

A study examining the mental health, self-efficacy and motivation within the workplace in Ireland.

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Submitted in partial fulfilment of the requirements of the Bachelor of Arts degree in Psychology at DBS School of Arts, Dublin.

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April 2013

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Acknowledgments

I would like to express my sincere thanks to the following people for their help and assistance during my final year project, my supervisor Dr. Jonathan Murphy for the helpful comments and support and Dr. John Hyland for his help in coming up with a proposal. To Dr. Patricia Frazer, Margaret Quinn Walsh and Michael Nolan for the assistance in the preparation for the project. I am very grateful for the cooperation and interest of those who took part in the study and the input from the Dublin Chamber of Commerce; this paper would not have been possible without your assistance.

1. Abstract

The current research examined the relationship between general and psychological mental health and self-efficacy, motivation, outlook on business results with business owners and non business owners in the current recessional economic climate. Additionally, possible sex differences among the psychological and financial outlook factors were explored. A cross-sectional survey design was employed using the GHQ-12, GSE, UMS measures and yearly financial outcomes statements. All surveys were self reported and one hundred and fifty-six participants (N=156) were recruited. The results indicated that the strongest predictor of mental/psychological health was self-efficacy and previous yearly-financial outcomes accounting for a moderate 13% of the variance. It can be concluded that workplaces should be aware of the link between work-abilities and general/psychological mental health in times of recession.

Key Words: general mental health, self-efficacy, motivation, recession, Ireland.

1. Introduction

The economic challenges in Ireland have severely impacted the Irish population following the recession and banking crisis over the past five years. This has resulted in business and related stakeholders being negatively impacted. A recent PWC/IBEC survey stress tested over nine thousand business entities, half of which show a high risk of failure (Price Waterhouse Coopers 2011). High profile insolvency cases were common place in 2012 and included the Quinn Group, Treasury Holdings, McNamara Group and Clerys to name just a few. Insolvencies numbered four thousand six hundred and eighty-eight since 2010 with slightly over four hundred insolvencies in Q4/2012 (Insolvency Journal, 2013). Average earnings in Q3/2012 were €36,140, now 1% less than 2008 and decreased by 3% at the lowest point in Q1/2010. Unemployment levels have increased since June 2008 by 145% with an excess of three hundred thousand people unemployed. (CSO, 2012) Negative consumer sentiment is evident, as reported by Amarach Research that calculated a strong correlational trend of 0.84 consumer sentiment with unemployment (O'Neill, 2009).

Media exposure is heightened as a result of the economic recession e.g. a newspaper headline reported in January 2013 - 'Eurostat says; Irish Debt is growing faster than any other EU state' (Irish Times, Jan 24, 2013, business Pg. 3). Research in 2009 highlighted the influence of the media, as a previous study indicated that 52% of respondents felt that both TV and newspapers increased negative feelings about life (O'Neill, 2009). Outcomes from several commercial studies among participants indicated a decrease in confidence, negative health related issues, stress, financial and negative influences for business generally. Confidence is key to the economic development and growth across the population (Price Waterhouse Coopers 2011). Internationally, for example, consumer confidence in Canada fell to its lowest in October 2012 since 1982. However, it should be noted that Canada is not in recession. Stock market volatility and news coverage are causing consumers concern. The

psychological dimension of using 'we' and 'recession' leads to a loss of confidence. 'If we are confident in the economy as a whole, in our job prospects and in the ability to keep earning, we are likely to invest and take long term decisions' (Hodgson, 2012). Hodgson describes the 'generation factor' as Canada's last recession was in 1991-92. There is now a generation who have yet to experience a recession.

2.1 Recessional periods and psychological health

In recessional times there is an impact on individuals, not only in financial terms but also with regard to psychological mental health that may start to deteriorate. This has then a notable affect in the use of health/psychological health services, general medical practitioner (GP) visits and an increased level of suicides (Mental Health Commission, 2011). The Mental Health Commission recommended that psychological services such as the College of Psychiatry, the Psychological Society of Ireland work with MABS (Money Advice and Budgeting Service) support clients on a pro-bono basis. They also recommended the Department of Social Protection create a form similar to Debt and Psychological health Evidence Form (DMHEF) implemented in the UK to support the transfer of client information between the psychological health and financial/social services (Mental Health Commission, 2011).

Ireland is faced with major company re-structuring leading to unemployment, the reduction in public service payroll costs across all departments with the negative consequences to the population in terms of health, confidence, income and future financial concerns. Research conducted in May 2012, reported that 58% of those surveyed now claim to be financially worse off than 2 years ago and that an increased number of Irish people claim to have some experience of psychological health problems, either themselves or through others. (Millword Brown Landsdowne, 2012). Research in the United States compared psychological distress linked to recessionary factors identified for a 1% change in

mortgage delinquencies (foreclosures), had a 16% rise in psychological distress in one month (11% in four months). They showed signs of depression, anxiety disorders that were linked to psychological distress (non-specific levels of distress) although it was not ascertained if it was clinical depression through diagnostic tools (Ayers, Althouse, Allem, Childers, Zafar, Latkin & Brownstein, 2012).

2.1 Irish Business owners and psychological health

Large segments of the Irish population are involved in enterprises. An enterprise is described by the CSO as the smallest combination of legal units that is an organisational unit producing goods and services, which benefits from a certain degree of autonomy in decision-making. In practice it is equivalent to a company or firm. There were over five thousand enterprises or companies ranging in size based on employees: Micro, less than twenty employees, representing 27% employed; Small, ten to forty nine, 23%; Medium, fifty to two hundred and forty nine, 19%; Large, greater than two hundred and fifty employees with 31% employed (CSO, 2012). Enterprises represent a considerable segment of the Irish population and have taken significant reduction in earnings and employment since 2008. It is also a barometer to predict the future for the Irish economy. When business owners were asked 'where do you expect Ireland, your sector, and your own business to be in 2020; 66% responded with 'Better than it is to-day' and 18% responded with 'No change'. 'On optimism' 49% are positive and upbeat about the future (Price Waterhouse Coopers. 2011).

With regard to workers, there are several economic stressors such as mortgage foreclosures, lack of employment opportunities that are purported to identify an increased risk of psychological distress, a 1% increase in the economic stressors was estimated to cause 16% increase in psychological distress in one month (11% four months later). In the same study stock markets indicators and house prices had no impact (Ayers, Althouse, Allem, Childers, Zafar, Latkin & Brownstein, 2012). Further evidence has shown the link between

psychological health (and psychological health) and work, more specifically work burnout and stress. Work burnout has been previously measured within a sample of university lecturers where a significant correlation existed between work burnout and employees' psychological health (Jaber & Al-Zoubi 2012). Thus, findings have identified that role of negative work environment and psychological health.

2.2 Self-efficacy and Motivation

This study will explore self-efficacy, motivation how and if they relate to general psychological health. These factors are shown to also impact job performance, quality of work and are shown to be personality traits of entrepreneurs influencing risk-taking and innovation (Stewart, Watson, Carland, Carland, 1999). Firstly, self-efficacy will be examined. Self-efficacy was investigated by Bandura (1997) in his extensive research on social learning, aggression and social cognitive theory. Bandura conducted experiments in aggression including the controversial Bobo doll experiment (1977). This explored the behaviour of children's actions on aggression in hitting the doll. Social Cognitive Theory followed in the mid 1980s and developed a more integrated approach to cognition, based on social learning theory.

