Measuring Empathy in Health Care Staff in Relation to Job Satisfaction, Job Related Affective Well Being, Gender, Occupation and Length of Service

Louise Farrelly

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

Supervisor: Dr. Barbara Caska

Head of Department: Dr. Sinead Eccles

March 2012

Department of Psychology

DBS School of Arts
# TABLE OF CONTENTS

<table>
<thead>
<tr>
<th>Content</th>
<th>Page Number</th>
</tr>
</thead>
<tbody>
<tr>
<td>Acknowledgements</td>
<td>3</td>
</tr>
<tr>
<td>Abstract</td>
<td>4</td>
</tr>
<tr>
<td>Introduction</td>
<td>5</td>
</tr>
<tr>
<td>Methodology</td>
<td>18</td>
</tr>
<tr>
<td>Results</td>
<td>24</td>
</tr>
<tr>
<td>Discussion</td>
<td>29</td>
</tr>
<tr>
<td>References</td>
<td>40</td>
</tr>
<tr>
<td>Appendices</td>
<td>49</td>
</tr>
</tbody>
</table>
ACKNOWLEDGEMENTS

I would like to thank Barbara Caska, Department of Psychology, Dublin Business School for much appreciated help and guidance in supervising this project.

It is a pleasure to thank those who made this thesis possible namely the Management and Staff of HSE Meath Disability Services who agreed to place their service under the spotlight and enable this piece of research to come to fruition.

I am indebted to my family whose tireless support and encouragement has made the completion of my studies possible. To Daragh, who gives meaning to the madness, thank you for your constant support, reliable advice and sense of humour.

For Tom, whose affection, kindness, faith and honesty was an inspiration – RIP.
ABSTRACT

Empathy is an important attribute for health service staff in establishing a relationship with patients. The aim of the present study was to determine if there was a correlation between empathy levels, job satisfaction and job-related affective well-being in a sample of Health Service Staff (N=84). A correlational study was undertaken using the Davis IRI Scale, Job Satisfaction Survey and Job-related Affective Well-being Scale. Differences in Empathy Levels across gender, occupation and length of service were also investigated. A positive significant correlation was found between IRI Subscale Perspective Taking and the two variables Job Satisfaction and Job-related Affective Well-being. Females were found to have significantly higher levels of Empathic Concern than Males. No significant differences were found according to Occupation and Length of Service.
INTRODUCTION

The word empathy is derived from the Greek word meaning “to suffer with”, empathy as a psychological construct is a set of feelings and behaviours which allow individuals to recognise, perceive and respond to the emotional states of others.

"Empathy is an important component of social cognition that contributes to one’s ability to understand and respond adaptively to others’ emotions, succeed in emotional communication, and promote prosocial behaviour" (Spreng, McKinnion, Mar and Levine, 2009 p.63)

Empathy in its broadest sense can be defined as emotional reactions that are directed towards or concentrated on helping others (Batson and Oleson 1991).

Davis (1983) proposed that empathy refers to the reactions of individuals to the observed experiences of others. This implies two classes of empathic response, firstly there is the cognitive reaction – the ability to understand another person’s thoughts and feelings and secondly an emotional reaction to the other person. Research prior to Davis had taken the position that empathy was constituted by only one of these elements (Davis, 1983, Clifford, 2001). Hogan (1969) conceived of empathy as an exclusively cognitive process – the apprehension of another’s condition or state of mind. Mehrabian and Epstein (1972) think of empathy as an exclusively affective phenomenon – as a response to the perceived emotions of others. Most contemporary research would agree that empathy is both a

Davis (1980) developed a self-report measure of empathy; the Interpersonal Reactivity Index Scale (IRI) is based on a multi-dimensional approach to empathy. The IRI Scale measures empathy as a set of four distinct but related constructs. The four elements of empathy outlined by Davis (1980) are:

- Perspective Taking – the tendency to adopt the psychological point of view of others in everyday life, this could be described as the cognitive aspect of empathy.
- Empathic Concern – the tendency to experience feelings of sympathy and compassion for unfortunate others, this could be referred to as the emotional aspect of empathy.
- Personal Distress – the tendency to experience distress and discomfort in response to distress in others.
- Fantasy – the tendency to imaginatively identify with fictional characters.

The primary aim of the present study is to investigate empathy in a sample of Irish Health Service Staff. Of the four constructs outlined in the IRI Scale; Empathic Concern and Perspective Taking are particularly relevant to patient care, research also suggests that while Personal Distress and Fantasy are features of empathy, they could be detrimental to the physician’s performance in a health care setting where objectivity and clinical neutrality are required (Hojat, Mangione, Kane and Gonnella, 2005). As the present study will examine empathy in a sample of health service staff, the research will focus on Empathic Concern and Perspective Taking.
Larson and Yao (2005) state that “empathy should characterise all health care professions”. There is much research exploring the importance of empathy as an attribute for health service staff. Empathy is an important quality for health care workers in establishing a relationship with and understanding their patients (Brown, Williams, Boyle, Molloy, McKenna, Molloy and Lewis 2010) and empathy can ensure rewarding and constructive outcomes for patients (Reynolds and Scott 1999).

Hollinger-Samson and Pearson (2000) studied empathy levels of staff and levels of depression in elderly residents in a Nursing Home. This study found that perceived staff empathy was found to have a significant correlation with residents’ depression levels. This would indicate that health care staff empathy does have a direct impact on the emotional well-being of patients.

Empathy has also been found to have an influence on the treatment outcomes of patients. Siegal (1972) studied intellectually disabled children in a play therapy setting; children who had benefited from a therapist who displayed high levels of empathy and unconditional positive regard showed statistically significant improvements in verbal and behavioural development when compared to the children who received low levels of the two conditions.

Wrubel and Folkman (1997) studied the caregiving skills of the partners of men with AIDS, this study found that empathy allowed the caregivers to give appropriate and sensitive emotional support to their partners, while providing increasingly difficult clinical and physical care as the disease developed throughout the course of their partner’s illness. This study demonstrates the theory that - empathy is an essential requirement in the helping relationship (Reynolds & Scott 1999). Research has also found that empathy can create more
positive attitudes towards highly stigmatised groups, such as those with AIDS (Batson, Polycarpou, Harmon-Jones, Imhoff, Mitchener, Bednar, Klien and Highbberger, 1997).

Mohammadreza, Louis, Maxwell, Markham, Wender and Gonnella (2010) surveyed 537 hospital out-patients and learned that high physician empathy scores correlated with patient satisfaction, increased physician – patient trust and increased compliance levels with recommended medical treatments and interventions.

