



# **The influence of self-efficacy on the career development of female accountants**

**By:**

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## **Ethical Declaration**

I declare that this thesis is wholly my own work except where I have made explicit reference to the work of others. I have read the relevant notes, DBA Handbook and procedures on conducting academic writing and research and hereby declare that this proposal is in line with these requirements. I have discussed, agreed, and complied with whatever confidentiality or anonymity terms of reference were deemed appropriate by those participating in the research and dealt appropriately with any other ethical matters arising.

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Michelle Gleeson

5 September 2024

Date

## **Dedication**

To Amy, Mam, Olivia and all the wonderful strong and resilient women that I have crossed paths with, in my lifetime so far - together we can make positive changes for future generations.

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Thank you to my supervisors Dr Collette Kirwan, Dr Anne Marie Ivers and Dr Mick Rock for taking this DBA journey with me. I have learnt so much from you over these past few years. I know how lucky I am to have you as my supervisors. You challenged me to always reach a potential I never knew was possible. For this I will always be grateful. Thank you so much to Chartered Accountants Ireland Educational Trust and the Irish Accounting and Finance Association (IAFA) for their funding award towards transcription services, which was greatly appreciated. Huge thanks go to Denis, Seán, Collette all the team in South East Technological University Waterford that I have interacted with throughout my DBA studies. The kindness, support, and high-quality teaching you provided was invaluable.

Thank you so much to the expert reviewer of my study. With her substantial experience and expertise, I knew she was the perfect person to review my interview guide. She went over and above, and her review really strengthened, not only my interview guide, but my study in general. I knew the two pilot interviewees before they offered to help with my study. I was so lucky to have them onboard, as they finetuned the interview questions so that I was well prepared to commence the participant interviews. They did everything that I hoped they would do, and I thank you both so much for your contribution. Sincere gratitude goes to all the participants of my study. You are a truly wonderful group of women and I found you so inspiring professionally and personally. I feel connected to each one of you and I hope you feel that this study justifies your input. I would like to mention one participant in particular, who sadly and unexpectedly lost her husband in May 2023. My thoughts are with you and all your family.

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## Abstract

In Ireland, the representation of women at board level is improving (Balance for Better Business, 2023) but the representation of women in senior management positions has fallen from 2023 to 2024 (Grant Thornton, 2024). From an accounting perspective women occupy between 21 percent and 32 percent of partnership positions across the Big 4 accounting firms in Ireland (Malone, 2023). Literature suggests that self-efficacy is a factor contributing to the underrepresentation of women in senior positions (e.g., Betz and Hackett, 1981; Sullivan and Mahalik, 2000; Athanasopoulou et al., 2018). In traditionally male dominated careers, women generally possess lower self-efficacy than men (Betz and Hackett, 1981; Tellhed et al., 2017). Lower self-efficacy can result in individuals restricting their career progression by believing themselves incapable, even when the opposite is true (Bandura, 1988). While studies have explored self-efficacy in other career domains, it is less explored in an accounting career context (Burnett et al., 2010; Byrne et al., 2014, Beatson et al., 2020). This study extends the literature using Bandura's (1977) self-efficacy theory, to acquire a deeper understanding of how participants' self-efficacy is shaped, and how later career stage female accounts have navigated the challenges associated with career development.

This study adopted an interpretivist, qualitative approach in which 31 interviews were conducted with later career stage female accountants, working in industry. This study contributes to the body of literature on self-efficacy by presenting more nuanced findings that have not previously been discussed by scholars. Such nuanced findings include the significance of physiological factors on self-efficacy beliefs, how learning sources are used to overcome self-doubt, the nature of evolving self-efficacy, agentic action creating learning source experiences and the connection between individuals feeling less valued and the lesser prominence of performance accomplishments. This study offers value practically by highlighting where women in accounting experience fewer opportunities for their self-efficacy to be developed, therefore demonstrating opportunities to enhance the learning source experiences of women in an accounting context. Acting on such opportunities can improve the working lives of women and ultimately their self-efficacy beliefs. Improving women's self-efficacy is likely to improve women's career progression and ultimately the representation of women in senior positions in accounting.

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## **List of abbreviations**

ACCA: Association of Chartered Certified Accountants

Big 4: are the largest international accounting firms which include, Deloitte, EY, KPMG, and PwC

CAI: Chartered Accountants Ireland

CBI: Career Barrier Inventory

CIMA: Chartered Institute of Management Accountants

CPA: Certified Public Accountants

CPD: Continuous Professional Development

CSO: Central Statistics Office

DBA: Doctorate in Business Administration

IAASA: Irish Auditing and Accounting Supervisory Authority

IAFA: Irish Accounting and Finance Association

IFAC: International Federation of Accountants

LAA: London Association of Accountants

RQs: Research Questions

SCT: Social Cognitive Theory

SCCT: Social Cognitive Career Theory

SCS: Subjective Career Success

SETU: South East Technological University

STEM: Science, Technology, Engineering and Maths

TSSE: Task Specific Self-Efficacy

WIT: Waterford Institute of Technology



## **SECTION ONE**

### **Introduction and DBA Research Overview**

## **Section 1 Introduction**

This chapter introduces the research study, the purpose of which is to explore the influence of self-efficacy on the career development of female accountants. The research topic originated from the personal interests and experiences the researcher gained when she worked in industry. The research topic further developed as the literature review was undertaken. Throughout her career, the researcher witnessed women struggling to attain promotion to senior positions during their accounting careers, even when they desired and possessed the ability to do so. This observation of the researcher was reflected in the literature, which highlights the difficulties women encounter during their careers, when they pursue promotion to senior positions (e.g. Barker and Monks, 1998; Flynn et al., 2015; Cohen et al., 2020; Padavic et al., 2020; Kim et al., 2022).

This pattern is reflected in the accounting domain. Accounting was a male dominant profession for many decades, where women were initially refused entry. The London Association of Accountants (LAA), which later developed into the Association of Chartered Certified Accountants (ACCA) admitted the first woman as a member in 1909 and the other accounting bodies followed in the same manner from 1918 onwards (Jeacle, 2011). The accounting profession has become more feminised since the 1970s (Broadbent and Kirkham, 2008; Whiting et al., 2015). Across the accounting bodies worldwide, women account for 38 percent of total members and 50 percent of students in 2022 (FRC, 2023). Men and women have been entering the accounting profession in equal numbers for over three decades (Cohen et al., 2020). After over 30 years, it may be expected that women and men would be equally represented in senior positions in accounting, but this is not so. Women occupy only 17 percent of partnership positions throughout Europe (Catalyst, 2020). Women hold between 21 percent and 32 percent of partnership positions across the Big 4 accounting firms in Ireland (Malone, 2023). The Big Four accounting firms vigorously promote diversity within their organisations, yet this has not resulted in equality at partnership level. In a review of 25 years of accounting research on gender, Haynes (2017, p. 110) states, “. . .much has changed and yet little has changed”.