Self-efficacy as described in the social learning theory, is a person's belief that (s)he is capable of performing a particular task successfully, or a belief in the capabilities of organisation and execution of courses of action required to manage situations" (Bandura, 1997). The belief systems are influenced through mastery, social modelling, and social persuasion, managing psychological and emotional states (Arnold. 2005). It is an self-fulfilling prophecy: "Self-belief does not necessarily ensure success, but self-disbelief assuredly spawns failure" (Bandura, 1997, Pg. 77). This is also described as the Pygmalion effect where individuals perform in line with the expectation on them (Rosenthal and Jacobson. 1968). Self-efficacy is further defined a personal judgment of "how well one

can execute courses of action required to deal with prospective situations” (Bandura, 1982, pg.122). Stress, fatigue and depression can lower the sense of efficacy (Bandura, 1997). Bandura has studied many facets of self-efficacy in his work such as cognitive, health, clinical, athletic and organisational functioning, benefiting these areas and as a predictor of behaviour.

Additionally, self-efficacy plays an important role in the successful completion of goals, tasks, and challenges (motivational factors). A strong sense of self-efficacy means individuals view challenges as tasks to be mastered. They develop deeper interest and commitment in the activities in which they participate and recover quickly from setbacks and disappointments. Whereas people with a weak sense of self-efficacy, avoid challenges, believe that difficult tasks are outside their capabilities, focus on failings and negative outcomes, and lose confidence in their personal abilities. Thus, the research and theory would suggest that self-efficacy and motivation share some relatedness. In order to provide further understanding the nature and operationalization of motivation will be dealt with next.

Motivation is associated with personality, management, needs, human relationships and achievement. Maslow (1954) developed the concept of self actualizing questioning why people’s life, love and work leads to humanistic and transpersonal psychology. This has influenced organisation management, health and individualism (Maslow, 1970). Beck (1978) defines motivation as a theoretical concept as “our basic motivational premise is that organisms approach goals, or engage in activities that are expected to have desirable outcomes, and avoid activities that are expected to have unpleasant or aversive outcomes” (Beck, 2000, Pg 3). Beck explored regulatory approach, the body’s response to hunger and pain with the need to be at equilibrium known as homeostasis and the purposive approach a cognitive behavioural goal directed which is cognitive in nature (Beck, 2000). A challenge in the psychology of motivation has been the lack of consensus on its definition. In an

attempt to resolve the terminological confusion, a study of 102 definitions for motivation where nine categories were highlighted, the following descriptions were identified: psychological (internal mechanisms directing (functional processes), temporal and process restrictive (scope of motivation), broad based and inclusive (the comprehensive nature of motivation) (Kleinginna & Kleinginna, 1981). Motivation traits and attributes were explored in a USA study of seven hundred and sixty entrepreneurs, small business owners and corporate managers, entrepreneurs were identified as higher in achievement motivation than corporate managers, the small business owner was classified as a corporate manager in this study. (Stewart, Watson, Carland & Carland, 1999). It will be interesting to understand the role of motivation in the Irish context and their differences to business owners and non business owners.

2.3 Rationale, aims and objectives:

As Ireland moves through the recession with the positive/negative perspectives on the economy, it will be beneficial to better understand how general health is impacted as this is year six of the recession. Additionally it is expected that further insights may be understood which may be used to inspire new research. It is envisaged that this research will add knowledge beneficial to organisations creating, selecting and investing in business enterprises. For business owners this research will provide insights into general health and how they compare to non-business owners. This study will also expand the knowledge of self-efficacy and motivation (an aim of this study) and how these with help will contribute to business outcomes and potentially allow insights on developing skills necessary to be successful in life. This study will also be of importance to a wider range of interested groups. It is hoped that it will add value from the analysis of the variables to create interventions where change and adaption is required and overall to improve business outcomes.

The recession is a major topic which impacts most people in society, shaping lives in terms of confidence, health and concerns for the future (Millword Brown Landsdowne, 2012). Ireland now faces improving economic prospects in 2014 which means Ireland may be coming out of recession, the timing is advantageous given that Ireland is will likely exit this negative period (O'Neill, 2009). Business ownership in Ireland is a significant part of the national wealth generation, employment and economic development and represents a key element to the future and solution to the economic situation in Ireland. It is expected that Ireland's economic conditions with regard to GDP, employment and exports will improve in 2014 (Duffy, Durkan, Timoney & Casey, 2012). Investigating general health, self-efficacy and motivation following the period of economic recession provides a unique opportunity to understand the impact on the business owner and to compare the variables with non-business owners. Previous research on the influence of the recession on the positive outlook of leaders and non-leaders has shown that leaders were significantly impacted by domains of worry, optimism and relaxation and non leaders in the domain of worry (Dalton, 2011).

With regard to the current research based on the previous evidence the following hypothesis were formulated:

H1: General Health:

There will be a significant difference between the groups business owners and non business owners (those in other employment) related to general psychological health.

H2: Self-efficacy

There will be a significant difference between the groups' business owners and non-business owners (those in other employment) related to self-efficacy.

H3: Motivation

There will be a significant difference between the groups business owners and non business owners (those in other employment) related to motivation (fear, power, affiliation and intimacy).

H4: Sex Differences

Explore possible sex differences between male and female between the group's health, self-efficacy and motivation (fear, power, affiliation and intimacy).

H5: Explore possible relationship between the variables general health, self-efficacy, motivation and perceptions of financial business outcomes.

3. Methodology

3.1 Pilot Study

A pilot study using pen and paper was conducted using a small sample to test the understanding of the self-reported measures and to establish the approximate time for completion. The results of the pilot study indicated that the questionnaires were understood and completion was estimated to take 20 minutes. The Unified Motive Scale (question 33) required adjustment the feedback stated a preference for an online survey document.

3.2 Participants

A total of one hundred and fifty six participants (N=156) completed the questionnaire. A convenience sample was taken from the Researchers network and from the Dublin Chamber of Commerce business owner's network. The sample consisted of 94 Males and 48 Females (missing data 14); the mean age is 46 years. Business owners accounted for 60 responses with participants working for organisations were 87 (missing data 9).

3.3 Design

The aim of the study is to determine if there is a significant difference between business owners and a general population in categories of general health, self-efficacy and motivation. This study employed a quantitative cross-sectional survey design, adopting, correlational and descriptive approach. The criterion variable was general health (GHQ) and the predictor variables were self-efficacy, motivation (power, affiliation, intimacy and fear), work income (own a company or an employee of a company) financial outcomes, gender and age.

3.4 Materials

A brief demographic questionnaire was developed by the researcher to obtain information on age, gender, main job, source of income (business or non business owner), and a personal financial report for years 2013 to 2015. In addition to this brief questionnaire, all respondents were asked to complete a series of questionnaires including the General Health Questionnaire (GHQ-12: Goldberg, 1978), the General Perceived Self-Efficacy Scale (GSE: Schwartz & Jerusalem, 1995) the Unified Motive Scale (UMS-3: Schonbrodt & Gerstenberg, 2012).

