The Career Experiences of Industrial and Organisational Psychology Graduates

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A survey of 53 graduates of industrial and organizational psychology masters programs, from the four universities in New Zealand offering such programs (Auckland, Canterbury, Massey, Waikato), was conducted to explore their early career experiences. The survey confirms that industrial and organizational psychology graduates are reasonably successful in establishing careers within the discipline with most graduates working in related fields. Recommendations for students pursuing careers and universities offering such programs are suggested. The information derived from this study is potentially of benefit to future graduates and others who may be considering a career in the field of industrial and organizational psychology, and to the convenors of the respective university programs.

Attention has recently been given to the contributions that university programs in industrial and organizational (I/O) make to the profession and to organizations (O'Driscoll, Burt, Cable, Carr, Cooper-Thomas, Gardner & Lobb, 2010). Given the focus of these university programs, including the areas of recruitment and selection, and the general functioning of organizations, the expectation may be that graduates of these programs would be more knowledgeable than many in these topics and hence well prepared to enter the job market and launch their careers. Although knowledge of the general state of the practice of I/O psychology in New Zealand (NZ) has recently been published (Cable & O'Driscoll, 2010), much less is known about how individuals entering the practice fare in employment. Introductory text books offering information on the career paths available to I/O students abound (see for example: Aamodt, 2010; Levy, 2006; Woods & West, 2010), but much less information can be found that focuses on the post graduate career experiences of I/O psychology students. This study sought to fill that knowledge gap by surveying recent graduates (the past decade) from the four universities in NZ offering I/O psychology programs, being Auckland, Canterbury, Massey and Waikato, and exploring their early career experiences. As Scurry and Blenkinsopp (2011, p. 644) argued "recent graduates are of particular interest and potential concern due to the high levels of investment made by individuals, organizations and societies in this group".

Little has likely changed since Nicholson (1993, p. 138) noted that "career development ranks almost universally as a top employee concern". This 'concern' may be higher for individuals who are in the early stages of establishing a career, particularly at a time when employment opportunities may be limited. As Arnold and Cohen (2008, p.3) asserted, "…the external conditions in which careers are enacted cannot be ignored". One of those 'external conditions' is obviously the economy with the current economic recession likely having a considerable impact on career opportunities. Although the job market may recede in an economic recession, a more relevant impact may be the prevailing phenomenon of underemployment, particularly amongst university graduates (Cable & Hendy, 2010; Scurry & Blenkinsopp, 2011) who may be forced into accepting positions below their expectations, further compounding the situation for those job-seekers 'lower' in the employment hierarchy. Additionally, the overall life context within which careers are enacted has evolved (Lee, Kossek, Hall & Litrico, 2011) with individuals seeking greater work-life balance, amongst other societal changes, as familial duties and responsibilities are re-assigned to accommodate dual-income families, and the career interruptions of career moratoriums or breaks by spouses to accommodate new additions to the family. Although the influence of the pursuit of work-life balance shifts the focus of careers from primarily relating to work experiences to also include life experiences, it does reinforce the emergence of development models of careers within which career stages are mapped against life stages. As graduates most likely have the divided focus of establishing both career identity and emerging adult life identity, these influences discussed are potentially at their strongest.

Paralleling the economic and societal influences on the enactment of careers has been the shift in responsibility for career development and management. Under the old psychological contract, and the notion of a linear career and a career for life, the organization played a major role in the development of individuals' careers. The new psychological contract, within

which the concepts of protean and boundaryless careers and the notion of psychological success have emerged, has seen responsibility for career management and development shift primarily to the individual (Briscoe, Hall, & Demuth, 2005; King, 2004). The extent to which individuals embrace this new responsibility will also influence early career experiences with proactive and employability oriented individuals likely faring better in employment stakes.

