

Better knowing oneself and career options: an autoethnographic study of participation in an online career development course

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Abstract

Purpose – Given the challenges many PhD students face entering the job market, an online, optional, self-paced Career Readiness Course, underpinned by the cognitive information processing (CIP) model, was developed to help postgraduate students better understand themselves and potential career pathways. This study aims to explore the first author's experiences with this course, examining its impact on her awareness of personal skill sets and knowledge of career options.

Design/methodology/approach – Using an autoethnographic approach, the authors gathered reflections of engaging in this course, as well as pre- and post-course survey data to analyse any impact on career decision-making and self-efficacy. Pre- and post-course survey data were compared, and thematic analysis of qualitative data were guided by CIP.

Findings – Career decision-making self-efficacy was enhanced for the first author through the course. Moreover, the course enhanced her self-knowledge, especially personal values and strengths. It increased career insight by showing diverse pathways both within and outside academia. It helped clarify career direction through structured guidance and emphasised the importance of being proactive in career planning to navigate the academic and professional landscape.

Practical implications – Providing structured and reflective career development courses can benefit doctoral students. Consideration should be given to embedding such courses in programmes, whilst maintaining a flexible approach. Touchpoints and peer discussion forums may enhance engagement and accountability.

Originality/value – This study offers a first-person PhD student perspective on a career development course to improve self-awareness, decision-making and goal-setting skills. It validates the use of the CIP model and highlights the value of lived experiences in understanding career cognition.

Keywords PhD graduates, Career development, Autoethnography, CIP theory, Online course

Paper type Research paper

Introduction

With the development of the global knowledge economy, PhD graduates are increasingly pursuing diverse careers across academia and beyond, making significant contributions



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across different fields. Research highlights that an increasing number of PhD graduates are navigating a complex and variable job market transitioning into both academic and non-academic positions (Cavallo *et al.*, 2023; Chen, 2021). Many face challenges, including limited knowledge of career options and the skills required to match those opportunities (Tuononen and Hyytinen, 2022; Spronken-Smith *et al.*, 2024a). Moreover, PhD graduates may lack an understanding of their own career competencies and preferences, limiting self-awareness and preparedness (Spronken-Smith *et al.*, 2024b). These challenges contribute to insufficient preparation for the transition from academic research to professional practice, wherever that may be.

In New Zealand universities, PhDs involve supervised research over three to four years; typically there is no coursework, but workshops and short courses are available for the candidate's professional and career development. Recognising a gap in career preparedness, the second author developed an optional non-credit bearing, self-paced online "Career readiness Course (CRC)", designed for graduate research candidates, as well as early career academics, aiming to enhance their knowledge and preparedness for careers in academia and beyond. The course is underpinned by the cognitive information processing (CIP) theory (Sampson *et al.*, 2004), which has been widely applied to career development contexts. CIP theory provides a framework for understanding career decision-making through a three-tiered pyramid (Figure 1). The foundational tier emphasises self-knowledge and options knowledge, the middle tier focuses on decision-making and goal setting and the top tier centres on planning, implementing and monitoring actionable steps. So, people must first know about themselves and their skills, as well as about options knowledge, before they can make effective decisions about their career development. Taught via an online platform with engaging videos from alumni, text and graphics, as well as embedded GenAI acting as a tutor and course adviser (Spronken-Smith *et al.*, 2024d), the course takes about 20–25 h to complete. It takes learners through a cycle of discovering themselves, then career options, before learning some practical strategies and taking the actions of preparing an individual development plan (IDP), as well as material for job applications, thus providing insights into career planning techniques and actionable steps (see topics taught in Figure 2). If seeking a digital badge, participants must submit a portfolio which includes self-assessments, career exploration, an IDP, CV, cover letter and reflection on mock interview.

This article explores whether participating in the course could lead to an enhanced awareness of personal skill sets and potential career pathways. We adopt an autoethnographic approach, using a first-person perspective to reflect on personal experiences of participating in this course. Before detailing the research methods, we first examine the challenges PhD graduates face in today's labour market and review existing research on career preparation among PhD students.