This pattern in accounting is similar to the representation of women globally. According to the World Economic Forum’s Global Gender Gap Report (2023) the representation of women in senior positions globally has improved from 27 percent in 2021, to 31 percent in 2023. In

Ireland the numbers of women in employment have increased substantially since the 1970s (Cross, 2010). While the representation of women at board level is improving in Ireland, the representation of women in senior leadership positions is improving less quickly than anticipated (Balance for Better Business, 2023). Women occupy 30-36 percent of senior executive roles (CSO, 2023; Grant Thornton, 2024). In fact, the representation of women in senior positions in Ireland has fallen between 2023 and 2024 (Grant Thornton, 2024). The underrepresentation of women in senior positions persists on a worldwide basis, despite decades of initiatives and undertakings to reform this.

Externally imposed barriers to women's career progression have been well researched. For example, gender inequality or an overburdening workload may negatively impact female career development (e.g., Cohen et al., 2020; Ely and Padavic, 2020; Padavic et al., 2020; Hardies et al., 2021; PwC, 2024). Less researched are women's personal beliefs, perceptions and experiences of their career development in their accounting work environments. This results in an incomplete picture of the career development of female accountants. Self-efficacy theory provides a framework to explore women's self-beliefs and perceptions of their ability to develop their careers and progress into senior positions in accounting. Self-efficacy is an individual's beliefs that they can successfully perform certain tasks or behaviours (Bandura, 1977; Hackett and Betz, 1981). Every individual possesses self-efficacy beliefs, generally considered at either a high or low level. Women tend to have lower self-efficacy than men (Quinn, 2012; Athanasopoulou et al., 2018), particularly in traditionally male career domains (Betz and Hackett, 1981; Tellhed et al., 2017) such as accounting (Barker and Monks, 1998).

Literature suggests that lower self-efficacy is a factor contributing to the underrepresentation of women (e.g., Betz and Hackett, 1981; Dickerson and Taylor, 2000; Sullivan and Mahalik, 2000; Athanasopoulou et al., 2018). Lower self-efficacy can result in individuals restricting their career development, as they believe themselves incapable, even when this may be untrue (Bandura, 1988). This is a self-imposed limitation due to a lack of self-belief<sup>1</sup>, rather than

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<sup>1</sup> Self-efficacy researchers often use the term self-belief, rather than self-efficacy (e.g., Wood and Bandura, 1989; Zeldin and Pajares, 2000; Morris and Usher, 2011). The terms self-efficacy and self-belief are used interchangeably throughout the remainder of this chapter.

inability (Bandura, 1988), which women are particularly prone to (Quinn, 2012; Anderson-Gough et al., 2005). This may result in women not achieving their career potential (Hackett and Betz, 1981; Bandura, 1988; Athanasopoulou et al., 2018). In other words, self-efficacy can be more relevant to achieving outcomes [such as career progression] than ability is (Lent et al., 1987; Hackett and Lent, 1992; Betz et al., 1996; Rigotti et al., 2020). Self-efficacy has been researched in other career domains such as teaching, Science, Technology, Engineering and Maths (STEM) and with student groups (Betz and Hackett, 1981; Lent et al., 1986; Nauta et al., 1998; Klassen et al., 2011; Buse et al., 2013; Tellhed et al., 2017; Aymans et al., 2020; Elliott et al., 2020). Despite the knowledge that self-efficacy is an important factor in women's career development (Hackett and Betz, 1981), little research explores self-efficacy in an accounting context (Burnett et al., 2010; Byrne et al., 2014; Beatson et al., 2020).

Self-efficacy theory identifies four learning sources which initially form and continuously impact self-efficacy beliefs (Bandura, 1977). The four learning sources identified in self-efficacy theory are performance accomplishments, social persuasion, vicarious experiences, and physiological factors. Performance accomplishments are the achievements or successes of individuals themselves. Vicarious experiences are witnessing the successful experiences/behaviours of others, particularly those whom an individual can identify readily with as well as being impacted by the role models of others. Social persuasion is the encouragement and support received from various sources (oneself and others). Physiological factors are the feelings and beliefs of individuals e.g., not applying for a promotion due to fear, even if an individual possesses the ability. Alternatively, the feeling of confidence could enable an individual to apply for a promotion, even if they may not possess the required ability. The four learning sources suggest a complex and multifaceted explanation of the influence of self-efficacy beliefs on career development. Thus, there is a need to explore the lived experiences and perceptions of female accountants in their individual work environments.

The objective of this study is to identify the self-efficacy learning sources and the influence of self-efficacy on the career development of female accountants. The influence of the four learning sources on self-efficacy beliefs may depend on the career area in question (Zeldin et al., 2008). The self-efficacy learning sources have been researched in career domains such as STEM and teaching (e.g., Zeldin and Pajares, 2000; Zeldin et al., 2008; Morris and Usher, 2011; Gale et al., 2021; Bellemans and Devos, 2023; Marschall, 2023; Yim, 2023). However, to the

best of the researcher's knowledge, the learning sources have not been researched for women in accounting careers and self-efficacy generally has been less researched in accounting (Burnett et al., 2010; Byrne et al., 2014, Beatson et al., 2020). To gain a better understanding of the influence of self-efficacy on women's career development in accounting, the following research questions (RQs) have been developed:

- **RQ1:** What self-efficacy learning sources impact the self-efficacy beliefs of female accountants?
- **RQ2:** How do self-efficacy beliefs impact the attainment/non-attainment of senior positions for female accountants?

Career development can be defined in various ways. For example, Gyansah and Guantai (2018) describe career development as an individual's management of their growth and progress within their career. Similarly, in this study, career development refers to career progression and in the context of this study, career progression refers to the attainment or non-attainment of senior positions in industry, within the accounting domain.

This study incorporates the perceptions and experiences of later career stage women (aged 46 and over); a cohort of women underrepresented in literature. By targeting this cohort of women, this study provides an opportunity for participants to tell their stories and relay their perceptions and lived career experiences in accounting. Considerable research has been conducted on female accountants' career development in both practice (e.g., Anderson-Gough et al., 2005; Millar, 2013; Brennan and Millar, 2014; Whiting et al., 2015; Jones and Iyer, 2020), and the public sector (e.g., Anderson-Gough and Brown, 2008; Cullen and Christopher, 2012; Haynes and Fearfull, 2008; Galizzi et al., 2023). Very little research focusses on women working in industry, despite the finding that they are similarly underrepresented in senior positions as women working in practice (Gammie and Whiting, 2013). The category of industry in this study incorporates industry, financial services and non-profit organisations (which are not largely government funded). A better understanding of the influence of self-efficacy on the career development of female accountants may provide insights for organisations and professional bodies to better support women's career development and improve women's self-efficacy and career experiences. Improving women's self-efficacy and career experiences may help achieve greater female representation at senior levels.

