

*Paper presented at the HILDA Survey Research Conference,  
University of Melbourne, July 19-20, 2007*

## **Life in Small Business in Australia: Evidence from the HILDA Survey**

**Justin B. Craig\***, **Michael Schaper\*\***, and **Clay Dibrell\*\*\***

### **Abstract**

Comparatively, very little of the Household Income and Labour Dynamics (HILDA) data set has been used to analyse the activities of Australian small business owner-operators, even though there are currently some 1.8 million small firms in existence. Using multiple waves of the HILDA survey, in this paper we investigate three important research questions related to life in a small business in Australia. Question one seeks to uncover differences between small business respondents and employees of private sector firms, by examining issues related to (i) life satisfaction, (ii) job satisfaction, (iii) individual priorities, (iv) perceived prosperity, (v) risk preferences, and (vi) individual health (general health, vitality, social functioning, emotional well-being, mental health). The second question then examines whether the factors that contribute to life satisfaction are different for the self-employed and the employee groups. The third question aims to establish the effect that business closure has on individual functioning by comparing the perceptions of respondents whose business closes with those whose businesses continue to trade on many of the variables introduced in the first research question. Our principal findings are that the level of satisfaction between the self-employed and employee groups does differ significantly, and that the self-employed are more satisfied with their lives and their jobs than their employee counterparts.

\*Associate Professor of Entrepreneurship and Family Business, Co-Director, Australian Centre for Family Business, **Bond University** [jcraig@bond.edu.au](mailto:jcraig@bond.edu.au)

\*\*Dean, **Murdoch University Business School**, [michael.schaper@gmail.com](mailto:michael.schaper@gmail.com)

\*\*\* Associate Professor of Strategic Management **Oregon State University**; Research Fellow, Australian Centre for Family Business, **Bond University** [dibrellc@bus.oregonstate.edu](mailto:dibrellc@bus.oregonstate.edu)

## **Life in Small Business in Australia: Evidence from the HILDA Survey**

### **1. Introduction**

For many people, the opportunity to own and operate their own business is seen as the chance to realize one or more of a number of different opportunities: either to gain financial independence, work with family, or to focus on lifestyle aspirations. Such business operators are a significant group in any population. Estimates suggest that approximately 10% of all adult Australians are involved in running a small business venture. This involvement also influences individual well-being. However, although extensive research has been devoted to individual well-being in general, there is a dearth of studies that have investigated the impact of business ownership upon individual well-being.

This paper attempts to address that gap by comparing the subjective well-being of a sample of Australian small business owners with a sample of private sector employees. It also investigates the well-being of a finer sample of individuals who have been in a business that has closed. Specifically, using multiple waves of the Household, Income and Labour Dynamics in Australia (HILDA) survey, we investigate three important research questions related to life in a small business in Australia. Question one looks to uncover differences between small business respondents with those respondents who are employees of private sector firms on issues related to well-being: (i) life satisfaction, (ii) job satisfaction, (iii) individual priorities, (iv) perceived prosperity, (v) risk preferences, and (vi) individual health (general health, vitality, social functioning, emotional well-being, mental health). The second question is a follow-up question that examines the factors that contribute to life satisfaction for both the self-employed and employee groups. The third question aims to establish the effect that business closure has on individual well-being. We achieve this by tracking the responses for individuals whose business

closed down in Wave 1 over the following three waves of the HILDA project and comparing these responses with the responses of people who remained in business.

The results we report in this exploratory research make multiple contributions to the literature. First, we introduce the notion of business involvement as a significant issue in the extant discussion of individual well-being. This is an important extension, since, though business involvement has been demonstrated as having psychological and economic benefits, links between business involvement and well-being have not been extensively studied by scholars from any discipline. Second, the panel nature of our sample considerably enhances the understanding of post-business closure behaviour by facilitating the tracking of post-business closure activity. Data from individuals who have experienced business closure is scarce and analysis of the HILDA survey generates some valuable insights not previously provided to researchers.

We proceed as follows. In the next section the relevant literature related to small business and well-being is canvassed. Then, details of the dataset are presented along with a description of the dependent, independent, and control variables. Results are then tabled. Finally, the discussion section provides the implications from this research and the limitations of the paper and opportunities for further research are presented.

## **2. Literature**

### **Small Business in Australia**

The concept of “small business” is a frequently-used, but often poorly understood, term in much economic and social debate, even though they are the most common form of business enterprise across the globe. Although there is no one universally-agreed definition of the

concept, two key characteristics separate a small-scale business enterprise from its larger counterparts and from public sector and non-profit organizations. The first criterion is the scale of the enterprise. Relative to other economic units, a small business has fewer employees, lower turnover, a smaller product range, limited geographical presence, a more limited asset base, and a smaller market share than its larger counterparts (Australian Bureau of Statistics, 2000).

A more intangible, but perhaps more important, aspect is the qualitative aspects of small business. In contrast to other enterprises, a defining characteristic of all *bona fide* small firms are that they are independently owned and operated – in other words, the business does not constitute part of a larger corporation, nor is it effectively controlled by another firm. Instead, it is founded, managed and owned by the owners. These individuals take the responsibility of developing the business, fund the venture, bear the associated risks if it fails (such as potential bankruptcy), take most of its profits, and are the main decision-makers (Bolton Report, 1971). Most of the critical decisions are made by one or two people, since the firm is rarely big enough to support a group of professional specialists in areas such as marketing, administration, finance or logistics (Schaper & Volery, 2007).

In Australia, the most common definition of a small business (sometimes also referred to as a small- or medium-sized enterprise, or SME) is that adopted by the Australian Bureau of Statistics (ABS), which uses a combination of both qualitative and quantitative measures. A small business is a private-sector business entity that is independently owned (that is, not a subsidiary or wholly-owned part of a larger organisation) and managed by an individual or a small number of persons, employing less than twenty staff (ABS, 2000).

As Table 1 below indicates, small firms represent the vast majority of all business enterprises in existence in Australia today. This national pattern is not unique to Australia as a

similar trend exists throughout the rest of the OECD, with small and micro-sized firms accounting for more than 90% of all enterprises in each member economy (Schaper, 2006).

**Table 1: Distribution of Australia’s Private Sector Firms By Size, June 2006<sup>1</sup>**

Sector	Size
Small & micro (0-19 staff; includes self-employed)	1,877,895 (95.6%)
Medium-sized (20-199 employees)	80,215 (4.1%)
Large (200+ staff)	5,797 (0.3%)
<b>Total</b>	<b>1,963,907</b>

Individuals choose to become the owner-manager of their own business enterprise for a variety of reasons. One is a desire for autonomy – the need to exercise workplace independence, and to assume full control of one’s own working conditions and outcomes. A common expression in the Australian context is the desire to “be your own boss,” a term that is often referred to as “the second great Australian dream” after home ownership. Another is the perceived need for financial independence. Many individuals see business ownership as an opportunity to build greater wealth than might ever be achieved whilst simply drawing down a regular wage or salary. They also often have the desire to create an income that is not dependent upon salaried employment in a larger organisation. A third motivator is the wish to build a family business that can also provide employment and wealth-generating opportunities for the owner’s spouse, children and extended family members. Likewise, for some individuals lifestyle

<sup>1</sup> Includes all firms with an ABN and an active GST remittance . Excludes government agencies; non-profit organizations; firms not registered for GST.

issues are an important consideration, especially for those who believe that the self-employed have greater capacity to set their own working hours and conditions than do employees. Finally, another commonly-expressed reason is the desire to exercise creativity in the workplace, by being able to undertake the work that one wants, when one wants it, in the form one wants (Volery, Mazzarol, Doss & Thein, 1997).