The goals of the Irish Health Service Executive suggest a move towards person-centred care and the involvement of patients or service users in health service provision. The HSE in “A Vision for Change: Advancing Mental Health in Ireland” (2006) outlines an objective to develop a person-centred treatment approach with integrated care plans and special emphasis on the need to engage with and involve service users and their carers at every level of service provision. In the HSE National Strategy for Service User Involvement in the Irish Health Service (2008-2013) the benefits of service user involvement are outlined, these benefits include; better health and treatment outcomes, empowerment of the patient leading to greater responsibility for care, increased patient satisfaction and the development of services that respond better to the needs of the community. This type of service user involvement will also result in more equitable and inclusive services, with policies which are informed, relevant and appropriate.

While these aims outlined by the HSE are desirable and advantageous for both the patient and service, goals regarding person-centred service cannot be achieved unless staff can display an empathised awareness of the needs and emotions of the service user (Reynolds & Scott, 1999). If empathy is an essential requirement in the helping relationship and crucial to
advancing the goals of the HSE, it is necessary to establish an outline of what empathy levels are within HSE staff and if there are any other work related variables which may be associated with empathy levels in health care staff. This will be the focus of the present study.

Kelly (2007) states that patient care in Ireland has become fragmented and impersonalised, current budgetary constraints and staff shortages within the Irish Health Service have resulted in caring professionals who do not have the time to establish links with patients and their families. Practitioners must focus on a cure and treatment outcomes rather than the service user, resulting in the demise of the empathic relationship between practitioner and patient. Reynolds and Scott (1999) attribute this step backwards towards task focused care to lack of time, quick discharge and patient turn around resulting in reduced opportunity for one to one relationships with patients. It is hoped that by establishing an overview of empathy levels in health service staff that the present study may provide a dialogue in relation to variables which may be associated with empathy levels within the HSE and offer a basis for further examination of the barriers to person centred care and the empathic practitioner – patient relationship.

Mouavi, Yarmohammadi, Nosrat and Tarasi (2012) found that there is a significant positive relationship between empathy and job satisfaction. Job Satisfaction can be defined as “the positive and negative feelings and attitudes employees hold about a job” (Schultz and Schultz, 2010 p.189). Job Satisfaction can depend on many work related (work load, pay, job security) and personal factors (health, age, emotional stability, socio-economic status). Schultz and Schultz (2010) state that job satisfaction can influence psychological well-being even after workers retire. High job satisfaction has also been linked to pro-social behaviour.
Sand (2003) found that long-term job satisfaction is related to a high level of empathy in Nursing Staff. Larson and Yao (2005) suggest that empathy helps physicians to become more effective at their work, which in turn creates a higher level of job satisfaction. This view is supported in further research by Hojat, Gonnella, Mangione, Nasca, Veloska, Erdmann, Callahan and Magee (2002) using a sample of medical students, researchers found evidence to indicate that higher empathy levels were associated with higher ratings in clinical competence.

Homberg and Stock (2005) state that in the case of employees with ongoing customer contact, employee job satisfaction is positively associated with customer satisfaction and that empathy is a moderator variable which strengthens the association between these two variables, because empathy improves communication between the employee and customer and creates a better relationship. This improvement in communication improves customer satisfaction and in turn increases job satisfaction. Goetz, Campbell, Steinhaeuser, Broge, Wills and Szecenyi (2011) found that poor job satisfaction is associated with lower standards of service delivery, high staff turnover and inferior treatment outcomes for patients.

Empathy and Job Satisfaction can also be associated with the emotional well-being of staff. Lombardo and Eyre (2011) indicate that most nurses commence their career with a desire to provide empathetic care to patients, however where the needs of the patient outweigh the Nurse’s capacity to meet those needs, the Nurse can become a victim of continuing stress and compassion fatigue. This will then result in decreased job satisfaction and poor quality health services for the patient. Jansen (2011) in a study of volunteer workers found that higher levels of stress and decreased empathy levels were significant
predictors of volunteer burnout and higher empathy levels were significantly correlated with volunteer job satisfaction. Astrom, Nilsson, Norberg and Sandman (1991) found that nurses who do not become burned out are characterised by a high degree of empathy and a positive attitude toward their patients.

Gross (1994) studied the contribution of empathy constructs (as outlined in IRI Scale) to burnout in Salvation Army Volunteers. Empathy constructs were compared with 3 dimensions of burnout identified in Maslach’s Burnout Inventory – emotional exhaustion, depersonalisation and personal accomplishment. Gross found that Empathic Concern is a significant predictor of depersonalisation; low empathic concern can lead to an impersonal and uncaring attitude. Empathic Concern was also found to be positively associated with personal accomplishment which can be defined as a person’s belief in their competence and successful achievements at work.

An evaluation of previous research would indicate that empathy is positively associated with job satisfaction. Although past research has focused on the link between lack of empathy and negative emotional well being or burnout, it has been found that empathy is associated with people’s emotional reactions to their work. It is the intention of the present study to establish if there is a positive association between job related affective well being (emotional well-being of staff), when applied to a sample of HSE employees. In addition, the present study proposes to examine other demographic and work related variables in order to ascertain if there are any differences between empathy levels according to gender, occupation and length of service.
Previous research regarding empathy has indicated gender differences in empathy levels, with Females obtaining higher empathy scores than Males (Davis 1980, Hojat et al 2002). The research of Voinescu, Szentagotai and Coogan (2009) found that male doctors were less empathetic than female doctors. This study considers possible reasons for this gender difference. It is outlined that women may be more receptive to emotional signals than men and so are better equipped in establishing an empathetic relationship. It is also thought that female physicians have fewer patients, spend greater time with their patients and are more focused on care as opposed to cure. It is stated that it is unclear as to whether the empathy / gender difference is due to gender characteristics or gender role expectations.

Tavakol, Dennick and Tavakol (2011) assert that although females score higher on emotional responses measured by self-report questionnaires, there was no significant difference between males and females when non-verbal behaviour and physiological reactions are examined. The researchers recommend further study on the empathy / gender issue before it can be categorically stated that females are more empathetic than males.

May and Alligood (2000) found that the mean empathy scores of older adults aged between 63 and 93 years were lower than mean empathy scores in younger populations. These lower empathy scores were linked to the developmental stage of older adults and may be because older adults engage in less helping behaviours, May and Alligood (2000) recommend further study into the apparent decline in empathy across the lifespan.