This chapter proceeds as follows. Section 2 positions the study within the literature and further discusses self-efficacy. The research design is presented in Section 3 and Section 4 discusses the contribution of this research study. Finally, Section 5 outlines the structure of the thesis.

## **Section 2 Positioning the study within the literature**

Literature presents organisational and personal factors that influence women's career development. Considerable studies have investigated organisational factors (e.g., Barker and Monks, 1998; Flynn et al., 2015; Tinsley and Ely, 2018; Vidwans and Du Plessis, 2020; Cohen et al., 2020; Padavic et al., 2020; Hardies et al., 2021; Brannan et al., 2021; PwC, 2024). Despite the insights gained from the research, recommendations made, and changes implemented from a practical perspective, women remain underrepresented at senior levels. Self-efficacy is identified in literature as a personal factor which contributes to the career development and underrepresentation of women (e.g., Betz and Hackett, 1981; Hackett and Betz, 1981; Dickerson and Taylor, 2000; Sullivan and Mahalik, 2000; Athanasopoulou et al., 2018).

Self-efficacy theory was introduced in 1977 by the esteemed Canadian psychologist Albert Bandura. Self-efficacy theory has been applied in literature to many disciplines such as psychology, health, education and from 1981, to career development (Hackett and Betz, 1981). Together with capability and self-motivation, efficacy expectations are a major determinant of people's choice of activities, amount of effort provided and persistence in dealing with difficult situations. Bandura (1977) argues that improved self-efficacy assists individuals to cope with challenges/barriers that may arise. This is pertinent to female career development where organisational and personal barriers are discussed in Paper 1, Section 2.

Hackett and Betz (1981) bring the application of self-efficacy theory to the career domain, particularly in the context of women's career development. The self-efficacy of men and women appear to present differently time and again. This is demonstrated when men may apply for a position if they can do a few of the tasks, whereas women tend not to apply unless they can do every single task (Quinn, 2012; Hartman and Barber, 2020). In a recent working paper, Beatson (2024) finds that the self-efficacy of male accounting students is higher than that of female students, even though the female students performed a little better in their accounting

exam. Bandura (1988) discusses self-imposed limitations due to lower self-belief, rather than inability, which women are particularly vulnerable to (Quinn, 2012; Anderson-Gough et al., 2005). CEOs in a global study believe that high potential women frequently possess low self-belief, which hinders their career progression (Athanasopoulou et al., 2018). These CEOs believe that women do not promote themselves as they concentrate on what they lack, rather than what they possess. A study of college and professional women, find that while 60 percent of these women aspired towards senior positions, more than half were hesitant as they lacked self-belief (KPMG, 2015).

In traditionally male dominated careers, women generally possess lower self-efficacy than men (Betz and Hackett, 1981; Tellhed et al., 2017, Beatson, 2024). Barker and Monks (1998) find that women in accounting lack self-belief and underestimate what they have to offer. Kim et al. (2020) find female accountants with high self-efficacy work far harder, expecting this will result in career progression, whereas male accountants put their effort into strategic career development. Jones and Iyer (2020) find the aspirations of female accountants far lower than those of male accountants, for partnership progression. Self-efficacy literature in non-accounting domains find that increasing self-efficacy positively impacts the career aspirations of individuals (Lent et al., 1986; Nauta et al., 1998). Self-efficacy has been well researched in career domains such as teaching and STEM, as well as with student groups (e.g., Betz and Hackett, 1981; Lent et al., 1986; Nauta et al., 1998; Klassen et al., 2011; Buse et al., 2013; Tellhed et al., 2017; Aymans et al., 2020; Elliott et al., 2020). Yet, self-efficacy has been less researched in the domain of accounting (Burnett et al., 2010; Byrne et al., 2014, Beatson et al., 2020). Because of a dearth of research, an incomplete picture exists of the career experiences of female accountants, which justifies further exploration.

Buse et al. (2013) call for research in male-dominated professions to explore how factors such as self-efficacy are developed by individuals. Bandura (1977) identifies four learning sources which form and continuously impact self-efficacy beliefs. As previously discussed, these learning sources are performance accomplishments, vicarious experiences, social persuasion, and physiological factors. Researchers have undertaken quantitative studies testing self-efficacy or the self-efficacy learning sources, which resulted in interesting findings. For example, researchers initially find performance accomplishments the most effective self-efficacy learning source (Lent et al., 1991; Lopez and Lent, 1992; Luzzo et al., 1999), as

suggested in self-efficacy theory (Bandura, 1977). Further studies explored this concept and discovered that a combination of learning sources impacted self-efficacy, rather than simply performance accomplishments alone (Anderson and Betz, 2001) and that the learning sources for men and women may differ (Lopez et al., 1997; Usher and Pajares, 2006). For example, studies find that performance accomplishments are less prevalent for women than men (e.g., Zeldin and Pajares, 2000; Bellemans and Devos, 2023). Women also report stronger social persuasion influences than their male counterparts (e.g., Lopez et al., 1997; Anderson & Betz, 2001; Usher, and Pajares, 2006, Beatson, 2024).

Zeldin and Pajares (2000) conducted a qualitative study and find that vicarious experiences and social persuasion are the most influential self-efficacy learning sources for senior women working in STEM. This finding is very interesting, particularly as a further study in 2008 by Zeldin et al. with senior men in STEM, find performance accomplishments the most effective learning source for this sample (in accordance with self-efficacy theory). This presents differences in the learning sources that influence self-efficacy for men compared to women within STEM careers. The authors question whether this may apply for male dominated career areas in general, but further research would be required to establish whether this is the case (Zeldin et al., 2008). Few studies have investigated whether women in other career domains, experience differences in the learning sources that influence self-efficacy, to that postulated in self-efficacy theory by Bandura (1977). In Beatson's (2024) working paper, she claims that no studies have researched the self-efficacy learning sources in accounting. Exploring the learning sources that influence the self-efficacy of female accountants provides a better understanding of how their self-efficacy develops and is influenced. This will assist researchers in the future, who wish to design interventions to improve the self-efficacy of women (Fitzgerald and Crites, 1980; Betz and Hackett, 1981; Lent and Hackett, 1987; Betz and Schifano, 2000), in an accounting context.

By focussing on self-efficacy this study does not dismiss or ignore the various challenges, such as gender inequality or a culture of overwork, which may impact female career development (e.g., Cohen et al., 2020; Ely and Padavic, 2020; Padavic et al., 2020; Hardies et al., 2021; PwC, 2024). Instead, it is hoped that the findings from this study will complement and support other endeavours to improve the representation of women in senior positions in accounting.