Literature review

Students graduating from PhD programmes are entering a variety of career pathways. A study by Spronken-Smith *et al.* (2024c) on 126 PhD graduates from the USA and New Zealand revealed that 60% entered higher education, in positions ranging from tenured academic roles to tenure-track, fixed-term academic positions and professional non-academic roles. The other 40% of PhD graduates transitioned into a range of fields, including government, private sectors (both for- and non-profit) or teaching roles. Although much of the literature (e.g. Chen, 2021; Gemme and Gingras, 2011; McAlpine and Emmioğlu, 2014) categorises these career pathways broadly into academic and non-academic sectors, Spronken-Smith *et al.* (2024c) further distinguish between permanent and temporary roles, adding another critical dimension to understanding career trajectories. This nuanced

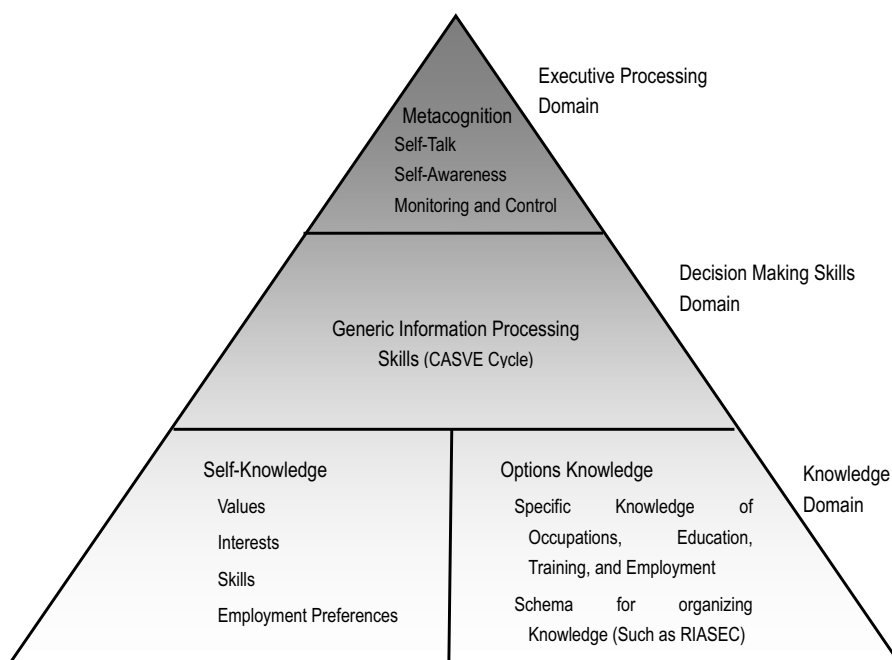


Figure 1. The cognitive information processing pyramid

Source: Adapted from *Career counseling and services: a cognitive information processing approach* (p. 20), by J.P. Sampson, R.C. Reardon, G.W. Peterson and J.G. Lenz, Copyright 2004 by Brooks/Cole with copyright transferred to J.P. Sampson, R.C. Reardon, G.W. Peterson and J.G. Lenz. Reproduced with permission from Sampson *et al.*, (2020)

perspective can help PhD students, particularly those with limited knowledge of career options, consider the impact of different employment sectors on work satisfaction. Career development opportunities can play a significant role in enhancing students' awareness of diverse career pathways, while equipping them with the skills and competencies needed to fit into various roles (Layton *et al.*, 2020).

Research has suggested that PhD students are often unaware of the challenges they might encounter when transitioning into the job market. Externally, the changing nature of the labour market poses significant difficulties. For instance, the fiscal instability following the COVID-19 pandemic led to higher unemployment rates and an increase in freelance work (Jackson and Tomlinson, 2020; Layton *et al.*, 2020). In addition, Sauermann and Roach (2016) highlighted the growing imbalance between the increasing number of PhD graduates and the limited availability of suitable academic or research jobs in academia. This scarcity is a key factor driving PhD graduates to seek opportunities outside academia, in a shift towards non-academic roles (Chen, 2021). Similarly, in China, the rapid growth in postgraduate students has outpaced economic development, leading to market saturation and job mismatches (Chen *et al.*, 2022). Internally, PhD graduates face equally pressing issues, such as unrealistic career expectations, uncertainty about their competencies and a lack of clear goals, making the transition into the workforce more challenging (Tuononen and Hyytinen, 2022), as well as affecting their career motivation, and mental wellbeing.

