



**UNIVERSITY of LIMERICK**

**O L L S C O I L L U I M N I G H**

**A Survey to Describe Vocational  
Rehabilitation among Occupational Therapists in Ireland.**

**Student Number: 0356115**

**Research Supervisor: Katie Robinson & MaryBeth Gallagher**

**Module: OT6054**

**Occupational Therapy Project 4**

**Module Leader: Dr. Judi Pettigrew**

**Submission Date: 10<sup>th</sup> April 2012**

**Word Count: 5074**

## Table of Contents

Abstract .....	4
Introduction.....	4
Literature Review .....	5
Method .....	9
Participants .....	9
Data Collection Tool .....	10
Validity and Reliability.....	10
Data Analysis .....	11
Results .....	11
Participants .....	11
Demographics .....	11
Educational Qualification .....	11
Continuing Professional Development .....	11
Experience in Work Practice .....	12
Workplace & Vocational Rehabilitation.....	12
Private / Public Sector.....	12
Part time / Full time .....	12
Work Demographics.....	12
Referral Source .....	12
Workplace .....	12
Further training.....	12
Service Provision .....	13
Prevention/education/training service.....	13
Assessment Services .....	13
Rehabilitation Services.....	13
Workplace Based Services .....	13
Perception of future service provision.....	14
Further Comment.....	14
Discussion .....	15
Implications to the Profession of Occupational Therapy .....	17
Conclusion .....	17
References .....	19
Appendix 1 .....	22
Appendix 2.....	28

**Acknowledgements:**

This research project was supported by the Occupational Therapy department of The University of Limerick. In particular I wish to thank Katie Robinson and MaryBeth Gallagher for their assistance in this project.

# A Survey to Describe Vocational Rehabilitation among Occupational Therapists in Ireland.

## Abstract

**Introduction:** This research was carried out in order to ascertain the demographic data on vocational rehabilitation (VR) among occupational therapists in Ireland; describing current practice highlighting gaps in practice, identifying training and educational needs of occupational therapists and informing future research on VR in Ireland.

**Method:** Participants were recruited through the AOTI database via email with an invitation to participate. The link of the electronic survey was attached to the email and sent to 294 members. The survey enquired about demographic details, service provision in the prevention, assessment and rehabilitation and further education needs in these areas.

**Results/Findings:** The responses of 11 (3.7%) therapists were analysed. The results indicate that VR is practiced largely as a part time duty among the occupational therapists surveyed. 87.5% of occupational therapists could foresee a need for VR in their work practice in the future. A clear gap in practice appears to be that there is little or no service provision in the workplace, in comparison to countries with developed work rehabilitation programs such as Australia, Japan and America. Three therapists out of the eleven had completed further training in the area of VR. This may suggest therapists were aware of their skills potential working in VR and were preparing themselves for future opportunities in the area.

**Conclusion:** Future research is required in the field to justify the need of VR in Ireland. Further research in this area, may raise awareness of the great potential of occupational therapy in VR and how it may provide occupational therapy in Ireland with new and exciting work opportunities.

## Introduction

For a significant period of time occupational therapy publications have confirmed that the profession has had a positive impact to the area of VR (Ellexson 1985, Deen et al 2002, Reilly 1962). In the United States of America Jundt and King (1999) undertook a study to determine the demographic profile of work rehabilitation programs employing occupational therapists. Results concluded occupational therapists had a key role in the delivery of prevention, assessment, and rehabilitation of occupational injuries. In more recent times a study conducted in Australia by Deen et al (2002) to determine the characteristics of the current occupational therapy practice in Australia in the

prevention, assessment and rehabilitation of workplace injuries. Results indicated that occupational therapy had an active role in the provision of prevention, assessment and rehabilitation in occupational health and safety and work rehabilitation in Australia. At present Ireland lacks an accurate profile of the role of occupational therapy in VR. The purpose of this study was to ascertain current demographic data on VR among occupational therapists in Ireland; describing current practice, highlighting gaps in practice, identifying training and educational needs and informing future research needs.

## Literature Review

Through all the occupations we engage in throughout our lifespan work takes up a vast amount of our lives. Work can provide an individual with remuneration, self-esteem, social interaction, fulfilment and a sense of identity (Ross 2007). Humans have an innate need to occupy their time in a purposeful way in order to maintain a healthy wellbeing and flourish (Wilcock 1993). An absence from the workplace as a result of a workplace injury or illness can have negative effects on an individual. An interruption in work performance for some people can disrupt their occupational balance and possibly have negative effects on their health (King and Olson 2009). This may lead to those individuals experiencing an occupational disruption, however occupational disruption is said to be a transitory state and with supportive circumstances may be resolved (Whiteford 2000).

VR is the process whereby those deprived by illness or disability can be enabled to access, maintain or return to employment or other productive occupations (Ekholm and Schüldt Ekholm 2009). The idea, approach and intervention of VR is to aid individuals in preserving or recovering gainful employment by tackling the impediments and obstacles that prevent them from participating in paid employment (Waddell et al 2008, COT 2008).

Evidence suggests that VR is effective in enabling individuals to access, maintain or return to a productive occupation. A systematic literature review on rehabilitation and work ability determined that where chronic disability is present the combining of multi modal medical rehabilitation needs and VR, can decrease disability pension and sick leave (Kuoppala and Lamminpaa 2008). A further systematic review including a meta-analysis of the efficacy of multidisciplinary interventions on the return to work for people on sick leave due to low back pain; verified that there is scientific evidence for the clinically relevant effect of multidisciplinary interventions on return to work (Norlund et al 2009). De Buck et al (2002) conducted a systematic literature review to describe the effectiveness of VR programs for patients with chronic rheumatic diseases; they concluded a marked positive effect of VR on work status. Empirical evidence was found to support the efficacy, clinical utility and cost

effectiveness of VR in returning individuals with chronic illnesses or disabilities to employment (Pruett et al 2008). Preliminary analysis of a VR program for individuals with an acquired brain injury, run over three years established that VR offering educational and experiential learning opportunities is effective in enabling participant's with severe acquired brain injuries to return to paid employment (Murphy et al 2006). This evidence suggests that there are positive outcomes for the practice of VR.

VR has attracted notice in the past few years, which has warranted further research in the area. Ekholm and Schüldt Ekholm (2009) offered three explanations for this occurrence. Firstly they highlighted the cost to society of having to provide sickness allowance or a disability pension. Secondly an increasing proportion of society is retiring which requires all individuals of a working age required in gainful employment. The final reason offered for the increased interest in VR is that individuals out of employment have an increased risk of disease and suicide.

