allow one to achieve the goals of the trajectory image. The trajectory image is also affected by existing facts or ‘hard data’ that would likely impede or assist in attaining the outcomes (Mitchell et al., 1986 p. 305). In applying this framework to the decision about engaging in post-retirement work, we suggest that the self-image will include evaluation or image of one’s current (pre-retirement) work so that those with negative evaluations of their pre-retirement work will be less likely to engage in post-retirement work. The projected image will involve attitudes or expectations about one’s future life in retirement and will be related to the trajectory image; and we expect that those people whose action image includes a proactive behaviour style will be most likely to engage in post-retirement work. The ‘hard data’ influencing these future plans and goals will include existing demographic characteristics.

The current study investigates how well this framework predicts whether or not a person who has not yet retired intends to engage in post-retirement work in a sample of pre-retired, older employees and also assesses the retrospective assessment of the impact of the framework on an already retired sample’s actual engagement in post-retirement work. Our use of prospective data with respect to the current employees is justified by widespread support for the theory of planned behaviour (Ajzen, 1991), showing that an individual’s intention to perform a certain behaviour (including job-search behaviours (e.g. Wanberg, Glomb, Song, & Sorenson, 2005)) is the immediate determinant of the behaviour. The use of ‘intentions’ is also common in research that examines prediction of expected retirement age where Adams (1999) argues for the fidelity of intentions as an outcome measure due to there being sufficient empirical evidence to show that intentions to retire are related to actual retirement.

**Trajectory image: The dependent variable**

As indicated above, we investigate the proposed image theory framework in two samples, with the dependent variable being intentions to engage in post-retirement work in the pre-retiree sample and actual engagement in post-retirement work in the retiree sample. In conceptualizing the trajectory image, we argue that it is important to address the issue of volunteer work. Apart from meeting the need for finance, volunteer work has the potential to achieve many of the same positive individual outcomes for
retirees as paid work (Hornstein & Wapner, 1985; Kim & Feldman, 2000) while also benefiting the community (Chamber, 1993). Furthermore, existing research has shown that many of the demographic predictors of volunteer work are the same as those that predict paid work (see Choi, 2003). Hence, there is a possibility that research which only compares those who engage in paid bridge work with those who do not, may not capture differences because the ‘not working’ group could include those who are actually working, but in a volunteer capacity. In the current study we include, and study separately, voluntary work, first to ensure that all types of post-retirement work are accounted for and secondly, to investigate if any of the proposed factors differentially predict a person’s intention to engage in or actual engagement in voluntary or paid work.

As will be discussed in greater detail in the Method section, the dependent variable in the current study is a categorical variable with four categories: ‘no work’, ‘paid work’ ‘volunteer work’ and ‘both paid and volunteer work’. As such the analysis must use multinomial logistic regression (Zickar & Gibby, 2003) which, in this case, assesses the likelihood of a participant being in the ‘paid’, ‘volunteer’ or ‘both’ categories compared to the reference or ‘no work’ category.

In summary, the current study will contribute to our understanding of post-retirement work activity because it investigates the validity of factors derived from image theory to predict intentions to engage in post-retirement, cross-validates these in a sample of already-retired individuals, and captures both paid and volunteer work. The following sections elaborate on each of the predictors, examining the extant empirical research in relation to both volunteer and paid (or bridge) employment in retirement.

**Self-image: Image of current (pre-retirement) work**

In image theory, future choices are said to be driven by the need to sustain a stable self-image. This is similar to Atchley’s (1989) continuity theory, which proposes that as people age they need continuity in their daily contexts and will seek to achieve this by maintaining those activities that have the most personal meaning and value. Work is thought to be meaningful for people because it fulfils a number of needs beyond the provision of finance, including the need for time structure, social outlet and generativity (Jahoda, 1982; Mor-Barak, 1995; Warr, Butcher, Robertson, & Callinan, 2004). Loss of meaning from work can result in low job satisfaction, feelings of being ‘burned out and old’ (Locke & Taylor, 1990 p. 163). We therefore suggest that if a person views their pre-retirement work as meaningful then they are more likely to consider engaging in post-retirement work but if pre-retirement work has lost its meaning then a person will be less likely to consider post-retirement work.

Previous research that has examined work-related variables in relation to bridge employment has focused on more objective factors such as tenure (Kim & Feldman, 2000) and the availability of flexible job options (Shultz, 2003). Heindel and Adams (1999) appear to be the only ones that have investigated attitudes to pre-retirement work in the context of predicting post-retirement work. They found that job involvement and career commitment predicted intention to engage in bridge employment in an area similar to their pre-retirement career but were unrelated to intention to work in bridge employment in a different area. Related research that predicts choice of early retirement (e.g. Beehr, Glazer, Nielson, & Farmer, 2000) has shown the influence of work-related attitudes. We suggest that similar work-related variables that act to delay retirement will also influence whether or not a person engages
in work activity, either paid or as a volunteer, in retirement. Two factors that predict retirement age, being tired of work (Beehr et al., 2000; Bidewell et al., 2006) and work overload (Lin & Hsieh, 2001) are included in the current study. We note that, given the cross-sectional nature of the current research, these evaluations will be retrospective data for the retiree sample. Beehr and Nielsen (1995) provide some support for the validity of retrospective evaluations of work.

In summary, a person's image or evaluation of his/her current (i.e. pre-retirement) work will affect his/her intention to engage in some form of work in retirement so that:

1a. The more tired of work a person feels the less likely they will be intending to engage in either paid and/or voluntary post-retirement work compared to not working in retirement.

2a. The more overloaded at work a person feels the less likely they will be intending to engage in either paid and/or voluntary post-retirement work compared to not working.