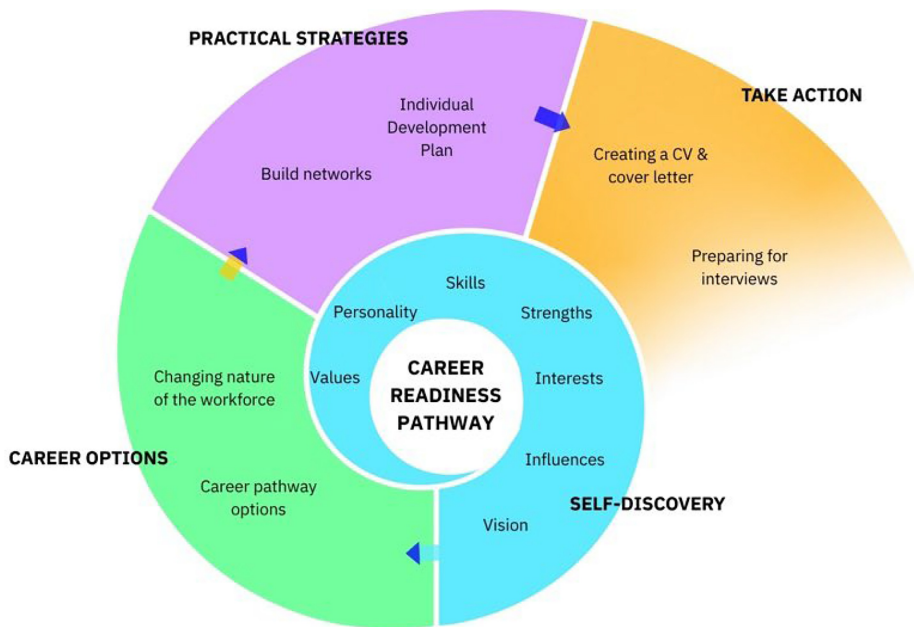


Figure 2. Illustration of the course structure, with the four main sections of self-discovery, career options, practical strategies and take action
Source: Authors' work

In addition, many PhD students struggle with insufficient preparation for navigating the complexities of the job market. Studies suggest that PhD graduates often have limited knowledge of career opportunities outside academia and feel a lack of access to critical information about career prospects (e.g. [Chen, 2021](#); [Spronken-Smith et al., 2024a, 2024b](#)). This lack of preparation extends to self-awareness and understanding of career pathways, leaving many uncertain about their options. [Tuononen and Hyytinen \(2022\)](#) investigated the transition of PhD graduates into the workforce, identifying those who struggled as often characterised by inadequate preparation, including poor career planning, limited professional networks, uncertainty about their competencies and low self-confidence or efficacy beliefs. Although their study highlights the significance of clear career goals and planning for a smooth transition ([Tuononen and Hyytinen, 2022](#)), it does not address the role of institutional support, such as career development courses or university career central services. This oversight limits the scope of its findings by neglecting the institutional resources that can facilitate career development. Addressing this gap, [Spronken-Smith et al. \(2024b\)](#) highlight the poor engagement of PhD students with career planning services and readiness activities, advocating for the integration of career development courses into doctoral programmes. Such initiatives could foster proactive career exploration and provide PhD students with the tools to effectively bridge the gap between doctoral training and career readiness.

PhD students often participate in career development courses offered in various modalities. For instance, [Cavallo et al. \(2023\)](#) highlights professional development practices such as workshops, learning communities and certificated programmes delivered through the Preparing Future Faculty course in the USA. These programmes provide semester-long

intensive learning opportunities aimed at equipping students with essential skills. Similarly, [Layton et al. \(2020\)](#) discuss practices such as *Preparing Science Professionals* and the *Hope is Not a Plan* courses, emphasising the importance of online resources in facilitating career development of PhD graduates. However, the effectiveness of such programmes is not always conclusive. [Feldon et al. \(2017\)](#) found no significant differences in outcomes between graduate students who participated in short-term training and those who did not, suggesting that short-format interventions may not substantially enhance research-related skill development. One of the key concerns raised in their study was the duration of training, arguing that brief programmes (e.g. eight weeks) are less effective than long-term interventions (e.g. six months) in supporting the developmental progression of graduate students (see also [Budé et al., 2011](#)).

While many studies focus on the experiences of specific groups of PhD students, few explore how career development courses can enhance PhD students' self-awareness, expand their understanding of career options and guide them in tailoring and achieving specific career goals through the lens of a PhD student's personal perspective. This study addresses this gap by drawing on the CIP theory ([Sampson et al., 2004](#)), which underpins both the research design and the structure of the CRC. By adopting CIP theory, this research investigates whether the first author's participation in the online CRC facilitated self-reflection, increased awareness of career options and guided decision-making processes to achieve actionable goals. Here we address two specific research questions:

- RQ1. Did participating in an online Career Readiness Course raise the first author's awareness of personal attributes and skill sets?
- RQ2. Did the course increase the first author's awareness of career options and inform decisions, goal setting and planning?

Methodology

This study adopts an autoethnographic approach, exploring the experiences of the first author (hereafter referred to as "I" or "my") who piloted the CRC. I am an international Chinese PhD candidate and was about eight months into my candidature when I piloted this course to check for any major errors and determine the time needed for each module (a student cohort started the course later that year). The course was not part of my own doctoral study, but I had an interest in career development. Autoethnography was the best method for this study because the aim was to explore my perceptions and lived experiences of taking the CRC. As I went through the course, I engaged in reflective self-examination and personal narrative ([Poulos, 2021](#)), to better grasp insights and experiences as I progressed on my career development journey. This autoethnographic study was approved by the University of Otago Human Ethics Committee (ref. 24/0260).