In 2002 people with disabilities were two and a half times less likely to have a job (National Disability Authority 2005). The vast majority of individuals with a disability acquire it over their lifetime (Conroy 2007). It has been identified that individuals with disabilities have lower participation levels and many inequalities across a wide range of areas of life (Hannon 2010). One of these areas is employment, which may give rise to deficiencies in other areas of life, possibly leading to poverty which in turn may lead to poor health (National Disability Authority 2005). The rehabilitation of workers back into work can ease these problems, and may positively affect physical health, psychological well-being and alleviate poverty (Bevan et al 2009). The 2006 census stated there were only 26% of individuals with a disability, in the labour force (CSO 2006). In comparison with the percentage of individuals without disabilities in the workforce, this is an alarming statistic.

The population in Ireland is growing and is forecast to hit the 5 million mark in 2015 and to surpass 5.3 million in 2020. The labour force is also projected to grow at an annual average of 2.2% over the whole period from 2005 to 2015. It is predicted that there will be 173,864 individuals over the age of 60 in the labour force in 2020 compared to 111,471 in 2005 (O'Brien and King 2006). With the increase of the State Pension age to 66 in 2014 and then to 68 by 2020, it is clear that the Irish workforce is ageing (Department of Social and Family Affairs 2010). With age comes the potential of ill health (Hébert 1997). This suggests the likelihood of the numbers of individuals being out of work due to injury and illness increasing. The combination of high numbers leaving the workforce due to illness or injury and the lack of VR services in Ireland, may lead to a rise in unemployment figures. Unemployment will deplete the Irish economy of necessary skills and knowledge, which may have an adverse impact on society as a whole (Bevan et al 2009). An absence from work caused by a work

injury usually leads to an individual becoming dependent on the Social Welfare Disability Payments system. This may have a negative influence on those affected decreasing their ability to participate in all aspects of Irish life. Furthermore, it places a financial cost on society and a taxation burden on business (Conroy 2007). With the downturn in the economy it is vital that we ensure that Ireland can compete with other nations for business. Therefore it is essential to ensure the strength of a skilled and knowledgeable workforce. Improvements in productivity which Ireland needs in order to compete in an increasingly globalised and knowledge-based economy may be mired without the skilled and knowledgeable workforce (Bevan et al 2009). Musculoskeletal disorders in work are directly costing at least 750 million euro, a year in Ireland (Bevan 2009). The loss of productive time due to rheumatoid arthritis and other forms of arthritis is estimated to cost 1.6 billion annually (Bevan 2009). In 2002 the annual cost for welfare disability payments was 1.282 million (McNamara and Miller 2006). Individuals out of work due to injury or illness, places a burden on the already strained welfare systems and government finances.

Studies suggest that work related injuries and illnesses have an effect on individual's psychological well-being and behaviour (Dembe 2001). Stress, depression, anxiety, drug abuse, family conflict and occasionally suicidal tendencies have been linked to work related injuries and illnesses (Dembe 2001). Psychosocial consequences of loss of work are difficult to measure, however they do provide a greater picture of the cost that individuals experience in regard to work related injuries and illnesses (Bevan 2009). If society fails to facilitate people with disabilities into our work force it will lead to damaging economic, social and psychological consequences. These negative consequences will not just affect individuals with a disability, but will also affect the Irish labour force, individual's families and carers and the whole of Irish society.

Work performance can be seen to be an important factor in a person's daily occupational life; which supports the sense of meaning and productivity, which is essential to health and well-being (Larson et al 2000). Work performance can be impacted by many aspects. Occupational therapists receive education in physical, cognitive, psychological and social aspects, which can be utilised in assessing work performance (King and Olson 2009). Work has always been of concern to occupational therapists in their practice however in recent times occupational therapists have been increasingly involved in the specialist area of VR (Deen et al 2002). Now that the profession of occupational therapy is widening its association from the medical model, occupational therapists are diversifying more into the workplace environment (Deen et al. 2002, Jundt and King 1999), engaging with employees and employers. There is a growing recognition of the potential of occupational therapy in the field of VR.

Occupational therapy has a long history and association with VR. Around about 1917 in America occupational therapy was founded and in the early days the focus was returning individuals back to work using the grading of activities (Holmes 2007). The outbreak of war in 1914 brought about a huge number of injured and disabled soldiers, requiring long term rehabilitation; this heralded the introduction of occupation into the hospital wards (Ross 2007). This application of occupation moved into civilian hospitals after the war, in America the Federal Industrial Rehabilitation Act 1923 was established which required the services of occupational therapists in hospitals for individuals who had suffered an industrial accident or illness (Ross 2007). Occupational therapy's role in VR has continued to grow from this point on and the profession has had a major influence on the growth of work rehabilitative programs (Jundt and King 1999).

The American Occupational Therapists Association's (AOTA's) centennial envisions; that occupational therapy is a well-established profession with strong quality evidence base and an internationally connected workforce that can meet the occupational needs of society (AOTA 2007). This vision looks towards the future of occupational therapy and especially towards societal needs. With the economic downturn, the ageing labour force, and the prevention of discrimination of disabled individuals, occupational therapists possess the skills, education and experience to provide a service of VR. Occupational therapists possess unique knowledge that is based upon occupation. This coupled with their individual skills, present occupational therapists with a major role in the provision of VR, in the prevention and the rehabilitation of work related injuries and illnesses (Jundt and King 1999). In the past VR was considered the supporting of individuals in the return to work however VR has expanded into job retention in recent times. (Varekamp et al. 2006) Occupational therapists have had very little influence in this area, with clients relying on the supports of employment and training agencies (Brewin and Hazell 2004). But it is an area of work that occupational therapists could apply their skills. Waddell et al (2008) described the principal aim of VR as improving ability for work and converting that into actually working.

In the US and Australia (Deen et al 2002, Jundt and king 1999) there has been a trend in recent times in providing rehabilitation and prevention services in the workplace. Deen et al (2002) recognised the lack of a profile of occupational therapy in work related injuries and illnesses, and identified the need to provide detailed and accurate data regarding the characteristics of Australian occupational therapy practice in the area of VR. With the growth of occupational therapy's involvement in VR, studies have been conducted in order to determine the state of involvement. Jundt and King (1999) conducted a study to determine the demographic profile of work rehabilitation programs in the United States of America, results of which revealed a wide variety of services offered, concluding



that therapists have a prominent contribution in the provision of prevention, assessment and rehabilitation services in treating occupational illnesses and injuries.

