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Identifying the factors that affect the job satisfaction of early career Notre Dame graduate physiotherapists

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Abstract

Objective: Previous studies have highlighted the short career intentions and high attrition rates of physiotherapists from the profession. The aim of this study was to examine the job satisfaction and attrition rates of early career physiotherapists graduating from one Western Australian university.

Methods: A self-administered online survey was conducted of 157 Notre Dame physiotherapy graduates (2006-2012), incorporating a job satisfaction rating scale.

Results: Results showed that lowered job satisfaction was related to working in the cardiorespiratory area of physiotherapy and working in multiple jobs since graduation. The majority of graduates did not predict a long-term career in physiotherapy highlighting a lack of career progression and limited scope of practice as influential factors.

Conclusions: Job satisfaction in early career physiotherapists varies across different clinical areas of practice related to several factors including challenge and flexibility. New roles in the profession including extended scope roles may impact on the future job satisfaction of physiotherapists. Further studies are needed to explore the impact of these roles on workforce trends including attrition rates.

What is known about the topic?

Physiotherapists predict careers of 10 years or less, on entry into the profession. No previous studies have explored the individual factors influencing job satisfaction in early career physiotherapists across different clinical settings.

What does this paper add?

This study highlighted specific factors influencing the job satisfaction of early career physiotherapists including clinical area of practice. Physiotherapists working in the area of cardiorespiratory were less satisfied as well as physiotherapists undertaking multiple positions since graduation.

What are the implications for practitioners?

This study informs employers and workforce planners on the factors influencing job satisfaction in early career physiotherapists. Additionally, knowledge of issues affecting job satisfaction in the early career stage may assist educational institutions in their preparation of graduates for the future health workforce.

Introduction

Physiotherapy workforce changes include an increase in male student admissions to physiotherapy programs and an exodus of experienced physiotherapists due to retirement.[1,2] The proportion of males in the physiotherapy workforce has steadily increased from 16% in 1986 to 27% in 2001, with further increases in the younger age groups.[1] Schofield and Fletcher estimated that 41% of the Australian physiotherapy workforce in 2001, will have retired by 2026.[1] This is of concern when coupled with reportedly high attrition rates from the profession. Although attrition rates have not been quantified in the literature, this has been determined by the limited increase in workforce participation over time and a decrease in professional life expectancy of male physiotherapists.[3,4] Anderson et al. reported that whilst there was an increase in males entering the profession, male physiotherapists were not being retained, as there was no increase in the modal age of male physiotherapists over time.[3]

Changes in the treatment population are also impacting on the physiotherapy workforce. Service provision is becoming more stretched in areas such as aged care and public health due to the ageing population. To respond to the challenges of an ageing population and changing workforce, it is essential to identify the factors that affect physiotherapists' longevity in the workforce, specifically the factors influencing job satisfaction.

There are a number of factors identified in the literature that influence the job satisfaction of professionals, particularly in health care. These include autonomy, commitment to the organisation and access to continuing professional development.[5-11] Finding work adequately challenging has been identified as a factor that exists on a continuum with perceived lack of or extreme challenge being

negative influences.[5,10,12,13] The opportunity to perform additional workplace duties and extend workplace roles, has also been recognised as an influential factor on job satisfaction.[14] This may be related to the challenge provided by these extra duties. Financial incentives and salary are influential, however appear to fall into the category of recruitment incentives, rather than issues impacting ongoing job satisfaction.[5,8,9,12]

The ability to help people, along with flexibility of workload have been highlighted in physiotherapy specific literature as influential on job satisfaction.[10] Thus both intrinsic and extrinsic motivating factors play a role. Of concern, Mulcahy et al's study conducted on Curtin University graduates (2000-2004) revealed that 65% of recent graduates were intent on leaving the profession within 10 years, with only 25% predicting a long-term career in physiotherapy.[10] Struber reviewed the physiotherapy workforce in Australia and reported attrition rates to exceed 20% annually[4], whilst Mulcahy et al. reported a 15% attrition rate for Curtin University graduates.[10] The literature highlights the importance of recognising factors influencing job satisfaction to minimise attrition and subsequently ensure an adequate workforce for the future.

The Bachelor of Physiotherapy undergraduate degree program commenced at The University of Notre Dame Australia (Notre Dame) in 2003. The program's first graduating cohort was 29 in 2006, increasing to 71 graduates in 2012. There has been no research to date on the job satisfaction or attrition of graduates from the xxx Physiotherapy program.