For those who have already retired this will mean:

1b. The more a person remembers feeling tired of work in their preretirement job, the less likely they will have actually engaged in either paid and/or voluntary post-retirement work.

2b. The more a person remembers feeling overloaded in their preretirement work, the less likely they will have actually engaged in either paid and/or voluntary post-retirement work.

Projected image: Attitude to life in retirement

As discussed, image theory suggests that one’s evaluation of future circumstances will be related to decisions about the future. The more one expects to have needs fulfilled in the future the more satisfied one will expect to be. It is suggested that post-retirement work fulfils the need for continuity by maintaining daily structure and routine, and providing outlets for social and generative activity (Atchley, 1989; Mor-Barak, 1995). Support comes from the strong evidence that paid work in retirement is associated with general satisfaction about being retired (Dendinger, Adams, & Jacobson, 2005; Herzog et al., 1991; Kim & Feldman, 2000) and that volunteer work has a positive relationship with well-being and life satisfaction (Van Willigen, 2000; Wheeler, Gorey, & Greenblatt, 1998). That people view post-retirement work as a means of meeting their needs is supported by Adams and Rau (2004) who showed that in a group of recent retirees, negative attitudes to being retired were associated with active seeking of bridge employment. Therefore, for those who are not yet retired this will mean:

3a. The more a person expects to be satisfied in retirement the more likely they will be intending to engage in either paid work, volunteer work or both compared to not working at all in retirement.

For those already retired:

3b. The more a person is satisfied with being retired the more likely they are to have actually engaged in paid and/or volunteer postretirement work compared to not having worked at all in retirement.

Action image: Proactive behavioural style

In image theory, the action image refers to the behaviours that allow one to attain future goals and aspirations (Mitchell et al., 1986). Unemployment research indicates that obtaining a new job requires motivation, persistence and activity
Obtaining work after retiring from one's long-term career is likely to require similar behaviours to seek out opportunities for paid or volunteer work. Interestingly, a number of theories related to ageing (e.g. Maddox, 1987) stress the role of active engagement in life as one of the central processes of successful ageing. Recently, increased research attention has focused on a style of behaviour labelled 'proactivity', which encompasses self-starting, forward thinking and persevering actions (Bateman & Crant, 1993). Proactive people identify opportunities and take action to change their environments for the better, whereas less proactive individuals are passive and will tend to accept circumstances rather than change them (Crant, 2000; Parker, Williams, & Turner, 2006). Proactive behaviour is related to a number of objective and subjective markers of career success (Seibert, Crant, & Kraimer, 1999).

Although no previous research has specifically linked proactivity with obtaining employment either pre- or post-retirement, a recent study by Wanberg et al. (2005) found that job search intensity predicted re-employment in a group of unemployed people. Their job search intensity measure comprised items that would come under the rubric of proactive behaviour. Given that past behaviour is thought to be the best predictor of future behaviour (Owens, 1976) and that obtaining post-retirement work is likely to require proactive behaviour, we hypothesize that:

4a. The more a person behaves proactively the more likely they are to be intending to engage in either paid work, volunteer work or both compared to not working at all in retirement.

For those who have already retired this will mean:

4b. The more a person behaves proactively the more likely they are to have actually engaged in paid and/or volunteer postretirement work rather than not having worked at all.

**Demographic variables**

Image theory suggests that future plans and goals are adjusted on the basis of quantitative facts concerning the individual’s situation (Mitchell *et al.*, 1986). Existing evidence shows that demographic variables such as health and wealth do affect choice to engage in post-retirement work (Davis, 2003; Kim & Feldman, 2000). The demographic variables included in this study are income, education, gender, health and retirement age.

We suggest that the need for finance will motivate people to consider and engage in paid work in retirement. This is supported by Kim and Feldman’s (2000) study which showed that acceptance of bridge employment was associated with lower income, and Heindel and Adams (1999) who found that pre-retirees’ intention to undertake post-retirement work was predicted by low expectation of a satisfactory retirement income. The prediction is different for volunteer work as several researchers have shown that volunteering is associated with higher income (e.g. Choi, 2003; Fisher, Mueller, & Cooper, 1991), possibly because of the personal costs, such as transport, associated with many volunteer activities and because high income earners are less likely to need to fill their time with paid work. We therefore hypothesize that for those who have not yet retired:

5a. The lower the income the more likely a person will have intentions to engage in paid work compared to volunteer work or not intending to work at all in retirement, and the less likely a person will intend to engage in volunteer work compared to no work.
For those who have retired this will mean:

5b. The lower the income the more likely a person will have actually engaged in paid work in retirement rather than volunteer work or not having worked, and the less likely a person will have engaged in volunteer work rather than not working at all since retiring.

Some prior studies show that the level of education predicts involvement in bridge employment (Shultz, 2003) and volunteer work in retirement (Choi, 2003). It is possible that, when compared with those with lower levels of education, those with higher levels will have a greater need for generativity or be less likely to want to ‘give up’ any opportunity to use their skills and training and therefore be more inclined to continue with some form of retirement work. Those with higher education may also have more contacts and skills needed to seek out and obtain both paid and volunteer work. We therefore propose that for those not yet retired:

6a. The higher the level of education the more likely a person will have intentions to engage in either paid work, voluntary work or both compared to not intending to work in retirement.

For those who have already retired this will mean:

6b. The higher the level of education the more likely a person will have engaged in either paid work, voluntary work or both rather than not having worked at all in retirement.