Practices in work injury rehabilitation and management have been changing in other countries (Jundt and King 1999), however there is little research found to show the extent of VR practice among occupational therapists in Ireland. There is a need to describe current practice in Ireland; a description of current practice would be beneficial to the profession in establishing education and service delivery needs (Jundt and King 1999).

VR has been described as a model in transition in Ireland (McNamara and Miller 2006). McNamara and Miller (2006) acknowledged that there had been changes made to the Irish model of VR since 2000; however they did distinguish that the area of VR resides outside the Irish health care system. They highlighted the gap between hospital care and employment, necessitating advancement in order to realise a continuous system from acute to community care for individuals with disabilities. Nevertheless there is a growing consensus of the importance of VR and the rising awareness of worker health in Irish society (Health and Safety Authority 2008). Although not widely publicised in Irish publications, there is some recognition that occupational therapy plays a vital role in the provision of VR (Health and Safety 2008, Bevan et al 2009).

## Method

This research study employed a survey questionnaire to describe current practice of occupational therapists working in VR, who primarily worked with individuals with a physical illness, injury or disease. It was initially anticipated that the study would include up to 200 participants. Eleven participants were recruited, therefore the data analysis method was then changed in order to best accommodate the small sample size.

## Participants

Participants were recruited through the Association of Occupational Therapists of Ireland (AOTI) database, an email of invitation to participate was sent to all members whereby they could identify if they met the inclusion criteria of; primarily working with individuals with a physical illness, injury or disease, practiced in Ireland currently or in the last five years.

The AOTI guidelines in the 'Process to Access AOTI Database for Research' (AOTI 2010) were followed and adhered too. There were 431 members of AOTI at the time. The survey was sent to 294 members, who agreed participate in research. The sample size was expected to be 200 approximately, as not all members will work in the specified area of practice.

Currently there is no register of occupational therapists in Ireland and for this reason using the AOTI's database of members was the only feasible and ethical method of accessing a large population of practising occupational therapists in Ireland. Non-probability sampling is the most appropriate form of sampling for this study as, there was little research conducted in the area in Ireland, so therefore there is no specific demographics to where therapists are practising and for the time limitation it was the most efficient method to collect the data for this study. However caution must be adhered to when analysing the data of non-probability sampling (Kielhofner 2006).

### **Data Collection Tool**

A three page multiple choice survey questionnaire was obtained by the researcher for this study (See Appendix 1). The survey was obtained from Deen et al (2002) who based the tool on Jundt and Kings (1999) tool (See Appendix 2), used to investigate work rehabilitation programs in the United States and Australia. Modifications included the removal of Australian and American terminology, and the removal of questions not relevant to the Irish context.

The survey comprised of twenty one questions, it contained demographic questions regarding education/training completed, experience, involvement in VR, referral sources and services offered. The survey listed services that may be offered in prevention, assessment and rehabilitation, and therapists were asked what they offered from their service. Therapists were asked to predict the level of service they may provide in the future in the areas of prevention, assessment and rehabilitation.

Surveys allow for the collection of data from a large amount of people at a low cost. They can provide a snapshot of a large population very quickly. Their advantages include enabling to collect data on numerous variables (Kielhofner 2006). Non-response bias and response bias are two factors which may influence the findings. Pilot testing can ensure a good response rate by preventing difficulties in completing the eventual survey (Fink 2006).

There are advantages to conducting surveys electronically through email or the web. A key advantage of conducting surveys through this media is that within an organisation a target population can be contacted through email, quickly and with little cost compared to other methods (Schonlau 2002). A follow up email reminder is beneficial in ensuring a response (Kalopwitz et al. 2004).

### **Validity and Reliability**

The validity and reliability of the survey was deemed reliable and valid as it had been used before and piloted. The survey was chosen as it was used in previous published studies (Jundt and King

1999, Deen et al 2002) that had conducted research in the same area and it addressed the research question at hand. It was modified to comply with Australian terminology and work practice and it was modified for use in this study. Modifications included the removal of Australian and American terminology, permission to use the survey was sought and obtained from Jundt and King (1999) and Deen et al (2002).

Ethical approval was sought and obtained from the University of Limerick Research Ethics & Governance committee, through the Clinical Therapies Research Ethics Committee and was approved. No substantive risks to participants were identified. Furthermore no identifiable information will be sought from participants. If any identifiable information was given in the further comment section, the information would not have been used.

## **Data Analysis**

As in Jundt and King (2002) and Deen et al (1999) investigation, it was hoped to analyse the results using SPSS (version 16) software, analysing descriptive statistics of frequencies and percentages according to the categorical items. It had been anticipated that inferential statistics would be used to analyse the data and draw conclusions, making predictions about the population based on the data collected. However due to the small sample size the results were downloaded to an Excel spread sheet where they were condensed and analysed.

## **Results**

### **Participants**

Two hundred and ninety four occupational therapists received the survey and eleven occupational therapists completed the survey, which is a 3.7% response rate. Not all therapists replied to all questions and some questions provided the opportunity for further comment.

### **Demographics**

#### **Educational Qualification**

The highest educational qualifications of the majority of the therapists who responded were a bachelor's degree and masters (54.5%). Fewer respondents had a diploma at (27.5%) and no respondents had a doctorate.

#### **Continuing Professional Development**

Six therapists answered this question with four therapists having participated in some form of continuing professional development. One therapist had completed a diploma in Occupational Health & Safety and another therapist had completed a master's in VR.

### **Experience in Work Practice**

All therapists answered this question and their experience ranged from 1-3 years to greater than 15 years. The majority of therapists had either 4-7 years' experience or greater than 15 years' experience.

### **Workplace & Vocational Rehabilitation**

One therapist skipped this question, 50% of therapists agreed that there was an element of VR in their workplace. The following question in the survey asked if those who did not have an element of VR in their workplace if they could foresee the need for the service in the future. Three therapists failed to complete the question, seven therapists answered yes to this question.

### **Private / Public Sector**

The majority of therapists worked in the public sector (90.9%) with just one therapist working in the private sector.

### **Part time / Full time**

Four therapists that had an element of VR in their workplace answered this question. All therapists worked at it part time; however one therapist stated both full time and part time.

## **Work Demographics**

### **Referral Source**

The most commonly identified source of referral was medical practitioners (72.7%). No therapist indicated that they received referrals from employers. 36.4% of therapists indicated that they received referrals from other sources but did not specify where these referrals came from.