### **Section 3 Research design**

Interpretive researchers seek to understand the world as it is subjectively, striving to understand rather than measure, therefore appropriate when seeking to understand the complicated actions of individuals within their individual contexts (Hasan, 2016). The research questions seek to explore the beliefs and experiences unique to each woman and her work environment, instead of placing an emphasis on the generalisability of findings. As self-efficacy beliefs, learning sources and career development are unique to individuals, one-to-one semi-structured interviews were deemed most appropriate. An interview approach will contribute to female accounting research, which tends not to use personal narratives to portray women's personal perceptions and experiences (Wallace, 2009). Further details of the research design are provided in Paper 2. In the sub-sections that follow, attention is given to the selection of participants and key areas of the research design.

#### **3.1 Participant selection**

Siboni et al. (2016) call for qualitative research of women working in accounting across various types of organisations. Participants in this study are later career stage female accountants, working in industry. Women working in industry in accounting, experience more barriers to progression (Cohen et al., 2020) and are similarly underrepresented at senior levels (Gammie and Whiting, 2013), as women working in practice. Namely, it seems that industry presents challenges for women's career progression in accounting. Yet, research focuses less on women working in industry in accounting. Due to a lack of research a clear perspective does not exist of the experiences of female accountants in industry, thus, justifying further exploration in this study.

Women's careers develop in age-related phases which include early career (aged 24-35), mid-career (aged 36-45) and later career (aged 46-60)<sup>2</sup> stages (O'Neil and Bilimoria, 2005). Arnold and Clarke (2016) suggest that career progression occurs more significantly up to the age of 45. Therefore, it is beneficial to study participants who are likely to have had the opportunity to progress as well as having the essential experience to progress. Women in the later career stage category (46+) are likely to possess the experience to furnish insights as to how self-

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<sup>2</sup> The study utilises this age categorisation with respect to later career stage, without imposing the upper age limit. The direction in Ireland is to extend the age of retirement/facilitate individuals to work longer.

efficacy impacts career development and the self-efficacy learning sources which impact their self-efficacy beliefs. Studying women at this career stage will contribute to knowledge, as little research focuses on women at later career stage. These participants possess significant work experience, spanning early, mid, and later career stages. Their lived career experiences can provide learnings to assist women in accounting at all career stages. The learnings informed by these participants can help inform practice to make changes to improve the working lives of women in accounting careers.

### **3.2 Data analysis**

Thematic analysis was adopted when analysing the data (Braun and Clarke, 2006). This requires exploring the dataset to seek repeated patterns of explanation. Braun and Clarke (2006) speak about how important writing is as an ongoing process from the beginning of data analysis. Data analysis was primarily a manual process, rather than being automated or mechanical. NVivo was employed initially for coding the data. As data analysis progressed, the researcher felt the need to move out of NVivo to elevate the analysis through manual coding. In other words, NVivo was supported through a labour-intensive in-depth process. The data analysis process undertaken was mapped to Braun and Clarke's (2006) six phases and description of thematic analysis, as demonstrated in Paper 4, Table 3. Once themes were developed, they were compared against the original dataset, to ensure that findings made sense relative to the original data collected (Lincoln and Guba, 1985).

### **3.3 Ethics**

In advance of data collection, an ethical assessment of the study was conducted to ensure that ethics continued to be considered throughout the study (Sin, 2005; Crowe and Sheppard, 2012). Prior to collecting data, ethical approval for the study was sought and received from South East Technological University (SETU) Business School. The consent form addressed various matters with participants such as participant anonymity, permission to record interviews and participant withdrawal from the study. To ensure that participants understood the general overview of the study (Punch, 1986, as cited in Qu and Dumay, 2011) an information sheet was provided to all participants. Corti et al. (2000) advise that participants must be informed of the purpose of the study, use of the data, anonymity, and their right to renegotiate or withdraw consent during the research process. These matters were addressed in the information sheet and consent form, as well as being explained to participants prior to the commencement

of each interview. A data protection impact assessment was conducted which addressed important matters such as the storage of data, data security, anonymity, data protection pertaining to the transcribing organisations and the professional code of ethics of the researcher. Detailed information on how ethics was addressed within the study is provided in Paper 2, Section 6.

It transpired that the ethical assessment encompassed all potential eventualities. Some participants chose their own pseudonym (they were given the choice of choosing their own or allowing the researcher to select one for them). One participant was not comfortable with being recorded on the day of the interview. Following a discussion with the researcher, the participant agreed to being recording if the researcher self-transcribed her interview (instead of it being professionally transcribed). This demonstrates how consent is not agreed at only one point in a study, but rather may require renegotiation at different stages (Sin, 2005). It also illustrates that within a study, there are different types of consent (Sin, 2005). Transcripts were shared with participants to ensure the accurate interpretation and presentation of their experiences within the research (Zeldin and Pajares, 2000). Upon transcript sharing, six participants adjusted or withdrew small segments of data from the transcriptions, which they felt would potentially identify them (or someone else), or which they simply felt uncomfortable about sharing. This reinforced to the researcher, how important participant checking is, from an ethical perspective. It provides participants another chance to consider and agree the personal data that they are willing to contribute to the study. This process of participant checking highlights how consent is not simply dealt with in the consent form, but becomes an ongoing process before, during and after the data collection (Sin, 2005).

### **3.4 Trustworthiness**

Lincoln and Guba (1985) explain the importance of trustworthiness, when presenting individuals' personal experiences within their individual contexts. The authors offer criteria to demonstrate trustworthiness as encompassing; credibility; confirmability; dependability and transferability. Various measures were undertaken to improve the trustworthiness of the study which are presented in Paper 2, Section 8 and mapped to the criteria provided by Lincoln and Guba (1985). These measures include debriefing with supervisors to ensure attention is given to alternative interpretations emerging from the data, maintaining and utilising a reflexive journal, conducting and documenting the detailed data analysis process, seeking peer reviews

(e.g., presenting findings at the IAFA Doctoral Colloquium 2022 and 2023, IAM conference 2023, EAA congress 2024 and being mentored as part of the EAA PhD Forum 2023), supporting findings with participant quotes, comparing findings and themes to the original dataset for sense checking and enabling participant checking of transcripts.

## **Section 4 Contribution**

This study contributes to the literature on self-efficacy and gender in the accounting career domain. Little research currently exists about self-efficacy in an accounting career context (Burnett et al., 2010; Byrne et al., 2014; Beatson, 2020). This study provides a framework, which is presented in the discussion paper (figure 1) which demonstrates the influence of self-efficacy on female accountants' career development. Aspects of this framework extend self-efficacy knowledge in the context of female accountants working in industry in Ireland. Literature points out that little is known about female accountants' career progression outside practice (Jeacle, 2011). Due to a paucity of research, insufficient knowledge exists of the experiences of female accountants in industry.