There have been inconsistent results relating gender to post-retirement work. In terms of paid work, Davis (2003) found that women were less likely to engage in bridge employment, whereas Quinn and Kozy (1996) found that they were more likely to. When finance was controlled for, the effect of gender disappeared in Adams and Rau’s (2004) study. Furthermore, there was no difference between men and women’s involvement in paid post-retirement work in Kim and Feldman’s (2000) study. In these studies, gender may just represent a proxy variable for finance as women, on average, have lower paid jobs (Whitehouse, 1992) and therefore it is likely to be this ‘hard fact’ constraining their image of the future rather than the fact of being female. There have also been conflicting results in terms of the relationship of gender to volunteer work – in earlier studies more women than men engaged in volunteer work (Fischer et al., 1991) but there is evidence that this may be a cohort effect as recent results (e.g. Choi, 2003) show that averaging across all ages, women and men are now volunteering in equal numbers. We therefore predict that for those who have not yet retired:

7a. Females will be no more likely than males to be intending to engage in volunteer work or paid work in retirement, after controlling for finance.

For those who have retired we expect that:

7b. Females will be more likely to have engaged in both volunteer work but no more likely to have engaged in paid work in retirement, once finance is controlled for.

Good health is expected to predict involvement in post-retirement paid and volunteer work for the same reason that it is consistently related to early retirement – those in poor health are less able to maintain the physical demands of working. Mor-Barak, Scharlach, Birba, and Sokolov’s (1992) and Kim and Feldman’s (2000) results support this hypothesis in relation to paid work and Choi (2003) and Caro and Bass (1997) provide support in relation to volunteer work. Therefore, our hypothesis is that:

8a. The higher the level of self-rated health the more likely a person will have intentions to engage in either paid work, voluntary work or both than not intending to work in retirement.
For those who have already retired this will mean:

8b. The higher the level of self-rated health the more likely a person will have engaged in either paid work, voluntary work or both rather than not having worked at all since retiring.

A number of studies (e.g. Davis, 2003; Kim & Feldman, 2000) examine bridge employment within the context of early retirement, possibly making the assumption that people who retire at older ages are unlikely to engage in some form of paid work. However, when compared with early retirees, those who continue to work to an older age might have a stronger self-image of themselves as workers and therefore be more likely to maintain that by engaging in bridge employment or volunteer work. Given the lack of evidence, we include retirement age to explore the research question, ‘Are those who retire early more likely to engage in post-retirement work than those who retire at older ages?’

Method

Participants

Participants included employees of a not-for-profit organization, clients of a major financial institution, and members of an association of retirees currently living in Australia. They were not contacted directly by the investigators, but were sent information and surveys from the Human Resource Department, the Marketing Department and the General Secretary, respectively. The survey was advertised as research investigating attitudes to retirement and the variables used in the current study form only a portion of the total data that were collected. Participation was voluntary and anonymous, and completed surveys were not sighted by the organizations but sent directly to the researchers. This process generated 987 responses from people who were 45 years of age or over and had not yet retired, and 725 responses from currently retired people who had been retired for 15 years or less.

The average age of the pre-retirees was 55.01 years (ranging from 45 to 84 years) and of the retirees was 66.69 years (ranging from 46 to 85 years). In the pre-retiree group 60.5% were males whereas 72.3% of the retirees were males. There was a significant difference in the education level between the two groups ($t = 6.14, p < .01$) with the pre-retiree group being more highly educated on average. For example, 49.7% of the pre-retirees had at least a bachelor degree when compared with 36.1% of the retiree group. This result reflects census finding that in Australia those in the age group of 45–54 are better educated than older cohorts (Australian Bureau of Statistics, 2005). Nevertheless, the effect size ($r = .148$) of this difference is only small (Rosnow, Rosenthal, & Rubin, 2000).

Measures

Trajectory image: Dependent variable

Pre-retirees were asked about what post-retirement work intentions they had with the options being ‘1’ Not work at all, ‘2’ Voluntary work, ‘3’ Part-time paid work or consultancy, ‘4’ Voluntary work and part-time paid work or consultancy and ‘5’ Don’t know. Retirees were asked to indicate what work they had done since retiring, with the same options as given to pre-retirees. The ‘don’t know’ option was chosen by 97 pre-retirees and 8 retirees. These participants were not included in any of the analyses.
Self-image: Image of pre-retirement work
Tired of work was measured using four items, two from Beehr et al. (2000) and two from Griffin and Hesketh (2006). Using a five-point Likert scale, pre-retirees were asked to describe their attitude to their current job and retirees were asked to describe how they felt about their job in the year before they retired in items such as ‘I’ve had enough of going to work’ and ‘I no longer have the energy for work’. Coefficient $\alpha$ was .83 for the pre-retiree group and .79 for the retiree group. Work overload was measured with four items (e.g. ‘My workload is extremely heavy’) from Caplan and Jones (1975) using the same five-point scale and instructions as described above. Coefficient $\alpha$ was .78 for the pre-retiree group and .77 for the retiree group.

Projected image: Attitude to life in retirement
In the pre-retiree sample, expectation for satisfaction was measured with two items from Bidewell et al. (2006) ‘I anticipate being able to enjoy my retirement years’ and ‘When the time comes, I am going to be satisfied with being retired’, which yielded a coefficient $\alpha$ of .83. In the retiree sample, retirement satisfaction was measured by two similar items ‘I am enjoying my retirement years’ and ‘In general, I am satisfied with being retired’, which yielded a coefficient $\alpha$ of .91.