### **Workplace**

27.5% of therapists were working in hospitals, 45.5% in primary care and 45.5% in community. Two therapists indicated they were working in another area but did not specify.

### **Further training**

Therapists highlighted the areas of; VR skills training / development, job analysis / risk hazard analysis and workplace assessments as being the most favoured in improving their knowledge and skills of VR.

Therapists also indicated that further training around supports available to clients in the workplace, supports for people with disability in the workplace, employment law and knowledge on state funded grants would be beneficial.

## Service Provision

### Prevention/education/training service

The most commonly identified preventative services provided by the therapists surveyed were body mechanics/back education, joint protection/energy conservation, manual handling and stress management. Refer to table for complete list of services.

### Assessment Services

The therapists identified disability evaluation / determination, as the most provided assessment.

Two therapists stated they used a self/locally-designed disability work questionnaire.

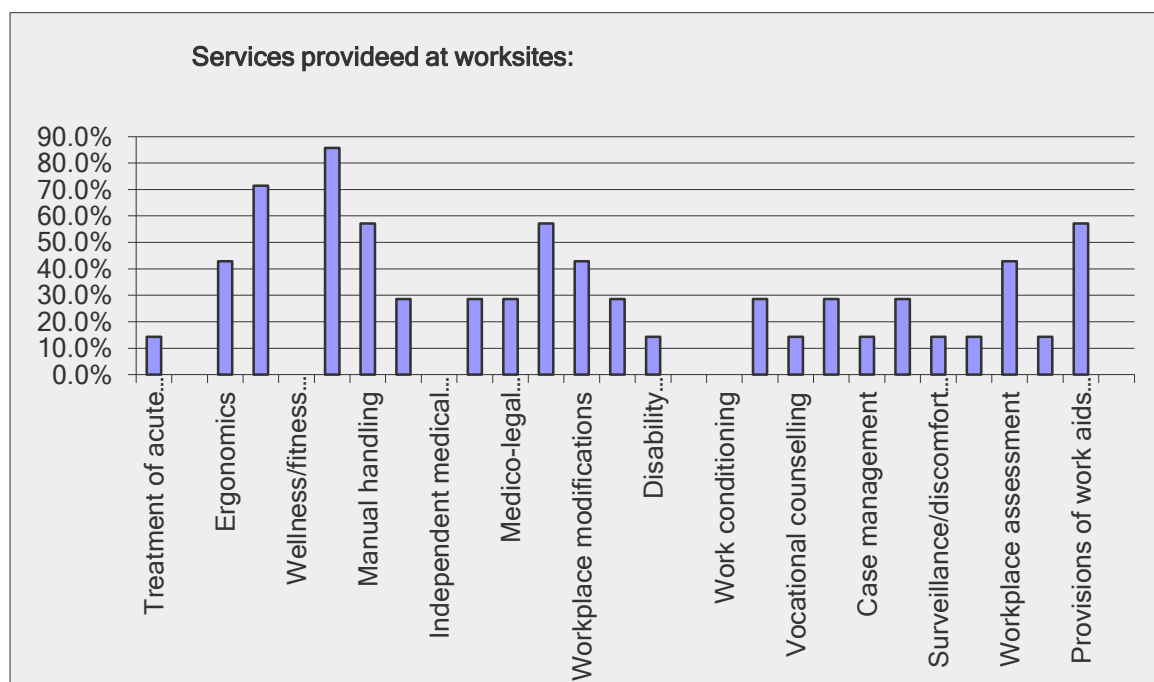
### Rehabilitation Services

Therapists acknowledged the two most commonly used rehabilitation service were; job modification and provision of workplace aids and equipment.

### Workplace Based Services

Body mechanics /back education (85.7%) and joint protection / energy conservation (71.4%) were the most commonly provided workplace-based services. However four other services were provided by more than 42% of therapists workplaces surveyed. These other services included workplace assessment (42.9%), workplace modifications (42.9%), functional capacity evaluations (57.1%) and provision of workplace aids and equipment (57.1%). See table 1 for services provided at worksite.

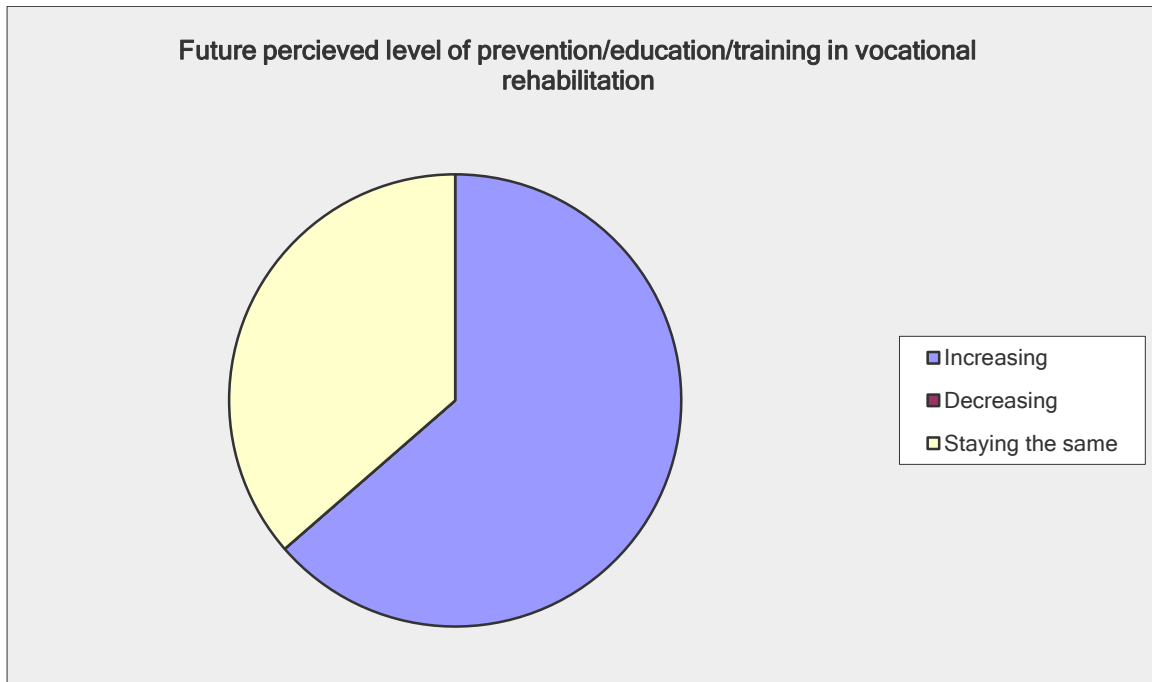
**Table 1**



### Perception of future service provision

Therapists surveyed were asked to foresee future service provision in the areas of prevention, assessment and rehabilitation. The most popular belief among the therapists is they envisaged all services increasing. However 50% of therapists predicted that services at employer locations would increase and 50% foresaw it staying at the same level. 63.3% of therapists foresaw the level of prevention/education and training in VR increasing. See table 2.