Data collection

Prior to starting the course, I completed a pre-course survey using the Career Decision-making Self-Efficacy Scale (CDMSES) developed by [Betz and Taylor \(2001\)](#); Copyright © 2012 by Nancy E. Betz and Karen M. Taylor. All rights reserved in all media. Published by Mind Garden, Inc. www.mindgarden.com). The short form (25 questions) of the CDMSES was modified with permission of the authors, to better reflect the context of doctoral candidates. For example, instead of an item "Select one major from a list of potential majors you are considering", it was reworded to be "Develop a research project from a list of potential topics". For each of the 25 items, a rating was made on a Likert scale from 1 (no

confidence at all) to 5 (complete confidence). Upon completion of the course, I retook this survey, without checking my earlier responses, to see if there had been any changes in my career decision-making self-efficacy.

The main method of data collection was gathering of my thoughts, reflections and experiences while engaging in the course. Throughout the course, I carefully took notes while engaging with the course materials. These materials were presented multimodally, such as pre-recorded videos, interactive discussion forums, text-based reading materials, visual diagrams and writing portfolio activities. I recorded my thoughts, insights and related experiences. As supported by [Wall \(2008\)](#), generating hardcopy data allows autoethnographers to create well-founded arguments and interpretations rather than relying solely on memory, avoiding the potential distortions that come from recollections. [Winkler \(2018\)](#) also advocated for using hard evidence to support personal insights. Consequently, I organised notes and a course portfolio, aligning each section and corresponding course activities with my observations and reflections. My notes naturally divided into two parts, new career development knowledge gained in this course, and my personal thoughts and insights with relevant experiences, especially focusing on the self-discovery module. After the course, I engaged in further reflection guided by questions from the second author, which covered three phases: pre-course, having completed and post-course reflections. Examples include:

- Before the course: career aspirations, awareness of career pathways and opportunities and self-knowledge including values, strengths, skills, interests and preferences.
- Having completed the course: ability to articulate skillsets, awareness of wider career options, positioning for job opportunities and practical job search strategies.
- After the course: insights gained, usefulness of tools and key takeaways.

This data collection method ensured a rich and reliable data set for my autoethnographic study.

Data analysis

The CDMSES data were analysed by first generating scores for the subscales of self-appraisal, occupational information, goal selection, planning and problem-solving. This was done by summing up the five items in each subscale. An overall score was also calculated by summing up the 25 ratings.

My qualitative data were analysed using thematic analysis, following the method of [Braun and Clarke \(2019\)](#), and guided by the CIP. The process began with familiarisation, involving repeated reading of the data from both notes and my portfolio. During this phase, some preliminary codes were captured from the data using an inductive approach. The second author also generated codes, thus enhancing the credibility of the analysis through rigorous cross-validation and ensuring consistency in the initial codes. Subsequently, the codes were grouped into themes, which were collectively reviewed, categorised, named and defined. Three themes were established: self-knowledge and personal awareness, career-option knowledge acquisition and emotional expression and affective experiences.

Results

Firstly, we report on the findings from analysing the CDMSES pre- and post-course responses, and then we report on the three major themes that were identified.

An increase in career decision-making self-efficacy

A comparison of the pre- and post-course survey responses showed that career decision-making self-efficacy improved by taking this course, changing from a pre-course value of 78 to a post-course value of 97 (Table 1). Moreover, there were increases in each of the subscales, with the most increase in goal selection and self-appraisal.

Self-knowledge and personal awareness

The experience of self-reflection and personal awareness was relatively new to me. This awareness seemed buried deep within my consciousness and was something I had not previously explored in a structured way. According to Lew and Schmidt (2011), self-reflection involves looking back on both how and what we understand and acquiring a deeper understanding of ourselves. Personal awareness, a broader concept that includes active self-reflection, refers to the ability to objectively recognise, analyse and refresh information about oneself (Morin, 2011).

To document my reflections and the potential shift in self and career readiness, I noted my thoughts before taking this course: “I had not really thought about how well I knew myself... I did not have a clear and detailed career plan before I took the career readiness course.” However, significant progress became evident when I revisited my initial thoughts and compared those with my reflections after completing the course:

I can articulate my skillset and attributes, such as self-management, willingness to learn and maintaining a positive attitude. I learned the importance of being proactive and having clear goals to achieve my career aspirations.

These self-reflection narratives highlight the progression this course fostered in my self-awareness regarding my skills and attributes. As the course progressed, I became more aware of my values, personality and strengths through self-assessment activities. The best part of this course was realising my strengths and skills as a PhD student and understanding how they align with my career goals.