The aim of this study was to examine the job satisfaction of early career physiotherapists from xxx and determine any relationships between job satisfaction and intrinsic and extrinsic factors; as well as determine the attrition rate of xxx graduates. The study results will inform employers and workforce planners on the factors influencing job satisfaction in early career physiotherapists. Additionally, findings may influence educational institutions and their preparation of graduates for the workforce.

This may include producing graduates with realistic expectations of the changing healthcare climate, treatment population and education on evolving roles in the profession.

Methods

Design

The study employed a self-administered online survey. The first component of the survey was adapted with permission from Mulcahy et al. and included demographic information from participants.[10,15] This included age, gender, employment status, number of jobs since graduation, sector and position, hours worked, income, clinical area and salary, overseas work, professional membership, continuing professional development hours; as well as questions regarding attrition and future employment predictions.

The second component of the survey was developed by the authors following an extensive literature review and pilot testing. A job satisfaction rating scale was developed and consisted of 10 statements related to job satisfaction (Figure 1) with participants rating each statement on a Likert scale from 1 (Strongly Disagree) to 5 (Strongly Agree). A global score was calculated for each participant, with the lowest possible score being 10 to a maximum of 50.

The two-part survey underwent a process of survey validation including expert validation. The survey was reviewed by several experienced clinicians and educators with experience in workforce surveys. This was followed by a pilot study of 10 current physiotherapists in the workforce employed in a variety of clinical areas who had not graduated from xxx. Feedback from this process contributed to refinement of the instrument.

Figure 1: Job satisfaction Rating Scale Statements

I enjoy working in my current position
I have opportunity to progress my career in my current position
I have access to mentoring and/or peer support in my current position

I have opportunity to further my professional development in my current position
I have opportunity to participate in additional workplace duties, outside of my regular role
I am committed to the organisation that I work for
I have the ability to make autonomous work decisions
I have flexibility in my workload hours
My work is challenging
I am recognised for my skills and experience in my current position

Participants

Graduates from the Bachelor of Physiotherapy degree program at Notre Dame, 2006-2012, were included in the study. Contact details of graduates were accessed from the alumni database as well as internet searches through the registration website, Australian Physiotherapy Association and Google ®.

Procedure

The survey was sent to graduates via email in February 2014 with two follow-up emails and two text reminders. Physiotherapy administrative staff managed the distribution of the survey with allocation of a personal identifier to each participant to allow for individualised follow-up.

Data Analysis

Survey responses were collated in the online server Survey Monkey® and then exported to Microsoft Excel® before being transferred to IBM SPSS Statistics 22. Survey responses were de-identified for analysis to maintain anonymity of the participants. Responses to the 5 point Likert scale ratings were grouped for analysis into 3 categories being Agree, Neither agree nor disagree and Disagree.

To test the job satisfaction in different clinical areas of physiotherapy, the data were grouped into: those working mostly in an area (≥ 50%); those working partly in an area (< 50%); and participants not working at all in an area (0%). For example, a participant who reported spending 80% of their time in paediatrics and 20% in geriatrics would be reported as working mostly in paediatrics and partly in geriatrics.

Testing for normality of the data was completed with the job satisfaction ratings plotted on Q-Q plots, P-P plots and plotted against a normal distribution curve. Through the visual representation and the data having a kurtosis of three, it was established the data were normally distributed.

Analysis of variance t-tests were then performed to compare means and a generalised linear model was used to control for variables that would impact the outcome, with significant associations tested at an alpha of 0.05.

Ethical Considerations

Completion of the online survey indicated implied consent by the participants. Ethical approval was gained for this study from The University of Notre Dame Human Research Ethics Committee (Ref no: 013161F).

RESULTS

There were 157 responses to the survey being 44% of the total number of graduates (157/354) and 50% of graduates with an email or phone contact (157/315). The majority of participants were female (71%) with the mean age of participants being 27.4 (range 22 to 48 years). The breakdown of the year of graduation and number of respondents and their gender per year of graduation is presented in Table 1. Of the 157 participants, 146 (93%) reported to be continuing in the physiotherapy profession.