**Table 2:**



### Further Comment

Therapists who responded to the survey were provided with the option to give further comment at the end of the survey. Five therapists responded.

One therapist was a primary care occupational therapist. This therapist stated they had little VR experience and did not view it as playing a large role in primary care occupational therapy.

Another therapist explained that VR was not offered at their service; however this therapist said there was a demand in the area and staff had an interest in it. This therapist reported that they currently lacked training and resources in the area of VR.

One therapist worked only part time but worked in a community acquired brain injury team and felt that his/her clients had cognitive rather than physical difficulties that affected their return to the workforce.

Another therapist working with neurology patients stated that work roles were a core element of what they look at, and the team explores the work role routinely.

A therapist who didn't state in what area they worked, reported that VR services provided by occupational therapists are also provided to third party case management organisations dealing with liability claims, income protection insurance claimants; charity sector; self-employed; FAS; also determinations for illness benefit and early intervention for liability claims.

## Discussion

The results of this study reflect the lack of research conducted regarding VR and occupational therapy in Ireland. It is limited what can be deciphered from the results due to the small sample size; but there are some findings to be interpreted. Although caution must be adhered to when making comparisons to the United States of America (1999) and Australia (2002) due to the small sample size and alterations made to the survey, some similarities and disparities can still be made.

An important aim of this study was to describe the current practice of VR among occupational therapists. From the small sample size it is clear that there are occupational therapists working in VR in Ireland. Significantly 50% of therapists who responded to the survey had an element of VR in their workload. 87.5% of the therapists could foresee a need for VR in their work practice in the future. The majority of participants worked in the public sector and reported that VR consumed their practice on a part time basis.

Interestingly no therapist selected employers as a referral source. In comparison with Australian counterparts (Deen et al 2002), employers were the most commonly identified sources of referral at 50%. This highlights a gap in practice in the Irish context. Countries such as Australia (2002), Japan (Lo 2000) and the United States of America (Jundt & King 1999) have developed Work Rehabilitation Programs, and are providing services within workplaces. From the results of this survey it is clear that there is a gap between employers and frontline healthcare staff. In Conroy (2007), under roles; referral onto an occupational therapist only falls under the general practitioners responsibilities. As VR is in a transitional phase, McNamara and Miller (2006) stated that in order to provide for people with disabilities; a seamless transition from hospital to employment requires development. The recent trend of providing prevention and rehabilitation services in the workplace in Australia, Japan and the United States of America (Deen et al 2002, Lo 2000, Jundt and King 1999) is evident, however from the survey conducted there were no occupational therapists working within industry from those who responded to this survey. This may be linked to the concept that VR is in transition (McNamara and Miller 2006).

Although the sample size is small three therapists that participated in the study had completed further academic courses specific to VR. This may indicate that there is a population of occupational therapists working in physical disabilities within Ireland, who have a significant element of VR on their workload. It may also suggest that occupational therapists are aware of the potential for their skills in VR (King and Olson 2009) and are preparing themselves for opportunities that may arise in the area.

With the change of model of VR within Ireland in 2000, there has been no evidence published measuring the effectiveness of this new model (McNamara and Miller 2006). This coincides with Deen et al (2002) stating that occupational therapists practicing in the work arena are lacking a sound and limited evidence base. Deen et al (2002) also stated that little research or outcome measurement was being conducted by practicing occupational therapists in the field. A Cochrane Review for the effectiveness of VR intervention on the return to work and employment for persons with multiple sclerosis concluded that further research would benefit VR. Further research should focus on the enhancement of the scientific rigour and development of valid outcome measures and the cost effectiveness of VR (Khan et al 2009). A possible area of future research is to demonstrate the cost effectiveness of VR and enhance its evidence base here in Ireland. A limitation of this study was the non-inclusion of a question relating to research, this may warrant further investigation in the future also.

Further limitations of this study include the self-selection of respondents and the low response rate. Low response rates are common with electronic surveys (Shih and Fan 2009). With the low response rate obtained the reliability of the figures is questionable and may not be representative of the population in question. Another limitation of the study is that the results represent only occupational therapists working in physical settings and the results do not provide a true representation of all areas of practice. It has been established that VR is deemed an effective approach in mental health. A randomised control trial (Burns et al 2007) demonstrated the effectiveness of an approach of VR with individuals with severe mental illness. A literature review and meta-analysis of randomised control trials of work rehabilitation interventions for people with severe mental illness (Twamley et al 2003) concluded that supported employment programs produced consistently good outcomes.

Despite the limitations of the study, the results of the study provide information on demographic data and directions for future development of VR in occupational therapy within Ireland. The results may assist therapists and academics to conduct further research in this area, which may raise



awareness of the great potential of occupational therapy (King and Olson 2009) and how it may provide occupational therapy in Ireland with new and exciting work opportunities.

## **Implications to the Profession of Occupational Therapy**

The results of this paper need to be regarded tentatively. The findings when contrasted with international findings to identify and raise questions regarding the professions role in VR in Ireland. The findings suggest implications for the professions future, education, practice and research.

Literature in relation to VR and occupational therapy has focused on the effectiveness of work rehabilitation programs in workplaces (Jundt and King 1999, Deen et al 2002, Lo 2000). Previously there has been limited research conducted in Ireland in this area; this study intended to add to the limited evidence. However the findings are limited due to the low response rate.

With the growing international trend of occupational therapy diversifying into workplaces, Irish occupational therapists have an opportunity to expand their practice into the workplace. These opportunities warrant further research, toward substantiating the effectiveness of VR in the Irish context. Occupational therapists are professionals with fundamental skills in physical, cognitive, psychological and social aspects, which can be applied in assessing work performance (King and Olson 2009). Their unique knowledge and understanding of the complexities of occupation places them in a key role for providing VR (Law 2002, Yerxa 1997). Further development of the study would principally involve a larger sample size.