Based on the prevailing job market conditions, and changes within the environment where careers are enacted, the question that arises is what might nascent practitioners of I/O psychology realistically expect regards career opportunities? O*Net, the USA Department of Labour online database of occupational information (O*Net code 19-0332.00), offers the following:

"Apply principles of psychology to personnel, administration, management, sales, and marketing problems. Activities may include policy planning, employee screening, training and development, and organizational development and analysis. May work with management to reorganize the work setting to improve worker productivity."

Cable and O'Driscoll (2010) delved further into that definition and explored the actual work activities that NZ practitioners in the industry engage in. That particular study offers some insight into the potential work activities that I/O graduates may experience. Cable and O'Driscoll found that the major fields of work engaged in by practitioners included, in descending order of popularity, training and development, organization development and change management, recruitment and selection, performance appraisal and management, and career development and management. Scurry and Blenkinsopp (2011, p. 652) were more prescriptive in further defining, beyond actual work activities, the expected outcomes for graduate employment suggesting that:

"(1) graduates will be employed in jobs commensurate with their level of education;

(2) they will be employed in jobs appropriate to the field in which they were educated;

(3) they will be employed in jobs which fully utilise the higher-level skills they acquired during their education;

(4) they will be employed on permanent, full-time contracts unless they have a preference or a need for temporary and/or part time contracts; and

(5) on graduating they will receive earnings commensurate with their education."

The extent to which career expectations are realised may be an individual assessment, but it was within this framework of fields of work and expectations that the early career experiences of recent graduates of I/O psychology programs were explored.

Method

Procedure & Participants

Invitations to participate in the on-line survey were issued to graduates of I/O psychology masters programs from the four universities in New Zealand offering such programs (Auckland, Canterbury, Massey, Waikato; see O'Driscoll et al., 2010). All four universities supported the survey by forwarding the invitation to participate through various channels including past class lists, university alumni associations and the business networking website LinkedIn. The survey was open to I/O psychology graduates who had graduated over the period 2002-2011 inclusive. It was estimated that, over this period, as many as 130 students may have graduated with a specialization in I/O psychology from the four universities. Sixty-seven responses were received but 14 were discarded as they provided insufficient data for analysis. The 53 responses retained for analysis indicate an approximate 42% response rate.

An analysis of the 53 responses revealed that 13 participants graduated from Auckland University, 12 from Canterbury, 14 from Massey, and 13 from Waikato, confirming a reasonably even representation across the universities (one participant did not indicate). Analysing by year, the lowest number of participants represented in the survey graduated in 2002 (n = 2) and 2009 (n = 2). The highest number of participants graduated in 2010 (n = 10).

Over the remaining years the number graduating each year ranged from four (2005) to seven (2006). The range confirms a reasonably even distribution of graduates over the years surveyed. Thirty-five of the participants were female (66%), 37 were married or living as married (70%), and 44 were full-time students while completing their masters program (83%). The age of participants ranged from 23 years to 61 years with a mean of 32.5. Forty-four participants described their ethnicity as Caucasian/European (83%), five as Asian, one as Pacific Peoples, and three as Other.

Survey Content

The survey content was developed specifically for this study based on the author's own experience in the career development/management field. Personnel from the I/O psychology programs from the participating universities accepted the opportunity to provide input to the development of the survey and its content. In addition to the general background questions section, the survey of 53 questions contained sections on professional development and memberships, career information relating to participants' first job or position, career information relating to their current or most recent position, and a final section on general career experiences. The results and discussion are presented within this framework.

Data Analysis

Closed questions, for which participants were able to select from responses provided, for example 'yes/no' type questions, or were responded to on a scale, or for which numerical data could be entered, for example job tenure, were analysed using basic statistical techniques. All scale questions were 5-point ranging from 1 = minor extent to 5 = very high extent. Open-ended questions, for which participants were able to enter free-form text, were analysed using the I/O psychology work classification framework utilized by Cable and O'Driscoll (2010) by conducting keyword matching across the responses. Responses that did not include a keyword from within this framework were analysed for indicative or repetitive themes.