The General Health Questionnaire 12-item (GHQ-12: Goldberg, 1978) the questionnaire is designed as a self administered screening test with a focus on psychological components of ill-health (Goldberg & Williams, 1978). The GHQ-12 is a shortened version of the GHQ-60 questionnaire; although shorter it is deemed as valid and reliable. The GHQ-12 model uses a four point scale: 'not at all', 'no more than usual', 'rather more than usual', 'much more than usual'. Questions on symptoms such as 'felt capable of making decisions about things' are scored 1, 2, 3, 4 respectively with the higher score suggesting the probability of a clinical disorder.

GHQ-12 has a good internal consistency, Cronbach's Alpha ranged from 0.82 to 0.90 in a series of studies and the retest reliability was 0.73. Cronbach's Alpha is an estimate of the reliability of a test for a sample of participants, it is used in social sciences, business and other disciplines. High scores on this measure represented poorer psychological health or psychological health, while lower scores more favourable levels of psychological or psychological health, a high score greater than 0.70 is desirable and suggests the items have a relatively high level of consistency.

The Generalised Self-Efficacy Scale (GSEs: Schwartz & Jerusalem, 1995) was used to assess the participants general sense of self-efficacy to predict coping with daily life hassles

and with adaption it can be used after experiencing various kinds of stressful events in life (Schwarzer & Jerusalem, 1995). The scale is designed for the general adult population, it is a 10 item scale, and each item had a four scale response from 'Not at all' to 'Exactly True'. Some of the statements on the scale include 'I can always manage to solve difficult problems if I try hard enough' and 'I can usually handle whatever comes my way' (Schwarzer, 1992). The measures are in use for two decades internationally and available in 33 languages in a wide range of applications. Higher totalised scores on this measure represent increased levels of self-efficacy or more perceived ability while lower scores less perceived ability. The internal consistency reliability of GSES was assessed using samples from 23 nations using Cronbach's alpha ranged 0.76 to 0.90 the majority are in the high 0.80s. A high score greater than 0.70 is desirable suggests the items have a relatively high level of consistency. A weakness as a general measure of behaviour change is identified for example physical exercise self-efficacy requiring additional measurement items (Schwarzer & Fuchs, 1996).

The Unified Motive Scale (UMS-3: Schonbrodt & Gerstenberg, 2012) used to assess achievement, power, affiliation, intimacy and fear. The UMS scale is based on an Item Response Theory (IRT) of existing scales from a pool of 237 items. IRT is a statistical technique applied to data used in psychometrics which is effective for subjective health status and quality of life outcomes. The full version scale has 54 items, the short version has 30 items and the ultra-short version UMS-3 has 15 items the shorter version measure. Each statement has a six-point Likert scale response from 'completely disagree' to 'completely agree', an examples of statements on the scale are 'I am afraid of failing in somewhat difficult situations, when a lot depends on me' and 'I like to have the final say', the scale is a translation from German Motives are classified as Agentic motives – Achievement (standard of excellence) and Power (impact on other people), described in Social Cognitive Theory as people being producers as well as products of social systems; Communal motives –

Affiliation (desire to have interpersonal relationships) and Intimacy (the goal state of being close to others). Two directional components are identified, the hope component, leads to seeking a positive desired goal state; the fear component seeking the avoidance of undesired goal states, fear scales have been developed for the achievement, affiliation and the power motives. Schonbrodt & Gerstenberg, 2012, 'report on average the UMS subscales shows higher correlations with all of the existing questionnaires than these questionnaires did amongst each other'. (Schonbrodt & Gerstenberg, 2012. Pg 3) Cronbach's alpha is reported for the subscales Power 0.80, Achievement 0.72, Affiliation 0.80, Intimacy 0.64 and fear 0.61. A score greater than 0.70 on Cronbach's alpha statistic is desirable.

3.5 Procedure

The participants were recruited from a number of sources: the researcher's contacts in Ireland from a wide range of settings and the Dublin Chamber of Commerce Business Owners Network. Participants were contacted by email and through LinkedIn introducing the study with a link to Survey Monkey. A short introduction letter was included on page one of the survey, followed by the questionnaires, a debriefing statement was included on the last page. The researcher distributed 250 email survey requests. The survey remained open for responses for 10 days from the date of the first invitation to participate. The data for the study was collected using Survey Monkey an online resource for the creation and publication of surveys, Survey Monkey is a USA Corporation based in Palo Alto, California (www.surveymonkey.com). The content on the Survey Monkey is protected by copyright, survey content is owned by the user, the use of the site is compliant as regards confidentiality and ethical considerations for this study.

With regard to ethical considerations, ethical approval was gained through the psychology department research ethics filter group. Any recommendation from this group was employed. There were no incentives offered to participants, they had the right to

withdraw at any time up to the point when the 'survey complete' button was entered. Ethical matters were addressed in both an introductory letter and a concluding letter within the survey on line document. Thus an implied consent approach was undertaken with participants self selecting themselves into the study once they had read the introductory letter. When the survey was closed and the collector was switched off the data was downloaded in spreadsheet format and input to SPSS a statistical package for the Social Sciences. Survey Monkey retains a message that the survey is closed with a contact address for the author.

3.6 Proposed analysis

Descriptive and inferential statistics will be employed. With regard to descriptive statistics; mean and standard deviations will be calculated to examine the trends within the employed measures. Inferential tests such as t-tests will be employed to explore differences between work related groups and sex. Further analysis using Pearson correlation coefficient will also be used to examine possible relationships between the criterion variables and predictor variables. Lastly, if appropriate a regression analysis will be used, here the criterion variable will be regressed on appropriate predictor variables.

4. Results

4.1 Descriptive statistics

Firstly descriptive statistical analysis was carried out to provide a general examination of the scores on the criterion variable and predictor variables. As can be seen in Table 1, analysis indicated that average GHQ scores were moderately favourable ($M = 11.43$, $SD = 5.24$) suggesting that participants in general had moderately less psychological worries. With regard to self-efficacy, scores indicated a moderately favourable level of internal confidence or ability ($M = 32.91$, $SD = 3.69$). The various dimensions of motivation were reported to show that; for fear participants rating in general were quite moderate ($M = 8.87$, $SD = 2.57$), with regard to power ($M = 10.68$, $SD = 2.22$), affiliation ($M = 11.10$, $SD = 2.35$) and intimacy ($M = 12.82$, $SD = 2.05$) each of these dimensions were rated highly by participants. This would suggest that participants were more likely to express feelings of power over others, need more affiliation and seek more intimacy around others. Lastly each of the items around financial perceptions were shown to be quite moderate or “stayed the same” in general ($M = 3.09$, $SD = 1.21$), however future projections did increase slightly each year for 2013 ($M = 3.34$, $SD = .92$), 2014 ($M = 3.54$, $SD = 1.12$) and 2015 ($M = 3.71$, $SD = 1.18$). This would suggest that participants in general viewed that in financial terms things are going to get a little bit better over the next three years. Additionally, in Table 1 the internal consistency statistics are presented; for GHQ and SE were reported to be very favourable. However motivation dimensions range from moderately favourable to very favourable.