## **Conclusion**

In conclusion this study has provided a brief overview of current Irish occupational therapy practice in VR. The findings suggest that Ireland is not on trend with the established international movement of occupational therapy towards workplace based interventions. However it does provide exciting and worthwhile opportunities to Irish occupational therapist to demonstrate the effectiveness of these programs through research. Although historically occupational therapy professional boundaries have been blurred in this area (Deen et al 2002), it is evident that some Irish occupational therapists see their potential in the area. Occupational therapists fundamental skills and unique and complex knowledge of occupation, provides them with a purposeful contribution to the area of VR. Further research is warranted to describe the role of VR in occupational therapy further, to prove or disprove the benefits it may have to individuals, occupational therapy as a profession, the Irish labour force and Irish society as a whole. It is hopeful that this research has

provided a case for VR in the Irish context and the key role that occupational therapy has to play within it.

## References

- American Occupational Therapy Association, (2007) 'AOTAs Centennial Vision and executive summary', *American Journal of Occupational Therapy*, (61) 613-614.
- AOTI, (2010) 'Process to Access AOTI Database for Research' available: [http://www.aoti.ie/component/option,com\\_docment/cid,2/Itemid,63/](http://www.aoti.ie/component/option,com_docment/cid,2/Itemid,63/) [accessed 30<sup>th</sup> April 2011].
- Bevan, S. McGee, R. and Quadrello, T. (2009) 'Fit For Work? Musculoskeletal Disorders and the Irish Labour Market[online]', The Work Foundation, London, available: <http://www.arthritisireland.ie/images/news/uploadsfile/Fit%20for%20Work%20Irish%20report.pdf> [accessed 9<sup>th</sup> April 2012].
- Blakely, T. A. Collings, S. C. D. and Atkinson, J. (2003) 'Unemployment and suicide: evidence for a causal association.' *Journal of Epidemiology and Community Health*, 57(8), 594–600.
- Brewin, J. and Hazell, A. (2004) 'How Successful are we at Getting our Clients Back to Work? The Results of an Audit', *British Journal of Occupational Therapy*, 67(4) 148-152.
- Burns, T. Catty, J. Becker, T. Drake, R.E. Fioritti, A. Knapp, M. Lauber, C. Rössler, W. Tomov, T. van Busschbach, J. White, S. Wiersma, D. and EQOLISE Group, (2007) 'The effectiveness of supported employment for people with severe mental illness: a randomised controlled trial', *Lancet*, (370)9593, 1146-1152.
- Central Statistics Office (2006) available: <http://census.cso.ie/Census/TableViewer/tableView.aspx> [accessed 12th March 2011].
- Conroy, M. (2007) 'Supporting an Injured Worker Return: A Review.' A Review Commissioned by the Workplace Safety Initiative.
- Fde Buck, P. D. M. Schoones, J.W. Allaire, S.H. and Vliet Vlieland, T. P. M. (2002) 'Vocational rehabilitation in patients with chronic rheumatic diseases: a systematic literature review', *Seminars in arthritis and rheumatism*, (32) 3, 196-203.
- Deen, M. Gibson, L. and Strong, J. (2002) 'A survey of occupational therapy in Australian work practice', *Work*, 19(3) 219–230.
- Dembe, A. E. (2001) 'The Social Consequences of Occupational Injuries and Illnesses', *American Journal of Industrial Medicine*, (40)4 403-417.
- Department of Social and Family Affairs (2010) National Pensions Framework, Dublin: Stationary Office.
- Ellexson, M. T. (1985) 'The Unique Role of Occupational Therapy in Industry', *Occupational Therapy in healthcare*, 2(4), 35-46.
- Ekholm J, and Schüldt Ekholm K. (2009) 'Guest Editorial: Vocational Rehabilitation', *Journal of Rehabilitation Medicine*, (41) 113–114.
- Fink, A. (2006) *How to Conduct Surveys: A Step-by-Step Guide*, ( 3<sup>rd</sup> ed), London: SAGE.

Hannon, F. (2010) 'Literature Review on Attitudes towards Disability: Disability Series 9', National Disability Authority [online], available: <http://issda.ucd.ie/documentation/nda/nda06-literature.pdf> [accessed 8<sup>th</sup> April 2012].

Health and Safety Authority (2008) 'Workplace Health and Well-Being Strategy - Report of Expert Group', Health and Safety Authority [online], available: <http://www.eapinstitute.com/documents/WorkplaceHealthWellBeingStrategy.pdf> [accessed 7<sup>th</sup> April 2012].

Hébert, R. (1997) 'Functional decline in old age', *Canadian Medical Association Journal*, 157(8) 1037-1045.

Holmes, J. (2007). Vocational Rehabilitation, Oxford: Blackwell Publishing.

Jundt, J. & King, P. M. (1999) 'Work rehabilitation programs: a 1997 survey', *Work*, 12(2), 139–144.

Kaplowitz, M. D. Hadlock, T. D. and Levine, R. (2004) 'A Comparison of Web and Mail Survey Response Rates', *Public Opinion Quarterly*, (68)1 94-101.

Khan, F. Ng, L. and Turner-Stokes, L. (2009) 'Effectiveness of vocational rehabilitation intervention on the return to work and employment of persons with multiple sclerosis', *Cochrane database of systematic reviews*, (1) CD007256.

Kielhofner, G. (2006) Research in occupational therapy: methods of inquiry for enhancing practice. Philadelphia: F.A. Davis.

King, P. M. and Olson, D.L. (2009) 'Work'. In E. B. Crepeau, E.S. Cohn, & B. A. Schell (Eds.) Willard and Spackman's occupational therapy (11<sup>th</sup> ed., pp.615-632), Philadelphia: Lippincott Williams & Wilkins.

Kuoppala, J. and Lamminpaa, A. (2008) 'Rehabilitation and Work Ability: A Systematic Literature Review', *Journal of Rehabilitation Medicine*, (40)10, 796-804.

Larson, B. Armstrong, F. Dahl, R. Ellexson, M. (2000) Occupational therapy services in facilitating work performance (statement) *American Journal Of Occupational Therapy*, 54(6) 626-628.

Law, M. (2002) 'Participation in the Occupations of Everyday Life, Distinguished Scholar Lecture', *American Journal of Occupational Therapy* (56)6 640-649.

Lo, E. K. S. (2000) Demographic Study on Occupational Therapy Work Rehabilitation Programs in Hong Kong Hospital Authority, *Work*, (14) 185-189.

McNamara A, Miller B. (2006) Vocational rehabilitation: the Irish model. In: Gobelet C, Franchignoni F. Vocational rehabilitation. Paris: Springer-Verlag, 353–366.