Table 1: Survey respondents per year level of graduation

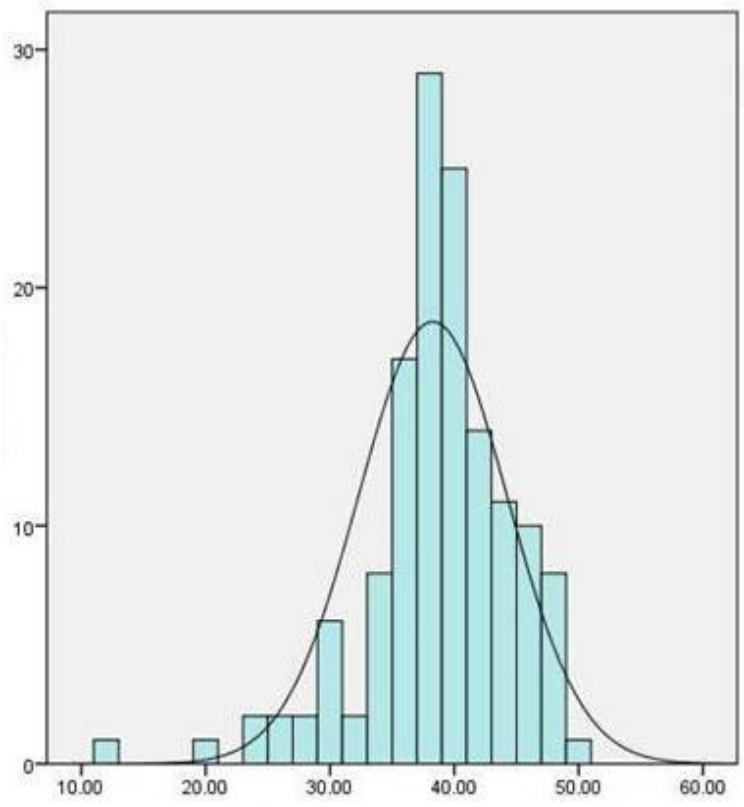
Year of graduation	Number of graduates (% females)	Number of contactable graduates	Number of survey respondents (% females)
2006	29 (69%)	26	13 (54%)
2007	38 (71%)	33	15 (60%)
2008	49 (84%)	46	24 (88%)

2009	60 (68%)	55	29 (72%)
2010	59 (63%)	53	24 (63%)
2011	48 (73%)	43	23 (74%)
2012	71 (73%)	59	29 (72%)
Total	354 (71%)	315	157 (71%)

Musculoskeletal physiotherapy was the most common clinical area of practice as reported by 42% of graduates. The second most common area was aged care (33%), followed by cardiorespiratory (23%), neurology (19%) and paediatrics (13%). 44% of graduates were working in a hospital setting compared to 34% in private practice.

A job satisfaction global score was obtained for 139 participants. The mean global score was 38.3 (SD 6.0) with a minimum of 12 and a maximum of 50. The spread of scores is shown in Figure 2.

Figure 2: Distribution of job satisfaction global score



Demographics and job satisfaction

There were no statistically significant relationships found between the job satisfaction global score and age, gender or location of work, as shown in Table 2.

Table 2 shows the mean job satisfaction global score for graduates per area of employment, professional membership and Continuing Professional Development (CPD) hours, with a comparison between groups. Participants who had worked overseas as a physiotherapist since graduating were less satisfied with their jobs compared to those who had only worked in Australia. A statistically significant relationship was found between participants who were looking to change their current employment, compared to those not looking to change.

Table 2: Mean job satisfaction global scores for graduates per demographics, area of employment, professional membership and CPD hours with comparison between groups

Mean job satisfaction global score (SD)				p value
Females n=98 38.15 (6.1)		Males n=41 38.5 (5.8)		0.730
Age <25 n=39 39.1 (4.9)	Age 25 – 30 n= 79 37.7 (6.7)	Age > 30 n=21 38.95 (4.5)		0.404
Graduates working in a major city n = 112 38.5 (5.5)	Graduates working in a regional/ remote area n= 20 39.3 (5.7)	Graduates working overseas n = 6 32.8 (11.0)		0.056
Graduates working in the private sector n=67 38.8 (5.3)		Graduates working in the public sector n=62 37.4 (6.2)		0.206
Graduates working in a junior public position n=46 38.9 (6.0)		Graduates working in a senior public position n=33 37.5 (6.4)		0.971
Graduates working as an associate in private practice n=64 38.5 (5.2)		Graduates working as a principal in private practice n= 5 43.4 (3.3)		0.228
Graduates who had worked overseas n=15 34.2 (7.9)		Graduates who had not worked overseas n=124 38.8 (5.5)		**0.005**
Graduates looking to change employment n=100 34.8 (5.5)		Graduates not looking to change employment n=39 39.6 (5.7)		**<0.001**
Graduates with APA membership n= 64 38.8 (5.9)		Graduates with no APA membership n=75 37.8 (6.0)		0.294
Graduates completing < 20 hours CPD* n=5 35.6 (6.8)	Graduates completing 20-50 hours CPD n= 67 38.8 (5.0)	Graduates completing 50-80 hours CPD n=39 38.6 (6.2)	Graduates completing >80 hours CPD n=28 37.1 (7.6)	0.442

*CPD= Continuing Professional Development

Clinical area and job satisfaction

The job satisfaction global score was tested against the area of work for the main clinical streams of physiotherapy including paediatrics, aged care, musculoskeletal, cardiorespiratory and neurology. Table 3 shows the mean job satisfaction global score of participants working in the main clinical

streams of physiotherapy. Participants working in cardio-respiratory had the lowest global scores compared to those working in other clinical streams.