Despite developing awareness of my values, strengths and skills, there remains a gap in applying these skills to potential future workplaces. The course highlighted the importance of developing transferrable skills during the PhD period. I tracked my skills and considered how to translate them into what employers need:

Oral communication skills are definitely among the transferrable skills relevant to my desired career. Throughout my PhD studies, I have had many opportunities, such as confirmation presentation and research symposium, to enhance my communication skills.

Understanding the significance of transferrable skills in the PhD labour market is just the beginning. This course provided an opportunity to explore and identify my transferrable

Table 1. Pre-and post-course scores of the first author for the Career Decision-Making Self-Efficacy Scale

Time of survey	Self-appraisal	Occupation information	Goal selection	Planning	Problem-solving	Total
Pre-course	15	16	14.5	16.5	16	78
Post-course	19.5	19.25	19.5	19.75	19.25	97.25
Difference	4.5	3.25	5	3.25	3.25	19.25

Note(s): Although the ratings are normally whole numbers, the first author gave some fractional ratings

Source(s): Authors’ own work

skills and encouraged me to create a long-term IDP to cultivate them, promoting monthly reviews. I wrote in my notes: “I believe that learning through this course, recognising the skills the market demands, and continually upgrading and transferring them will lead me to my desired workplace.”

Career-option knowledge acquisition

The second module, “career options”, provided the bulk of new knowledge related to career paths. Prior to this course, my understanding of career pathways was limited primarily to academia. As a new PhD student, my perspective was narrow, dominated by university influences, and I had only vague ideas about alternative career options. Through taking several self-assessments and knowledge acquisition from course materials, I discovered that my values emphasise balance and growth, my strengths lie in positivity, my skills focus on self-management and learning and my interests involve artistic, social and investigative areas. In addition, I discovered that careers in the higher education sector can be categorised into research, teaching and service administration and learned about various opportunities outside academia, including roles in government, private sectors and self-employment (Spronken-Smith *et al.*, 2024c). This new knowledge expanded my awareness of diverse career pathways and opportunities:

I have become more aware of a diverse range of career pathways and opportunities previously unfamiliar to me. For example, I have encountered new concepts such as fixed-term positions within universities and their potential impact on job satisfaction. These were areas I had not previously considered in depth.

As a beginner exploring the job market, learning about career-related knowledge felt like a sponge soaking in the water, absorbing and benefiting from the insights and experiences shared by individuals with experiences and expertise. With a better understanding of myself and the available job options, I now have a clear view of how to advance my career plans during my PhD studies.

I learned a significant amount of new knowledge, particularly related to career options and the job market. One of the most impactful concepts I learned about was the “hidden job market”, referring to positions that are not publicly advertised (NZIC, 2024). Before taking this course, my understanding of networking was limited to casual interactions with a few individuals around me. However, this course completely transformed my perspective, emphasising the importance of building meaningful professional relationships. In my notes, I reflected: “networking is not just about making new friends but maintaining relationships that can provide mutual support and opportunities.” I learned that effective networking requires strategic techniques, such as consistently following up with contacts, exploring fears of rejection, and practicing reciprocity. To apply these theories in real-world scenarios, I was encouraged to explore job postings on recruitment websites, which has since made me feel more equipped to dive into networks and build connections for future career opportunities.

Emotional expression and affective experiences

My reflections often highlighted emotions of motivation and inspiration. One particular moment was the sense of unprecedented insight I gained from alumni sharing their career trajectories at the beginning of this course. The experiences of alumni illustrated that career development is often iterative and complex, contrary to the linear path I previously imagined. My notes said:

In the video, I felt a profound sense of admiration and excitement as I observed that the individuals had a distinct career interest, which I refer to as their “career theme”. Despite shifts in their career

pathways, they remained anchored to this core theme. For instance, the second interviewee, despite her varied experiences living in different countries, consistently followed a career path connected to the themes of education, relationships, and personal development. This realisation emerged a strong emotional response in me. As a new PhD student who did not have any official work experiences previously, it made me feel a renewed sense of motivation and determination to discover my “career theme” and understand how it can guide my career journey.

The persistence of the alumni in pursuing a central “career theme”, despite varied career paths, was striking and deeply inspiring. Hearing their stories not only broadened my perspective but also motivated me to reflect on my own career journey. The opportunity to hear from alumni who graduated from the same university about their professional choices and experiences was rare and invaluable. It inspired me to identify my own career theme – something I am passionate about – and commit to following it with resilience and determination. I appreciated how the course offered a unique space to contemplate and prepare for future career plans, providing practical insights into real-world applications of academic experiences while encouraging me to stay persistent in my career journey.