Voinescu et al (2009) examined empathy levels in junior doctors and other medical residents and established empathy in medical students appears to decline during the course of their studies. The researchers associate this decline in empathy levels to the emphasis on
trainee physician's emotional detachment and clinical neutrality, and the emphasis in training on the technological elements of medicine as opposed to the humanistic aspects. Nunes, Williams, Sa and Stevenson (2011) also found a decline in empathy scores during students first year of training and the study attributes this decline to a shift from idealism to realism in students first year of study. Researchers also speculate that this decline may be an adaptive response to new responsibilities and increasing workload. Brown, Williams, Boyle, Molloy, McKenna, Molloy and Lewis (2010) state that empathy can be compromised by increased workloads and pressures to provide effective treatments.

Although there is copious past research indicating that medical students experience a decline in empathy levels during their years of study, there is little research available in relation to empathy levels in practising health care professionals and it has not yet been established if empathy levels in health care staff declines during the course of their employment. It is the goal of the present study to establish if there are significant differences in empathy levels according to length of service in health professional current occupation. Health service staff will be divided into groups according to duration of service; 0-5 years, 6-10 years, 11-15 years, 16-20 years, 21-30 years, 31-40 years and 40 years or more, empathy levels for these groups will be compared. Given previous research based on medical / health care students and results which indicate that empathy declines throughout the lifespan and throughout the duration of academic study and training, it is expected that the population of health staff who have worked the least amount of time will exhibit higher empathy levels than the population of staff who have the longest period of service within the HSE. It is hoped that this investigation will yield useful information which may contribute to staff training and career development.
Tavakol et al (2011) found that medical students choosing people orientated specialities had higher empathy levels than medical students choosing technology orientated specialities. Voinescu et al (2009) found that psychiatry residents had higher levels of empathy when compared to other disciplines. Hall, Davis and Connolly (2000) measured dispositional empathy and job satisfaction in two groups; “practitioner” psychologists – counselling and clinical and “scientific” psychologists – evaluation, measurement and statistics. Results of this study found that “female practitioner” status was associated with higher empathy scores in Empathic Concern and Perspective Taking. Also for all members of the practitioner group (both male and female), higher scores on Empathic Concern and Perspective Taking were correlated with higher job satisfaction. Research indicates that health practitioners with regular patient contact exhibit higher levels of empathy, Sand (2003) suggests that contact and proximity to patients allows empathy to develop and increase. The present study will examine health service staff from 5 occupational categories – Nurse, Care Assistant, Clinician / Therapist, Social Work and Management / Admin. Based on past research it is expected that those occupations with continuous patient care as part of their work i.e. Nurses, Care Assistants, Clinicians / Therapist and Social Workers will exhibit higher levels of empathy than the group which would have the lowest level of patient interaction – Management / Admin. It is hoped that this element of the present study will supply useful data in relation to occupational empathy levels and provide a basis for skills sharing within the HSE as an organisation.

Since previous research has found an association between empathy and job satisfaction, and also differences in empathy levels across gender, occupation specialisation and a decline in empathy levels during academic study; any research which extends current understanding in this area is valuable, particularly when applied to staff cohort in a health service setting.
Any information in relation to empathy differences between groups or correlating factors may inform interventions for staff education which may result in increased patient satisfaction and greater engagement of the service user in health service person centred planning.

Health Service Staff from a HSE Disability Service in County Meath will complete the Davis Interpersonal Reactivity Index (Davis, 1980) to identify empathy levels in Empathic Concern and Perspective Taking. The Job Satisfaction Survey (Spector, 1994) will also be completed in order to ascertain participants' job satisfaction levels and the Job-related Affective Well-being Scale (Van Katwyk, Fox, Spector & Kelloway, 2000) will determine participants' emotional reactions to their job.

Following a review of research of the relevant literature, the following are the hypotheses of the present study:

Hypothesis 1:
It is hypothesised that there will be a significant positive correlation between scores on IRI Scale Empathic Concern and Job Satisfaction in a sample of HSE staff.

Hypothesis 2:
It is hypothesised that there will be a significant positive correlation between scores on IRI Scale Perspective Taking and Job Satisfaction in a sample of HSE staff.
**Hypothesis 3:**
It is hypothesised that there will be a significant positive correlation between scores on IRI Scale Empathic Concern and Job-Related Affective Well-Being in a sample of HSE staff.

**Hypothesis 4:**
It is hypothesised that there will be a significant positive correlation between scores on IRI Scale Perspective Taking and Job-Related Affective Well-Being in a sample of HSE staff.

**Hypothesis 5:**
It is hypothesised that there will be a significantly higher level of Empathic Concern in Females than Males in a sample of HSE staff.

**Hypothesis 6:**
It is hypothesised that there will be a significantly higher level of Perspective Taking in Females than Males in a sample of HSE staff.

**Hypothesis 7:**
It is hypothesised that those occupations with continuous patient care as part of their work i.e. Nurses, Care Assistants, Clinicians / Therapist and Social Workers will exhibit significantly higher levels of Empathic Concern than the group which would have the lowest level of patient interaction – Management / Admin.

**Hypothesis 8:**
It is hypothesised that those occupations with continuous patient care as part of their work i.e. Nurses, Care Assistants, Clinicians / Therapist and Social Workers will exhibit significantly
higher levels of Perspective Taking than the group which would have the lowest level of patient interaction – Management / Admin.

_Hypothesis 9:_

It is hypothesised that participants with the least duration of service in the HSE; 0-5 years and 6-10 years will report significantly higher levels of Empathic Concern than those participants with longer duration of service; 11-15 years, 16-20 years, 21-30 years, 31-40 years and 40 years or more.

_Hypothesis 10:_

It is hypothesised that participants with the least duration of service in the HSE; 0-5 years and 6-10 years will report significantly higher levels of Perspective Taking than those participants with longer duration of service; 11-15 years, 16-20 years, 21-30 years, 31-40 years and 40 years of more.
METHODOLOGY

Materials

Each Questionnaire booklet contained a number of validated scales and demographic questions. Respondents were asked to provide details of their gender, occupation and length of service in their current occupation. The following scales were used in the questionnaire booklet.