### **Work and Well-Being**

The existing body of research into the life- and work-related satisfaction of entrepreneurs, business owners and self-employed is relatively small and limited in scope. One of the most common themes to be found within this literature, however, is the suggestion that the self-employed are likely to report higher levels of satisfaction than are employees (Jamal, 1997). Blanchflower, Oswald and Stutzer (2001), for example, in their examination of a number of industrialized nations found that entrepreneurs in different countries consistently displayed a significantly higher level of job satisfaction than do wage or salary earners. This finding has been supported by the work of Bradley and Roberts (2004), who, utilizing a database similar to the HILDA, the US National Survey of Families and Households, found that self-employed individuals in the USA did indeed report higher levels of job satisfaction than employees.

Within this overall cohort, however, some interesting patterns of difference do appear to exist between different categories of owner-operators. Specifically, there is a difference between those who emphasize economic and non-economic goals. Business operators who identify non-financial goals, such as workplace flexibility, family involvement and independence (so called, lifestyle owners) as the most important aspects of being an owner-manager often report

---

Source: Australian Bureau of Statistics (2007), Counts of Australian Businesses, Including Entries And Exits, Cat.no.8165.0, Canberra: ABS, p.14

significantly higher levels of satisfaction than do individuals whose main priority is generating a suitable economic return. Likewise, female owners are often more satisfied than their male counterparts, even though on the whole women tend to launch and manage businesses that are smaller in size and turnover (Cooper & Artz, 1995).

However, a number of studies have also indicated that the self-employed tend to report lower levels of health, and higher levels of stress, than their wage and salaried counterparts (Jamal, 1997; Chay, 1993). This may arise from a number of different factors including the lack of institutional support and limited resources which the self-employed have access to; the additional responsibilities and worries which arise when one is the manager; or the additional burden of multi-tasking and time management required of business owners.

Interestingly, dissatisfaction appears to be an important factor in the decision of many individuals to become self-employed. Research evidence suggests that an individual's dissatisfaction with paid employment can often be a primary determinant in the decision to leave the salaried workforce and venture into the field of entrepreneurship (Noorderhaven, Wennekens, Hofstede, Thurik & Wildeman, 1999). Conflict with a supervisor, an unpleasant working environment, stilted career prospects or unsupportive work colleagues, amongst other factors, can all contribute to the decision to escape from the role of an employee by becoming an employer. In this sense, then, dissatisfaction is often a causal agent or catalyst for self-employment, and logically suggests that, once such individuals have started their own business, the reported sense of satisfaction in the work environment should improve.

Notably, almost all of the research undertaken to date has been outside of Australia. There is very little empirical analytical comparison of business-owners and employees in

---

Australia, and this oversight, along with the above discussion, supports that the following questions are worthy of examination:

*Research Question 1: Do individuals who are self-employed and those who are employees differ in regards to (i) life satisfaction, (ii) job satisfaction, (iii) priorities, (iv) risk preference (v) perceived prosperity, (vi) health (general health, vitality, social functioning, emotional well-being, mental health)?*

*Research Question 2: Do the contributors to life satisfaction differ for individuals who are self-employed than for those who are employees?*

### **Business Closure, Exits and Well-Being**

Just as there can be psychological and economic benefits to being involved in business ownership, business ownership also involves additional risk not faced by paid employees. For example, many businesses fail and this failure can negatively influence the owner's reputation, career aspirations, family relationships, individual well-being and financial situation.

The actual level of business closure is poorly understood. Whilst the term "failure" is often used to describe the closure of a business enterprise, this may not be an accurate description of the event (Watson & Everett, 1993). Businesses can cease to exist for a variety of reasons. This can, of course, include a lack of profitability or insufficient turnover, leading to bankruptcy, liquidation, placing the firm in voluntary administration, or simply ceasing to trade. However, firms can also cease to exist if they merge with another enterprise, the owner retires, a different legal structure is adopted, a partner exits the firm, or they are bought out by a competitor. Not all of these conditions can be regarded as failures, yet are typically all treated as

business closures or exits. As such, separating out failure from non-failed exits is not possible in most statistical databases.

With that caveat in mind, it is worth noting that the level of business exits in Australia is relatively low and certainly much less than the popular notions that most firms fail within a few years of commencement. For example, of the 1.87 million Australian firms in existence as at June 2003, some 65.0% were still trading in June 2006 (ABS, 2007). Indeed, various estimates over the last decade have suggested that only about 4 to 8% of businesses cease to exist each year (Bickerdyke, Lattimore & Madge, 2000; ABS, 1997). This is also offset by the churn of new business entries into the marketplace each year. Those that do exit, however, are far more likely to be new small owner-operated firms than large, well-established corporations (ABS, 2007).

Business failure can impose a psychological as well as an economic toll on those involved. Understanding the consequences of business failure has attracted the recent interest of scholars but, because attaining data from individuals after business failure is difficult, in the main these discussions have been largely conceptual and have not adequately measured the effect that business closure has on the individual in terms of their life satisfaction and well-being.

In the extant small business literature, business closure has occasionally been linked with grief, where grief is defined as the negative emotional response generated by the loss of the business (Shepherd, 2000). Such is the emotional attachment between the business owner and their business, that a parallel has been drawn between the grief experienced from business failure and that which is experienced when a person is forced to give up some aspect of their life they deem important, or even through the loss of a loved one.

The grief literature has established that the process of grief recovery, defined as that point when thoughts of the loss do not evoke a negative emotional response, is classifiable either as through a loss orientation or a restoration orientation. A loss-orientated approach to grief is a process by which the individual works through the event about which they are grieving with the end result being that the way the event is interpreted changes (Archer, 1999). This changed interpretation allows the individual to reframe their viewpoint and regulate their negative response-driving thoughts (Gross, 1999). For the self-employed who experience business failure, this can involve directing thoughts to the positive aspects of the business experience (e.g., overcoming the challenges involved in getting the business started and the feelings one usually gets being their own boss) and away from the negative aspects leading up to the business closure.