Table 1: Descriptive statistics for GHQ, SE, motivation and financial factors

Variables	N	Mean	SD	Items	α
GHQ	124	11.43	5.24	12	.86
Self-Efficacy	140	32.91	3.69	10	.85
Motivation					
Fear	142	8.87	2.57	3	.66
Power	136	10.68	2.22	3	.55
Affiliation	128	11.10	2.35	3	.75
Intimacy	131	12.82	2.05	3	.65
Achievement	148	13.15	1.92	3	.75
Compared to 12 months ago, do you think that your current personal financial situation has?	155	3.09	1.21	1	N/A
How do you think your personal financial situation will change over the next 3 years? - This year 2013	152	3.34	.92	1	N/A
How do you think your personal financial situation will change over the next 3 years? - Next year 2014	147	3.54	1.12	1	N/A
How do you think your personal financial situation will change over the next 3 years? - Following year 2015	146	3.71	1.18	1	N/A

Note: N/A = not applicable only one item

4.2 Sex differences

An independent samples t-test was carried out in order to explore possible sex differences in each of the variables. The results (see Table 2) reported that there was only a differences between males ($M = 8.43$, $SD = 2.40$) and females ($M = 9.77$, $SD = 2.78$) in relation to the motivation factor of fear. It was identified that female participants rated significantly higher levels of fear than males ($t(129) = -2.84$, $p = .01$); thus suggesting in these recessionary times females were slightly more likely to exhibit more fear within an organisational workplace than males. However, with regard to psychological health (Males: $M = 11.07$, $SD = 4.75$; Females: $M = 11.67$, $SD = 5.95$), SE or work ability (Males: $M = 33.35$, $SD = 3.72$; Females: $M = 32.50$, $SD = 3.75$), power (Males: $M = 10.63$, $SD = 2.34$; Females: $M = 11.00$, $SD = 2.06$), affiliation (Males: $M = 10.99$, $SD = 2.34$; Females: $M = 11.67$, $SD = 2.07$), intimacy (Males: $M = 12.83$, $SD = 2.00$; Females: $M = 12.62$, $SD = 2.22$) and achievements (Males: $M = 13.10$, $SD = 2.11$; Females: $M = 12.70$) there only very slight differences between males and females however not significant. Interestingly, with regard to perceptions about

financial situations over the past twelve months males ($M = 3.05$, $SD = 1.15$) had a slightly less favourable experience than females ($M = 3.17$, $SD = 1.37$), though once again this was reported not to be significant. Furthermore, in relation to a three year project of their financial situation for 2013 (Males: $M = 3.35$, $SD = .94$; Females: $M = 3.28$, $SD = .94$) and 2015 (Males: $M = 3.73$, $SD = 1.16$; Females: $M = 3.62$, $SD = 1.19$) males tended to have only a very slight positive outlook than females; while for 2014 females had a slightly more positive outlook than males (Males: $M = 3.49$, $SD = 1.09$; Females: $M = 3.63$, $SD = 1.20$). However, none of these were reported to be statistically significant.

Table 2 Sex differences in variables

Variables	Sex	N	M	SD	t	df	sig																																																																																																																				
GHQ	Male	74	11.07	4.75	-.58	111	.56																																																																																																																				
	Female	39	11.67	5.95				SE	Male	85	33.35	3.72	1.27	127	.21	Female	44	32.50	3.75	Fear	Male	88	8.43	2.40	-2.84	129	.01	Female	43	9.77	2.78	Power	Male	83	10.63	2.34	-.88	123	.38	Female	42	11.00	2.06	Affiliation	Male	81	10.99	2.34	-1.54	118	.13	Female	39	11.67	2.07	Intimacy	Male	83	12.83	2.00	-.54	120	.53	Female	39	12.62	2.22	Achievement	Male	81	13.10	2.11	-.18	114	.85	Female	35	13.17	1.70	Compared to 12 months ago, do you think that your current personal financial situation has?	Male	94	3.05	1.15	-.49	81.33	.63	Female	48	3.17	1.37	How do you think your personal financial situation will change over the next 3 years? – This year 2013	Male	94	3.35	.94	.41	138	.69	Female	46	3.28	.94	How do you think your personal financial situation will change over the next 3 years? – Next year 2014	Male	89	3.49	1.09	-.67	133	.51	Female	46	3.63	1.20	How do you think your personal financial situation will change over the next 3 years? - Following year 2015	Male	89	3.73	1.16	.51	132	.61
SE	Male	85	33.35	3.72	1.27	127	.21																																																																																																																				
	Female	44	32.50	3.75				Fear	Male	88	8.43	2.40	-2.84	129	.01	Female	43	9.77	2.78	Power	Male	83	10.63	2.34	-.88	123	.38	Female	42	11.00	2.06	Affiliation	Male	81	10.99	2.34	-1.54	118	.13	Female	39	11.67	2.07	Intimacy	Male	83	12.83	2.00	-.54	120	.53	Female	39	12.62	2.22	Achievement	Male	81	13.10	2.11	-.18	114	.85	Female	35	13.17	1.70	Compared to 12 months ago, do you think that your current personal financial situation has?	Male	94	3.05	1.15	-.49	81.33	.63	Female	48	3.17	1.37	How do you think your personal financial situation will change over the next 3 years? – This year 2013	Male	94	3.35	.94	.41	138	.69	Female	46	3.28	.94	How do you think your personal financial situation will change over the next 3 years? – Next year 2014	Male	89	3.49	1.09	-.67	133	.51	Female	46	3.63	1.20	How do you think your personal financial situation will change over the next 3 years? - Following year 2015	Male	89	3.73	1.16	.51	132	.61	Female	45	3.62	1.19								
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	Female	43	9.77	2.78				Power	Male	83	10.63	2.34	-.88	123	.38	Female	42	11.00	2.06	Affiliation	Male	81	10.99	2.34	-1.54	118	.13	Female	39	11.67	2.07	Intimacy	Male	83	12.83	2.00	-.54	120	.53	Female	39	12.62	2.22	Achievement	Male	81	13.10	2.11	-.18	114	.85	Female	35	13.17	1.70	Compared to 12 months ago, do you think that your current personal financial situation has?	Male	94	3.05	1.15	-.49	81.33	.63	Female	48	3.17	1.37	How do you think your personal financial situation will change over the next 3 years? – This year 2013	Male	94	3.35	.94	.41	138	.69	Female	46	3.28	.94	How do you think your personal financial situation will change over the next 3 years? – Next year 2014	Male	89	3.49	1.09	-.67	133	.51	Female	46	3.63	1.20	How do you think your personal financial situation will change over the next 3 years? - Following year 2015	Male	89	3.73	1.16	.51	132	.61	Female	45	3.62	1.19																				
Power	Male	83	10.63	2.34	-.88	123	.38																																																																																																																				
	Female	42	11.00	2.06				Affiliation	Male	81	10.99	2.34	-1.54	118	.13	Female	39	11.67	2.07	Intimacy	Male	83	12.83	2.00	-.54	120	.53	Female	39	12.62	2.22	Achievement	Male	81	13.10	2.11	-.18	114	.85	Female	35	13.17	1.70	Compared to 12 months ago, do you think that your current personal financial situation has?	Male	94	3.05	1.15	-.49	81.33	.63	Female	48	3.17	1.37	How do you think your personal financial situation will change over the next 3 years? – This year 2013	Male	94	3.35	.94	.41	138	.69	Female	46	3.28	.94	How do you think your personal financial situation will change over the next 3 years? – Next year 2014	Male	89	3.49	1.09	-.67	133	.51	Female	46	3.63	1.20	How do you think your personal financial situation will change over the next 3 years? - Following year 2015	Male	89	3.73	1.16	.51	132	.61	Female	45	3.62	1.19																																
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Intimacy	Male	83	12.83	2.00	-.54	120	.53																																																																																																																				
	Female	39	12.62	2.22				Achievement	Male	81	13.10	2.11	-.18	114	.85	Female	35	13.17	1.70	Compared to 12 months ago, do you think that your current personal financial situation has?	Male	94	3.05	1.15	-.49	81.33	.63	Female	48	3.17	1.37	How do you think your personal financial situation will change over the next 3 years? – This year 2013	Male	94	3.35	.94	.41	138	.69	Female	46	3.28	.94	How do you think your personal financial situation will change over the next 3 years? – Next year 2014	Male	89	3.49	1.09	-.67	133	.51	Female	46	3.63	1.20	How do you think your personal financial situation will change over the next 3 years? - Following year 2015	Male	89	3.73	1.16	.51	132	.61	Female	45	3.62	1.19																																																								
Achievement	Male	81	13.10	2.11	-.18	114	.85																																																																																																																				
	Female	35	13.17	1.70				Compared to 12 months ago, do you think that your current personal financial situation has?	Male	94	3.05	1.15	-.49	81.33	.63	Female	48	3.17	1.37	How do you think your personal financial situation will change over the next 3 years? – This year 2013	Male	94	3.35	.94	.41	138	.69	Female	46	3.28	.94	How do you think your personal financial situation will change over the next 3 years? – Next year 2014	Male	89	3.49	1.09	-.67	133	.51	Female	46	3.63	1.20	How do you think your personal financial situation will change over the next 3 years? - Following year 2015	Male	89	3.73	1.16	.51	132	.61	Female	45	3.62	1.19																																																																				
Compared to 12 months ago, do you think that your current personal financial situation has?	Male	94	3.05	1.15	-.49	81.33	.63																																																																																																																				
	Female	48	3.17	1.37				How do you think your personal financial situation will change over the next 3 years? – This year 2013	Male	94	3.35	.94	.41	138	.69	Female	46	3.28	.94	How do you think your personal financial situation will change over the next 3 years? – Next year 2014	Male	89	3.49	1.09	-.67	133	.51	Female	46	3.63	1.20	How do you think your personal financial situation will change over the next 3 years? - Following year 2015	Male	89	3.73	1.16	.51	132	.61	Female	45	3.62	1.19																																																																																
How do you think your personal financial situation will change over the next 3 years? – This year 2013	Male	94	3.35	.94	.41	138	.69																																																																																																																				
	Female	46	3.28	.94				How do you think your personal financial situation will change over the next 3 years? – Next year 2014	Male	89	3.49	1.09	-.67	133	.51	Female	46	3.63	1.20	How do you think your personal financial situation will change over the next 3 years? - Following year 2015	Male	89	3.73	1.16	.51	132	.61	Female	45	3.62	1.19																																																																																												
How do you think your personal financial situation will change over the next 3 years? – Next year 2014	Male	89	3.49	1.09	-.67	133	.51																																																																																																																				
	Female	46	3.63	1.20				How do you think your personal financial situation will change over the next 3 years? - Following year 2015	Male	89	3.73	1.16	.51	132	.61	Female	45	3.62	1.19																																																																																																								
How do you think your personal financial situation will change over the next 3 years? - Following year 2015	Male	89	3.73	1.16	.51	132	.61																																																																																																																				
	Female	45	3.62	1.19																																																																																																																							