### **4.1 Contribution to knowledge**

Buse et al. (2013) calls for research in male-dominated professions to explore how factors such as self-efficacy are developed by individuals. In exploring the learning sources that impact individuals' self-efficacy various concepts emerge which contribute to existing knowledge. Such contributions include the significance of physiological factors on participants' self-efficacy, excluding women from networking appears to reduce the organisational support provided to women and the link between women feeling undervalued within their work environments and the lesser prominence of performance accomplishments as a learning source. As this is the first study to explore the learning sources in an accounting career context, it contributes to self-efficacy theory with an understanding of the learning sources which impact women's self-efficacy in their accounting careers. Literature has not previously explained how individuals overcome self-doubt, by drawing on the self-efficacy learning sources. Nor has literature explained how individuals' agentic action creates learning source experiences which then positively impact participants' self-efficacy.

## 4.2 Contribution to practice

This study contributes from a practical perspective by demonstrating how self-efficacy influences women's career development in accounting as follows: high self-efficacy is required for career progression; the role of the learning sources in overcoming self-doubt; agentic action directly impacts career development and the interaction of agency and the self-efficacy learning sources. Highlighting these concepts raises awareness of the importance of self-efficacy within career development. This study draws attention to where participants experience fewer learning source opportunities to impact their self-efficacy beliefs. As women they feel undervalued, they perceive a lack of organisational support, they feel excluded from organisational networks and have less female role models available. Highlighting where participants experience less learning source opportunities, provides awareness and an understanding for improving such learning source opportunities for women. Little research exists on evolving self-efficacy and no study has explored this concept in an accounting context. This study finds that self-efficacy generally evolves over time for women. This can assist organisations, professional accounting bodies and other bodies that seek to develop female accountants within their careers. Understanding that high self-efficacy is required for career progression and the evolving characteristic of self-efficacy can assist in providing the required supports to improve women's self-efficacy, particularly at the career stages where they may be needed most.

## Section 5 Structure of thesis

To portray how this DBA thesis is structured, Table 1 sets out the four sections which largely make up the thesis and indicates the various chapters, papers, and timelines applicable to each of these four sections.

**Table 1: Structure and timelines of DBA thesis**

<b>Thesis sections</b>	<b>Subsections (if applicable)</b>	<b>Timelines</b>
Section 1: Introduction and DBA research overview		Nov 23 - September 24
Section 2: Research paper series	Paper 1: Conceptual paper	May 21 - Jan 22
	Paper 2 Methodology and research design	Nov 21 – Nov 22
	Paper 3: Design implementation	Oct 22 – May 23
	Paper 4: Findings	Apr 23 – Dec 23
Section 3: Discussion, conclusions, and recommendations		Sep 23 – May 24
Section 4: Reflective log extracts		Jan 20 – May 24

Table 1 displays the structure of this thesis into four sections. The DBA process ensures that all four of the Research Paper Series (Section 2) are completed and presented to examiners prior to completing Section 3, Section 1, and Section 4. The timelines pertaining to each section demonstrate the order in which these sections were undertaken. These timelines do not include the semesters spent studying lecture notes, reviewing literature, attending DBA workshops, and preparing in advance of commencing the research paper series.

Section 1 (this chapter) has introduced the study in the context of relevant theory and literature. It has introduced the research design and outlined the issues of ethics and trustworthiness and presented the contribution of the study. The research paper series is contained in Section 2 (which follows this chapter). Paper 1 (conceptual paper) conducts a literature review and introduces self-efficacy and the self-efficacy learning sources. It explains why this study is required and presents the conceptual framework. Paper 2 (methodology and research design) outlines and justifies the research design and interview guide. Paper 3 (design implementation) presents the design operationalisation for the pilot interviews and initial six participant interviews. Paper 4 presents the findings for this study and a framework is presented to demonstrate the relationships which evolved from the findings. Prefaces are included before each paper in Section 2 and again before Section 3, to demonstrate adjustments to the study in the periods between each paper/chapter. These prefaces serve to better unite each paper, with that, which preceded it.

Section 3 presents the discussion, conclusions, and recommendations chapter. This chapter discusses the findings in detail, in the context of the literature and presents implications, limitations, recommendations for future research and discusses the contributions to both theory and practice. Section 4 presents excerpts from the reflective log of the researcher, which commenced after enrolment onto the DBA programme and will be maintained until after the Viva Voce is completed. The reflective log extracts attempt to portray the professional and personal development of the researcher in undertaking this DBA research journey.

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## **SECTION TWO**

### **Research Paper Series**

## **Preface to Paper 1 – Conceptual Paper**

This conceptual paper (Paper 1) commenced in May 2021 for presentation to the examiners in November 2021. The researcher found the conceptual framework a particularly difficult part of this study as briefly explained below:

- Struggle to develop conceptual framework: The DBA module “Research Ideas” from Workshop 3 (Research Design) in March 2021 equipped the researcher well for the preparation of this paper. Substantial challenge was provided by the lecturers during and after this module and subsequently by the supervisors, to really think comprehensively about the conceptual framework. The researcher struggled with this aspect of the study but took the excellent advice from her supervisors, to start with the literature review and allow the conceptual framework to evolve with time. This approach really helped as gradually the objective and research questions were developed and guided by the literature review. Also, the initial conceptual framework emerged from the literature and the researcher’s thinking at the time on the topic (in advance of data collection).

The examiners recommended only minor adjustments, but these adjustments, together with their comments, following the presentation, were very helpful in guiding this research study. The paper presented here reflects the feedback and subsequent revisions, following that examination in November 2021. One such recommendation from the examiners was to explore the representation of women in senior positions in other professions, such as law and architecture, relative to their membership, to better understand if the underrepresentation of women is specific to the accounting domain, or a wider issue. The researcher found this very insightful and explored the representation of female barristers, architects, and accountants (representing non-traditional female careers) and teaching (representing traditional female careers). The percentages of women in senior positions in teaching was far higher than those in the other three career domains. This representation at senior level was then considered relative to female membership, within each career domain. Across both traditional and non-traditional career domains, women were far less represented in senior roles, relative to their membership in that career domain. This finding is supported in the literature which finds that women globally in the workplace are underrepresented in senior roles.



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Date: 10/01/2022

## **RESEARCH PAPER SERIES**

### **Paper 1: CONCEPTUAL PAPER**

#### **“Why are female accountants underrepresented in senior positions?; The influence of self-efficacy”**

##### **Abstract**

Literature presents the benefits of greater female representation at senior levels. Such benefits include higher company profits, improved organisational operations and enhanced ethical outcomes. Females and males have entered the accounting profession in equal numbers for over three decades (Cohen et al., 2020), yet female accountants occupy only 17 percent of partnership roles within Europe (Catalyst, 2020). Despite years of equality legislation, commitment to diversity and the implementation of various organisational measures, female accountants remain underrepresented at a senior level. Literature suggests that self-efficacy, which is self-belief regarding one’s ability to carry out a task, largely contributes to this underrepresentation. Females frequently demonstrate lower self-efficacy than men (Hackett and Betz, 1981; Quinn, 2012), which can result in the failure to reach career potential (Hackett and Betz, 1981; Bandura 1988; Quinn 2012; Athanasopoulou et al., 2018). Even when females are more qualified and possess greater career experience than men, they are frequently paid lower salaries and are less represented at senior levels (Dreher and Ashe, 1990; Block and Tietjen-Smith, 2016). This study examines the underrepresentation of female accountants in senior roles, through the lens of self-efficacy. As self-efficacy plays an important role in career development, it is imperative to understand how self-efficacy beliefs are formed (Tschannen-Moran and McMaster, 2009). These are the self-efficacy learning sources. The objective of this study is to identify the learning sources and influence of self-efficacy on the career development of female accountants. This knowledge can assist female accountants and organisations to improve self-efficacy, ultimately increase the representation of female accountants at senior levels and assist in closing the gender gap that exists at this level.