Conversely, a restoration orientation sees the individual actively distracting themselves from the loss in order to speed up their recovery from grief. This process involves the person busying themselves so that they minimize loss-related thoughts. In the case of personal relationship breakdowns, individuals who quickly enter into new relationships are able to trade previous negative thoughts about the failed relationship with positive thoughts that they are able to link to the potential of the new situation (Schuchter, 1986). For business owners who experience business closure, a restoration orientation would see them engage in activities that would enable them to avoid the negative thoughts associated with the grief-inducing event of closure.

Loss and restoration orientations are not always mutually exclusive states. Several researchers suggest that grief recovery cannot be categorized as an either/or orientation (Shoeb & Schut, 1999). Using a learning framework, Shepherd (2000) argues for a dual process examination of grief recovery for individuals coming to terms with business closure. He suggests

“starting with a loss orientation gives an individual the ability to focus on aspects of the loss experience and to begin processing information about the business loss, as well as breaking the emotional bonds to the business” (p. 323).

Regardless of the individual grieving process, or even whether a person does necessarily grieve after business closure (as in some instances, closure could be a positive outcome), how individual functioning is affected by business closure is not currently clearly understood and leads us to our third research question.

*Research Question 3: Do self-employed individuals who report that their business closes differ from those self-employed individuals whose businesses continue to trade in relation to (i) life satisfaction, (ii) job satisfaction, (iii) perceived prosperity, (iv) risk preference, and (v) health (general health, vitality, social functioning, emotional well-being, mental health)?*

### **3. Method**

#### **Data Source: HILDA**

Multiple waves of The Household, Income and Labour Dynamics in Australia (HILDA) Survey data were used to investigate our research questions (for comprehensive details, see Watson & Wooden, 2002). The HILDA Survey is based on similar studies conducted in both Germany and the UK (the German Socio-Economic Panel and the British Household Panel Survey respectively). The HILDA Survey thus involved the selection of a large nationally representative sample of households and then seeking interviews with members of those households. Specifically, a household interview was sought with at least one adult member. Individual interviews were then sought with all household members over the age of 15 years on

the 30 June preceding interview. In addition to the collection of data through personal interview, all persons completing a personal interview were also given a self-completion questionnaire which they were asked to return, once completed, either by mail or by handing it to the interviewer at a subsequent visit to the household.

For our comprehensive description of the data collection process, we drew directly from Shields and Wooden (2003). In Wave 1 (2000), 13,969 individuals aged 15 years or older were successfully interviewed (from a sample of 15,127 in 7,683 households). Subsequent interviews for following waves were conducted one year apart. Attrition rates were comparable with other longitudinal surveys ranging from a high of 13.2% (Wave 2) to a low of 6.6% (Wave 3). Households were selected into the sample by a multi-stage process. First, a random sample of 488 Census Collection Districts (CDs), based on 1996 Census boundaries, was selected from across Australia (each of which consists of approximately 200 to 250 households). After adjusting for out-of-scope dwellings (e.g., unoccupied, non-residential) and households (e.g., all occupants were overseas visitors) and for multiple households within 9 dwellings, the total number of households identified as in-scope was 11,693. Interviews were completed with all eligible members at 6,872 of these households and with at least one eligible member at a further 810 households. The total household response rate was, therefore, 66 per cent. Within the 7,682 households in which interviews were conducted, there were 19,917 people. Of this group, 4,790 were under 15 years of age on the preceding 30 June and hence were ineligible for an interview in Wave 1. This left 15,127 persons eligible for a personal interview, 13,969 of whom completed the Person Questionnaire. Additionally, of this group, 13,159 (94%) completed and returned the Self-Completion Questionnaire. As discussed in Wooden, Freidin and Watson (2002), these response rates compare favourably with the rates achieved in the first waves of similar major

household panel surveys conducted in other Western nations and well in excess of the rates typically reported in other Australian surveys that have attempted to measure life satisfaction (Davern & Cummins, 2006; Smart & Sanson, 2005).

More importantly, comparison with population benchmark data from ABS sources suggest that the sample has characteristics that are broadly in line with what would have been expected if the sample were truly random.

## **Variables**

The issues investigated in this research paper were measured using the following constructs:

**Life Satisfaction:** Survey respondents were asked to indicate how satisfied they were with their overall life satisfaction (*All things considered, how satisfied are you with your life?*) using a scale ranging from 0 (totally dissatisfied) to 10 (totally satisfied). An almost identical question has been included as part of the German Socio-Economic Panel since its inception, in 1984, and has formed the basis for a number of studies into life satisfaction in that country (e.g., Winkelmann & Winkelmann, 1998; Clark, Georgellis & Sanfey, 2001, Frijters, Haisken-DeNew & Shields, 2004). The question is also very close to the overall life satisfaction item included in the widely used World Values Survey (Inglehart et al., 2000) and the Euro-Barometer Surveys (Di Tella et al., forthcoming).

This question follows probes into respondents' satisfaction with eight life aspects, including: (i) the home in which people live; (ii) employment opportunities; (iii) financial situation; (iv) personal safety; (v) feeling part of the local community (vi) personal health; (vii)

the neighbourhood in which people live; and (viii) amount of free time, again using a scale where 0 = totally dissatisfied, 5 = neither satisfied nor dissatisfied, and 10 = totally satisfied.

**Job Satisfaction:** Similarly, respondents were asked to rate their overall job satisfaction using a scale ranging from 0 (totally dissatisfied) to 10 (totally satisfied). This question follows five related questions: Total pay satisfaction; Job security satisfaction; The work itself satisfaction; The hours you work satisfaction; The flexibility to balance work and non-work commitments satisfaction; all measured using a scale ranging from 0 (totally dissatisfied) to 10 (totally satisfied).

**Individual Priorities:** Respondents were asked to respond to eight questions related to how they ranked aspects of their lives using a scale ranging from 0 (the least important thing) to 10 (the most important thing). The aspects were: The home in which you live; Your employment and work situation; Your financial situation; Involvement in your local community; Your health; Your family; Leisure activities, such as hobbies, sports and contact with friends; Religion.

**Perceived Prosperity:** A single item question that asked respondents perceived prosperity given their current needs and financial responsibilities with 6 response options: 1 = Prosperous; 2 = Very comfortable; 3 = Reasonably comfortable; 4 = Just getting along; 5 = Poor; 6 = Very poor.

**Risk Preference:** A single item question that asked respondents the financial risk they are prepared with 5 response options: 1 = Takes substantial risks expecting substantial returns; 2 = Takes above-average risks expecting above-average returns; 3 = Takes average financial risks expecting average returns; 4 = Not willing to take financial risks; 5 = Never has any spare cash.

**Individual Health Metrics:** Included in the HILDA Survey, as part of the self-completion questionnaire (SCQ), was the SF-36<sup>2</sup>, a survey of generic health concepts that has been

---

<sup>2</sup> The SF-36 comprises 36 items that can then be used to construct multi-item scales measuring each of the following eight health concepts: (i) physical functioning; (ii) role limitations due to physical health problems; (iii) bodily pain;

extensively tested and used around the world (see Ware et al., 2000). For this study, we were interested in the following SF-36 scales: general health, vitality, social functioning, role-emotional, and mental health. Raw scores on these scales are standardised in the HILDA dataset so that the scale values range from 0 to 100. Though there is some concern using self-report measures of health (see, for example, Chirikos, 1993) there is a large literature that supports that self-assessed measures are highly correlated with medically determined health status (e.g., Nagi, 1969; Maddox & Douglas, 1973; Ferraro, 1980) and are good predictors of mortality and morbidity (e.g., Mossey & Shapiro, 1982; Idler & Kasl, 1995).