Table 3: Mean job satisfaction global scores for participants working in the main clinical streams

% Workload in clinical stream	Mean job satisfaction global score (SD)				
	Cardio (n=32)	Paeds (n=17)	Aged care (n=47)	MSK (n=59)	Neuro (n=26)
> 50%	31.7* (8.0)	41.6 (5.8)	37.4 (4.4)	39.2 (4.7)	36.8 (7.8)
< 50%	35.9** (7.0)	39.8 (4.3)	37.6 (5.7)	37.9 (5.0)	37.9 (6.3)
Not at all	39.4 (5.0)	37.9 (6.0)	38.7 (6.3)	38.1 (6.7)	38.4 (5.9)

Cardio = Cardiorespiratory; Paeds = Paediatrics; MSK = Musculoskeletal; Neuro = Neurology

*Statistically significant compared to not working in cardio $p < 0.001$
**Statistically significant compared to not working in cardio $p = 0.024$

To determine the factors that influenced job satisfaction, the individual statements within the job satisfaction rating scale (Figure 1) were tested against different clinical areas. Twenty percent of participants working mostly in cardiorespiratory (n=2) disagreed with the statement 'I enjoy working in my current position' compared to 4% (n=4) of those not working in cardiorespiratory (p=0.025). Forty percent of participants working mostly in cardiorespiratory (n=4) and 55% of participants working partly in cardiorespiratory (n=12) also disagreed with the statement 'I have flexibility in my workload hours' (p<0.001). To the statement 'My work is challenging', 40% of participants working mostly in cardiorespiratory (n=4) agreed with this statement, in comparison to 85% of participants not working in cardiorespiratory (p=0.009).

Income, number of years and positions and job satisfaction

Table 4 shows the mean job satisfaction global scores per income bracket and number of years and positions since graduation. There was no statistically significant difference found between graduates on different income brackets or graduates who had been in the workforce for longer. The relationship

between the number of jobs held since graduation, accounting for time since graduation, and global score, when analysed via a generalised linear model, was statistically significant.

Table 4: Mean job satisfaction global scores for income brackets, years and positions since graduation with comparison between groups

Mean job satisfaction global scores (SD)			p-value
Income < $65 000 n=32 36.2 (6.9)	Income $65 001 – 95 000 n=83 38.8 (5.8)	Income > $95 001 n=23 39.0 (5.0)	0.087
Graduates 2-3 years since graduation n = 48 39.4 (4.8)	Graduates 4-5 years since graduation n=50 38.1 (7.0)	Graduates 6-8 years since graduation n=41 37.1 (5.7)	0.185
Graduates with 1-2 positions since graduation n=68 38.8 (5.3)	Graduates with > 5 positions since graduation n=22 33.1 (7.9)		**<0.001**

Attrition

Eleven participants (7%) reported to have either left the physiotherapy profession or had never been employed in physiotherapy. Graduates who had left were asked to provide an open-ended response as to their reasons. The main theme surrounding the eleven responses was limited career progression and autonomy. Seven of the participants reported on this theme, with comments including 'physiotherapy practice can be limited', 'no new challenges' and 'I chose to seek a job with greater long term career prospects.' Three of the participants reported moving to medicine to obtain more autonomy and progress their careers with one commenting 'Physiotherapy was primarily a stepping stone to enter medicine. I wanted more autonomy and responsibility in treating sick patients'. One participant had left the profession due to maternity leave, whilst two participants had undergone degrees in different fields.

Future employment predictions

Participants were asked to report how many years they planned to stay in the profession with 141 respondents. Responses were then grouped with 10% of participants (n=16) reporting that they were planning to stay in the profession for less than 5 years, 41% (n=58) reporting that they would stay in the profession for 5-15 years and 16% of participants (n=23) planning to stay in the profession 'indefinitely' (>35 years). When asked for their most likely reasons to leave the profession, 57% of graduates (n=80) identified family commitments, 23% (n=33) reported job opportunities elsewhere, 22% (n=31) highlighted a career change, 20% (n=28) reported salary incentives elsewhere and 18% (n=26) reported entry into postgraduate study. Of note, 17% (n=24) identified that it would be due to a lack of recognition or potential for growth and 6% (n=8) reported due to stress.