Paper word count: 7768

## **Ethical Declaration**

I declare that this proposal is wholly my own work except where I have made explicit reference to the work of others. I have read the relevant notes, DBA Handbook and procedures on conducting academic writing and research and hereby declare that this proposal is in line with these requirements. I have uploaded the entire proposal as one file to Turnitin on Moodle, examined my 'Originality Report' by viewing the detail panel listing of percentages behind the overall 'Similarity Index', and have addressed any matches that exceed 3 percent. I have made every effort to minimise my overall 'Similarity Index' score and the number of matches occurring.

Name: Michelle Gleeson

Date: 10 January 2022

## **Section 1 Introduction**

According to the World Economic Forum's Global Gender Gap Report (2021), females in the workplace occupy 27 percent of managerial positions and it is expected this percentage may deteriorate further as the full impact of the Covid 19 pandemic is realised. Men and women generally enter the workplace at equal levels, yet after a few years the careers of women lag behind those of men (Blake-Beard, 2001). This pattern is reflected in the accounting arena, where in 2020 half the managers in CPA (Certified Public Accountant) firms in the US were women, but they represented only 29 percent of partners and principals (Accounting MOVE Project, 2020). While some fields may ascribe the poor representation of females at senior levels, to the relatively recent entrance of females within the field, this is not the case within accounting. Females have been entering the profession in equal numbers for over 3 decades (Cohen et al., 2020). Therefore, how can the underrepresentation of females at senior levels in accounting be explained?

Research identifies the benefits of increasing female representation at senior levels such as increased company profits (Noland et al., 2016; Han and Noland, 2020). Ethics is of the utmost importance following worldwide significant fallout from various unethical behaviours and women bring different ethical standards and viewpoints for resolving ethical problems. Therefore, a combination of males and females ensure the most satisfactory ethical results for organisations (Dawson, 1995). Studies show that females are highly educated and qualify with more undergraduate and master's degrees than men (PwC, 2014). Organisations place increased value on soft skills, such as decision making and collaboration, which women are more likely to possess (Rosener, 1990; Kray and Kennedy, 2017). The most successful organisational operations result from diversity (Ellemers, 2014; Hannum et al., 2015). According to the 2020 Women in the Workplace, McKinsey and Company report, women are more likely to support employee-friendly policies and promote diversity, which develops more women moving up the ranks and can contribute towards closing the gender gap (Han and Noland, 2020). If firms recruit from only half the available talent pool, they will be disadvantaged against competitors (Han and Noland, 2020).

One of the main factors arising from the literature is the lack of self-efficacy (self-belief in their ability to carry out a task) females possess with respect to their careers. Bandura (1988) discusses individuals restricting their career options, believing themselves incapable, even

when this is not true. Women are especially vulnerable to this phenomenon (Anderson-Gough et al., 2005; Quinn, 2012). The KPMG Women's Leadership Study (2015) of college and professional women find over 60 percent aspire towards senior roles, but more than half were hesitant due to lack of self-belief. Athanasopoulou et al. (2018) studied male and female CEOs around the globe and find that females with high potential frequently have low self-belief and do not promote themselves, concentrating on what they lack, rather than what they possess. Holton and Dent (2016) find the requirement to build women's self-beliefs and confidence, as the most important factor within career development. Low self-efficacy beliefs play a role in explaining the low numbers of females occupying senior positions and women not reaching their full capabilities within their careers (Hackett and Betz, 1981). Yet there is little known about the overall influence of self-efficacy in the underrepresentation of female accountants at a senior level.

This paper proceeds by examining previous literature pertaining to the career development of females, which introduces the various factors that impact upon their careers. These organisational and personal factors and the interacting relationships between them are presented and explained in Section 2. Self-efficacy emerges as a personal factor which plays a significant role in career development. Section 3 introduces and explains self-efficacy theory, presents empirical findings pertaining to female careers, briefly presents other theories considered and describes the research gaps identified. Having identified the significance of self-efficacy pertaining to the career development of females, Section 4 presents and explains the conceptual framework and research questions of this study. Finally, Section 5 provides the conclusion.

## **Section 2 Female career development**

A gender gap persists worldwide in senior positions, despite decades of initiatives and endeavours to remedy this. Studies find that males and females generally enter the workplace at an equivalent level, but after a few years the careers of males outpace those of females (Blake-Beard, 2001). Even when women have more experience and qualifications than men, they are paid less and occupy fewer senior positions (Dreher and Ashe, 1990; Block and Tietjen-Smith, 2016). Catalyst (2020) reports that in the EU in 2020 women represent 50 percent of the workforce but within large publicly quoted companies account for 19 percent of executives and eight percent of CEOs. Many organisations find too few females available when

senior level vacancies arise (Flood, 2005). Research pertaining to the career development of females is presented in **Appendix 1**.

Accounting was a male dominant profession for many years. Jeacle (2011) states that The London Association of Accountants (LAA), the body which later developed into ACCA (Association of Chartered Certified Accountants), admitted the first female member in 1909 and the other accounting bodies followed suit from 1918 onwards. Numbers of females in accounting rose significantly from the 1970s (Broadbent and Kirkham, 2008). Across the accounting bodies in Ireland and the UK, women account for 37 percent of total membership and 49 percent of students in 2020 (FRC, 2021). Across Europe females occupy 17 percent of partnership positions (Catalyst, 2020). The Big Four accounting firms strongly promote diversity within their organisations, yet this has not resulted in parity at partnership level. This is worrying considering equal numbers of males and females have been entering the profession for over 3 decades (Cohen et al., 2020). Research contributing findings pertinent to the career development of female accountants is presented in **Appendix 2**.

Career development is discussed throughout this paper. Super (1990) describes career development as career preparation, career choices, commencing work and adapting to work situations throughout the career life span. This is a sufficiently broad interpretation to include all possible occurrences within a career such as progression/lack of, leaves of absence, career breaks, career moves/changes and achievements/lack thereof.