Action image: Proactive behavioural style
Griffin and Hesketh’s (2006) measure of proactive retirement behaviour was used. This 11-item scale was developed to include all of Frese and Fay’s (2001) components of proactivity such as active exploration, planning and monitoring. Participants were asked to what extent they engaged in a range of behaviours, for example, ‘Read articles or attend seminars about planning retirement’ and ‘Develop knowledge and skills to help you cope well with retirement’. It did not cover planning for post-retirement work but general proactive planning for retirement. Coefficient $\alpha$ was .91 for the pre-retiree group and .88 for the retiree group.

Hard data: Demographic variables
Education level, gender, income and expected/actual retirement age were each measured with one item. The participants were asked to nominate their before-tax annual income on a 10-point scale with increments of $20,000 starting from $< 40,000$ up to $> 200,000$. Retirees were asked at what age they retired from permanent full-time work and pre-retirees were asked at what age they expected to retire. Current self-rated health was assessed by two items (e.g. ‘Generally speaking, my health is very good’) adapted from Adams and Beehr (1998) and yielding coefficient $\alpha$ values of .89 for the employees and .88 for the retirees.

Data analysis
The proposed predictors of post-retirement work were examined using multinomial logistic regression (MLR) because traditional methods used for prediction, such as multiple regression, are inappropriate for use with categorical-dependent variables (Zickar & Gibby, 2003). The dependent variable in the current study had four categories: ‘no work’, ‘paid work’, ‘volunteer work’ and ‘paid + volunteer work’. MLR assesses the probability of a person choosing one of these categories, given certain scores on the predictor variables.
Because there is some existing evidence that demographic variables are related to engagement in post-retirement work, it was important that they be examined not only as part of the theoretical model but also as controls in order to assess whether the work, retirement and proactivity variables improved prediction. Therefore, the demographic variables were included in a first step and the analysis was repeated with all the remaining variables. The chi-squared difference test was used to assess improvement in fit. The second analysis was performed twice for the pre-retiree group and for the retiree group – the first time the ‘no work’ category was set as a reference group and the second time the ‘paid work’ group was the reference category in order to compare that group with those in the ‘volunteer work’ group. The parameters derived from the MLR show which of the model variables were significant when controlling for all other variables.

Results

Descriptive statistics

There was a significant difference between the amount of actual post-retirement work that the retiree group reported and the amount of post-retirement work that the pre-retiree group intended to engage in ($\chi^2 = 125.337, p < .001$), with only 38% of retirees having done some form of paid work in retirement but 63% of pre-retirees with intentions to do some paid work; and 29% of retirees not having worked after retiring when compared with only 12% of pre-retirees not planning to do any work in retirement. As the data are not longitudinal, this may reflect cohort differences, but given that the pre-retirees intended to engage in similar amounts of volunteer work to what the retirees had actually engaged in (43% and 48%, respectively), it may indicate a level of unrealistic expectations by the pre-retirees in terms of paid work.

Table 1 presents the means and standard deviations on the study variables for each category of the dependent variable. The correlations between the predictor variables (see Table 2) were only moderate, discounting multicollinearity.

Multinomial logistic regression

Results of the multinomial logistic regressions are reported in Tables 3 and 4. The $\chi^2$ log likelihood and chi-squared values show that the variables provided a significant fit to the pre-retiree data and to the retiree data. Furthermore, when the work, retirement and proactivity variables were entered together in a second step after the demographic variables, they significantly improved the fit of the data for the pre-retiree group ($\Delta \chi^2 = 26.80, p < .01$) and for the retiree group ($\Delta \chi^2 = 28.23, p < .01$).

Self-image: Evaluation of pre-retirement work – pre-retirees

Tired of work was a significant predictor of intentions to work in retirement (paid, volunteer or both) even after controlling for all the demographic variables. For example, a one-unit increase in being tired of work decreased the odds of intending to do paid work rather than no work by 28%, and volunteer work rather than no work by 35% (ExpB column). Being tired of work did not distinguish between intentions to do paid or volunteer work. These results support Hypothesis 1a.

Work overload also had significant effect in the presence of the other variables, but in the direction opposite to that predicted and hence did not support Hypothesis 2a as
Table 1. Means and standard deviations of the predictor variables for the pre-retiree and the retiree samples

<table>
<thead>
<tr>
<th></th>
<th>Pre-retiree sample (N = 890)</th>
<th>Retiree sample (N = 717)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>No work (N = 102)</td>
<td>Voluntary (N = 225)</td>
</tr>
<tr>
<td></td>
<td>Mean</td>
<td>SD</td>
</tr>
<tr>
<td>Education</td>
<td>3.03</td>
<td>1.51</td>
</tr>
<tr>
<td>Income</td>
<td>3.52</td>
<td>2.77</td>
</tr>
<tr>
<td>Health</td>
<td>3.98</td>
<td>1.03</td>
</tr>
<tr>
<td>Expected/actual retirement age</td>
<td>62.77</td>
<td>6.42</td>
</tr>
<tr>
<td>Tired of work</td>
<td>2.63</td>
<td>1.18</td>
</tr>
<tr>
<td>Work overload</td>
<td>3.00</td>
<td>1.03</td>
</tr>
<tr>
<td>Expected/actual retirement satisfaction</td>
<td>3.80</td>
<td>1.13</td>
</tr>
<tr>
<td>Proactive retirement behaviour</td>
<td>2.78</td>
<td>0.94</td>
</tr>
</tbody>
</table>
stated. The more overloaded a person felt, the more likely he/she was to be intending to engage in paid work or volunteer work when compared with not intending to work; for example, a one-unit increase in being overloaded increased the odds of intending to do paid work rather than no work by 35%.