**Self-Employed:** The HILDA survey includes two quantifying questions related to self-employment status using definitions established by the Australian Bureau of Statistics (ABS): (1) "Employee of own business" refers to people who work for their business which is incorporated and (2) "Employer/own account worker" refers to people who work in their own business which is not incorporated. In this research we were concerned with the former subset of self-employed (i.e., those with incorporated businesses).

**Private Sector Employees:** This subgroup of HILDA respondents were those who reported being in paid employment.

**Business Closure:** Individuals who reported that their business had closed (for economic or other reasons) in the year prior to HILDA Wave 1 were included in the sample of business closures that we tracked.

### **Control Variables**

**Age:** We controlled for the effects of age as there is evidence in recent studies employing large nationally representative data sets that age does impact psychological constructs (such as life

---

(iv) general health; (v) vitality; (vi) social functioning; (vii) role limitations due to emotional problems; and (viii) mental health.

satisfaction) (e.g., Clark & Oswald, 1994; Clark et al., 2001; Frijters et al., 2002; Helliwell, 2002; Di Tella et al., forthcoming).

**Education:** As measures of educational attainment in models of subjective well-being are usually included, in this analysis we included a series of dummy variables for different levels of education attainment.

**Gender:** We included respondents' gender as a control.

## 4. Results

### Research Question 1

The results suggest that the level of satisfaction between the self-employed and paid employees does differ significantly, and that entrepreneurs are more satisfied than their waged counterparts. Self-employed business owners report both higher levels of overall life satisfaction (see Table 2a), job satisfaction (Table 2b), and priorities (Table 2c). As seen in Table 2d, there were comparable findings for risk preference, perceived prosperity, and health. The control variables of age, gender, and education were significant for many of the different variables.

### Research Question 2

Research Question 2 posed whether the contributors to life satisfaction differed from those who were self-employed compared to those who were employees. Table 3 reports the regression results for both self-employed and employees. The adjusted  $R^2$  for the self-employed regression model was higher at .58 contrasted to an adjusted of  $R^2$  of .44 for employees. For both regression models, age was the only variable that was not associated (self-employed  $\beta = -.05$ ;  $p > .05$ ; employees  $\beta = .015$ ;  $p > .05$ ) with life satisfaction.

### **Research Question 3**

For Research Question 3, four waves of data were analysed for differences between ventures that were closed in Wave 1 and subsequently tracked across the remaining three waves to ventures that were still operating in each respective wave. Table 4a reports the life satisfaction comparisons between past owners of business closures and owners of still operating businesses. The only consistent statistically significant ( $p < .05$ ) differences between these two groups were in relation to: (1) how satisfied are you with employment opportunities?; (2) how satisfied are you with your personal health?; and (3) how satisfied are you with your amount of free time? For the items of how satisfied are you with employment opportunities and how satisfied are you with your personal health, the still operating group had higher means across the four waves than the closed business group. However, the closed business group did have higher means across the four waves for the item measuring how satisfied are you with your amount of free time.

For job satisfaction results, shown in Table 4b, there were no significant differences ( $p > .05$ ) between the two groups. Conversely, the results in Table 4c illustrate that there were significant differences ( $p < .05$ ) for the constructs of perceived prosperity, risk preference, and health metrics for each wave of data. Closed business ventures were significantly lower across these dimensions.

**Table 2a:** Life Satisfaction Differences between Self-Employed and Employees HILDA Wave 1.

Variable	Self-employed Mean (Standard Deviation) (n=526)	Employees Mean (Standard Deviation) (n=6840)	F-value	With Controls for Age F-value	With Controls for Gender F-value	With Controls for Education F-value
<b>Life Satisfaction</b>						
All things considered, how satisfied are you with your life?	8.12 (1.60)	7.91 (1.48)	8.28**	13.57***	6.20**	36.10***
How satisfied are you with the home in which people live?	8.04 (2.02)	7.84 (2.05)	1.36	50.01***	.31	38.59***
How satisfied are you with your employment opportunities?	7.85 (2.30)	7.22 (2.26)	47.53***	19.45***	10.64***	19.46***
How satisfied are you with your financial situation?	7.03 (2.42)	6.28 (2.27)	36.03***	34.18***	.18	20.29***
How satisfied are you with your personal safety?	8.31 (1.69)	7.91 (1.89)	18.76***	1.82	32.70***	.01
How satisfied are you with feeling part of the local community?	7.02 (2.23)	6.56 (2.28)	8.25***	102.81***	11.27***	1.48
How satisfied are you with your personal health?	7.87 (1.84)	7.72 (1.8)	6.54**	11.60***	.10	8.34***
How satisfied are you with the neighbourhood in which people live?	8.35 (1.64)	7.91 (1.87)	13.46***	85.26***	2.06	3.28
How satisfied are you with your amount of free time?	5.90 (2.94)	6.04 (2.62)	2.15	11.34***	2.14	115.68***

\*  $p < .05$   
\*\*  $p < .01$   
\*\*\*  $p < .001$

**Table 2b:** Job Satisfaction Differences between Self-Employed and Employees HILDA Wave 1

Variable	Self-employed Mean (Standard Deviation) (n=526)	Employees Mean (Standard Deviation) (n=6840)	F-value	With Controls for Age F-value	With Controls for Gender F-value	With Controls for Education F-value
<b>Job Satisfaction</b>						
All things considered, what is your overall job satisfaction?	8.01 (1.91)	7.60 (1.94)	15.25***	72.90***	33.96***	54.74***
How satisfied are you with your total pay?	6.93 (2.69)	6.78 (2.35)	.04	47.34***	.15	8.04***
How satisfied are you with your job security?	7.81 (2.52)	7.77 (2.446)	2.28	9.78***	28.49***	.15
How satisfied are you with the work itself?	8.17 (1.89)	7.56 (2.09)	22.49***	103.49***	3.68	1.81
How satisfied are you with the hours you work?	6.80 (2.49)	7.20 (2.32)	19.76***	65.99***	24.29***	65.23***
How satisfied are you with your flexibility to balance work and non-work commitments?	7.58 (2.71)	7.38 (2.57)	3.62	13.40***	33.44***	62.20***