4.3 Differences on variables by income

A further independent samples t-test was conducted in order to examine differences between those participants who owned a company and those who worked for one on their responses to each of the variables within this study. As can be seen from Table 3, none of the psychological variables of GHQ (works for organisation: $M = 11.62$, $SD = 5.27$; owns their own company: $M = 10.22$, $SD = 4.21$), SE (works for organisation: $M = 33.25$, $SD = 3.53$; owns their own company: $M = 32.85$, $SD = 3.80$), fear (works for organisation: $M = 8.97$, $SD = 2.88$; owns their own company: $M = 8.40$, $SD = 1.95$), power (works for organisation: $M = 10.73$, $SD = 2.41$; owns their own company: $M = 10.60$, $SD = 2.02$), affiliation (works for organisation: $M = 10.74$, $SD = 2.31$; owns their own company: $M = 11.42$, $SD = 2.32$), intimacy (works for organisation: $M = 12.88$, $SD = 1.98$; owns their own company: $M = 12.76$, $SD = 1.98$) and achievements (works for organisation: $M = 13.13$, $SD = 2.14$; owns their own company: $M = 13.00$, $SD = 1.89$) were reported to be not significant; and only slight differences between those who owned a company or not were observed. This would suggest that no matter if owning one's own company or working for a company it would not have a significant difference in one's level of psychological work, ability around work incidences or even on various aspects of motivation. Furthermore, there was no reported difference in perceptions around their financial situation over the past twelve months (works for organisation: $M = 3.03$, $SD = 1.23$; owns their own company: $M = 3.22$, $SD = 1.21$) with both groups being quite moderate in their views. However, with regard to perceptions about participant's financial situations overall significant differences were reported. With regard to the financial period of 2013 (works for organisation: $M = 3.22$, $SD = .98$; owns their own company: $M = 3.62$, $SD = .75$) it was reported that those who owned their own company held slightly more favourable views on their financial situation compared to those who work for one ($t(139.30) = -2.75$, $p = .01$). Likewise, there was an increase of favourability for both groups around their personal financial situations for 2014; it was those who owned their own company (works for organisation: $M = 3.39$, $SD = 1.18$; owns their own company: $M = 3.88$, $SD = .92$) held more significantly favourable perceptions than those who worked for an organisation ($t(133.82) = -2.71$, $p = .01$). Finally, perceptions around personal financial situations for the 2015 period once again saw a slight rise on average for both groups, but however it was those that owned their own company

that on average viewed their financial year significant more favourable (works for organisation: $M = 3.59$, $SD = 1.24$; owns their own company: $M = 4.07$, $SD = .92$) than those who worked for a company ($t(133.49) = -2.64$, $p = .01$).

Table 3 Group differences in variables by work type

Variables	Income	N	M	SD	t	df	sig
GHQ	Works for organisation	68	11.62	5.27	1.55	116	.13
	Owens their own company	50	10.22	4.21			
SE	Works for organisation	79	33.25	3.53	.62	132	.53
	Owens their own company	55	32.85	3.80			
Fear	Works for organisation	78	8.97	2.88	1.37	132.36	.17
	Owens their own company	57	8.40	1.95			
Power	Works for organisation	74	10.73	2.41	.32	127	.75
	Owens their own company	55	10.60	2.02			
Affiliation	Works for organisation	69	10.74	2.31	-1.61	119	.11
	Owens their own company	52	11.42	2.32			
Intimacy	Works for organisation	69	12.88	1.98	.34	122	.74
	Owens their own company	55	12.76	1.98			
Achievement	Works for organisation	68	13.13	2.14	.35	122	.73
	Owens their own company	52	13.00	1.89			
Compared to 12 months ago, do you think that your current personal financial situation has:	Works for organisation	86	3.03	1.23	-.88	144	.38
	Owens their own company	60	3.22	1.21			
How do you think your personal financial situation will change over the next 3 years? - This year 2013	Works for organisation	85	3.22	.98	-2.75	139.30	.01
	Owens their own company	58	3.62	.75			
How do you think your personal financial situation will change over the next 3 years? - Next year 2014	Works for organisation	82	3.39	1.18	-2.71	133.82	.01
	Owens their own company	56	3.88	.92			
How do you think your personal financial situation will change over the next 3 years? - Following year 2015	Works for organisation	82	3.59	1.24	-2.64	133.49	.01
	Owens their own company	55	4.07	.92			