**Self-image: Evaluation of pre-retirement work – retirees**

In the retired group, the work variables were retrospective data. Nevertheless, being tired of (pre-retirement) work had a similar effect as in the pre-retiree group in terms of volunteer work. A unit increase in retrospective assessments of having been tired of work decreased the odds of having done volunteer work in retirement by 20% or paid + volunteer work by 43% when compared with no work. However, there was no effect on the odds of having done paid vs. no work so Hypothesis 1b was only partially supported. Retrospective ratings of being overloaded in pre-retirement work had no effect on actual engagement in post-retirement work therefore Hypothesis 2b was not supported.

**Projected image: Attitude to life in retirement – pre-retirees**

Expected retirement satisfaction did not significantly affect the odds that someone had intentions to engage in post-retirement paid and/or volunteer work vs. no work so Hypothesis 3a was not supported. However, increases in the level of expected retirement satisfaction increased the odds by 25% that a person had intentions to engage in volunteer work rather than paid work.

**Projected image: Attitude to life in retirement – retirees**

Hypothesis 3b, that those who had done some form of post-retirement work would be more satisfied than those who had not, was not supported. It is noted however that actual satisfaction in retirement distinguished those who had done volunteer work vs. paid work in retirement, where for every unit increase in retirement satisfaction there

Table 2. Correlations among the predictor variables†

<table>
<thead>
<tr>
<th></th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
<th>8</th>
<th>9</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Gendera</td>
<td>-0.03</td>
<td>0.19**</td>
<td>-0.04</td>
<td>0.21**</td>
<td>-0.09**</td>
<td>-0.12**</td>
<td>-0.03</td>
<td>0.01</td>
<td></td>
</tr>
<tr>
<td>2. Education</td>
<td>0.04</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3. Income</td>
<td>0.37**</td>
<td>0.33**</td>
<td></td>
<td>0.07</td>
<td>0.10**</td>
<td>-0.16**</td>
<td>-0.05</td>
<td>0.04</td>
<td>0.04</td>
</tr>
<tr>
<td>4. Health</td>
<td>-0.08*</td>
<td>0.04</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5. Expected/actual retirement age</td>
<td>0.07*</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>6. Tired of work</td>
<td>0.03</td>
<td>-0.12**</td>
<td>-0.07*</td>
<td>-0.19**</td>
<td>-0.27**</td>
<td></td>
<td>0.24**</td>
<td>-0.01</td>
<td>0.01</td>
</tr>
<tr>
<td>7. Work overload</td>
<td>0.05</td>
<td>0.15**</td>
<td>0.22**</td>
<td>-0.02</td>
<td>0.06</td>
<td>0.23**</td>
<td></td>
<td>0.01</td>
<td>0.15**</td>
</tr>
<tr>
<td>8. Expected/actual satisfaction</td>
<td>0.08*</td>
<td>0.08**</td>
<td>0.07*</td>
<td>0.22**</td>
<td>-0.08*</td>
<td>-0.10**</td>
<td>-0.07*</td>
<td>0.19**</td>
<td></td>
</tr>
<tr>
<td>9. Proactive retirement behaviour</td>
<td>0.09**</td>
<td>0.10**</td>
<td>0.10**</td>
<td>0.07*</td>
<td>0.07*</td>
<td></td>
<td>-0.04</td>
<td>0.00</td>
<td>-0.11**</td>
</tr>
</tbody>
</table>

Note. *p < .05; **p < .01; †pre-retiree sample below diagonal, retiree sample above diagonal
aFemale = 0, Male = 1.
Table 3. Pre-retiree group multinomial logistic regression results showing parameters of full model

<table>
<thead>
<tr>
<th></th>
<th>Voluntary vs. no work</th>
<th>Paid vs. no work</th>
<th>Paid + voluntary vs. no work</th>
<th>Voluntary vs. paid</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>B</td>
<td>Exp(B)</td>
<td>95% Conf interval for</td>
<td>B</td>
</tr>
<tr>
<td>Intercept</td>
<td>.156</td>
<td>1.038</td>
<td>-1.038</td>
<td>-3.067</td>
</tr>
<tr>
<td>Gender*</td>
<td>-.640**</td>
<td>.53</td>
<td>.30–.94</td>
<td>-3.11</td>
</tr>
<tr>
<td>Education</td>
<td>.086</td>
<td>1.09</td>
<td>.90–1.32</td>
<td>.436**</td>
</tr>
<tr>
<td>Income</td>
<td>-.084</td>
<td>.92</td>
<td>.83–1.03</td>
<td>-.087</td>
</tr>
<tr>
<td>Health</td>
<td>-.080</td>
<td>.92</td>
<td>.68–1.26</td>
<td>.148</td>
</tr>
<tr>
<td>Retirement age</td>
<td>.005</td>
<td>1.01</td>
<td>.96–1.06</td>
<td>.023</td>
</tr>
<tr>
<td>Tired of work</td>
<td>-.437**</td>
<td>.65</td>
<td>.50–.84</td>
<td>-.440**</td>
</tr>
<tr>
<td>Work overload</td>
<td>.289*</td>
<td>1.34</td>
<td>1.00–1.78</td>
<td>.360*</td>
</tr>
<tr>
<td>Retirement satisfaction</td>
<td>-.045</td>
<td>.96</td>
<td>.70–1.30</td>
<td>-.157</td>
</tr>
<tr>
<td>Proactive behaviour</td>
<td>.473**</td>
<td>1.60</td>
<td>1.18–2.17</td>
<td>.424**</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Variables entered in steps</th>
<th>-2 log likelihood</th>
<th>Goodness-of-fit index</th>
<th>df</th>
<th>( \Delta \chi^2 )</th>
<th>( \Delta df )</th>
<th>Cox &amp; Snell ( R^2 )</th>
</tr>
</thead>
<tbody>
<tr>
<td>First step</td>
<td>1868.51</td>
<td>680.3**</td>
<td>15</td>
<td>.078</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Gender, education, income, health, expected retirement age</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Second step</td>
<td>1998.89</td>
<td>948.4***</td>
<td>27</td>
<td>26.8*</td>
<td>12</td>
<td>.111</td>
</tr>
<tr>
<td>Tired of work, overload, expected retirement satisfaction, proactivity</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Note. *p < .05; **p < .01; *Female = 0, Male = 1.
Table 4. Retiree group multinomial logistic regression results showing parameters of full model