## **2.1 Explanations for the underrepresentation of females at senior levels**

Various reasons accounting for the underrepresentation of females at senior levels have been presented from a practitioner perspective, including lack of ambition (Fulton et al., 2006), choosing family over career (Ely et al., 2014; Flynn et al., 2015; Tinsley and Ely, 2018) and lack of ability/appropriate qualities (Adapa et al., 2016), among others. Many studies have challenged these explanations. Women are equally ambitious to men (Barker and Monks, 1998; Ely et al., 2014). The vast majority of women do not choose family over career, as they return/intend to return to work after having families (Hewlett and Luce, 2005) and those with children actually have higher ambition for progression into partnership roles in accounting firms, than those without (Jones and Iyer, 2020). Women possess the qualities and

characteristics required for senior roles equally to men (Davidson and Dalby, 1993; Hyde, 2005).

Within the accounting domain the generally presented explanation for the underrepresentation of females at senior levels, is that females choose family over careers. Anderson et al. (1994) find that once female auditors have children, they are considered less likely for progression by their employers, but this is not the case once male auditors have children. Barker and Monks (1998) demonstrate that both males and females desire a greater work-life balance. According to the American Institute of Certified Public Accountants (AICPA) in 2019, flexible work arrangements are used by 94 percent of accounting firms. Unfortunately, flexible working arrangements may further hinder career advancement. Both males and females believe that partaking in flexible arrangements will adversely impact their career advancement, as many organisations consider individuals only on a linear career path (McKeen and Bujaki, 1998; Whiting, 2008; Anderson, 2020). This results in reinforcing gender inequality (Acker, 1990; Kornberger et al., 2010; Rubery et al., 2016). Fritz and Knippenberg (2018) confirm that work life supports reduce work-life conflicts for individuals and find that such initiatives within organisations improve career aspirations for both males and females but particularly for females. New accounting employees believe that flexible work arrangements are valued by both men and women (Anderson, 2020). This presents an opportunity for organisations to utilise and change the culture associated with such arrangements, to attract and retain talent, so that users are not hindered within their career progression (McKeen and Bujaki, 1998; Johnson et al., 2008; Gammie and Whiting, 2013; Edgley et al., 2016).

If women are ambitious, do not chose family over work and possess the qualities required for senior roles, why are they still underrepresented at senior levels? Literature presents a myriad of factors which impact (either positively or negatively) upon female career development. These factors, categorised as organisational or personal factors, are presented in **Table 1**. Organisational factors include organisational barriers and organisational supports. Personal factors include personal barriers, career aspirations and self-efficacy.

**Table 1: Personal and organisational factors presented in female career literature**

<b>Organisational factors</b>	
<b>Organisational barriers:</b>	
Lack of flexible work arrangements	(Barker and Monks, 1998; McKeen and Bujaki, 1998; Whiting, 2008; Kornberger et al., 2010; Flynn et al., 2015; Anderson, 2020; Padavic 2020)
Lack of networks	(Barker and Monks, 1998; McKeen and Bujaki, 1998; Linehan and Scullion, 2008; Hewlett, 2013; Holton and Dent, 2016; Cohen et al., 2020)
Lack of role-defining assignments	(Brody et al., 2016; Cohen et al., 2020)
Lack of mentoring/sponsorship	(Linehan and Scullion, 2008; Hewlett, 2013; Holton and Dent, 2016; Cohen et al., 2020)
Long working hours	(Barker and Monks, 1998; Gammie and Whiting, 2013; Whiting et al., 2015; Padavic et al., 2020)
Lack of senior male support	(Cohen et al., 2020)
Work-life conflict	(Swanson et al., 1996; Luzzo and Hutcherson, 1996; Linehan and Scullion, 2008; Gino et al., 2015; Adapa et al., 2016; Jones and Iyer, 2020; Padavic et al., 2020)
Bias against female progression	(Dambrin and Lambert, 2012; Millar, 2013, Gammie and Whiting, 2013; Flynn et al., 2015; Adapa et al., 2016; Holton and Dent, 2016; Cohen et al., 2020; )
<b>Organisational supports:</b>	
Flexible work arrangements/work-life balance	(Whiting et al., 2015; Fritz and Knippenberg, 2018; Vidwans and Plessis 2019; 2020; Jones and Iyer, 2020)
Mentoring/sponsorship/networking	(Lent et al, 2000; Holton and Dent, 2016; Jones and Iyer, 2020)
Access to role models	(Lent et al, 2000; Holton and Dent, 2016; Vidwans and Plessis 2019; 2020)
Supportive organisational culture	(Dukstein and O'Brien, 1995; Baron and Morin, 2010; Whiting et al., 2015; Adapa et al, 2016; Holton and Dent, 2016; Fritz and Knippenberg, 2018; Tinsley and Ely, 2018; Vidwans and Plessis 2019; 2020)
Support systems	(Lent et al, 2000; Holton and Dent, 2016)
Transparent practices	(Adapa et al, 2016; Holton and Dent, 2016)
<b>Personal factors</b>	
<b>Personal barriers:</b>	
Gender conditioning	(Hackett and Betz, 1981; Matsui et al., 1989; Dambrin and Lambert, 2012; Padavic et al., 2020)
Lack of agentic control	(Hakim, 2000; Mainiero and Sullivan, 2005; Holton and Dent, 2016; Vidwans and Plessis 2019; 2020, Vidwans and Cohen, 2020)
Undervaluation of achievements	(Jost, 1997; KPMG Women's Leadership Study, 2015)
<b>Career aspirations</b>	(Lent et al., 1986; Barker and Monks, 1998; Nauta et al., 1998; Ely et al., 2014; Tinsley and Ely, 2018; Fritz and Knippenberg, 2018; Jones and Iyer, 2020, Hartman and Barber, 2020)
<b>Self-efficacy</b>	(Hackett and Betz, 1981; Barker and Monks, 1998; Sullivan and Mahalik, 2000; Zeldin and Pajares, 2000; Zeldin et al., 2008; Gino et al., 2015; Holton and Dent, 2016; Athanasopoulou et al., 2018)

## 2.2 Organisational factors

Literature has focussed considerably on the influence of organisational factors, which largely constitute the organisational policies, culture, operations, measures, and expectations impacting upon female career development. These factors can impact career development either positively or negatively. Organisational barriers are the impediments to female career

development and organisational supports are the enabling factors which facilitate female career development.

### **2.2.1 Organisational barriers**

Farmer (1985) finds that female career development suffers greater role conflict than that of males. The existence of organisational barriers can reduce female aspirations (Adapa et al., 2016). Swanson et al. (1996) find that women score higher in gender discrimination, lack of self-belief and work-family conflict. Many studies discuss gender organisational bias benefitting men and not women, or where women are judged differently to males (Holton and Dent, 2016). These practices may exclude women from pertinent decision-making networks and result in females being mentored, while males are sponsored, the difference being, that mentors provide career support, but sponsors have the ability to influence and impact upon career development (Hewlett, 2013). Padavic et al. (2020) suggest that organisations' differing treatment of women to men, has a largely negative impact upon female's careers.