\*  $p < .05$   
\*\*  $p < .01$   
\*\*\*  $p < .001$

**Table 2c:** Individual Priority Differences between Self-Employed and Employees HILDA Wave 1

Variable	Self-employed Mean (Standard Deviation) (n=526)	Employees Mean (Standard Deviation) (n=6840)	F-value	With Controls for Age F-value	With Controls for Gender F-value	With Controls for Education F-value
<b>Individual Priorities</b>						
How would you rate the importance of the home in which you live?	7.96 (1.87)	8.02 (1.92)	1.74	85.31***	45.94***	199.88***
How would you rate the importance of your employment and work situation?	8.09 (1.70)	7.99 (1.75)	1.46	1.86	72.41***	28.59***
How would you rate the importance of your financial situation?	8.14 (1.61)	8.04 (1.64)	2.38	2.23	2.58	55.54***
How would you rate the importance of your involvement in your local community?	5.88 (2.29)	5.49 (2.29)	4.72*	145.64***	33.35***	4.82*
How would you rate the importance of your health?	9.01 (1.20)	8.88 (1.32)	4.25*	31.06***	82.17***	6.40**
How would you rate the importance of your family?	9.61 (.84)	9.50 (1.11)	5.04*	25.41***	111.97***	4.71*
How would you rate the importance of leisure activities, such as hobbies, sports and contact with friends?	7.66 (1.88)	7.95 (1.71)	4.11*	29.30***	19.35***	33.82***
How would you rate the importance of religion?	4.39 (3.53)	4.24 (3.48)	.09	91.72***	127.20***	.62

\*  $p < .05$   
\*\*  $p < .01$   
\*\*\*  $p < .001$

**Table 2d:** Prosperity, Risk and Health Differences between Self-Employed and Employees  
HILDA Wave 1

Variable	Self-employed Mean (Standard Deviation) (n=526)	Employees Mean (Standard Deviation) (n=6840)	F-value	With Controls for Age F-value	With Controls for Gender F-value	With Controls for Education F-value
<b>Perceived Prosperity</b>						
What is your perceived prosperity given your current needs and financial responsibilities?	2.79 (.83)	3.17 (.75)	123.27***	24.01***	3.59	137.42***
<b>Risk Preference</b>						
What level of financial risk are you prepared to live with?	3.07 (.88)	3.62 (.92)	126.04***	.09	93.64***	258.74***
<b>Health Metrics</b>						
General health	75.13 (19.02)	73.54 (18.41)	7.33**	23.72***	2.39	8.82**
Vitality	64.38 (18.54)	62.30 (18.37)	.74	13.99***	80.16***	1.32
Social functioning	88.14 (20.51)	85.20 (20.54)	4.60*	5.83*	17.41***	.05
Role-emotional	88.61 (26.73)	86.50 (28.48)	.78	4.32*	15.12***	6.77***
Mental health	77.90 (15.50)	74.58 (16.13)	5.86*	50.89***	29.67***	1.22

\*  $p < .05$   
 \*\*  $p < .01$   
 \*\*\*  $p < .001$

**Table 3:** Life Satisfaction Contribution Self-Employed Versus Employees

Dependent Variable	Independent Variable	Self-Employed		Employees	
		$\beta$	<i>t</i> -value	$\beta$	<i>t</i> -value
		(n = 526) <sup>a</sup>		(n = 6840)	
Life Satisfaction	Age	-.053	-1.78	.015	1.61
	Gender	.051	1.71	.029	3.20**
	Education	.076	2.54*	.045	4.79***
	Home	.205	5.82***	.145	13.93***
	Employment opportunities	.213	6.11***	.114	11.01***
	Financial situation	.148	4.02***	.182	16.78***
	Personal safety	.154	4.48***	.151	14.14***
	Part of community	.119	3.38**	.081	7.48***
	Personal health	.123	3.78***	.193	18.81***
	Neighbourhood	.038	1.00	.065	5.83***
	Free time	.190	5.95***	.145	14.90***
	Adjusted $R^2$	.58		.44	
	<i>F</i> -Value	82.82***		649.14***	

\*  $p < .05$

\*\*  $p < .01$

\*\*\*  $p < .001$

<sup>a</sup> Pairwise deletion

Table 4a: Life Satisfaction Comparisons between Business Closure and Still Operating Business Respondents

	HILDA WAVE 1			HILDA WAVE 2			HILDA WAVE 3			HILDA WAVE 4		
	Closed Business in Wave 1 Mean (Standard Deviation)	Still Operating Mean (Standard Deviation)	t-test Scores	Closed Business in Wave 1 Mean (Standard Deviation)	Still Operating Mean (Standard Deviation)	t-test Scores	Closed Business in Wave 1 Mean (Standard Deviation)	Still Operating Mean (Standard Deviation)	t-test Scores	Closed Business in Wave 1 Mean (Standard Deviation)	Still Operating Mean (Standard Deviation)	t-test Scores
<b>Life Satisfaction</b>	(n=97)	(n=526)		(n=86)	(n=519)		(n=75)	(n=460)		(n=67)	(n=455)	
All things considered, how satisfied are you with your life?	8.07 (1.87)	8.12 (1.60)	-.25	8.05 (1.70)	8.07 (1.50)	-.10	8.17 (1.55)	8.11 (1.38)	.33	8.10 (1.94)	8.07 (1.41)	.15
How satisfied are you with the home in which people live?	8.38 (2.00)	8.04 (2.02)	1.53	8.40 (2.06)	7.97 (1.94)	1.77	8.37 (2.03)	8.16 (1.74)	.87	8.25 (1.79)	8.01 (1.94)	1.03
How satisfied are you with employment opportunities?	4.72 (3.69) (n=46)	7.85 (2.30)	-5.66***	4.97 (3.35) (n=29)	7.83 (2.34)	-4.53***	5.59 (3.14) (n=22)	8.18 (1.92)	-3.83**	4.30 (3.01) (n=20)	8.16 (1.84)	-5.67***
How satisfied are you with your financial situation?	6.13 (2.77)	7.03 (2.42)	-3.00**	5.93 (2.64)	6.92 (2.27)	-3.28**	6.64 (2.38)	7.09 (2.18)	-1.55	6.69 (2.36)	7.20 (2.16)	-1.68
How satisfied are you with your personal safety?	8.06 (2.04)	8.31 (1.69)	-1.14	8.15 (1.77)	8.12 (1.74)	.15	8.19 (2.09)	8.28 (1.65)	-3.61	8.03 (2.11)	8.33 (1.49)	-1.14
How satisfied are you with feeling part of the local community?	7.00 (2.62)	7.02 (2.23)	-.05	6.72 (2.64)	7.00 (2.14)	-.94	7.21 (2.45)	6.85 (2.09)	1.20	7.21 (2.43)	7.24 (1.90)	-.11
How satisfied are you with your personal health?	7.12 (2.35)	7.87 (1.84)	-2.97**	6.77 (2.30)	7.79 (1.69)	-3.94***	7.21 (2.06)	7.77 (1.68)	-2.21*	6.96 (2.29)	7.77 (1.69)	-2.80**
How satisfied are you with the neighbourhood in which people live?	8.16 (1.95)	8.35 (1.64)	-.88	8.07 (1.82)	8.22 (1.59)	-.73	8.29 (2.01)	8.32 (1.54)	-.13	8.27 (1.81)	8.33 (1.50)	-.28
How satisfied are you with your amount of free time?	7.48 (2.96)	5.90 (2.94)	4.84***	8.01 (2.14)	5.88 (2.73)	8.20***	8.23 (2.32)	5.66 (2.62)	7.96***	8.54 (2.20)	5.99 (2.62)	8.62***