4.4 Correlates of psychological worry

In order to explore the possible relationships of the variables with general health as set out in hypothesis 5, Zero order correlations were carried out in order to examine possible relationships between the criterion variable of GHQ and each of the predictor variables of SE, motivational factors and financial situation factors. As can be seen from Table 4; the strongest association was indicated with their financial situation over the past twelve months ($r = -.321, p = .00$) where generally, those who identified that there was little change in their financial situation were more likely to feel less psychological worry. Similarly, in general those who perceived that for 2013 ($r = -.361, p = .00$) and 2014 ($r = -.282, p = .00$) there would be an improvement in their financial situation that this would be significantly yet moderately related to less psychological worry or distress. Two psychological factors of SE ($r = -.281, p = .00$) and fear ($r = -.233, p = .01$) were also related moderately yet significantly with psychological worry. Suggesting that those with more perceived level of ability and favourable levels of fear were more likely to rate themselves with better psychological health. Finally, psychological worry was reported not to be significantly related to the motivation factors of power, affiliation, achievement and intimacy. Also there were no reported relationships with either participants' perceived financial situations for 2014 or 2015.

Table 4 Correlates of psychological worry/distress

Variables	1	2	3	4	5	6	7	8	9	10	11
1. GHQ	-----										
2. SE	-.281**	-----									
3. Fear	.233**	-.300**	-----								
4. Power	-.176	.186*	.121	-----							
5. Affiliation	-.118	-.085	.000	.238**	-----						
6. Intimacy	-.075	.055	-.113	.069	.192*	-----					
7. Achievement	.011	.081	-.038	.118	.109	.042	-----				
8. Compared to 12 months ago	-.321**	.013	.043	.158	.038	.023	-.006	-----			
9. This year 2013	-.361**	.225**	-.034	.181*	-.010	-.062	.096	.520**	-----		
10. Next year 2014	-.282**	.131	-.096	.084	.053	.012	.038	.466**	.800**	-----	
11. Following year 2015	-.178	.099	-.075	.128	-.039	-.009	-.023	.411**	.673**	.811**	-----

** Correlation is significant at the 0.01 level (2-tailed). * Correlation is significant at the 0.05 level (2-tailed).

4.5 Predictors of psychological distress

Though not part of the original hypothesis further analysis to predict psychological distress, a regression was conducted (see Table 5). Psychological worry/distress (GHQ) was regressed on SE, motivation (fear, affiliation, power and intimacy). The results reported the SE ($\beta = .24$, $p = .02$) and their perceptions of their financial situation over the past twelve months ($\beta = -.27$, $p = .01$) significantly influenced psychological worry. Though both predictors had only a moderate influence it would suggest that those individuals rating higher levels of ability and more positive evaluation of their financial situation were more likely to have more favourable psychological health. The other predictors did not have a significant influence on psychological distress/worry. Despite two of the predictors having a significant influence on psychological distress/worry, the overall model, though significant, explained a small amount of variance (13 %) in psychological distress/worry (*Adjusted R*² = .13; $F(7.91) = 3.00$, $p = .01$).

Table 5 Predictors of psychological distress

Variables	R	Adj R ²	β	<i>t</i>	<i>Sig.</i>
	.43	.13			
SE			-.24	-2.35	.02
Fear			.15	1.48	.14
Power			-.09	-.86	.39
Affiliation			-.13	-1.27	.21
Intimacy			-.01	-.09	.93
Achievement			.07	.75	.46
Compared to 12 months ago (Financial Situation)			-.27	-2.76	.01

5. Discussion

The overall aim of this study was to examine the mental or psychological health of business owners to compare it to non-business owners during a recessionary period in Ireland. More specifically the following section will examine each of the main hypotheses namely that there will be possible significant differences between business owners and non-business owners with regard to their psychological health, levels of self-efficacy, motivation factors and financial outcomes. A further hypothesis of this study was to explore possible sex differences between male and female business workers across all variables of psychological health, self-efficacy, motivational factors and financial outcomes. The last hypotheses of this study looked at the relationship between predictor variables (self-efficacy, motivation and financial outcomes) and psychological health. Each of these hypotheses will be examined in the following sections.

5.1 Hypothesis 1: Difference in psychological health by work type group

The first hypotheses examined differences between the groups with regard to psychological health, however this hypothesis was not supported ($t(116) = -1.55, p = .13$), the descriptive statistics show ‘works for organisation: $M = 11.62, SD = 5.27$; owns their own company: $M = 10.22, SD = 4.21$ ’, the difference for both groups was not significant, the lower mean score demonstrates better psychological health. This is contrasted to research based on data from the German national health survey that found entrepreneurs compared to employees to have significantly better health outcomes for blood pressure, somatic diseases, mental disorders, well-being and behavioural indices. For mental disorders the employee was 40% more likely to suffer from at least one disorder in their lifetime. This research contrasted with a previous study citing Bradley & Roberts, 2004 where entrepreneurs were found to have worse health outcomes than employees (Stephan & Roesler, 2010). In another USA study entrepreneurs compared to employees, using the Diagnostic and Statistical

Manual of Mental Disorders, 4th edition (DSM-IV), the entrepreneurs were shown to have better psychological health, general well being and more favourable health outcomes. This contrasts with this Irish study (Stephan & Roesler, 2010).

There may be other variables impacting the results as is evident from the research. Taking the Health Service Executive statistics on perceived health status 16% males (females 17%) rated fair to very bad health. On psychological health 11% of people said they personally experienced a psychological health issue, the suicide statistic increases by 6.1% 2010 to 2011. It would appear that the participants in this study reported positively. In this study there was a small difference for business owners showing slightly positive psychological health. However the financial situation has a more significance impact than general psychological health (Health Service Executive, 2007, 2012).

5.2 Hypothesis 2: Differences in self-efficacy by work type group

The second hypothesis stated that there will be a significant difference between the groups' business owners and non-business owners related to self-efficacy. However this hypothesis was not supported ($t(132) = 0.62, p = 0.53$), the descriptive statistics show 'works for organisation: $M = 33.25, SD = 3.53$; owns their own company: $M = 32.85, SD = 3.80$. The difference for both groups was not significant. This contrasts with a study in the United States of inventors who built a new venture around their invention compared to inventors who went to work for established organisations. A general self-efficacy score was significantly higher for the group who developed their own business (Markman, Balkin, & Baron, 2002). In another study Markman & Baron identified self-efficacy as an important factor leading to a greater magnitude for success (Markman & Baron, 2003). More recent data using the same scale as this study has shown the opposite in the United States. Investigating self-efficacy, success and burn-out of small business owners it concluded that a high level of self-efficacy was evident however the study did not indicate a strong correlation

of self-efficacy with business success for those with longer than one year in business (Kaiser, 2012). The findings from one Irish study into job satisfaction of workers during a recession exploring the variables self-efficacy, self-esteem and positive affect, noted that self-efficacy and positive affect were significant to job satisfaction (Fitzmaurice, 2012). In a similar study of Japanese mid-level managers self-management (means self-efficacy in Japan) skills are likely to have the potential of affecting the employee's psychological health (Shimizut, Mizoue, Takahashi, Shazuki, Kubota, Mishima & Nagata, 2003). Thus, the finding of this hypothesis indicate that there is no differences between work type positions but rather self-efficacy could be more related or predict psychological health of workers (see hypotheses 5).