*Davis Interpersonal Reactivity Index*: The Davis IRI Scale (Davis, 1980) is a multi-dimensional scale designed to measure 4 distinct but related constructs of empathy. The instrument contains 4 7-item subscales, each looking at a separate aspect of empathy. The Perspective Taking Scale measures the tendency to adopt the psychological point of view of others in everyday life. The Empathic Concern Scale assess the tendency to experience feelings of sympathy and compassion for fortunate others. The Personal Distress Scale evaluates the tendency to experience distress and discomfort in response to distress in others and The Fantasy Scales measures the tendency to imaginatively identify with fictional characters. Hojat, Mangione, Kane and Gonnella (2005) state that of these four constructs Empathic Concern and Perspective Taking are particularly relevant to patient care. As the present study is based on empathy levels of Health Service Staff, 2 of the Davis IRI Subscales - Empathic Concern and Perspective Taking were utilised as part of the study. The Interpersonal Reactivity Index sets out statements which measure Empathic Concern - “*When I see someone being taken advantage of, I feel kind of protective towards them*” and Perspective Taking – “I try to look at everybody’s side of a disagreement before I make a
decision”, respondents are then asked to indicate how well these statements describe you on a scale from A – does not describe me very well to E – describes me very well. The scores are calculated separately for each subscale and Davis does not recommend summation of the subscales to ascertain an overall empathy score, increases in each subscale are not indicative of greater levels of empathy. The IRI has demonstrated good intrascale and test-retest reliability and convergent validity is indicated by correlations with other established empathy scales. Internal reliabilities across the four sub-scales range from 0.71 to 0.77 and test-retest reliabilities range from 0.62 to 0.71 (Davis, 1980).

**The Job Satisfaction Survey (JSS):** The Job Satisfaction Survey (Spector, 1985) is a 36-item scale designed to measure respondent’s attitudes towards their job based on 9 facets which are; pay, promotion, supervision, fringe benefits, contingent rewards, operating procedures, co-workers, nature of work and communication. The document provides 36 statements in relation to the respondent’s job, for example, “My supervisor is unfair to me”, and responses are made using a 6-point scale, with 1 representing the strongest disagreement and 6 representing the strongest agreement. Spector (1994) states that the JSS has good internal consistency reliability (Cronbach’s Alpha = .91)

**The Job-related Affective Well-being Scale (JAWS):** The Job-related Affective Well-being Scale (Van Katwyk, Fox, Spector & Kelloway, 2000) is a 30-item scale which is designed to assess respondent’s emotional reactions to their job. Respondents are provided with a list of emotions for example, “my job made me feel calm” and are required to indicate how often they have experienced this emotion at work over the past 30 days, using a 5-point scale -
never, rarely, sometimes, quite often, extremely often or always. Internal consistency reliability estimates were reported as high (Cronbach’s Alpha = .95).

Participants

A self selecting sample of Health Service Staff in HSE Meath Disability Services, Navan, Co. Meath participated in this study. Staff at HSE Meath Disability Services deliver multi-disciplinary services to Children and Adults with Intellectual, Physical and / or Sensory Disabilities living in County Meath. Services provided to clients include; occupational therapy, physiotherapy, speech and language therapy, psychology, liaison nursing, social work, home support, day service, respite and residential services. Staff members employed in this service include; Nurses, Care Assistants, Occupational Therapists, Physiotherapists, Speech & Language Therapists, Psychologists, Social Workers, Management and Administration. Participation in this study was voluntary and no incentives were offered.

Of the 84 total participants who took part in this study, the following was the division of these participants per Occupation Category:

- 14 Nurses
- 12 Care Assistant
- 32 Clinician / Therapist
- 6 Social Work / Social Care
- 20 Management / Administration
24 of the respondents were Male and 60 were Female. Participants (N=84) were also divided into groups according to the length of service in their current occupation, with 19 participants in the 0 to 5 years category, 23 participants in the 6-10 years category, 17 participants in the 11-15 years group, 7 participants had work in the service for 16-20 years and a further 7 for 21 – 30 years, finally 10 participants had worked in the HSE for 31 – 40 years and only 1 participant had worked for 40 years or more. See Figure 1.

![Pie Chart]

*Figure 1: Breakdown of Participants by Length of Service in Current Occupation*

**Apparatus**

The Statistical Package for Social Sciences 18.0 (SPSS; SPSS Inc., Chicago, IL., USA) was used for data storage, tabulation and the generation of descriptive and inferential statistics.
Procedure

The researcher submitted a research proposal to the Management of the HSE Meath Disability Services and permission was attained to conduct the study using a sample of staff from this service. The research proposal was also submitted to Dublin Business School Department of Psychology Ethics Committee for approval.

Questionnaires were then distributed to the 150 staff members within the HSE Meath Disability Services. Each potential participant received the questionnaire booklet, a cover letter explaining the purpose of the study and a reply envelope. A copy of the questionnaire and the cover letter can be found in the Appendix.

Participation in the study was voluntary and anonymous, returning the questionnaire was considered consent to participate. Potential participants were asked to complete the questionnaires at a time that was convenient and place completed documents in the sealed envelope provided. A locked “ballot type” box was placed in a central location in the work place and participants were asked to return questionnaires to this box. A 3 week timeframe was allocated for return of questionnaires. Of the 150 questionnaires circulated, 84 were returned completed (56% response rate)

Design

This study utilised a correlational design to measure the associations between the variables Empathic Concern, Perspective Taking, Job Satisfaction and Job-related Affective
Well-being (Hypotheses 1 to 5). The criterion variables in relation to Hypotheses 1 to 5 were scores on the IRI Scales Empathic Concern and Perspective Taking, the predictor variables for these hypotheses were Job Satisfaction and Job-related Affective Well-being.

A between groups design was used to test if there were any significant differences between empathy levels across gender, occupation and length of service (Hypotheses 6 to 11). The criterion variables in relation to Hypotheses 6 to 11 were Empathic Concern and Perspective Taking and the predictor variables were; gender, occupation and length of service.
RESULTS

The data was analysed to investigate the correlations between the Empathy (IRI) Scales – Empathic Concern and Perspective Taking, Job Satisfaction and Job-related Affective Well-being.

The mean score for Perspective Taking was 17.33 (SD = 3.949) and for Job Satisfaction was 136.52 (SD = 22.229). A Spearman’s rho correlation found that there was a moderate positive significant relationship between Perspective Taking and Job Satisfaction (rho = 0.357, p < 0.05, 2-tailed).

A Spearman’s rho correlation was also used to ascertain if there was a significant correlation between Perspective Taking and Job-related Affective Well-being (mean = 101.77, SD = 15.424). A weak positive significant correlation was found between Perspective Taking and Job-related Affective Well-being (rho = 0.231, p < 0.05, 2-tailed).

The mean score for Empathic Concern was 18.24 (SD = 3.431). A Spearman’s rho correlation found that there was no statistically significant association between levels of Empathic Concern and Job Satisfaction (rho = 0.144, p > 0.05, 2-tailed).