<table>
<thead>
<tr>
<th>Voluntary vs. no work</th>
<th>Paid vs. no work</th>
<th>Paid vs. voluntary vs. no work</th>
<th>Voluntary vs. paid work</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>B</td>
<td>95% Conf interval for B</td>
<td>B</td>
</tr>
<tr>
<td></td>
<td>Exp(B)</td>
<td>Exp(B)</td>
<td>Exp(B)</td>
</tr>
<tr>
<td>Intercept</td>
<td>-1.457</td>
<td>1.457</td>
<td>-1.880</td>
</tr>
<tr>
<td>Gender(^a)</td>
<td>-0.053**</td>
<td>0.52</td>
<td>0.31–0.87</td>
</tr>
<tr>
<td>Education</td>
<td>.136</td>
<td>1.15</td>
<td>0.97–1.35</td>
</tr>
<tr>
<td>Income</td>
<td>-0.091</td>
<td>.91</td>
<td>.81–1.03</td>
</tr>
<tr>
<td>Health</td>
<td>-0.008</td>
<td>1.01</td>
<td>0.78–1.30</td>
</tr>
<tr>
<td>Retirement age</td>
<td>.026</td>
<td>1.03</td>
<td>0.99–1.07</td>
</tr>
<tr>
<td>Tired of work</td>
<td>-0.230*</td>
<td>.80</td>
<td>0.64–0.99</td>
</tr>
<tr>
<td>Work overload</td>
<td>-0.050</td>
<td>.95</td>
<td>0.74–1.22</td>
</tr>
<tr>
<td>Retirement satisfaction</td>
<td>.084</td>
<td>1.09</td>
<td>0.80–1.49</td>
</tr>
<tr>
<td>Proactive behaviour</td>
<td>.196</td>
<td>1.22</td>
<td>0.91–1.63</td>
</tr>
<tr>
<td>Variables entered in steps</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>-2log likelihood</td>
<td>Goodness-of-fit index</td>
<td>df</td>
</tr>
<tr>
<td>First step</td>
<td>1458.08</td>
<td>61.35**</td>
<td>15</td>
</tr>
<tr>
<td></td>
<td>Gender, education, income, health, actual retirement age</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Second step</td>
<td>1297.21</td>
<td>89.58**</td>
<td>27</td>
</tr>
<tr>
<td></td>
<td>Tired of work, overload, retirement satisfaction, proactivity</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Note. *p < .05; **p < .01; \(^a\) Female = 0, Male = 1.
was a 52% increase in the odds that a person would have done volunteer work rather than paid work. This result mirrors that of the pre-retiree group.

Action image: Proactive behavioural style – pre-retirees
Proactive retirement behaviour remained a significant predictor when all variables in the model were controlled for (Table 3). A one-unit increase in proactivity resulted in a 60% increase in the odds of having intentions to do volunteer work and a 48% increase in the odds of having intentions to do paid work. As expected, proactivity did not distinguish between intentions to engage in paid vs. volunteer work. Hypothesis 4a is therefore supported.

Action image: Proactive behavioural style – retirees
The effect of proactivity was not significant in the presence of other variables for the retirement sample so Hypothesis 4b was not supported.

Demographic variables – pre-retirees
As seen in Table 3, education and gender were the only demographic variables that significantly predicted intentions to work in retirement. Those with higher levels of education were more likely to engage in paid work or paid + volunteer work rather than no work in retirement, supporting Hypothesis 6a. However, Table 3 also shows that those who intended to do only volunteer work had lower levels of education than those who intended to do paid work.

A chi-squared test showed that more males than females intended to engage in paid work (47% vs. 31%, respectively) but as hypothesized, once finance (and all other variables) was controlled for, the effect of gender on paid work was not significant. However, Hypothesis 7a was only partially supported because fewer males than females intended to engage in volunteer work (20% vs. 33%, respectively; \( X^2 = 30.09, p < .001 \)). This effect remained significant after controlling for finance, with males 47% less likely to intend to engage in volunteer work when compared with not intending to work at all, and 66% less likely to have intentions to do volunteer work when compared with paid work in retirement (see ExpB column).

When controlling for all variables, neither income, health nor expected retirement age affected intentions for post-retirement paid or volunteer work.

Demographic variables – retirees
The results related to income, education, gender and retirement age were similar to the pre-retiree group, but in the retiree group health were related to post-retirement work.

Hypothesis 5b was not supported as income was unrelated to actual engagement in any form of post-retirement work. There was partial support for Hypothesis 6b in that higher levels of education increased the odds of actually having engaged in paid or paid + volunteer work, but education did not affect the odds of having done volunteer work.

A chi-squared test found that more males than females had engaged in paid work (27% vs. 10%) and fewer males had engaged in volunteer work (28% vs. 48%; \( X^2 = 35.53, p < .001 \)). However, Hypothesis 7b was not supported as the effect of gender on paid work remained after controlling for income and other variables – retired
males were more likely than females to have done paid work rather than voluntary work or no work (and less likely to have done voluntary work rather than no work or paid work).