5.3 Hypothesis 3: Differences in motivational factors by work type group

The third hypothesis stated there will be a significant difference between the group's business owners and non-business owners (those in other employment) related to motivation (fear, power, affiliation and intimacy). Once again, overall no significant differences were reported. However, one study of entrepreneurs, small business owners and corporate managers provides insight into the question of motivation. Entrepreneurs displayed higher levels of motivation, achievement, risk taking with a preference for innovation than the business owners and managers. This suggests motivation differences do occur however there are cultural and demographic differences with this study (Stewart, Watson, Carland, & Carland, 1999). This could suggest that motivation within an Irish context may have to be reevaluated within a more specific cultural context to that of Ireland. However, Mitchell and Sheppard (2011) studied fear as a motivator for entrepreneurs. They related the type of fear and the characteristics of the individual and they also reviewed fear from the perspective of failure, self vulnerability fear of devaluing self-estimate and fear of upsetting important others. Fear can impede action or alternatively enhance action due to uncertainty of the future (Mitchell & Shepherd, 2011).

5.4 Hypothesis 4: Differences in psychological health, self-efficacy, motivational factors and financial outcomes by sex

The fourth hypothesis explored possible sex differences between male and female between the group's health, self-efficacy and motivation (fear, power, affiliation and intimacy). There was a significant difference in the variable fear, females showing a higher level of fear than males, ($t(129) = -2.84, p = .01$) and descriptive statistics show males ($M = 8.43, SD = 2.40$) and females ($M = 9.77, SD = 2.78$). Females may be affected more by the impact of the recession compared to males. In terms of business ownership studies have shown a fear of failure, in a seventeen country study women are shown to start business units and are more likely to exhibit a fear of failure and are less confident in entrepreneurial skills (Koellinger, Minniti & Schade, 2013). The situation in the workplace is radically different for women in terms of equality, barriers, recruitment and power encompassed in the glass ceiling (Hogue, 2010). The evidence could suggest that females experience worse health outcomes in Ireland. 17.2% of females stated fair-to-bad perceived health compared to males 16% and in 2007, 11% females said they personally experienced psychological health problems compared to males 8% (Health Service Executive, 2007, 2012). This study has shown a small but not significant unfavourable health report for females. Previous research using the general health questionnaire has shown females marginally scoring higher on self-efficacy compared to males in this study; males scored marginally better. However, neither of these were significant (Fitzmaurice, 2012).

5.5 Hypothesis 5: Correlates of psychological health

The final hypothesis explored the possible relationship between the variables general health, self-efficacy, motivation and perceptions of financial business outcomes. Pearson's zero order correlations was carried out between the criterion variable general psychological health and each of the predictor variables. The strongest association was identified in the question relating to the financial position over the past twelve months. They were more likely to feel less psychological worry ($r=.321$, $p=.00$). Those who anticipated an improvement in their financial situation for 2013 would be significantly and yet moderately likely to experience less worry or distress ($r=-.361$, $p=.00$ and 2014 ($r=-.282$, $p=.00$). Self-efficacy and fear were moderately related to less psychological worry. There was no significant reported relationship related to motivation factors, power, affiliation and intimacy or in the perceived financial situation for 2015 with psychological worry.

The personal financial situation outcome in 2012 highlighted a strong association with general psychological health, therefore suggesting when individuals can report positively on their future financial situation it will have a similar positive impact on their health. This contrasts with a study of unemployed people which has shown elevated levels of psychological health compared to the employed group (Artazcoz, Benach, Borrell & Cortès, 2004). A positive outlook of the future financial situation could prove beneficial to psychological health, the positive evaluations lead to the filtering of incoming information that distort it in a positive direction and treat negative data as unthreatening (Taylor & Brown, 1999).

Fear is shown to have consequences for psychological health. Now that Ireland has experienced a recession this is not surprising. Fear of unemployment is having short term consequences on job satisfaction and long-term psychological health consequences. The American Society for Training reported: "Compared with 2001 to 2002 people are calling in

sick less in 2003 (despite stress, child care, and similar reasons) because they're afraid of losing their jobs'' (Fear Factor, 2003).

5.6 Regression analysis

Though not originally part of the hypotheses the reported findings from the regression analysis reported the SE ($\beta = .24, p = .02$) and their perceptions of their financial situation over the past twelve months ($\beta = -.27, p = .01$) significantly influenced psychological worry. These two predict higher levels of self-efficacy and a more positive view of their financial situation can account for 13% in psychological health. Prediction of health or distress may be helpful this is highlighted in a study of the 2009 Slan the National Survey of Lifestyle, Attitudes and Nutrition which concluded “Social well-being and health behaviours correlate with both positive and negative psychological health” and recommended that positive and negative indicators should be used in health surveys. (Slan, 2009 as cited in Lente, Barry, Molcho, Morgan, Watson, Harrington, & McGee, 2012)

5.7 Strengths and weakness of the study

With regard to the current research there are some limitations and strengths; however it should be noted that the strengths of this study do outweigh the weaknesses. Firstly one strength of this study was that the sample size was anticipated at 100 and the study got responses from 156, the number of females business owners was 8 which limited the review of more detailed statistical analysis. A convenience sample was used in this study invited to respond by the researcher, some of the respondents would have known the researcher which may impact the responses perhaps in a more favourable way. Self-report questions as used in the study which may cause bias by under or over reporting behaviour. An introductory and concluding letter was included with the questionnaire; anonymity was adhered to in the study. Participants had the option of opting out. Additionally, the motivation section questions were challenging to align and compare to other research. Perhaps an alternative questionnaire may

be more appropriate such as the Global Motivation Scale (GMS) (Guay, Mageau & Vallerand, 2003), which measures intrinsic motivation and can be adapted to work motivation. The output comparing business owners to non-business owners differences generally were not significant. A number of interesting aspects were gained from the study, the high scores of general health, self-efficacy and the change in financial situation, the impact of self-efficacy and future financial situation on general health, the predictor of general health from self-efficacy and financial situation in past 12 months representing 13%. The question of general health in the study is beneficial in understanding self-efficacy and the prediction of a personal financial situation. It suggests that these areas are important to a wide audience in business and other interested organisations in the current economic climate.

5.8 Future Research

A wider sample of respondents in terms of gender and occupation would greatly improve the quality of results. A review and expansion of the motivation variables and a more in depth review of fear gender differences is desirable. Additionally, future research could employ focus groups prior to the study with qualitative interviews at the end in order to provide a more integrated and mixed-methodological approach in exploring the experiences of workers within recessionary times in Ireland. Furthermore, the experiences of females in the workplace as employee and as business owner would need further investigation, as there is limited research from the psychological perspective within Ireland. Often this research is more from a business sociological point of view and not psychological. Lastly research in this area could expand to North European Celtic Economies, by examining the experiences of psychological health and well-being with Northern Ireland and Scotland workers.

5.9 Conclusions

Although the study did not align with hypothesis differences between business owners and non-business owners it has explored the impact of general psychological health, self-efficacy, fear and control as areas for various interested organisations to explore and develop. These also are identified as areas for future research. However, what was found does have implications for the real world work place; more specifically for employers and company owners to focus and be aware of psychological or psychological health within the workplace, especially within recessionary times. Motivation seminars or workshops may not be as important to workers as health and psychological health workshops.