\*  $p < .05$   
 \*\*  $p < .01$   
 \*\*\*  $p < .001$

Table 4b: Job Satisfaction Comparisons between Business Closure and Still Operating Business Respondents

	HILDA WAVE 1			HILDA WAVE 2			HILDA WAVE 3			HILDA WAVE 4		
	Closed Business in Wave 1 Mean (Standard Deviation)	Still Operating Mean (Standard Deviation)	t-test Scores	Closed Business in Wave 1 Mean (Standard Deviation)	Still Operating Mean (Standard Deviation)	t-test Scores	Closed Business in Wave 1 Mean (Standard Deviation)	Still Operating Mean (Standard Deviation)	t-test Scores	Closed Business in Wave 1 Mean (Standard Deviation)	Still Operating Mean (Standard Deviation)	t-test Scores
<b>Job Satisfaction</b>	Not asked	(n=523)		(n=14)	(n=516)		(n=8)	(n=460)		(n=9)	(n=455)	
All things considered, what is your overall job satisfaction?		8.01 (1.91)		8.36 (2.62)	7.99 (1.85)	.71	8.00 (1.51)	7.87 (1.82)	.24	6.78 (1.86)	7.99 (1.59)	-1.95
How satisfied are you with your total pay?		6.93 (2.69)		7.21 (2.94)	6.89 (2.57)	.41	5.38 (3.11)	6.93 (2.45)	-1.41	5.22 (2.86)	7.06 (2.41)	-1.92
How satisfied are you with your job security?		7.81 (2.52)		7.86 (2.98)	7.85 (2.51)	.01	6.86 (3.08)	8.04 (2.38)	-1.01	6.33 (3.67)	8.10 (2.20)	-1.44
How satisfied are you with the work itself?		8.17 (1.89)		8.43 (2.10)	8.08 (1.93)	.62	8.88 (.99)	8.04 (1.78)	2.33*	7.22 (2.86)	7.95 (1.76)	-.76
How satisfied are you with the hours you work?		6.80 (2.49)		8.21 (2.81)	6.94 (2.38)	1.69	8.25 (1.49)	6.72 (2.41)	2.84*	7.67 (2.45)	6.92 (2.29)	.91
How satisfied are you with your flexibility to balance work and non-work commitments?		7.58 (2.71)		8.50 (2.38)	7.57 (2.62)	1.44	8.88 (1.73)	7.47 (2.61)	2.25	7.44 (2.35)	7.54 (2.44)	-.124

\*  $p < .05$   
 \*\*  $p < .01$   
 \*\*\*  $p < .001$

Table 4c: Prosperity, Risk and Health Comparisons between Business Closure and Still Operating Business Respondents

	HILDA WAVE 1			HILDA WAVE 2			HILDA WAVE 3			HILDA WAVE 4		
	Closed Business in Wave 1 Mean (Standard Deviation)	Still Operating Mean (Standard Deviation)	t-test Scores	Closed Business in Wave 1 Mean (Standard Deviation)	Still Operating Mean (Standard Deviation)	t-test Scores	Closed Business in Wave 1 Mean (Standard Deviation)	Still Operating Mean (Standard Deviation)	t-test Scores	Closed Business in Wave 1 Mean (Standard Deviation)	Still Operating Mean (Standard Deviation)	t-test Scores
<b>Perceived Prosperity</b>	(n=90)	(n=482)		(n=78)	(n=448)		(n=66)	(n=428)		(n=58)	(n=415)	
What is your perceived prosperity given your current needs and financial responsibilities?	3.33 (.84)	2.79 (.83)	5.63***	3.31 (.81)	2.88 (.77)	4.36***	3.14 (.74)	2.77 (.81)	3.68***	3.09 (.86)	2.75 (.79)	2.84**
<b>Risk Preference</b>	(n=88)	(n=483)		(n=79)	(n=444)		(n=63)	(n=428)		(n=58)	(n=413)	
What level of financial risk are you prepared to live with?	3.91 (.99)	3.07 (.88)	7.40***	3.91 (.94)	3.04 (.93)	7.65***	3.78 (.89)	2.96 (.91)	6.84***	3.86 (.89)	2.91 (.88)	7.64***
<b>Health Metrics</b>	(n=90)	(n=486)		(n=82)	(n=450)		(n=65)	(n=422)		(n=58)	(n=415)	
General health	65.88 (21.19)	75.03 (19.02)	-3.78***	65.55 (21.73)	75.51 (18.24)	-3.86***	63.93 (23.03)	76.53 (17.83)	-4.22***	63.05 (22.84)	75.74 (18.23)	-4.02***
Vitality	58.69 (19.61)	64.38 (18.54)	-2.55*	59.84 (21.46)	65.58 (18.55)	-2.27*	57.74 (19.21)	65.39 (17.67)	-3.06**	58.79 (22.56)	64.72 (17.94)	-1.92
Social functioning	76.11 (27.13)	88.14 (20.51)	-4.00***	78.20 (26.19)	88.89 (18.81)	-3.53**	73.51 (31.04)	88.08 (20.19)	-3.72***	76.29 (27.28)	89.36 (18.00)	-3.54**
Role-emotional	75.78 (37.19)	88.61 (26.73)	-3.06**	77.78 (38.62)	90.96 (24.40)	-2.91**	78.46 (33.56)	90.40 (24.92)	-2.75**	74.14 (39.02)	89.72 (26.14)	-2.95**
Mental health	71.87 (18.79)	77.90 (15.50)	-2.87**	72.63 (17.93)	78.69 (14.79)	-2.88**	74.78 (18.50)	79.84 (13.19)	-2.15*	70.62 (21.89)	78.68 (13.78)	-2.73**

\*  $p < .05$   
 \*\*  $p < .01$   
 \*\*\*  $p < .001$

## 5. Discussion

The purpose of this exploratory research was to investigate three questions related to individual functioning in small businesses in Australia using the rich information compiled by the HILDA initiative. Our findings shed further light on the contrasts between a life *in* business versus a life *for* business and support similar studies around the world that point to the perceived positive outcomes of business ownership. From our results, we are able to make several observations.

In regards to Research Question 1, the results suggest that the level of satisfaction between the self-employed and employees groups differs significantly, and that self-employed are more satisfied than their waged counterparts in most areas. Self-employed business owners report both higher levels of overall life satisfaction and job satisfaction. More specifically, the self-employed are significantly more satisfied than employees in regards to their life conditions, their employment opportunities, their financial situation, their personal safety, in feeling part of the community, their personal health, and their neighbourhood. This would tend to confirm the results uncovered in previous studies of satisfaction among small business owner-operators in other nations, which report similar findings to those reported here from Australia. This appears to arise from several factors. As the Wave 1 data analysis shows, small business owner-operators are satisfied with most aspects of their life (employment, finances, personal security, community belonging, and personal well-being) – all of which are commonly accepted measures of well being.