In the retiree sample, health remained a significant predictor of engagement in paid work after controlling for all variables, which supports Hypothesis 8b. A one-unit increase in self-rated health resulted in a 43% increase in the odds of having engaged in paid work rather than no work and a 29% decrease in having done volunteer work vs. paid work.

The actual retirement age was not a predictor of having engaged in paid and/or volunteer work in retirement.

Discussion
This study tested the utility of a framework based on image theory to predict a person’s decision to engage in post-retirement work of either a paid or a voluntary nature. The person’s self-image or evaluation of their pre-retirement work, their projected image or evaluation of future life in retirement, their action image involving proactive behaviour and demographic variables provided a good fit for the data in predicting the trajectory image, which was operationalized as either intentions to engage in post-retirement work or actual engagement in post-retirement work.

One of the most important contributions of this study is its inclusion of paid and volunteer work – to our knowledge the only research to cover both forms of post-retirement work. Because prior studies have shown that many of the non-financial functions of paid work are achieved by volunteer work we argued that it was important to include both when investigating post-retirement work. The results, which showed similarities and differences in their prediction, justified this examination. Both forms of post-retirement work were strongly related to people’s evaluation of their pre-retirement work and for pre-retirees, a proactive style of behaviour also predicted intentions to engage in either form of post-retirement work. Conversely, the other two factors (one’s image of future life in retirement and most of the demographic variables) differentially predicted the type of post-retirement work, with gender, health and retirement satisfaction more related to volunteer work and education to paid work.

The overall fit of the data and the significant relationship of each of the elements of image theory to some form of post-retirement work together provide strong support for the utility of using image theory to understand engagement in work during retirement and to guide future research in this area.

Methodologically, the study was strengthened by its two sample approach – one consisting of those who had not yet retired and the other of retirees, which provided comparisons of differential prediction for intentions to engage in post-retirement with actual post-retirement work behaviour. The similar findings in the two samples suggest that results from other studies using either type of sample might be generalized across groups.

The following sections discuss the elements from image theory and the implications of the results showing their relationship to post-retirement work.

Self-image: Image or evaluations of pre-retirement work
Mitchell et al. (1986) proposed that the way a person evaluates their current situation will guide decisions regarding their future situation. We therefore argued that those for
whom current (pre-retirement) work has lost its meaning or who had negative evaluations about their current work are less likely to decide to engage in post-retirement work. The results showing a significant effect of pre-retirement work evaluations provide support. Pre-retirees who were feeling tired of work were less likely to be intending to engage in paid or volunteer work in retirement. This finding has practical implications for organizations that may hope to have access to the talent pool of retired Baby Boomers to deal with impending skill shortages. If the so-called ‘third age’ group is to respond to the need for their skills, how they feel about their working lives pre-retirement will matter. Organizations will do well to consider the well-being of pre-retirees, ensuring that they do not exit with a negative self-image of feeling tired of work. The effect of retrospective feelings of being tired of work was similar in the retiree group but only in terms of volunteer work.

An unexpected result in the pre-retiree group was the effect of current work overload. The more overloaded a person was feeling, the more likely he/she was intending to engage in volunteer and/or paid work in retirement. We anticipated that overload would be a negative evaluation of work; however, it is interesting to note the very different pattern of correlation of variables with tired of work from the pattern with overload. Health and retirement age were correlated with tired of work but not overload, while income and proactive behaviour were related to overload, but not tired of work. Education was positively correlated with overload but negatively with tired of work. Although being overloaded can have negative outcomes for workers (Gillespie, Walsh, Winefield, Dua, & Stough, 2001), those who indicated high levels of overload may, to some extent, have a tendency to workaholism and value their current self-image of being a busy person with a heavy workload, which in turn would make them more likely to see themselves in the future as taking on high levels of retirement activity in the form of voluntary and paid work commitments. It is interesting that for those in the seemingly quieter years of actual retirement, being busy and proactive did not predict engagement in post-retirement work.

Projected image: Attitude to life in retirement

Our hypothesis that pre-retirees who had higher expectations for retirement satisfaction would be more likely to be intending to engage in some form of post-retirement work was not supported. Importantly, however, expected retirement satisfaction did differentiate the kind of work a person intended to do in retirement. Of those intending to work in retirement, the higher the expectation for satisfaction the more likely the intention to engage in volunteer work rather than paid work. This relationship was confirmed in the retiree sample where those who had engaged in paid retirement work were less satisfied with their retirement than those who had engaged in volunteer work. While these results might suggest that the need to do paid work might reduce satisfaction or that there could be something more intrinsically satisfying about volunteer work, they could equally indicate the existence of an individual difference variable that causes both the tendency to engage in volunteer work and to be generally satisfied with life. We also note that retirees were asked about what type of work they had done since retiring, not whether they were currently engaged in bridge employment or volunteer work. Other research (e.g. Kim & Feldman, 2000) that has shown a relationship between retirement satisfaction and post-retirement work has compared those currently working in bridge employment to those not currently engaged in post-retirement work so higher satisfaction may only exist for the duration of the work.
Action image: Proactive behavioural style
Consistent with image theory, this study showed that one's action image impacted on intentions to engage in post-retirement work. Those with a proactive behavioural style in relation to retirement activity were more likely to have intentions to engage in post-retirement work than those with a more passive style, adding to the growing body of literature attesting to the importance of this behavioural style in predicting work behaviours. Proactivity has become salient given today's requirement for career self-management (Frese & Fay, 2001; Hesketh & Considine, 1998), which extends to taking personal responsibility for retirement planning (Sterns & Subich, 2005). As noted earlier, changing demographic profiles indicate that post-retirement work will become increasingly important for individuals, organizations and at a broader national level. Practically, our results indicate the need to build greater proactivity into today's workforce. Parker et al. (in press) suggest that one mechanism to achieve this is to build employees' self-efficacy for engaging proactively in their day-to-day job activities. Pre-retirement training programs might consider how to increase self-efficacy for proactive approaches to finding and managing appropriate post-retirement work. We note, however, that the relationship between post-retirement work and proactivity was not replicated in the retired sample and therefore longitudinal studies are required to support its importance.