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7. Appendix 1

Sample Questionnaire

My name is Paschal Naylor and I am a final year undergraduate student in Dublin Business School. I am conducting a research study as part of a BA Honours Degree in Psychology. My Research Supervisor is Dr. Jonathan Murphy.

The aim of the study is to provide a scientific review of the general health of individuals and the contribution of self-efficacy and motivation. There are three questionnaires enclosed (in addition to the Demographic questions) which measure Self Efficacy, General Health and Motivation. These will take approximately 15 minutes to complete in total.

Participation in this study is completely voluntary, and you may stop completing the questionnaires at any time, or withdraw your participation. You will not be identified in any of the questionnaires or demographic sheet and all answers given will be treated in the strictest confidence.

If you would like me to provide you with the results of my findings, please contact me on the email below, thank you very much for your participation and time.

Paschal Naylor Email: paschalnaylor@gmail.com Phone: 00353 86 2606089

Supervisor's Details Email: jonathan.murphy@dbs.ie Phone: 00 353 1 4178774

DBS Research

1. What is your main job?

2. My main income is earned from:

- My Own Business
- Company / Corporation
- Investments
- Retirement
- Social Support

Other (please specify)

3. What is your age?

4. Are you male or female?

- Male
- Female

5. Compared to 12 months ago, do you think that your current personal financial situation has:

- GOT A LOT BETTER
- GOT A LITTLE BETTER
- STAYED THE SAME
- GOT A LITTLE WORSE
- GOT A LOT WORSE

6. How do you think your personal financial situation will change over the next 3 years?

	A LOT BETTER	A LITTLE BETTER	STAY THE SAME	A LITTLE WORSE	A LOT WORSE
This year 2013	<input type="radio"/>				
Next year 2014	<input type="radio"/>				
Following year 2015	<input type="radio"/>				

DBS Research

Please read the following sentences and select (tick) an answer for each statement which indicates how much the statement applies to yourself.

7. I can always manage to solve difficult problems if I try hard enough

- Not at all true Hardly true Moderately true Exactly true

8. If someone opposes me, I can find the means and ways to get what I want.

- Not at all true Hardly true Moderately true Exactly true

9. It is easy for me to stick to my aims and accomplish my goals

- Not at all true Hardly true Moderately true Exactly true

10. I am confident that I could deal efficiently with unexpected events

- Not at all true Hardly true Moderately true Exactly true

11. Thanks to my resourcefulness, I know how to handle unforeseen situations

- Not at all true Hardly true Moderately true Exactly true

12. I can solve most problems if I invest the necessary effort

- Not at all true Hardly true Moderately true Exactly true

13. I can remain calm when facing difficulties because I can rely on my coping abilities

- Not at all true Hardly true Moderately true Exactly true

14. When I am confronted with a problem, I can usually find several solutions

- Not at all true Hardly true Moderately true Exactly true

15. If I am in trouble, I can usually think of a solution

- Not at all true Hardly true Moderately true Exactly true

16. I can usually handle whatever comes my way

- Not at all true Hardly true Moderately true Exactly true

DBS Research

**17. Have you recently:
been able to concentrate on what you're doing?**

- much less than usual less than usual same as usual better than usual

**18. Have you recently:
lost much sleep over worry?**

- not at all no more than usual rather more than usual much more than usual

**19. Have you recently:
felt that you are playing a useful part in things?**

- more so than usual same as usual less useful than usual much less useful

**20. Have you recently:
felt capable of making decisions about things?**

- more so than usual same as usual less so than usual much less capable

**21. Have you recently:
felt constantly under strain?**

- not at all no more than usual rather more than usual much more than usual

**22. Have you recently:
felt you couldn't overcome your difficulties?**

- not at all no more than usual rather more than usual much more than usual

**23. Have you recently:
been able to enjoy your normal day to day activities?**

- more so than usual same as usual less so than usual much less than usual

**24. Have you recently:
been able to face up to your problems?**

- more so than usual same as usual less able than usual much less able than usual

**25. Have you recently:
been feeling unhappy or depressed?**

- not at all no more than usual rather more than usual much more than usual

DBS Research

**26. Have you recently:
been losing confidence in yourself?**

- not at all no more than usual rather more than usual much more than usual

**27. Have you recently:
been thinking of yourself as a worthless person?**

- not at all no more than usual rather more than usual much more than usual

**28. Have you recently:
been feeling reasonably happy, all things considered?**

- more so than usual about same as usual less so than usual much less than usual

DBS Research

For each statement
Please tick the box that applies

29. for this statement please tick the box that applies

I am afraid of failing in somewhat difficult situations, when a lot depends on me.

completely disagree disagree somewhat disagree somewhat agree completely agree

30. for this statement please tick the box that applies

When I get to know new people I often fear to be rejected by them

completely disagree disagree somewhat disagree somewhat agree completely agree

31. for this statement please tick the box that applies

I become scared when I lose control over things

completely disagree disagree somewhat disagree somewhat agree completely agree

32. for this statement please tick the box that applies

The opportunity to exercise control over an organization or group.

completely disagree disagree somewhat disagree somewhat agree completely agree

33. for this statement please tick the box that applies

Be able to exert influence

completely disagree disagree somewhat disagree somewhat agree completely agree

34. for this statement please tick the box that applies

I like to have the final say

completely disagree disagree somewhat disagree somewhat agree completely agree

DBS Research

35. for this statement please tick the box that applies

Maintaining high standards for the quality of my work

completely disagree disagree somewhat disagree somewhat agree completely agree

36. for this statement please tick the box that applies

Personally producing work of high quality

completely disagree disagree somewhat disagree somewhat agree completely agree

37. for this statement please tick the box that applies

Projects that challenge me to the limits of my ability

completely disagree disagree somewhat disagree somewhat agree completely agree

38. for this statement please tick the box that applies

I try to be in the company of friends as much as possible

completely disagree disagree somewhat disagree somewhat agree completely agree

39. for this statement please tick the box that applies

Engage in a lot of activities with other people

completely disagree disagree somewhat disagree somewhat agree completely agree

40. for this statement please tick the box that applies

Encounters with other people make me happy

completely disagree disagree somewhat disagree somewhat agree completely agree

41. for this statement please tick the box that applies

Have a close, intimate relationship with someone

completely disagree disagree somewhat disagree somewhat agree completely agree

42. for this statement please tick the box that applies

Give sympathy and love to other people

completely disagree disagree somewhat disagree somewhat agree completely agree

DBS Research**43. for this statement please tick the box that applies****I like to fully immerse myself in a relationship** completely
disagree disagree somewhat disagree somewhat agree completely agree

DBS Research

Many thanks for participating in this study.

You have completed the General Health Questionnaire GHQ (Goldberg, 1972), the Generalised Self Efficacy Scale GSES (Jensen & Schwarzer, 1998), the Unified Motives Scale UMS3 (Schoenbrodt & Gerstaeber, 2012) and demographic questions.

The study aims are to investigate differences across employment type in light of the recent economic difficulties, between employees, business owners and other occupations.

Many thanks for participating in this study.

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The study aims are to investigate general mental health, self-efficacy and motivation differences across employment type in light of the recent economic difficulties, between employees, business owners.

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