The course also facilitated my exploration of personal values, strengths, skills and career choices. These areas are not commonly discussed in my culture, as sharing personal strengths and skills can be perceived as showing off or disregarding those who might not possess similar abilities. People are often reluctant to discuss their career choices, especially if they have not yet succeeded or secured a position. Growing up in such an environment, I had not previously engaged in a structured self-exploration. This course provided a valuable opportunity to align my values and strengths with potential career prospects. My notes reflect this: “I am appreciative and thankful for the comprehensive self-exploration.”

The emotional influence of this self-discovery journey was significant. I felt a deep sense of appreciation and delight while exploring my values and strengths. Receiving feedback from the second author on my portfolio further enriched this emotional journey. Her feedback made me feel valued and supported. Her suggestions to consider more attainable roles and the gradual achievement of career goals were particularly insightful, arising a sense of hope and motivation in me. I recorded my gratitude for both her support and the self-discovery module of this course, feeling a strong emotional connection to the process of taking this course.

Discussion

In this section, we integrate and synthesise our findings across four stages from the CIP model to reflect how the CRC influenced the first author’s perspectives as a PhD candidate on career development. Initially we discuss the rise of my self-knowledge, then the growth of my insight into careers. This is followed by the strengthening of my career direction and planning, and then implications and recommendations. The final subsection concerns the strengths and limitations of this study.

The rise of my self-knowledge

Self-knowledge is foundational in career decision-making, as emphasised in the CIP model. Spronken-Smith *et al.* (2024b) explored the career preparation of PhD graduates, revealing that they possessed constrained self-knowledge concerning their values and career preferences. Beyond these, other aspects such as personality type, strengths, skills and interests, form key components of self-knowledge that PhD students should ideally explore prior to embarking on a career journey. The first module of this course, self-discovery, covers all these aspects of self-knowledge, guiding participants towards a comprehensive understanding of themselves in relation to their career aspirations.

As a new PhD student with limited professional experience, I had not previously engaged in a structured exploration of my personal attributes and career preferences. Growing up in an Asian-Confucian cultural background that values collectivism, I was not encouraged to articulate my individual strengths or values. Collectivist cultures often prioritise group harmony and interdependence over personal expression, leading individuals to adopt a non-subjective stance to preserve community cohesion (Aizawa and Whatley, 2006). This cultural orientation, common in East Asia, tends to discourage self-expression and emphasises conformity, which can limit self-awareness in work-related contexts (Leung *et al.*, 2002). Kim (2016) similarly suggested that individuals from East Asia might show less work-related values compared to those from more individualistic cultures. This limited self-focus can result in a passive approach to career planning, potentially blocking an understanding of which career paths align best with one's personal attributes.

While navigating the job market and securing employment are crucial, self-awareness, particularly around personal values, strengths and work preferences, is an essential and foundational step to meaningful career success. Research revealed that many PhD graduates struggled to clearly identify their competencies or understand the expectations of the job market (Hobin *et al.*, 2014; Tuononen and Hyytinen, 2022). Through several self-assessments and multimodal tasks in this course, I expanded my understanding of how my personal attributes connect with potential career opportunities. Spronken-Smith *et al.* (2024a) recommended that PhD students should cultivate self-awareness of their personal attributes, actively pursue career-related knowledge and support and remain open to diverse career opportunities. As evidenced by my improved scores in the subscale of self-appraisal on the CDMSES, this CRC provided me with a practical platform for self-discovery and development.

The growth of my insight into careers

The other foundational stage of the CIP model is career options and knowledge, which plays a critical role in the career decision-making process. As reflected in my autoethnographic narratives, my awareness of career paths was initially limited, especially as a new PhD student. In terms of professions, my exposure has primarily been to university positions, having gone straight from undergraduate to PhD studies without any breaks. Chen (2021) and Hobin *et al.* (2014) pointed out that postdoctoral scholars often lack sufficient knowledge about career options. Similarly, Spronken-Smith *et al.* (2024a) who focused on PhD graduates, found they frequently have limited familiarity with career pathways beyond academia, highlighting the need for proactive career exploration by current doctoral students. Therefore, it is suggested that doctoral programmes could benefit from including comprehensive career preparation covering a wide range of professional directions, addressing both benefits and challenges associated with each career pathway (Sauermann and Roach, 2016; Spronken-Smith *et al.*, 2024a, 2024c). By offering rich resources and structured guidance, this CRC enables PhD students to explore and build knowledge across diverse career pathways. The post-course survey results show a notable increase in occupational information scores following completing this course.