Results

Professional Development and Memberships

Throughout this section, "participants" refers to the total sample and "respondents" refers to the participants who responded to a specific question. Fourteen of the 53 participants were registered psychologists in New Zealand and all 14 of these participants had engaged in further professional development or training since completing their masters program. The time these 14 participants had been registered as a psychologist ranged from two weeks to 4.5 years, with a mean period of 3.4 years. Of the remaining 39 participants, eight indicated that they were pursuing a program of professional development leading to registration as a psychologist.

Thirty-seven of the 47 respondents (79%) to the question on professional development confirmed that they had engaged in such development following the completion of their masters program; 12 respondents indicated that they had completed, or were completing, other tertiary education; 12 had completed training in psychometrics (test administration and interpretation); 10 had completed industry specific development; and 12 had completed general or non-industry specific development (multiple responses occurred). The remaining ten respondents either indicated that the question was not applicable ($n = 3$), or that they had not completed any formal professional development since completing their masters program ($n = 7$). The high level of commitment to continuing self-development could be interpreted as an employability orientation which, under the new psychological contract, suggests a move toward this orientation and away from the previously expected nature of job security. Employability, which refers to the development and/or maintenance of competencies that ensure the ability to acquire work, is considered a critical requirement in the pursuit of career success (Nauta, van Vianen, van der Heijden, van Dam and Willemsen, 2009).

Of the 39 respondents (74% of sample) to the question on professional memberships, 10 indicated that they were members of the NZ Psychological Society, 13 indicated membership of the Human Resources Institute (NZ), and four indicated membership of both. Other memberships included several overseas associations but with none of these being cited more than once. Interestingly, the results of the survey (N = 75) conducted by Cable and O'Driscoll (2010) indicated that 45% of I/O psychology practitioners worked in the career development/management field, yet it is not included as a specific topic in I/O programs currently offered by the four universities involved (O'Driscoll et al., 2010), and only one respondent in the current survey indicated membership of the Career Development Association (CDANZ). Seventeen respondents (46% of sample) indicated that they did not belong to a professional body, with one commenting that the cost of membership was prohibitive.

The First Job/Position Experience

The section relating to participants' first job or position was completed by the 30 respondents (57% of sample) who had held more that one job/position since graduating. Eleven of these 30 respondents had held two jobs since graduating, 13 had held three jobs, and six had held four jobs, suggesting a reasonable degree of career mobility within the industry. The highest number of respondents worked in Auckland (15), followed by Wellington (8), Christchurch (2), and Hamilton (2). Eight respondents (27% of sample) had relocated geographically to secure their first role. Consulting was the highest industry worked in ($n = 11$) followed by human resources ($n = 4$). Also cited were defence, law enforcement, health, I/O psychology, and government. Only one respondent was self-employed. Fifteen respondents acknowledged an annual remuneration in their first job of less than $50,000 per annum with nine citing between $50,000 and $60,000, and two each between $60,000 and $70,000, and $70,000 and $80,000. Two respondents cited an annual remuneration of $100,000 or higher per annum.

Respondents held their first job for 30 months, on average, with eleven indicating that they held this job at the time they completed their masters program. First job held, which took on average 3.8 months to identify and 4.4 months to secure (indicating a potential 8 months job search program), included consultant ($n = 7$), advisor ($n = 7$), psychologist ($n = 3$), with 13 indicating various other roles/positions. A match for skills and education (18 citations) and opportunities for development (10 citations) were the most often cited features or aspects of the job that appealed most (multiple citations possible). Money (2 citations) was the least cited aspect. On a five point scale (1 = minor, 5 = very high) the mean for extent of the fit of first job with career ambitions was 3.4, part way between reasonable and high. Ten respondents described the fit of first job with career ambitions as very high. Respondents generally felt that their masters program was relevant to the positions they had held with a mean of 2.4 jobs being relevant against a mean of 2.8 jobs being held.