Demographic variables
According to action theory, when people envisage their life in retirement, choices of activity, goals and expected events are influenced by the realities or 'hard data' of their current situation. Past researchers have recognized this in their focus on demographic variables as predictors of post-retirement work and this study found that gender and education influenced both plans to engage in and actual engagement in post-retirement work but in different ways. Education, for example, was related to paid retirement work, supporting Shultz (2003), but not to volunteer work. This result might reflect greater availability of paid jobs for higher skilled people but also the perception that paid work offers better opportunity for utilization of higher-order skills than volunteer work does. Dendinger et al. (2005) highlighted the importance of generativity, which refers to the need to teach and pass on knowledge to younger generations, as a reason for work among bridge employees and it is possible that the need for generativity is higher among those with higher levels of education. Education and income were correlated which may explain why income was not predictive of post-retirement work in this study.

Gender on the other hand, appeared to be more predictive of volunteer work than paid work, with both pre-retired and retired women more likely to be intending to/actually engaged in volunteer work in retirement than males, despite having a lower average income. Perhaps women have a strong self-image of being caring and other-oriented, which in turn affects their willingness to consider volunteer work. Interestingly, even though females had a lower average income than males they were actually less likely to be intending to engage in or less likely to have engaged in paid work in retirement. For retired women, the effect remained after controlling for income which may be a cohort effect reflecting social norms of an older generation. Longitudinal studies are needed to determine if this difference between pre-retired and retired women changes over time.

Self-rated health only affected the odds of a retiree having engaged in paid work in retirement but not volunteer work and was not a significant factor in determining the
intentions of pre-retirees for either type of post-retirement work. This was somewhat surprising given the robust finding in extant research (e.g. Beehr et al., 2000; Bidewell et al., 2006) that health predicts intended retirement age. It suggests that while poor health drives people to consider early retirement from full-time work they do not necessarily assume that it prevents them from part-time bridge employment. However, such an assumption appears false given that health has a clear relationship with actual engagement in bridge employment.

The findings related to the effect of income were also unexpected. Whether or not a person was intending to do paid and/or voluntary work in retirement or had actually done so was unrelated to current income. The fact that we simultaneously investigated a number of variables including education, which was correlated with income, may explain why this result is contrary to past research (e.g. Heindel & Adams, 1999), and suggests that income may not have as strong effect as previously thought.

It is interesting that neither expected retirement age nor actual retirement age was related to post-retirement work activity. As most of the prior research on bridge employment has examined it in the context of early retirement (e.g. Kim & Feldman, 2000), the current study shows that results can probably be generalized to those who retire at older ages.

Limitations and future directions
In interpreting the findings of this research, a limitation is that the analysis relied on cross-sectional data, thus precluding causal inference. Whilst the similar relationships found in both the pre-retiree and retiree samples might suggest a level of stability over time, the need for longitudinal studies remains to adequately deal with the apparent gender and cohort effects found in this study. Ideally, a group of pre-retirees should be tested at the same time relevant to their retirement, say 5 years and 1 year before and after retirement, to determine the direction of causality of the variables. Longitudinal data would also provide opportunity for multivariate analysis of change to investigate what factors affect whether or not an individual actually acts on his/her intentions to engage in post-retirement work.

Another limitation is that the work attitude data collected from the retiree sample that was based on retrospective accounts are susceptible to bias. However, Beehr and Nielson’s (1995) research showing a strong correlation between retrospective reports of retirees and pre-retirement activities does provide some evidence for the validity of the measure used.

Future research could examine the effect of other work attitudes such as job satisfaction, and investigate whether any specific pre-retirement job characteristic affects intentions to engage in or actual engagement in post-retirement work. Another important issue that needs to be addressed in further studies is the effect of environmental context on post-retirement activity. For example, 6 months after the current data were collected, the Australian Government announced significant changes related to compulsory retirement superannuation schemes and perhaps a follow-up study would find different effects for income on intentions to engage in post-retirement work.

Conclusion
This study contributes to a relatively new area of research investigating factors that influence engagement in paid or volunteer work in the retirement phase of a person’s
career. The results support the use of image theory (Mitchell et al., 1986) in predicting future choices (the ‘trajectory image’). We showed that whether or not a person engages in any kind of post-retirement work is influenced by their self-image, operationalized as attitudes to pre-retirement work, and at least for future intentions, when the action image includes a proactive behaviour style. Results relating to the other two elements of image theory, the projected image and hard data, were useful in distinguishing engagement in either volunteer or paid work, where females, healthier retirees, and those with positive views about retirement were more likely to engage in volunteer work and better educated people more likely to engage in paid work.

By providing understanding on variables beyond the demographic variables usually examined, the results will assist in the management of late career workers and in overall workforce planning. Encouragement for proactive behaviour, efforts to reduce older workers from feeling tired of and no longer interested in their pre-retirement work, and programs targeted at employees with lower levels of education could potentially increase the pool of retirees prepared to engage in some form of bridge work.

Acknowledgements
This research was supported by an Australian Research Council Discovery Project grant (No. DP0208829) awarded to Professor Beryl Hesketh.

References
120  Barbara Griffin and Beryl Hesketh


Received 15 August 2006; revised version received 20 March 2007