Lastly, a Spearman’s rho correlation found no statistically significant association between levels of Empathic Concern and Job-related Affective Well-being (rho = 0.005, p > 0.05, 2-tailed).
In light of both variables Job Satisfaction and Job-related Affective Well-being demonstrating a significant correlation with Perspective Taking, these variables were also compared. A Pearson correlation coefficient found that there was a strong positive significant relationship between Job Satisfaction and Job-related Affective Well-being ($r = 0.706, p < 0.05, 2$-tailed).

Differences in Empathy Scales were also examined according to Gender, Occupation and Length of Service. Table 1 shows the mean Empathy scores for Males and Females.

<table>
<thead>
<tr>
<th>Gender</th>
<th>Empathy(IRI) Scale</th>
<th>Mean</th>
<th>Standard Deviation</th>
<th>Minimum</th>
<th>Maximum</th>
</tr>
</thead>
<tbody>
<tr>
<td>Males (N=24)</td>
<td>Perspective Taking</td>
<td>16.21</td>
<td>3.912</td>
<td>10</td>
<td>22</td>
</tr>
<tr>
<td></td>
<td>Empathic Concern</td>
<td>16.21</td>
<td>3.765</td>
<td>2</td>
<td>23</td>
</tr>
<tr>
<td>Females (N=60)</td>
<td>Perspective Taking</td>
<td>17.78</td>
<td>3.906</td>
<td>8</td>
<td>25</td>
</tr>
<tr>
<td></td>
<td>Empathic Concern</td>
<td>19.05</td>
<td>2.948</td>
<td>10</td>
<td>24</td>
</tr>
</tbody>
</table>

Examination of the data shows that the Female group (mean = 19.05) of participants had higher mean scores in Empathic Concern when compared to the Male group (mean = 16.21). See Figure 2. The differences between these 2 groups were compared using a Mann Whitney U test. The Male group had a mean rank of 28.25, compared to the mean rank of
48.20 for the Female group. The Mann-Whitney U test revealed that males and females did differ significantly in Empathic Concern Scores. ($U=378.000$, $p < 0.05$, 2-tailed)

![Empathic Concern Scores Bar Chart](chart.png)

**Figure 2: Mean Empathic Concern Scores for Males and Females**

Although the Female group was found to have a higher mean Perspective Taking (mean = 17.78) when compared to the Male Group (mean = 16.21), an independent samples t-test found that there was no statistically significant difference between the Perspective Taking scores of Males and Females. ($t(82) = -1.669$, $p > 0.05$, 2-tailed)

The Job Satisfaction levels of these two groups was also compared however, an independent samples t-test found no statistically significant difference between job satisfaction levels of Males and Females ($t(82) = -0.789$, $p > 0.05$, 2-tailed). An independent samples t-test also found no statistically significant difference between Job-related Affective Well-being levels of Males and Females ($t(82) = -0.916$, $p > 0.05$, 2-tailed)
Data was also analysed to compare Empathic Concern, Perspective Taking, Job Satisfaction and Job-related Affective Well-being across 5 Occupation Groups – Nurse, Care Assistant, Clinician / Therapist, Social Work and Management / Admin. A Kruskal-Wallis test showed that there was no significant difference between levels of Empathic Concern across the 5 Occupation Groups ($x^2(4) = 3.898, p > 0.05$).

A One Way Analysis of Variance was conducted to compare Perspective Taking levels between the Occupation Groups but no significant difference was found ($f(2,79) = 0.367, p = 0.831$). A One Way Analysis of Variance also found no significant difference in Job Satisfaction Levels across the 5 Occupation Groups ($f(4,79) = 0.670, p = 0.615$). Lastly, a One Way Analysis of Variance compared Job Related Affective Well-being Levels across the 5 Occupation Groups but no significant difference was found ($f(4,79) = 1.978, p = 0.106$).

Participants were then grouped according to Length of Service in their current occupation – 0-5 years, 6-10 years, 11-15 years, 16-20 years, 21-30 years, 31-40 years and 40 years or more. A Kruskal Wallis test showed that there was no significant difference Empathic Concern Scores across these 7 groups ($x^2(6) = 10.856, p > 0.05$). A One Way Analysis of Variance was conducted to compare Perspective Taking levels between the Length of Service Groups but no significant difference was found ($f(5,77) = 0.866, p = 0.524$). A One Way Analysis of Variance also found no significant difference between Job Satisfaction levels among the Length of Service Groups ($f(5,77) = 0.853, p = 0.533$). Finally,
a One Way Analysis of Variance compared Job Related Affective Well Being across the 7 Length of Service Groups but no significant difference was found ($f(5,77) = 1.341, p = 0.249$)
DISCUSSION

The present study examined empathy levels in a sample of Irish Health Service staff. The Davis (1980) Interpersonal Reactivity Index Subscales of Empathic Concern and Perspective Taking were measured together with Job Satisfaction and Job Related Affective Well Being.

In the first part of the study, the data was examined to ascertain if there were any correlations between Empathic Concern and Job Satisfaction or Job Related Affective Well-Being. It was hypothesised that there would be a significant positive correlation between the IRI Scale Empathic Concern and the variables Job Satisfaction (Hypothesis 1) and Job Related Affective Well Being (Hypothesis 3). However, the results demonstrated that there was no statistically significant correlation between Empathic Concern and Job Satisfaction or Job Related Affective Well Being. So Hypothesis 1 and Hypothesis 3 are rejected.

The second hypothesis that there will be a significant positive relationship correlation between Perspective Taking and Job Satisfaction was supported by data analysis. Indicating that high levels of Perspective Taking are associated with high levels of Job Satisfaction and reversely, low levels of Perspective Taking are suggestive of depleted Job Satisfaction among health service staff. Mouavi et al (2012) found a significant positive relationship between empathy and job satisfaction in a sample of physical education teachers. The present study develops this research further, by proving that this finding applies to other occupations which involve a helping relationship other than the teacher – student dynamic.
Homburg and Stock (2005) found that in the case of employees with ongoing customer contact, empathy strengthens the relationship between job satisfaction and customer satisfaction. This research found that empathy creates a positive relationship and good communication with the customer, increasing customer satisfaction and thereby increasing the employee’s job satisfaction. As HSE employees work at the frontline of health service provision, staff – service user contact is an intrinsic part of all health service professions, it may be that perspective taking allows the health service worker to more readily perceive the viewpoint of the client, resulting in positive relationships being established between staff and service users. Mohammadreza et al (2010) found that high physician empathy correlated with patient satisfaction, increased physician – patient trust and increased compliance levels with medical treatments and interventions. So it could be suggested that perspective taking fosters the client – patient relationship, increasing patient satisfaction, resulting in successful treatment outcomes and thereby increasing job satisfaction.