Major duties/responsibilities covered in first job/position (multiple citations possible, number of citations in brackets) included recruitment and selection (17), training and development (14), performance management and appraisal (6), career development and management (5), and change management and organizational development (4). Mentioned less frequently were quality of work-life and occupational safety and health, education and research, and human factors and ergonomics. Most enjoyed duties/responsibilities were training and development (8), which was also cited by three respondents as the least enjoyed duty/responsibility, and recruitment and selection which was cited by seven respondents. For the least enjoyed duty/responsibility multiple mentions were made of administrative tasks not directly related to I/O psychology, including report writing, and sales. On the five-point scale the extent to which respondents were able to apply what they had learned in their degree program the mean rating was 3.3, midway between a reasonable and high extent.

The Current Job/Position Experience

The section relating to the participants' current job or position was completed by 45 respondents (85%

of sample). Of the respondents, the highest number worked in Auckland (20), followed by overseas (16), Wellington (3), and Christchurch (2). Thirty-six percent of the respondents to this question ($n = 16$) had relocated geographically to secure their current role. Consulting was the most frequently recorded industry worked in ($n = 10$) followed by education and training ($n = 6$), government ($n = 5$), military and law enforcement ($n = 4$) and recruitment ($n = 3$). Also cited were finance/insurance, health and retail. Three of the 45 respondents were self-employed. Within their current job, six respondents acknowledged an annual remuneration of less than $50,000 per annum with four citing between $50,000 and $60,000, eight each between $60,000 and $70,000, and $70,000 and $80,000, seven between $80,000 and $90,000, and two between $90,000 and $100,000. Ten respondents acknowledged an annual remuneration of $100,000 or higher.

Respondents had held their current job/position for two years, on average, with this ranging from one month to 9.25 years. Current job/position held, which took on average 3.1 months to identify and three months to secure (indicating a potential 6 months job search program), included human resources ($n = 10$), consulting ($n = 9$), psychologist ($n = 6$), education ($n = 5$), and organizational development ($n = 4$). Also recorded were management ($n = 2$), training and development ($n = 2$), and various other jobs/positions ($n = 7$). Those respondents ($n = 27$), for which this was not their first job/position, cited career advancement/development ($n = 11$), geographical relocation ($n = 8$), to broaden scope/field of work ($n = 5$), and moving from a temporary role to a permanent role, redundancy, and to pursue registration as a psychologist, as reasons behind being prompted to seek a new role. Variety of work (11), meeting client needs (8), professional development (6), research (5), program development (4), working for a large organization (4), and role autonomy (3) and people management (3) were the most often cited features or aspects of the job that appealed most (multiple citations possible, number of citations in brackets). On a five point scale (1

= minor, 5 = very high) the mean for extent of fit of current job/position with career ambitions was 3.9, close to high. Fifteen respondents described the fit with career ambitions as very high. On the same scale, the mean for the extent to which prevailing job market conditions influenced respondents in accepting their current job/position was 2.8, close to reasonable. Thirteen respondents rated the prevailing job market conditions as only having a minor influence on their decision to seek another role/position.

Major duties/responsibilities covered in current job/position (multiple citations possible, number of citations in brackets) included training and development (15), recruitment and selection (14), change management and organizational development (9), performance management and appraisal (8), career development and management (5), and education and research (5). Mentioned less frequently was human factors and ergonomics. The most enjoyed duties/responsibilities were change management and organizational development (10), training and development (4), career development and management (4), and client relationship management and development (4). Seven respondents noted that they enjoyed all their duties/responsibilities. For the least enjoyed duty/responsibilities, administrative tasks not directly related to I/O psychology, including report writing, and sales, were cited 21 times. Recruitment and selection (6) and client relationship management and development (4) were also mentioned as being least enjoyable. On the five-point scale the extent to which respondents were able to apply what they had learned in their degree program the mean rating was 3.5, midway between a reasonable and high extent.