Murphy, L. Chamberlain, E. Weir, J., Berry, A. Nathaniel-James, D. and Agnew, R. (2006) 'Effectiveness of vocational rehabilitation following acquired brain injury: preliminary evaluation of a UK specialist rehabilitation programme', *Brain injury*, (20)11, 1119-1119.

National Disability Authority (2005) 'How far towards equality? Measuring how equally people with disabilities are included in Irish Society.' Dublin, NDA.

Norlund, A., Ropponen, A. and Alexanderson, K. (2009) 'Multidisciplinary Interventions: Review Of Studies of Return to Work after Rehabilitation for Low Back Pain', *Journal of Rehabilitation Medicine*, 41(3), 115-121.

O'Brien, D and King, E, (2006). '2020 Vision: Ireland's Demographic Dividend.' Dublin: NCB, available: <http://www.irishtimes.com/newspaper/special/2006/ncb/index.pdf> [accessed 13th March 2011]

Pruett, S. Swett, E. Chan, F. Rosenthal, D. and Lee, G. (2008) 'Empirical evidence supporting the effectiveness of vocational rehabilitation', *Journal of Rehabilitation*, (74)2, 56-63.

Reilly, M. (1962) 'Eleanor Clarke Slagle lecture: Occupational therapy can be one of the great ideas of 20th century medicine', *American Journal of Occupational Therapy*, (16)1, 87-105.

Ross, J. (2007). 'Occupational Therapy and Vocational Rehabilitation. West Sussex: John Wiley & Sons Ltd.

Schonlau, M. Fricker, R. D. Elliott, M. N. Rand Corporation, (2002). 'Conducting research surveys via e-mail and the web, Issue 1480' Rand Corporation.

Shih, T. H. Fan, X. (2009) 'Comparing response rates in email and paper surveys: a meta-analysis.' *Educational Research review*, 4(1) 26-40.

Twamley, E. Jeste, D. and Lehman, A. (2003) 'Vocational rehabilitation in schizophrenia and other psychotic disorders - A literature review and meta-analysis of randomized controlled trials', *Journal of Nervous and Mental Disease*, (191)8, 515-523.

Varekamp, I. Verbeek, J. H. A. M. and van Dijk, F. J. H. (2006) 'How can we help employees with chronic diseases to stay at work? A review of interventions aimed at job retention and based on an empowerment perspective.' *International Archives of Occupational and Environmental Health*, 80(2), 87-97.

Waddell, G. Burton, A. and Kendall, N. (2008) 'Vocational rehabilitation—what works, for whom, and when?' (Report for the Vocational Rehabilitation Task Group)', available: <http://www.dwp.gov.uk/docs/hwwb-vocational-rehabilitation.pdf> [accessed 22nd April 2011].

Whiteford, G. (2000) 'Occupational Deprivation: Global challenge in the New Millennium', *British journal of Occupational Therapy*, (63)5, 200-204.

Wilcock, A. (1993) 'A theory of the human need for occupation.' *Occupational Science*, (1)1, 17-23.

Yerxa, E. J. (1997) 'Occupation: The Keystone of a Curriculum for a Self-Defined Profession', *American Journal of Occupational Therapy*, (52)5 365-372.

## Appendix 1

### Occupational Therapists Demographics

1. Your current educational qualifications include:
  - Bachelor degree in Occupational Therapy
  - Diploma in Occupational Therapy.
  - Other Bachelor degree\_\_\_\_\_.
  - Master's degree.
  - Doctorate.
  - Other\_\_\_\_\_.
2. On the lines, below indicate any further education or training you have undertaken that has enhanced your knowledge of vocational rehabilitation.

---

---

---

---

---

3. How long have you worked with individuals with a physical illness, injury or disease?
  - 0-1years
  - 1-3 years
  - 4-7 years
  - 8-11 years
  - 12-15 years
  - > 15 years
4. Does your work practice involve an element of vocational rehabilitation?
  - Yes
  - No
5. If not, do you foresee a need for vocational rehabilitation in your area of practice?
  - Yes
  - No
6. You are currently employed in the:
  - Public sector
  - Private sector
7. If you work in vocational rehabilitation, would you consider you work at it on:
  - A full time basis.
  - A part time basis.
8. On the scale provided, from 1 (not at all beneficial) to 7 (highly beneficial), mark how beneficial you consider further education and training in the stated areas would be in improving your knowledge of current work rehabilitation practice.

Body	1	2	3	4	5	6	7
------	---	---	---	---	---	---	---

Mechanics/ Back Education							
Occupational Overuse Syndrome prevention	1	2	3	4	5	6	7
Ergonomics	1	2	3	4	5	6	7
Joint protection/ energy conservation	1	2	3	4	5	6	7
Wellness/ fitness programs	1	2	3	4	5	6	7
Manual Handling	1	2	3	4	5	6	7
Stress Management	1	2	3	4	5	6	7
Surveillance/ discomfort surveys	1	2	3	4	5	6	7
Functional Capacity Evaluations	1	2	3	4	5	6	7
Pre-placement screening	1	2	3	4	5	6	7
Workplace assessments	1	2	3	4	5	6	7
Job analysis/ Risk hazard analysis	1	2	3	4	5	6	7
Independent Medical Evaluations	1	2	3	4	5	6	7
Vocational skills assessment	1	2	3	4	5	6	7
Medico Legal assessment	1	2	3	4	5	6	7
Disability evaluation/ determination	1	2	3	4	5	6	7
Suitable duties program	1	2	3	4	5	6	7
Work hardening	1	2	3	4	5	6	7
Work conditioning	1	2	3	4	5	6	7
Job modification	1	2	3	4	5	6	7

Workplace modification	1	2	3	4	5	6	7
Provision of workplace aids & equipment	1	2	3	4	5	6	7
Vocational rehabilitation skills training/development	1	2	3	4	5	6	7
Vocational counselling	1	2	3	4	5	6	7
Treatment of acute injuries	1	2	3	4	5	6	7
Case management	1	2	3	4	5	6	7
Pain management	1	2	3	4	5	6	7
Other	1	2	3	4	5	6	7
	1	2	3	4	5	6	7

If other selected please list same below:

---



---



---

**Section 2: Employer.**

- Which of the following are the most common source of referrals to you as a therapist.
  - Medical practitioners
  - Employers
  - Others \_\_\_\_\_
2. What setting do you work in?
  - Hospital
  - Community
  - Primary care
  - Other \_\_\_\_\_

**Section3: Work Rehabilitation Practice/ Provider Services.**

Questions 1-3 in this section are divided into three sections:

- Q1. Prevention/education/training services.
- Q2. Assessment services.
- Q3. Rehabilitation services.