Hypothesis 4 proposed that there would be a significant positive correlation between Perspective Taking and Job related Affective Well Being, the results of the present study supported this hypothesis. Previous research is, for the most part, focused on negative emotional states and associating these negative feelings with low empathy levels, Jansen (2011) found that decreased empathy levels were significant predictors of burnout in volunteer workers. Astrom et al (1991) found that nurses who do not become burned out have a higher degree of empathy and a positive attitude towards their patients. The findings of the present study develop the link between emotional well being at work and empathy levels. Results of the current study demonstrate that positive job related emotional well being is associated with higher empathy levels in employees. The present study also supports
previous research findings that negative emotional states experienced by employees are linked with low degrees of empathy (Gross 1994). This negative well being can lead to staff burn out. Kelly (2007) suggests that current challenges being experienced in the HSE such as, budget cuts and staff shortages, has increased pressures on HSE staff and resulted in the clinician being afforded little time to establish links with the service user, this would result in low perspective taking, as the clinician cannot give priority to considering the viewpoint of the patient. Increased pressures can cause negative emotional states in employees and result in reduced empathy levels (Reynolds & Scott, 1999), based on this research, it could be plausible that working conditions cause changes in job related affective well being and perspective taking. This is certainly an area where further research is warranted, particularly in relation to health services.

The relationship between Job Satisfaction and Job-related Affective Well-being was also examined, a strong positive significant relationship was found between these two variables. Gurkova, Cap, Ziakova and Duriskova (2012) also found a significant correlation between job satisfaction and emotional well being in a sample of Nurses. Bowling, Eschleman and Wang (2010) also found a positive relationship between job satisfaction and emotional well being, the causal nature of this relationship was investigated and researchers suggest that there is evidence to indicate that there is a reciprocal relationship between job satisfaction and emotional well being.

Although the present study has established a significant association between Perspective Taking, Job Satisfaction and Job-related Affective Well-being, due to the
correlational nature of the study the direction of the association between these three variables cannot be certain. See Figure 3. The present supports previous research, that the three variables are interlinked but causal relationships can only be speculated at this point. Previous research has presented many theories regarding this relationship, Larson and Yao (2005) suggest that empathy helps physicians becomes more effective at their work, which creates higher job satisfaction and results in positive emotional well being. Lombardo and Eyre (2011) suggest that job satisfaction increases positive emotions, which causes an increase in empathy levels. The present study lays a basis for further studies investigating this relationship.

![Figure 3: Demonstrates the relationship between Perspective Taking, Job Satisfaction and Job-related Affective Well-being](image)

The confirmation of a correlation between Perspective Taking, Job Satisfaction and Job-related Affective Well-being does have an influence on the delivery of health services. The HSE has set forth a plan for person centred service delivery and service user involvement in health service planning in the National Strategy for Service User Involvement in the Irish Health Service (2008 – 2013). One of the actions outlined by the HSE to achieving this plan is that “Management and Clinical Leadership at all levels will strive to create the environment, the structures and related processes for service user involvement to work
effectively” (HSE, 2008 p.14). By establishing the correlation between Perspective Taking, Job Satisfaction and Job-related Affective Well-being, the present study would indicate that the promotion of the empathic approach to service users and fostering of an environment where employees are supported and satisfied in their work and encouraged to establish relationships with service users will be associated with positive job-related well being and high levels of Perspective Taking. This increased Perspective Taking will advance the development of the patient centred model of health care delivery within the HSE.

It is worth noting, the difference in outcomes when both Empathic Concern and Perspective Taking were examined in relation to Job Satisfaction and Job-related Affective Well-being. While there was a significant relationship between Perspective Taking and these two variables, there was no statistically significant association between Empathic Concern and Job Satisfaction or Job-related Affective Well-being. These results would support the research by Davis (1980) which asserts that Empathy is a multi-dimensional psychological construct, made up of distinct cognitive and emotional elements. Davis argues that a multi-dimensional approach to empathy is necessary and each element is a specific and separate aspect of the general concept of empathy. Davis (1980) states that the elements of empathy must be examined individually and higher scores in one empathy subscale are not indicative of higher scores in another. Empathic Concern is the propensity of the individual to experience sympathy and compassion for others and can be categorised as an emotional element of empathy. Perspective Taking is defined by Davis as the tendency to adopt the psychological viewpoint of others, this could be considered a cognitive element of empathy. So from the results of the present study, it can be concluded that the emotional element of
empathy is not related to changes in job satisfaction or job related affective well-being, while the cognitive element of empathy is positively correlated with these variables.

The second part of the present study explored the differences in empathy subscales - Perspective Taking and Empathic Concern between groups of health service staff according to gender, occupation and length of service.

It was hypothesised that there would be a significantly higher level of Perspective Taking in Females than Males in a sample of HSE staff, this hypothesis was not supported by the results of the present study. However, Hypothesis 5, that there will be a significantly higher level of Empathic Concern in Females than Males in a sample of HSE staff was supported by data analysis. This finding is congruent with previous research which has indicated gender differences in empathy levels (Davis 1980, Hojat et al 2002, Voinescu et al 2009).

Garaigordobil (2009) found statistically significant gender differences in empathy levels in a sample of participants aged 10 to 14 years. The researcher states the discovery of greater empathy levels in girls at this age group may be linked to differences in rearing patterns for boys and girls. Girls have been socialised in a way that favours the development of empathic care giving skills and the capacity for sharing emotions and discussing the feelings of others has been stereotyped as the feminine role. Voinescu et al (2009) also state that gender differences in empathy levels may be attributed to gender role expectations.
Contemporary cognitive neuropsychology also offers explanations for this apparent gender difference in empathy levels. Empathy has been represented as a function of higher brain structures, including the cortex. Derntl, Finkelmeyer, Eickhoff, Kellermann, Falkenberg, Schneider and Habel (2010) found that females and males rely on different processing strategies when solving emotional tasks, females seem to recruit more emotion and self-related regions of the brain such as the amygdala; males activate more cortical, rather cognitive-related areas of the brain. Schulte-Ruther, Markowitsch, Shah, Fink and Piefke (2008) found that females and males rely of different neuro-processing strategies when assessing their own emotions in response to other people. Females recruit the right frontal cortex of the brain more so than males, while in the same empathy related experiment, males were found to exhibit increased neural activity in the temporoparietal junction of the brain. Current research has also linked the gender difference in empathy to neuroendocrine and autonomic processes which regulate body states, emotions and reactivity, specifically the neuropeptide Oxytocin (Striepens, Kendrick, Maier, Hurlemann (2011). This type of neuroscientific research indicates that gender differences in empathy levels may not be a factor which is controllable in humans, and empathy levels are genetically and biologically predetermined. This is an area which has lately attracted unprecedented interest and is likely to be the focus of much development in relation to empathy and prosocial behaviour.