Overall Career Experience

The number of participants who completed the questions in the section on overall career experience varied between 19 and 46 per question, with the actual numbers cited accordingly. Within this section participants were able to make multiple citations with this number included in brackets. Forty-six responses were recorded to the question on what aspects of their

masters program had been *most* relevant to their career experiences to date with the following results. Research, and the associated skills developed through conducting, reviewing, and analysis, received the most citations (20). Recruitment and selection, and the development, application and interpretation of the tools and techniques associated with this activity received 16 citations. Within the broader topic of recruitment and selection, job analysis received several citations. Other topics cited included performance management and appraisal (6), training and development (5), organization development and change management (4), and occupational health and safety (1). Other themes that emerged included the development of skills that supported relationship management and leadership, the development of relevant competencies including communication, critical thinking, writing, analysis, presentations, a greater understanding of workplace behaviours, an appreciation of business ethics, and self-development including motivation and confidence.

Forty-four responses were recorded to the question on what aspects of their masters program had been *least* relevant to their career experiences to date with the following results. Statistics topped the list of the aspects least relevant to their career with this being cited by eight respondents. Following this aspect were human factors and ergonomics (8), organization development and change management (2), recruitment and selection (2), occupational health and safety (2), research (2), performance management and appraisal (1), and career development and management (1). However, by comparing the two sets of responses one may conclude that knowledge, skills, and abilities underpinning the activities relating to research, recruitment and selection, and performance management and appraisal, are particularly relevant to a career in I/O psychology. Cable and O'Driscoll (2010) reported that 55%, 84%, and 76%, respectively of practitioners were working in these fields of work.

Forty-six responses were recorded to the question on what participants considered to be the highlights of their career since completing their masters program. The range of responses was

wide and varied with some respondents focussing on the content of the job/position they held, whereas others focussed on advances they had made in their careers including opportunities that arose for overseas engagement. Some respondents mentioned that actually getting a job and being able to launch their career was their highlight, with this leading to opportunities for self/professional development, including training, pursuit of registration, specific career progression, and professional acknowledgement by the industry. More specifically, within the field of organizational development and change management, it was noted that gaining knowledge of the organization, recommending and implementing development and change interventions, program/project management and review, and involvement in policy development, were highlights. Within the field of performance management, workplace engagement, productivity, and resolving performance issues, were noted as highlights. Within the field of training and development, involvement in the development and implementation of programs was cited as a highlight. Within the field of research, pursuing research, presenting the results, and gaining publication were cited by respondents as highlights.

Forty-five responses were recorded to the question on what difficulties participants had encountered in their career since completing their masters program with the following results. Overwhelmingly, the most frequently cited career difficulty was career establishment and gaining entry to the first job/position with this being cited 14 times. Akin to this was: the competition for jobs and competing with human resources practitioners for the same job/position (6); restricted or limited career progression (6); perceptions of over qualification for the jobs/positions on offer (6); and having to relocate geographically in order to secure a job/position (3). A perceived lack of understanding in industry of what I/O psychology offers, and having to communicate knowledge on this, was cited seven times as a difficulty that had been encountered. Other difficulties cited included achieving registration as a psychologist, the repetitive nature of

work, the financial focus on activities, dealing with company politics, and having to engage in business development.

Thirty-one responses were recorded to the question on whether participants had anything else they would like to share regarding their career since completing their masters program with the following results. The value and relevance of the masters program completed received 13 citations. Following this was the suggestion that university programs could include the creation of realistic expectations regarding work opportunities (8), and provide more preparation for students entering the job market (3). Thirty-eight responses were recorded to the question on whether there was anything participants would share with students considering pursuing a masters program in I/O psychology with the following results. Receiving multiple citations were specific actions/advice that students could heed in establishing their careers: get work experience while studying (6), network, and apply for jobs early (6), broaden field of study (4), be prepared to relocate to the larger cities to get a job (3), differentiate between I/O and HR (3), and be prepared to start at the bottom (3). Three respondents also noted that I/O psychology is a great field to work in.