My initial insights into career knowledge began with an introductory video in this course, featuring alumni who shared their varied career journeys. This early exposure highlighted that career trajectories are often non-linear and unexpected, a pattern supported by Main *et al.* (2019), who demonstrated that PhD graduates aiming for tenure-track positions do not always experience straightforward paths. Hearing the alumni discuss their transitions from PhD studies to their current roles, and for some, their prior work experiences, provided invaluable perspectives. These insights are uncommon in structured programmes, making

this learning opportunity especially valuable and meaningful. This aligns with [Spronken-Smith et al. \(2024b\)](#) where an interviewee expressed appreciation for faculty sharing their professional experiences, expectations and achievements.

Participating in this course has allowed me to explore thoroughly the career options available to PhD students in a categorised and structured way. [Cavallo et al. \(2023\)](#) suggested that current graduate students were prepared to enter a highly variable job market. However, studies by [Hobin et al. \(2014\)](#) and [Spronken-Smith et al. \(2024a, 2024b\)](#) identified that PhD graduates lack sufficient knowledge about career options. Despite having spent eight years within the university environment, I was not fully aware of the various professional roles available, even in the higher education sector.

This course has deepened my understanding of the range of positions PhD students may take. These roles include permanent/tenured faculty, tenure-track, academic professional permanent, academic fixed-term, government/public sector, private sector and teaching ([Spronken-Smith et al., 2024c](#)). Many PhD graduates, as I learned, remain in higher education following their studies. However, research by [Chen \(2021\)](#) and [Layton et al. \(2020\)](#) illustrated that some PhD students lost interest in academia or felt disappointed with the limited positions available, prompting them to consider careers beyond academic institutions.

Regardless of which career paths PhD students ultimately choose, this CRC provides valuable knowledge about diverse career options and knowledge. Its activities are designed to help students identify careers that align with their skills and interests, using tools such as ChatGPT and real hiring websites for practical exploration. This aligns with the recommendations of [Sauermann and Roach \(2016\)](#), who advocated for graduate programmes to encourage students to evaluate various career pathways and why a PhD might be the most promising direction for their future.

The strengthening of my career direction and planning

As I moved through the course, my sense of career direction slowly began to take shape. I had always hoped to stay in the field of higher education, but this path felt uncertain and even intimidating at times. Through the carefully designed self-assessments and multimodal activities in this course, I was able to pause and reflect, not just on what I could do, but on what truly mattered me. It was through these reflections that I recognised how much I valued the opportunity to teach and research, even if that path was not always easy. [Chen \(2021\)](#) reminded me that intrinsic values play an important role in career decision-making for PhD graduates. This really resonated with me. The course did not push me to choose a career path, but it gave me the space to look at myself and my preferences, and at the same time, understand why certain paths feel more meaningful.

Another realisation came from recognising how important it is to seek support and have open conversations. I used to feel unsure about discussing my future with my supervisors, and during my first formal progress meeting, I remember being caught off guard when my convenor asked if I had talked with them about my plans. At that point, I had not. Looking back, I see it as a missed opportunity. At the end of the CRC, I received warm, handwritten comments from the second author on my portfolio tasks. These seemingly small gestures of encouragement made a big difference as they helped me feel seen, capable, and more confident in taking the next steps. This echoes the importance of having conversations with supervisors and career advisors that [Spronken-Smith et al. \(2024b, 2024c\)](#) have highlighted in their research on the perceptions of PhD graduates on their career development.

The shift from thinking to planning was gradual but powerful. I noticed a five-point increase in my “goal-selection” score on the CDMSES between the pre- and post-course surveys. That change did not happen overnight, but through small and steady actions, like

setting specific goals and writing them down. [Hobin et al. \(2014\)](#) emphasised that individuals are more likely to achieve goals when they define them clearly and take ownership. Inspired by that, I committed to improving my oral communication skills which is something I have always found challenging as a non-native English speaker. I started practising more and signed up to give presentations, one small step at a time. What really helped me follow through was the IDP this course recommended. It was quite time-consuming to complete, but the outcome was worth it, as it gave me a detailed, monthly roadmap for both my research and career goals. The monthly email reminders helped keep me on track. It felt like the course did not just ask to plan but, it stayed with us through the process.

Still, I have come to see that planning is not just about writing down what you want to do. [Vincent et al. \(2015\)](#) reminded me that effective planning should involve conversation, guidance and collaboration. I am still learning to open up about my goals, but the course helped me start. Using artificial intelligence tools to explore career fit as part of the design of this course also gave me more confidence to eventually share these plans with my supervisors. Interestingly, [Sauermann and Roach \(2016\)](#) found that postdoctoral researchers often have clearer career goals than PhD students, likely because they better understand the job market and their possible career pathways. Their findings made me reflect on how PhD students, like myself, could benefit from earlier opportunities to think intentionally about where we are heading; this is something this course gave me.