No statistically significant differences in Perspective Taking and Empathic Concern were found between the 5 Occupation Groups – Nurses, Care Assistants, Clinicians / Therapists, Social Workers and Management / Administration. Although the sample size (N=84) was too small to be certain whether there was no actual difference. Previous research
has found higher levels of Empathic Concern and Perspective Taking in psychologists with
direct patient contact when compared to research psychologists, however, hypotheses 8 and 9
of the present study; that those occupations with continuous patient care as part of their work
will exhibit significantly higher Perspective Taking and Empathic Concern, are not
supported. This may present as an important finding as it can be inferred from this result that
there is no significant difference in empathy levels across the occupational groups employed
within the HSE. This may be the product of HSE policy which aims to promote service user
facilitation at all levels of the health service and may be indicative of staff buy in to the
concept of person centred service provision. The present study is potentially limited by the
small sample size and further research with a larger number of participants across various
health related occupations may confirm or refute these findings.

Another interesting avenue for further investigation in relation to occupational
differences in empathy levels would be a comparison study between health service staff
employed within the HSE and those employed in the private sector. This would contribute to
the examination of HSE work practices and policies and would also yield useful information
for staff training and development. Pillay (2009) found a significant disparity in the levels of
job satisfaction of South African Staff Nurses employed in the public and private sectors,
with public service employed Nurses recording lower levels of job satisfaction. Given that the
present study has found a correlation between job satisfaction and empathy subscale –
Perspective Taking, this may indicate that there is potential for a difference in empathy
between public and private sector health care staff.
Hypotheses 9 and 10 predicated that participants with the least duration of service in the HSE would report significantly higher levels of Empathic Concern and Perspective Taking than those participants with a longer duration of service. Analysis of the data did not support these hypotheses. Previous research found a decline in the empathy levels of medical students during the course of their studies (Voinescu et al 2009, Nunes et al 2011) this decline was linked to an adaptive response to new responsibilities. Brown et al (2010) also state that empathy can be compromised by increased workloads and pressures to provide effective treatments. Based on this previous research it was proposed that a similar decline in empathy levels would be evident in practicing health care staff. To record no significant difference between the groups according to length of service, indicates that exposure to the realities of working with service users does not correspond with a decline in empathy levels. The results of the present study also contradict research which suggests that emotional detachment and clinician neutrality cause a decline in empathy levels (Voinescu et al 2009)

In relation to the evident decline in empathy throughout the course of study, it may be valuable to conduct a longitudinal study to compare empathy levels in groups of students completing their academic studies with the empathy levels of the same participants 1, 2 and 3 years into employment. This will indicate if empathy levels are low leaving college as students face the unknown and then perhaps increase when working directly with the client becomes a day to day reality.

There are some limitations to the present study; the measures used were self report questionnaires. Issues with self report questionnaires include the tendency of participants to respond in a socially appropriate or socially desirable way (Crown and Marlowe 1960). It is also unclear how accurate individuals are at assessing their own cognitive and emotional
states. Teherani, Hauer and O'Sullivan (2007) advocate standardised simulations as an assessment tool for measuring clinician empathy, this research indicates that this type of observation can highlight important empathy deficiencies during clinical training. Other suggestions offered by Teherani et al (2007) in measuring empathy include; reflective practice, discussion on challenging cases, peer rating and patient satisfaction surveys. Further research involving the Interpersonal Reactivity Index (Davis 1980) in conjunction with another measure of behavioural empathy such as video situations testing could add to the findings of the present study. Participants could be shown videos regarding simulated patient situations and asked to discuss how they would treat the mock patient. Another useful addition to the present study regarding health service staff would be the inclusion of a patient satisfaction questionnaire.

This study is potentially limited by the small sample size (N=84) and sampling of participants from a HSE Disability Service. Staff in this service provide services to the same patients / service users for a long period of time. Typically, service users are referred to Disability Services at birth and do not exit the service until deceased. This would allow the health service employee a considerable amount of time to establish relationships with clients and their families, which would benefit the development of an empathic relationship between staff and service user. Also previous research by Brown et al (2010) has found that clinicians display higher empathy towards clients who are diagnosed with medical conditions which are not considered to be the fault of the patient such as stroke and cerebral palsy. Whereas decreased empathy levels were evident towards patient groups, such as those with complications associated with substance abuse, where the medical condition was perceived to be the fault of the patient. A final suggestion for future research would be to involve samples
of health service workers from varied health service settings such as general medicine, geriatric care, mental health, paediatrics, this would allow greater generalisation of findings to the HSE as a whole.

The findings of the present study support the notion that some aspects of empathy are associated with job satisfaction and job-related affective well-being. A significant positive correlation was found between Perspective Taking and the two variables Job Satisfaction and Job-related Affective Well-being. This result has several implications for the development of service user involvement in the HSE. The present study also found significant differences in Empathic Concern between Males and Females, this result is congruent with previous research in relation to gender differences in empathy levels. The current study provides a basis for further research regarding empathy levels and health service staff.
REFERENCES


Trust and Compliance. *International Journal of Medical Education*, 83-87 DOI: 10.5166/ijme.4d00.b701


Tavakol, S., Dennick, R., & Tavakol, M. (2011) Empathy in UK Medical Students: Differences by Gender, Medical Year and Speciality Interest. *Education for Primary Care, 22*(5), 297-303


APPENDIX

List of Appendices

Appendix A: Cover Letter for Questionnaire
Appendix B: Questionnaire
APPENDIX A

Cover Letter with Questionnaire

Dear Participant,

Thank you for taking the time to complete this survey.

My name is Louise Farrelly and I am a final year psychology student at Dublin Business School. This research project is part of my degree programme.

I am studying the relationship between Empathy, Job Satisfaction and people’s emotional reactions to their job. This survey is divided into 3 short questionnaires and should take no more than 5 minutes to complete.

Participation is voluntary, you can choose not to take part and you can also choose not to finish the survey. If you prefer not to answer a particular question, you can leave this section blank. By returning this questionnaire you are giving your consent to participate.

Please do not write your name on the document, I do not need to know who you are and nobody will know whether you participate or not. Each survey is anonymous and all information remains STRICTLY CONFIDENTIAL. Access to completed questionnaires is limited to the Researcher and Thesis Supervisor for data analysis purposes.

If you have any questions about completing this questionnaire or about participating in this study, please contact me at [Contact Information].

Thank you.

Louise Farrelly.