Finally, 19 responses were recorded to the question on whether there was anything else participants would like to share that hadn't already been covered, with the following results. Two points were raised that were cited twice. The first point suggested that the profession could do more to promote itself. The second point suggested that university programs could be more realistic when discussing job opportunities within the field. Three other points were raised, once each, and referred more directly to the structure and content of I/O psychology masters programs. These points suggested that such programs could be more oriented toward their business application, could include a broader range of psychology papers, and could consider the inclusion of a practicum component as some overseas programs do. All remaining comments were of a general nature and not considered specifically related to

careers in the field, or to the masters programs supporting such careers.

Discussion

Although there were some exceptions, the results of this survey provide support for the notion that graduates of university I/O psychology programs enjoy a reasonable level of success in establishing careers within that field of practice. Consistent with the popular fields of work identified by Cable and O'Driscoll (2010), the early career experiences of participants were in the traditional areas of recruitment and selection, training and development, performance management, career development and change management with the popularity of many of these fields of activity prevailing beyond the first job or position held.

Kline and Rowe (1998, p. 144) suggested that graduate programs "need to bring different career possibilities to their [graduates'] attention". Opportunities may therefore exist to promote the practice areas of industrial and organizational psychology that offer career opportunities beyond the traditional areas of practice. Harking back to the O*Net description of work practices, the areas of policy planning and work setting reorganization may offer additional opportunities and may well be considered viable options for employment by current I/O psychology students contemplating employment. With reference to the latter, the fields of occupational safety and health, and human factors and ergonomics, may also offer opportunities for career specialization (Cable & O'Driscoll, 2010). Human factors and ergonomics in particular were mentioned less frequently as a field of activity for both first position and current position. To what extent opportunities within the field of human factors and ergonomics exist in New Zealand is subject to further exploration but is something I/O psychology students may wish to investigate. One survey participant who had pursued this field as a specialization noted that it opened up international opportunities.

In addition to the field of human factors and ergonomics, the field of career development and management may also offer continuing opportunities,

particularly in the area of retirement, and the transition into this, as the so-called baby-boom generation approach retirement. Although career development and management that focuses on "vocational choice and career counselling outside organizational contexts" was relegated to the background by Arnold and Cohen (2008, p. 1), in their review of careers in industrial and organizational settings, this also provides an opportunity that current and future I/O psychology practitioners establishing careers in the field of career development and management may identify as viable and under-tapped. King (2004, p. 113) suggested, for example, that the field of vocational psychology "could also benefit from a greater degree of integration with other fields such as industrial/organizational (I/O) psychology."

In unfavourable economic times, when job opportunities are less favourable, the phenomenon of underemployment, in which individuals are compelled to accept employment below their expectations or not directly aligned to their qualifications, is a potential outcome (Blenkinsopp & Scurry, 2006; Cable & Hendy, 2010; Scurry & Blenkinsopp, 2011). Although not a specific objective of this survey, the time period within which it was conducted, and the prevailing economic conditions at the time of the survey, did lend itself to a consideration of the phenomenon. Within such an economic environment, and compounded by many individuals remaining in tertiary education longer in the expectation that job market conditions will improve, the potential for an over-supply of graduates existed. Two potential impacts on the career experiences of recent graduates may result. Firstly, as noted by Judge, Kammeyer-Mueller and Bretz (2004, p. 277), "success early in one's career is an important component of later career accomplishments", as was reinforced in earlier research by Dreher and Bretz (1991) who reported strong correlations between early career success and subsequent career achievements, the extent to which participants gained early career experience was relevant. Secondly, if graduates do not secure employment in the expected field of

work and at the expected level, early in their careers, there may potentially be "consequences for their future career trajectory and success" as "extended periods of underemployment may be viewed negatively by employers" (Scurry & Blenkinsopp, 2011, p. 649).