Implications and recommendations

Our autoethnographic study highlights the value of structured and reflective career development courses for PhD students, particularly for those, like myself, who began their doctoral journey with limited knowledge of career options or a clear sense of self. As [Spronken-Smith et al. \(2024b\)](#) observed, many PhD students are unaware of the diverse career pathways available beyond academia. Courses like the CRC can play an essential role in broadening students' perspectives early in their candidature. So, counter to [Feldon et al.'s \(2017\)](#) claim about the possible ineffectiveness of short courses, this course proved effective, at least for me. This may have been due to the flexible timeframe for completion and the self-paced nature of the course. Moreover, this course focused on career development, rather than intensive research training which [Feldon et al. \(2017\)](#) were analysing.

Institutions and graduate schools should consider embedding such courses into the first year of PhD programmes as a foundational component of researcher development. This could help motivate early career thinking and empower students to explore their values, strengths and goals. We recommend integrating career planning tools such as IDPs, which can help students engage with professional and career development ([Arnaud and Cahill, 2024](#)). To build on its success, the second author and her team are working to formally integrate the course into the doctoral training programme at our university, ensuring future cohorts benefit from structured career development.

However, there are challenges that should not be overlooked. While the self-paced nature of the course offers flexibility, it also places a high level of responsibility on students to stay engaged, especially as the course takes 20–25 h to complete. This can be particularly difficult during demanding research phases or when students do not immediately see the relevance of career planning. To improve engagement, we recommend incorporating touchpoints such as periodic check-ins, peer discussion forums, or facilitated workshops to build community and accountability. Moreover, the course team plan to break the course into four smaller chunks to increase flexibility and reduce the pressure on students. Digital badges will be awarded to encourage participation and recognise progress.

From a programme development perspective, our study offers a unique and situated account, but it can prompt important reflections. Developers should consider how to design flexible yet supportive structures that encourage active participation and make space for artificial intelligence-embedded tools. Future research might explore how students from different backgrounds shape engagement and outcomes in similar courses.

Strengths and limitations of the study

Strengths of our study included the use of multiple data sources, including pre- and post-CDMSES scores to measure impact on career decision-making self-efficacy, detailed notes taken during the course, portfolio activities that critically engage with course content while connecting it to personal experiences, and post-course reflections. This triangulation of data enriched the depth of analysis and gave a more nuanced understanding of how the course impacted on personal and professional growth. The collaborative approach also strengthens the study's credibility as the thematic analysis was cross validated through discussions with the second author, enhancing the rigour and trustworthiness of the findings.

As with most autoethnographic research, the findings are naturally subjective and context-specific based on the experience of a single participant, the first author, and therefore have limited generalisability. However, as noted by [Chang \(2016\)](#), the findings from autoethnographic can be applicable in similar contexts. Thus, we expect that the findings will offer useful insights to institutions, PhD graduates, career developers and others, particularly to PhD students who are struggling with improving their career preparedness and to designers of career development courses.

Conclusion

Our research aimed to explore whether the first author's participation in an online career development course enhanced self-awareness of skill sets, career exploration, goal setting and future professional planning. Using an autoethnographic approach, the findings demonstrate that the course significantly impacted my understanding of my values, strengths, skills and career preferences while broadening my awareness of diverse career pathways within and beyond academia. Aligned with the CIP model, the course provided a structured approach to career development. At the foundational level, it helped me gain insights into myself and the job market through activities designed to explore personal and professional attributes. The middle level of CIP, focused on decision-making and goal setting, clarified my career direction and highlighted areas for growth, such as improving communication skills in higher education. At the highest level, the course adopted an IDP tool to break long-term goals into actionable steps, supporting pragmatic career planning. Overall, the course positively and effectively influenced my career development, equipping me with the knowledge and strategies to take meaningful steps towards achieving my goals.

This research makes several contributions to the field of career development and readiness for PhD students. Firstly, it affirms the utility of the CIP model in designing CRCs, bridging theory with practice. By mapping personal learning experiences ranging from self-awareness to actionable planning, this study first highlights the potential effectiveness of the CIP model in guiding PhD students through their career development. Second, it identifies the potential value of the modified CDMSES as a pre- and post-survey tool for evaluating the impact of career development courses. However, both should be applied in a learning cohort. Moreover, this study addresses the gap in an individual perspective by incorporating the lived experience of a PhD student, offering a first-person lens to provide a deeper and more nuanced understanding of how an online career development course can influence an individual's career development.

Further research should conduct cohort studies on career development courses to determine whether the impacts observed in the first author are more widely applicable. Using a qualitative and longitudinal approach, we could gain deeper insights into PhD students' career development experiences while facilitating them to enhance their self-awareness, explore career options, and navigate their transition into the job market.

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ChatGPT was used by the first author to check grammar and improve expression.

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