1. Look at the prevention/education/training services below. A) In the box on the left, tick those which you currently provide. B) On the lines on the right, estimate the frequency at which you have performed the selected services in the last week.

Prevention/education/training services	Frequency
<input type="checkbox"/> Body mechanics/back education	_____
<input type="checkbox"/> Occupational overuse syndrome (OOS) prevention	_____
<input type="checkbox"/> Ergonomics	_____
<input type="checkbox"/> Joint protection/energy conservation	_____
<input type="checkbox"/> Wellness/fitness programs	_____
<input type="checkbox"/> Manual handling	_____
<input type="checkbox"/> Stress management	_____
<input type="checkbox"/> Surveillance/discomfort surveys	_____
<input type="checkbox"/> Other _____	_____
<input type="checkbox"/> _____	_____
<input type="checkbox"/> _____	_____

2. Look at the assessment services below. A) In the box on the left, tick those which you currently provide B) On the lines on the right, estimate the frequency at which you have performed the selected services in the last week.

Assessment service	Frequency
<input type="checkbox"/> Functional capacity evaluations (if using purchased system, name of vendor: _____)	_____
<input type="checkbox"/> Pre-placement screening	_____
<input type="checkbox"/> Workplace assessment	_____
<input type="checkbox"/> Job analysis/risk assessment	_____
<input type="checkbox"/> Independent medical evaluations	_____
<input type="checkbox"/> Vocational skills evaluation	_____
<input type="checkbox"/> Medico-legal assessment	_____
<input type="checkbox"/> Disability evaluation/determination	_____
<input type="checkbox"/> Other _____	_____

3. What vocational assessments do you currently use? \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_

3. Look at the list of rehabilitation services below. A) In the box on the left, tick those you currently provide. B) On the lines on the right, estimate the frequency at which you have performed the selected services in the last week.

Rehabilitation Service	Frequency
<input type="checkbox"/> Suitable duties program	_____
<input type="checkbox"/> Treatment of acute injuries	_____
<input type="checkbox"/> Work hardening	_____
<input type="checkbox"/> Work conditioning	_____
<input type="checkbox"/> Job modification	_____
<input type="checkbox"/> Workplace modification	_____

- Provision of workplace aids and equipment \_\_\_\_\_
- Vocational rehabilitation skills training/development \_\_\_\_\_
- Vocational counselling \_\_\_\_\_
- Case management \_\_\_\_\_
- Pain management \_\_\_\_\_
- Other \_\_\_\_\_

4. Do you provide the following services at worksite:

- Treatment of acute injuries
  - Occupational Overuse Syndrome treatment
  - Ergonomics
  - Joint protection/energy conservation
  - Wellness/fitness programs
  - Body mechanics/back education
  - Manual handling
  - Job analysis/risk hazard analysis
  - Independent medical evaluations
  - Vocational skills assessment
  - Medico-legal assessment
  - Functional capacity evaluations
  - Workplace modifications
  - Vocational rehabilitation skills training/development
  - Disability evaluation/determination
  - Work hardening
  - Work conditioning
  - Job modification
  - Vocational counselling
  - Pain management
  - Case management
  - Stress management
  - Surveillance/discomfort surveys
  - Pre-placement screening
  - Workplace assessment
  - Suitable duties program
  - Provisions of work aids and equipment
- Other \_\_\_\_\_

5. Do you foresee the level of prevention/education/training in vocational rehabilitation by you:
- Increasing
  - Decreasing
  - Staying the same
6. Do you foresee the level of assessment services provided by the you:
- Increasing
  - Decreasing
  - Staying the same
7. Do you foresee the level of rehabilitation services provided by you:
- Increasing
  - Decreasing
  - Staying the same
8. Do you foresee the level of service provided at employer locations by you:
- Increasing
  - Decreasing
  - Staying the same

Have you any further comment, which you may wish to add: \_\_\_\_\_

## Appendix 2

### Correspondence for consent from author of survey

ULStudent:EMMA.COSTELLO

Sent Items

06 April 2011 19:06

To: MPKING [pking@uwm.edu]

Hi Phyllis,

Thank you for replying to my query so promptly and thank you for the use of the survey.

Would you be able to send the survey on to me or can I access it somewhere online?

Thanking you again,

Emma.

PKING [pking@uwm.edu]

06 April 2011 02:18

You replied on 06/04/2011 19:09.

Hi Emma:

I appreciate your interest in this survey. You are very welcome to use the survey. Let me know if I can be of further assistance.

Success to you!

Phyllis M. King, PhD

Professor/Interim Associate Vice Chancellor

Associate Director, Center for Ergonomics

University of Wisconsin-Milwaukee

P.O.Box 413

Milwaukee, WI 53201

(414) 229-6175

**From:** Shrs-Student-Enquiries

**Sent:** Monday, 28 March 2011 10:28 AM

**To:** Elizabeth Gibson

**Subject:** FW: FAO Libby Gibson

Libby,

I am emailing you with regard to the article you published, "A survey of occupational therapy in Australian work practice." (2002). I am a student in a MSc. in Occupational Therapy (Professional Qualification) in the University of Limerick in Ireland. My research topic is focusing on vocational rehabilitation in occupational therapy within Ireland. There has been very little research conducted in Ireland on vocational rehabilitation and I wish for my research to gain more of an insight of this area.

I thoroughly enjoyed reading your article; I found it very interesting and informative. It has provided me with a good perspective of vocational rehabilitation within the field of occupational therapy. I too, wish to conduct a survey among occupational therapists. I am emailing to ask for permission to have the use of your survey for use in my research. I believe your survey was comprehensive and I would appreciate the use of it.

I would be very grateful for the use of your survey and I look forward to hearing from you.

Kind regards,

Emma Costello.

From: Elizabeth Gibson [libby@uq.edu.au]

Sent: 29 March 2011 00:34

To: ULStudent:EMMA.COSTELLO

Hi Emma

Thanks for your interest in our paper. That is great that you wanting to replicate the study in Ireland. I have asked my co-researcher Michael Deen about the survey, as I think we adapted ours from the one Phyllis King used in the US so am not sure if we can give you permission as we got permission from her! Complicated.

I will let you know what Michael recalls about this and get back to you.

Regards

Libby