Final Year Student – BA Psychology
APPENDIX B

Questionnaire

Please tick the appropriate box:

What is your Gender?       Male ☐       Female ☐

Which of the following best describes your current occupation?

☐ Nurse
☐ Care Assistant
☐ Clinician / Therapist
☐ Social Work / Social Care
☐ Management / Administration
☐ Other __________________________

How long have you been employed in your current occupation?

☐ 0 - 5 years
☐ 6 – 10 years
☐ 11 – 15 years
☐ 16 – 20 years
☐ 21 – 30 years
☐ 31 – 40 years
☐ 40 years or more
The following statements inquire about your thoughts and feelings in a variety of situations.

*For each item, indicate how well it describes you by choosing the appropriate letter on the scale: A, B, C, D, or E.*

*When you have decided on your answer, please tick the corresponding box.* READ EACH ITEM CAREFULLY BEFORE RESPONDING. Answer as honestly as you can.

**ANSWER SCALE:**

<table>
<thead>
<tr>
<th></th>
<th>A</th>
<th>B</th>
<th>C</th>
<th>D</th>
<th>E</th>
</tr>
</thead>
<tbody>
<tr>
<td>Does not describe me well</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Describes me very well</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

I often have tender, concerned feelings for people less fortunate than me

I sometimes find it difficult to see things from the "other person’s" point of view

Sometimes I don’t feel very sorry for other people when they are having problems.

I try to look at everybody’s side of a disagreement before I make a decision

When I see someone being taken advantage, I feel kind of protective towards them

I sometimes try to understand my friends better by imagining how things look from their perspective

Other people’s misfortunes do not usually disturb me a great deal

If I’m sure I’m right about something, I don’t waste much time listening to other people’s arguments

When I see someone being treated unfairly, I sometimes don’t feel very much pity for them

I am often quite touched by things that I see happen

I believe that there are two sides to every question and try to look at them both

I would describe myself as a pretty soft-hearted person

When I’m upset at someone, I usually try to “put myself in their shoes” for a while

Before criticising somebody, I try to imagine how I would feel if I were in their place
The following section, Job Satisfaction Survey, is designed to measure people’s satisfaction with their job. *Please tick one box for each question which comes closest to reflecting your opinion about that question.*

<table>
<thead>
<tr>
<th></th>
<th>Agree very much</th>
<th>Agree moderately</th>
<th>Agree slightly</th>
<th>Disagree slightly</th>
<th>Disagree moderately</th>
<th>Disagree very much</th>
</tr>
</thead>
<tbody>
<tr>
<td>I feel I am being paid a fair amount for the work I do</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>There is really too little chance for promotion on my job</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>My supervisor is quite competent in doing his/her job</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>I am not satisfied with the benefits I receive</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>When I do a good job, I receive the recognition for it that I should receive</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Many of our rules and procedures make doing a good job difficult</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>I like the people I work with</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>I sometimes feel my job is meaningless</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Communications seem good within this organisation</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Pay raises are too few and far between</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Those who do well on the job stand a fair chance of being promoted</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>My supervisor is unfair to me</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>The benefits we receive are as good as most other organisations offer</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>I do not feel that the work I do is appreciated</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>My efforts to do a good job are seldom blocked by red tape</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>I find I have to work harder at my job because of the incompetence of people I work with</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>I like doing the things I do at work</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>The goals of this organisation are not clear to me</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>I feel unappreciated by the organisation when I think about what they pay me</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>People get ahead as fast here as they do in other places</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Disagree very much</td>
<td>Disagree moderately</td>
<td>Disagree slightly</td>
<td>Agree Slightly</td>
<td>Agree moderately</td>
<td>Agree very much</td>
</tr>
<tr>
<td>------------------------------------------------------------------</td>
<td>-------------------</td>
<td>---------------------</td>
<td>------------------</td>
<td>---------------</td>
<td>-----------------</td>
<td>----------------</td>
</tr>
<tr>
<td>My supervisor shows too little interest in the feelings of subordinates</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>The benefit package we have is equitable</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>There are few rewards for those who work here</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>I have too much to do at work</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>I enjoy my co-workers</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>I often feel that I do not know what is going on with the organisations</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>I feel a sense of pride in doing my job</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>I feel satisfied with my chances for salary increases</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>There are benefits we do not have which we should have</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>I like my supervisor</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>I have too much paperwork</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>I don’t feel my efforts are rewarded the way they should be</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>I am satisfied with my chances for promotion</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>There is too much bickering and fighting at work</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>My job is enjoyable</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Work assignments are not fully explained</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
This last section, the Job-related Affective Well-being scale, is designed to assess people’s emotional reactions to their jobs.

Below are a number of statements that describe different emotions that a job can make a person feel. Please indicate the amount to which any part of your job (e.g. the workload, co-workers, supervisor, client, pay etc) has made you feel that emotion in the past 30 days.

*Please tick one response for each item that best indicates how often you’ve experienced each emotion at work over the past 30 days.*

<table>
<thead>
<tr>
<th>Statement</th>
<th>Never</th>
<th>Rarely</th>
<th>Sometimes</th>
<th>Quite Often</th>
<th>Extremely Often</th>
</tr>
</thead>
<tbody>
<tr>
<td>My job made me feel at ease</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>My job made me feel angry</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>My job made me feel annoyed</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>My job made me feel anxious</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>My job made me feel bored</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>My job made me feel cheerful</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>My job made me feel calm</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>My job made me feel confused</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>My job made me feel content</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>My job made me feel depressed</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>My job made me feel disgusted</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>My job made me feel discouraged</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>My job made me feel elated</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>My job made me feel energetic</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>My job made me feel excited</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>My job made me feel ecstatic</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>My job made me feel enthusiastic</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Never</td>
<td>Rarely</td>
<td>Sometimes</td>
<td>Quite Often</td>
<td>Extremely Often</td>
</tr>
<tr>
<td>-----------------------------------------------------------------</td>
<td>-------</td>
<td>--------</td>
<td>-----------</td>
<td>-------------</td>
<td>-----------------</td>
</tr>
<tr>
<td>My job made me feel frightened</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>My job made me feel frustrated</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>My job made me feel furious</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>My job made me feel gloomy</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>My job made me feel fatigued</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>My job made me feel happy</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>My job made me feel intimidated</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>My job made me feel inspired</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>My job made me feel miserable</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>My job made me feel pleased</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>My job made me feel proud</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>My job made me feel satisfied</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>My job made me feel relaxed</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
</tbody>
</table>

Thank you for taking the time to complete this questionnaire.

If you have any questions or would like to know the results of my research project, please contact me at [REDACTED]