Though, it seems that for the self-employed this well-being does not come without cost. It is of interest to point out that employees were more satisfied with their free time when controlling for age and education. This specific finding could suggest that employees are able to have greater control of their free time versus the self-employed who may feel that they are always responsible to their business and their consumers. This finding is further validated as employees were more satisfied with the hours they worked and their leisure activities than the self-employed.

As expected, the self-employed were also more satisfied with their perceived prosperity than employees. The self-employed respondents, as a whole, felt “very comfortable” with their perceived prosperity. This point is further validated as the self-employed were more willing than employees to take risks to gain greater financial well being.

The results for Research Question 2 suggest that all of the studied variables (with the notable exceptions of age, gender, and neighbourhood) explain approximately 58% of the variance associated with life satisfaction for the self-employed. Interestingly, age and gender did not play a significant role for the self-employed groups’ life satisfaction. This finding may suggest that the self-employed feel more empowered to overcome well-documented biases associated with age and gender and thus reduce the effects of these two components on overall life satisfaction. For employees, only 44% of the variance was explained through the regression model. Likewise, gender did play a significant role for employees in determining their life satisfaction, though the effect was the weakest compared to other variables in the regression model. As stated earlier, the self-employed are more satisfied with their lives than employees.

Research Question 3 asked whether there were differences between the self-employed who closed their business compared to those who remained in business. In effect, do the self-employed who close their business report consistently higher levels of life satisfaction, job satisfaction, perceived prosperity, risk preference, and health? There were no differences for job satisfaction and the overall single measure of life satisfaction. As would be expected, the self-employed whose business closed did report a higher level of free time as compared to their still-operating business counterparts.

Antithetically, the self-employed whose businesses closed reported significantly lower scores on the dimensions of perceived prosperity, risk preference, and health relative to the self-employed with businesses across the four waves of data. The dimensions of perceived prosperity and risk preference are often associated as entrepreneurial attributes. Those who closed their business may

feel that they have lost their personal identity as a business-owner. This suggestion is strengthened through findings relating to differences in health between the two groups. The individuals remaining in business have significantly higher mean scores than those who close their business. Moreover, the largest gap in mean scores between the two groups relates to the role-emotional item followed by social functioning. These health findings may suggest that the self-employed who lose their business may be grieving the loss of their business or the loss of their identity as an entrepreneur. Conversely, other obfuscating findings which were not controlled for through the research design could be affecting the health results (e.g., chronic illness).

## 6. **Implications**

We suggest there are implications from these findings for several audiences. First, those considering pursuing a career move into business ownership should be encouraged to know that, although there are well documented risks and challenges, our results point to rewards in terms of life satisfaction, work satisfaction, and health. Second, those already involved in business may also be enlightened to know that, although at times the odds do seem unsurpassable, the general perception is that the benefits do outweigh the cost, in well-being, if not in financial terms. Finally, such results also pose some interesting challenges for policymakers and educators.

Small business ownership, it seems, can bring many personal and job-related advantages, compared to conventional paid employment. The self-employed provide economic opportunities for the communities they work in (by the creation of new products, services and jobs, and by overall wealth creation), and the reward is a greater sense of well-being than can be achieved by working as an employee. However, the path to business success is often uncertain and unpredictable, whereas a wage or salaried occupation is not necessarily so. Should more emphasis be placed on these findings by those seeking to promote a greater embrace of entrepreneurship in the Australian community?

The implications for business closures are that those who close their business are not as healthy, their risk preference is diminished, and their perceptions of their prosperity are lowered. More attention should be paid to this group which is making the transition from having the identity and responsibility of being self-employed to that of an employee. Assistance, especially in the form of psychological well-being related health initiatives, could greatly soften and expedite this transition.

## **7. Limitations and Future Research**

Analysing data collected to address multiple agendas is not without limitations and it would be remiss of us to not include an overview of what we see as the most significant of these uncovered during the process of developing this project. First, as our primary audience of interest is those respondents involved in small business (unlike much of the previous work that has been published in this area), the use of a household sample means that the respondents' frame of reference is from a household, rather than a business, perspective. Ideally, we would have preferred to have included more information about, and insights into, respondents' business activities. While there are additional questions in the HILDA survey that relate to the respondents' business activities, these are not often couched in extant entrepreneurial and small business theories, so we elected to not include these during this exploratory investigation. However, we do see potential in the future to investigate research questions that will include finer attributes of respondent businesses.

Second, we deliberately omitted including details about the respondents' family situation. This is a limitation of the study but one that we considered being not a requirement of an exploratory project. The HILDA survey provides rich insights into family functioning and we intend to continue to investigate the small business owner respondents' data in order to gain further knowledge into the business-family relationship.

Third, while we included control variables in our comparisons, we limited these to only three, and there is opportunity to make finer analyses in future studies. Finally, our analysis of the 97 business closures and their post business closure activity does not include reasons for the business closure and specific details of the respondents' post closure activities. The well-being related variables that we track can only be interpreted as indicative comparisons with the continuing business respondents. As well, bias issues related to not being able to validate responses are a limitation of this type of research.

## **8. Conclusion**

In this research project we have demonstrated that the HILDA initiative, as well as providing researchers rare glimpses into Australian households, also provides a better appreciation of functioning in Australia's small business sector. The individual-work-business interface is at the core of contemporary society and the increased understanding provided by this project, and others like it, will improve stakeholder knowledge and assist in developing support programs for those involved in Australia's vital small and family business sector.

## References

- Archer, J. (1999) *The nature of grief: The evolution and psychology of reaction to loss*, Routledge, New York.
- Australian Bureau of Statistics (1997) *Business exits in Australia*, Cat. no. 8144.0, ABS, Canberra.
- Australian Bureau of Statistics (2000) Defining businesses by size, *Small business in Australia 1999*, ABS, Canberra, pp. 135–50.
- Australian Bureau of Statistics (2007) *Counts of Australian businesses, including entries and exits*, Cat.no.8165.0, Canberra: ABS, p.14
- Bickerdyke, I., Lattimore, R., & Madge, A. (2000) *Business failure and change: An Australian perspective*, Productivity Commission, Canberra.
- Blanchflower, D.G., Oswald, A., & Stutzer, A. (2001) Latent Entrepreneurship Across Nations, *European Economic Review*, vol. 45 no. 4-6, pp. 680-691.
- Bolton Report, Government of the United Kingdom (1971) *Committee of inquiry on small firms*, HMSO, London.
- Bradley, D.E. & Roberts, J.A. (2004) Self-employment and job satisfaction: Investigating the role of self-efficacy, depression, and seniority, *Journal of Small Business Management*, vol. 42 no. 1, pp. 37- 58.
- Chay, Y.W. (1993) Social support, individual differences, and well-being: A study of small business entrepreneurs and employees, *Journal of Occupational and Organizational Psychology* no. 66, pp. 285-302.
- Chirikos, T. N. (1993) The relationship between health and labor market status, *Annual Reviews of Public Health*, 14: 293-312.
- Clark, A., Georgellis, Y., & Sanfey, P. (2001) Scarring: The psychological impact of past unemployment, *Economica*, 68, May: 221-241.