The two propositions discussed in the preceding paragraph raise a relevant question. To what extent was the phenomenon of underemployment evident in the participants of this survey? The questions in the survey, relating to the extent to which a job was a good fit with career ambitions provides some insight. The mean for the extent to which participants' first job met career ambitions was 3.4 where three was a reasonable extent and four was a high extent. Although ten participants rated the extent of fit as very high extent, six rated it as a minor extent suggesting the possibility that for these particular participants early or initial career expectations may not have been met. For the current role or position, the same question revealed the mean to be slightly higher at 3.9. However, only four participants in this group responded that the fit with career ambitions was minor with all other responses being reasonable or higher. Similarly, the questions in the survey, relating to the extent of the ability to apply learning from the graduate programs provide further insight. For first job the mean was 2.4 with five participants describing it as minor and eight describing it as some. For current job the mean was 3.5 with five participants describing it as minor and two describing it as some. Although length of tenure may be a confound, the inference that could be drawn from these statistics is that some graduates may accept a first job or position that doesn't fully meet their career ambitions but they subsequently move to a job that more closely aligns with their ambition.

One obvious action that individuals can take to achieve their career ambitions is to go to where the opportunities are. Relocation to secure a role was an action taken by 27% of participants to secure their first job and by 36% of participants to secure their current job. Although probably not unique to I/O psychology, opportunities for graduates are more likely to arise in geographical areas of

greater commercial activity. Certainly, within this survey, the figures confirm that the majority of participants were located in the larger population areas including Auckland and Wellington. The conclusion that may be drawn from the reported levels of mobility is that a willingness to relocate geographically may be conducive to achieving career ambitions and is an action for new graduates to consider.

Practitioners of I/O psychology appear to be committed to ongoing development yet only 42% of participants were either registered as psychologists, or were pursuing registration as psychologists. A commitment to the continuing competence obligation of registration as a psychologist would underpin the professional development of this cohort of participants. However, the knowledge that as many as 79% of participants had pursued professional development, since completing their graduate programs, suggests that practitioners in the field are committed to maintaining their knowledge and competency to practice. Professional membership appears to be less of a priority with only 10 participants indicating membership of what one would expect to be their representative society, namely the NZ Psychological Society.

University offerings of research based and applied I/O psychology programs appear to be highly relevant to the practice with the skills developed through research cited by many participants as the most important aspect of such programs. The ability and opportunity to engage in research activities, including reviewing and analysing results, is an outcome that supports many of the work activities that practitioners in the field engage in. Although, perhaps somewhat contradictory, statistics was rated as the least relevant aspect of I/O psychology masters programs, participants were willing to acknowledge the benefits accrued through the development of the ability to bridge the science-practice gap. With reference to the most/least relevant aspect questions, it must be acknowledged that the responses to these particular questions could be an artefact of career specialization. Graduates who have followed a more

specialized career path are likely to cite aspects related to that specialization as more relevant and aspects not related to that specialization as less relevant.

From the results of this survey, the overall indication is that graduates of university I/O psychology programs enjoy reasonable career success within their chosen fields of endeavour. Although there were some participants in this study who were not realizing their career ambitions to the extent they expected, the majority appear to believe that they have achieved a good career fit leveraging off the learning they acquired during their university programs. Ultimately it is the individual who construes career success. As affirmed by Judge, Kammeyer-Mueller, and Bretz (2004), career success depends more on how well a person performs, than it does on their social position. This affirmation may suggest that, for graduates as well as others, gaining an opportunity to perform early in one's career will likely predict future career success. The extent to which early career experiences leads to subsequent career experiences, and the assessment of those experiences as career success, is an assessment each individual must make. There are actions that career oriented individuals can take to maximise the potential for career success with one of these actions being the responsibility for individual career management underpinned by a commitment to the maintenance of employability. King (2004, p. 119) discussed three aspects of career self-management that appear particularly relevant to graduates, these being a) positioning behaviors: ensuring that "one has the contacts, skills, and experiences to achieve desired outcomes", b) influence behaviors: "actively attempting to influence the decisions of key gatekeepers [decision-makers]", and c) boundary management: "balancing the demands of work and non-work domains". In these turbulent times, engaging in these career self-management strategies should support graduates (and other job seekers) in maximising the potential for expected or desired career outcomes.