Cross tabulation was performed to review the reasons for leaving the profession and gender. The most likely reason for males to leave the profession was attractive job opportunities elsewhere (n=17; 40%) with a change of career (n=15; 36%) rated second highest. For females, family commitments ratest highest (n=78; 79%) followed by postgraduate study (n=20; 20%).

Discussion

The primary aim of the study was to examine the job satisfaction of Notre Dame graduates. Although the majority of graduates reported high levels of job satisfaction as determined by the job satisfaction rating scale, there were graduates with low ratings including one graduate scoring as low as 12 overall. Mulcahy et al. reported the most satisfied physiotherapy graduates were those working in senior positions, members of a professional body and participating in continuing professional development.[10] In contrast, this study showed no difference in job satisfaction levels related to these factors. Clinical area of practice appeared to have the greatest influence with graduates working in the cardiorespiratory area being the least satisfied overall. Exploring the individual components affecting job satisfaction in this group, may assist in determining issues that can be addressed within the profession.

Less flexibility in workload hours and lack of challenge were identified as issues affecting job satisfaction in cardiorespiratory physiotherapists. The majority of graduates working in cardiorespiratory (88%) were also working in the hospital setting which may account for less flexibility in workload hours. It is difficult to ascertain why graduates working in cardiorespiratory identified 'lack of challenge' without a further breakdown of their roles and responsibilities. However, if this is linked to the qualitative responses of those physiotherapists who had left the profession, it may be in part due to decreased responsibility or autonomy when treating medically unwell patients. Campbell et al. reported that challenge is an intrinsic motivator essential to feelings of achievement and job fulfillment.[5]

A report by Health Workforce Australia highlighted the need for extended scope and advanced practice roles to improve career progression and retention of senior physiotherapists.[16] Commonplace in the United Kingdom, Europe and North America, extended scope and advanced practice roles are less common in Australia with the exception of emergency departments and orthopaedic settings. Although these roles are being introduced there is limited literature on the job satisfaction of physiotherapists in these positions, both in the Australian context and overseas workforce. Included in the extended scope and advanced practice debate in Australia is the role of prescribing medications. Health Workforce Australia's report on the Health Professionals Prescribing Pathway reviewed the ability of health professionals outside of medical practitioners to prescribe medications, including cardiorespiratory medications.[17] It can be proposed that extended scope and advanced practice positions in additional clinical areas including cardiorespiratory, may offer increased challenge and job satisfaction, however, introduction of these roles needs to be considered on a framework of education and review practices.[18]

The number of jobs held since graduation also influenced job satisfaction. Graduates working in five or more jobs since graduation had lowered satisfaction. It is difficult to determine if lower job satisfaction led to a higher turnover, or if multiple jobs was the causative factor. The current health climate in Australia has seen a reduction in offerings of permanent positions with physiotherapists frequently moving between short-term contracts outside the control of the individual.

This study aimed to establish an attrition rate and review the factors influencing attrition. Seven percent of graduates had never been employed in physiotherapy or reported leaving the profession. The true attrition rate is likely higher, as graduates who had left the profession may not have undertaken the survey. Although a clear attrition rate is hard to define, it is well accepted in the literature that physiotherapists predict relatively short careers. Just over half of the respondents in this study (51%) predicted that they would stay in the profession for 15 years or less. For males, a change in career was reported to be the most likely reason for them to leave the profession. By comparison, female graduates identified family commitments as their most likely cause. These gender differences warrant further research to determine the links between gender, job satisfaction and attrition in the physiotherapy workforce.

Limitations to this study included the response rate of 50% of contactable graduates with no follow-up of non-responders. Dykema et al. reported survey response rates of under 20% to be commonplace, putting the response rate of this study above expected rates for similar surveys.[19] A further limitation of this study was the restriction of the survey to five graduating cohorts of one university. As such, the generalisability of the results to the physiotherapy workforce can be questioned however the data represented a cross-section of clinical practice areas and settings.

Conclusion

In summary, it is essential that the physiotherapy profession considers the factors that influence job satisfaction in order to retain experienced therapists. Findings from the job satisfaction rating scale highlighted a key clinical area where respondents had lowered job satisfaction. It is recommended that future research addresses the job satisfaction of cardiorespiratory physiotherapists. In addition, further studies are needed to explore the job satisfaction of practitioners in extended scope and advanced practice roles and the impact of these roles on future workforce trends including attrition. The relationship between gender and job satisfaction also warrants further investigation to ensure the longevity of experienced physiotherapists in the workforce.

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