- Clark A., & Oswald, A. J. (1994) Unhappiness and unemployment, *The Economic Journal*, 104, May, 648-659.
- Cooper, A. C., & Artz K. W. (1995) Determinants of satisfaction for entrepreneurs, *Journal of Business Venturing*, vol. 10 no. 6, November, pp. 439-457.
- Davern, M. & Cummins, R. (2006), Is life dissatisfaction the opposite of life satisfaction? *Australian Journal of Psychology*, 58 (1): 1-7.
- Diener, E., & Biswas-Diener, R. (2002) Will money increase subjective well-being? A literature review and guide to needed research, *Social Indicators Research*, 57, February, 119-169.
- Diener, E., & Lucas, R. E. (1999) Personality and subjective well-being, in D. Kahneman, E. Diener and N. Schwarz (eds), *Well-being: The foundations of Hedonic psychology*, Russell Sage Foundation, New York.
- Diener, E., Suh, E. M., Lucas, R. E., & Smith, H. L. (1999). Subjective well-being: Three decades of progress, *Psychological Bulletin*, 125, March, 276-302.
- Di Tella, R., McCulloch, R. J., & Oswald, A. J. (forthcoming) The macroeconomics of happiness, *Review of Economics and Statistics*.
- Ferraro, K. F. (1980). Self-ratings of health among the old and old-old, *Journal of Health and Social Behavior*, 20: 377-383.
- Frijters, P., Haisken-DeNew, J. & Shields, M. (2002) The value of reunification in Germany: An analysis of changes in life satisfaction, *IZA Discussion Paper No. 419*, IZA, Bonn.
- Frijters, P., Haisken-DeNew, J. & Shields, M. (2004) Investigating the patterns and determinants of life satisfaction in Germany following reunification. *Journal of Human Resources*, 39: 649-674.
- Frey, B., & Stutzer, A. (2000), Happiness, economy and institutions, *The Economic Journal*, 110, October, 918-938.
- Gross, J. J. (1999) Emotion regulation: Post, present, future. *Cognition and Emotion*, 13: 551-573.

- Helliwell, J.F. (2002) How's life? Combining individual and national variables to explain subjective well-being, *National Bureau of Economic Research Working Paper 9065*, NBER, Cambridge, MA.
- Idler E.L. & Kasl S.V. (1995) Self-ratings of health: Do they also predict change in functional ability? *Journal of Gerontology: Social Sciences*, **50B**: S344-S353.
- Inglehart, R. et al. (2000), *World Values Surveys and European Values Surveys, 1981-84, 1990-93 and 1995-97* [computer files], ICPSR version, Institute for Social Research, Ann Arbor, MI.
- Jamal, M. (1997) "Job stress, satisfaction, and mental health: an empirical examination of self-employed and non-self-employed Canadians" *Journal of Small Business Management* vol. 35 no. 4 October, pp. 48-57.
- Maddox, G. L., & E. B. Douglas, (1973), Self-assessment of health: A longitudinal study of elderly subjects, *Journal of Health and Social Behavior*, 14: 87-93.
- Mossey, J. M. & Shapiro, E. (1982), Self-rated health: a predictor of mortality among the elderly, *American Journal of Public Health*, 72: 800-7.
- Nagi, S.Z. (1969), Congruency in medical and self-assessment of disability. *Industrial Medicine*, 38:74-83.
- Noorderhaven, N.G.; Wennekers, S.; Hofstede, G.; Thurik, A.R. & Wildeman, R.E. (1999) Self-employment out of dissatisfaction: An international study, *Tinbergen Institute Discussion Paper No.99-089/3*. Online: <http://www.tinbergen.nl/discussionpapers/99089.pdf>
- Schaper, M. (2006) Distribution patterns of small firms in developed economies: Is there an emergent global pattern? *International Journal of Entrepreneurship and Small Business* Vol.3 No.2, pp.183-189.
- Schaper, M. & Volery, T. (2007) *Entrepreneurship and small business: A pacific rim perspective* (2<sup>nd</sup> edition) Brisbane: John Wiley & Sons.
- Schuchter, S. R. (1986). *Dimensions of grief: Adjusting to the death of a spouse*. New York: Jossey-Bass.

- Scutella, R and Wooden, M 2004, 'Jobless households in Australia: incidence, characteristics and financial consequences', *The Economic and Labour Relations Review*, vol.14, no.2, pp.187-207.
- Shepherd, D. A. (2000) Learning from business failure: Propositions of grief recovery for the self-employed, *Academy of Management Review*, 28(2), 318-326.
- Shields, M., & Wooden, M. (2003) Investigating the role of neighborhood characteristics in determining life satisfaction, Melbourne Institute of Applied Economic and Social Research Working Paper No. 24/03. ISSN 1447-5863 (Online).
- Smart, D. & Sanson, A. (2005), What is life like for young Australians today, and how well are they faring? *Family Matters*, Issue 70:46-53.
- Volery, T., Mazzarol, T., Doss, N., & Thein, V. (1997) Barriers and triggers affecting entrepreneurial intentionality: The case of Western Australian nascent entrepreneurs, *Journal of Enterprising Culture*, September, vol. 5 no. 3, pp. 273-291.
- Ware J.E., Snow K.K., Kosinski M. & Gandek B. (2000), SF-36<sup>®</sup> Health Survey Manual and Interpretation Guide. QualityMetricIncorporated, Lincoln, RI.
- Watson, J. & Everett, J. (1993) 'Defining small business failure', *International Small Business Journal*, vol. 11, no. 3, pp. 35-48.
- Watson, N., & Wooden, M. (2002a) The Household, Income and Labour Dynamics in Australia (HILDA) Survey: Wave 1 Survey Methodology', HILDA Project Technical Paper 30 Series No. 1/02, May 2002 (Revised September 2002), Melbourne Institute of Applied Economic and Social Research, University of Melbourne.
- Watson, N., & Wooden, M. (2002b) Assessing the quality of the HILDA Survey Wave 1 Data, HILDA Project Technical Paper Series No. 4/02, October 2002, Melbourne Institute of Applied Economic and Social Research, University of Melbourne.
- Winkelmann, L., & Winkelmann, R. (1998) Why are the unemployed so unhappy? Evidence from panel data, *Economica* 65, February, 1-15.

Wooden, M., Freidin, S., & Watson, N. (2002) The Household, Income and Labour Dynamics in Australia (HILDA) Survey: Wave 1, *Australian Economic Review* 35, September, 339-348.