Finally, Larkin, Pines and Bechtel (2002) suggested that universities could be proactive in preparing students for entry to the job market. It is up to individual graduate programs to decide whether or not they accept this responsibility and to what extent they are delivering on the responsibility. An option may be to include in graduate programs a career exploration assignment as a component of formal assessment (Larkin, Pines & Bechtel, 2002). For example, two participants suggested that programs could be more realistic about job opportunities and two suggested that the profession could do more to promote itself. Although these comments may be viewed as isolated, they could be heeded. It may therefore not just be a case of churning out qualified job seekers, but also providing realistic information about the job market and setting expectations accordingly. This survey has made progress toward providing that information. Kline and Rowe (1998, p. 147) also concluded that "students should be involved in internships, practicums, and consulting work" to gain extensive exposure to organizations and to prepare themselves for the realities of work life. Encouraging graduates to maintain a relationship with their graduating university may also be beneficial to both parties as this would support bridging the practitioner-researcher divide in organizational psychology (Anderson, Herriot, & Hodgkinson, 2001), as would continuing professional development.

Contributions & Limitations

This survey provides information in an area where such information was previously lacking. Firstly, for students considering pursing graduate study in industrial and organizational psychology, and subsequently pursuing a career in the field, it confirms the viability of such endeavours. The early career experiences of the participants were generally reported as positive. Secondly, for the four universities in New Zealand offering such programs, it confirms the alignment of their programs with both the expectations of graduate students and the expectations of the industry. The majority of participants were positive in describing the alignment of their graduate programs with both their own career expectations, and the expectations of the job market.

The extent to which the results of this study may be generalised to graduates of other disciplines may be limited. I/O psychology is a niche employment area and the job market conditions that apply to this niche may not be experienced by graduates of other more mainstream disciplines such as human resource management, clinical psychology, finance, and information technology. Nevertheless, much of the advice relating to the establishment and maintenance of a career will be more widely applicable. For that reason, students and graduates of other disciplines will possibly find this study of interest. Future research, with a focus on other disciplines, may reveal just how applicable that advice is.

Conclusions & Recommendations

This study confirms the viability of industrial and organizational psychology as a career option and current and future students of the discipline can be confident that the programs offered by the four universities in New Zealand are preparing them well for establishing careers within the discipline. Ultimately it is the individual's responsibility to establish their career and the results of this survey suggests that I/O psychology graduates are reasonably successful in doing so. As Kline and Rowe (1998) noted, career planning as a related competency of the focus of graduate training programs (Society for Industrial and Organizational Psychology, 1985), is deemed important. Summarising the recommendations that arise from this study for students/graduates establishing careers in I/O psychology the following is offered: embrace the responsibility for self-management of career; adopt and maintain an employability orientation, in contrast to seeking job security; be prepared to relocate geographically to where the opportunities exist; gain work experience while studying; network and apply for jobs early; and finally, gain initial experience in the traditional areas of I/O psychology before branching out into a specialisation. These recommendations may apply equally to all students establishing careers in their chosen vocation. Additionally, the extent to which universities could do more to prepare graduates for entry into the labour-market, and to bridge the research/practice divide, is

a consideration not restricted to I/O psychology programs. What lays ahead for future graduates in a continually changing world of work? The final word is left to Arnold and Cohen (2008, p. 33) who proposed that "the organizational careers field resembles the early stages of the universe according to 'big bang' theory: expanding rapidly, with some bright stars and solid objects and the beginnings of some solar systems, but also large clouds of particles and gas drifting about that may or may not eventually come together."

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