Consistent overwork within organisations is the real problem for female career development, which organisations refuse to acknowledge (Padavic et al., 2020). This issue of overwork also arises in accounting literature. Barker and Monks (1998) present the greatest challenge to progress, experienced by male and female accountants, as the long hours required for the role and that almost 75 percent of men and women express a preference for an improved work-life balance. Women believe the career barriers they face are excessive hours, lack of family supportive policies and lack of access to networks.

Hewlett and Luce (2005) argue against the explanation that mothers choose family over careers, as they find the average leave from careers taken is slightly more than two years, which is too short to negatively impact career development. Female CEOs agree that a few years leave from a career is insignificant and accounts for such a short period within a lifelong career (Athanasopoulou et al., 2018). Padavic et al. (2020) find that females' careers are not hindered by having families but rather by organisational practices which encourage mothers to adapt their careers to accommodate, in the form of part-time work or non-career progressing roles. Flexible work arrangements are used by 94 percent of accounting firms (AICPA, 2019). Despite the findings that a greater work-life balance is sought by both male and female



accountants (Barker and Monks, 1998) and 97 percent of millennials (PwC, 2014) and flexible work arrangements preferred by both male and female accounting recruits (Anderson, 2020), flexible working arrangements may further hinder career advancement. Both males and females perceive that taking up such arrangements, will impede career advancement, as many organisations assess individuals only on a linear career path (McKeen and Bujaki, 1998; Whiting, 2008; Anderson, 2020). This contributes further to gender inequality (Acker, 1990; Kornberger et al., 2010; Rubery et al., 2016). Barker and Monks (1998) warn that introducing family supportive policies is insufficient, as such policies must be socially and professionally supported also.

Females in accounting firms appear reluctant to blame their firms for gender bias yet studies portray the existence of such organisational bias (Millar, 2013; Flynn et al., 2015). Flynn et al. (2015) postulate that organisations attribute limited female progression to choosing family over career, but assert that this is an organisational barrier, which contributes to the glass ceiling (Gammie and Gammie, 1997; Bettio and Verashchagna, 2009). Women advance in Irish accounting firms if they comply with patriarchal organisational cultures but are completely discounted from career advancement when they have children (Flynn et al., 2015). Yet the expectations of accounting students are that women should have equal progression opportunities, equal access to career enhancing assignments and equal remuneration to men (Brody et al., 2016).

In 2020, Cohen et al. researched glass ceiling perceptions held by female accountants and find that women believe they encounter a bias against female progression, a lack of support from male senior leaders for career development and structural barriers (lack of mentoring, lack of promotion-defining job assignments and lack of networking opportunities). Women in industry perceived greater barriers to advancement than women in practice (49 percent compared to 28 percent). This 2020 study contributes to theory regarding the careers of female accountants outside practice, for which a paucity of research exists. Gammie and Whiting (2013) find that women who left practice for other accounting roles, show similarly low representation at the most senior levels, despite working for 10-15 years. This is a particularly interesting study as very little research exists on female accountants working in non-practice roles and portrays that female accountants are similarly underrepresented at senior levels both in practice and non-practice.

### **2.2.2 Organisational supports**

Research by Lent et al. (2000) hypothesised that supports, rather than barriers, may be a greater influence on career outcomes. The relevance of organisational supports is reinforced by Tinsley and Ely (2018), who find the ability to develop and grow in the workplace, depends on opportunities and organisational care. Fritz and Knippenberg (2018), assert that work-life arrangements have a positive effect on aspirations regarding leadership, particularly for females. A supportive environment for females can enable them to achieve a successful career (Vidwans and Plessis 2019; 2020). A 2017 AICPA study of American CPA firms finds that organisations who implemented various programmes (mentorship, sponsorship, gender initiatives and diversity inclusion), find them significantly successful within their organisations. However, this study finds the implementation of initiatives is very low amongst organisations.

Adapa et al. (2016) find that female accountants in Australia working in small sized accounting firms, feel engaged, supported, and encouraged to aspire to senior roles and encounter less role conflict and organisational barriers, than females in medium sized firms. Whiting et al. (2015) states that smaller firms can be more supportive to ambitious mothers in striking a work-life balance. This supportive environment towards females within small firms may explain why AICPA (2019) finds over three times the percentage of female partners in small firms of 10 or less qualified accountants, than in large firms of over 100 qualified accountants.

## **2.3 Personal factors**

Literature has identified various personal factors which can represent barriers to career development or support female career development. Literature has focussed less on the influence of personal factors in the context of female accountants' career development. In this section, the personal factors which include, personal barriers, career aspirations and self-efficacy, will be discussed.

### **2.3.1 Personal barriers**

Gender role socialisation beliefs can result in lower self-efficacy and subsequently less than potential career outcomes (Hackett and Betz, 1981). Vidwans and Cohen (2020) find that

females taking an agentic approach (agency is an assumption in self-efficacy theory) within their careers, can manage obstacles encountered (Holton and Dent, 2016) and reduce the impact of gender role socialisation beliefs (Hakim 2000). A survey in 2013 of over 6,500 Harvard Business School graduates reports 73 percent of men and 85 percent of women explain the lack of female career progression to senior levels, by females prioritising families over careers (Ely et al., 2014). Padavic et al. (2020) asserts that social conditioning causes women to attribute the lack of females at senior levels to work-family conflict. Improving self-efficacy (self-beliefs) can impact positively on restrictive gender role socialisation beliefs within career development (Matsui et al., 1989).

A study on female accountants in New Zealand finds that, while women juggled multiple life roles, they find it possible to enjoy a successful career while maintaining other commitments, through careful career crafting (an agentic approach to manage careers within constraints) and that self-efficacy plays a crucial role in this process (Vidwans and Plessis 2019; 2020). This supports prior findings by Mainiero and Sullivan (2005) that women disregard the idea of linear career progression and instead self-craft their careers in an agentic manner, to combine the various aspects of their lives, so that their career successfully operates within their integrated personalised life path.

The KPMG Women's Leadership Study (2015) find over 60 percent of women aspire to senior roles, but more than half were hesitant due to lack of confidence and only one third of women surveyed recognised and acknowledged their achievements, which supports the findings of Jost (1997) that women undervalue their contributions by 18 percent relative to males, despite identical work.

### **2.3.2 Career aspirations**

While Ely et al. (2014) find that male and female aspirations were the same at college stage, a study by Jones and Iyer (2020) presents the aspirations of female accountants being far lower than those of male accountants (24 percent of females compared to 46 percent of males) for attaining partner level. Females with children actually have higher ambition for progression into partnership roles in accounting firms, than those without. Employees who experience work-family conflict and who avail of flexible work arrangements are less likely to aspire

towards partnership roles. Females who are supported to manage work-life conflicts, have higher career aspirations (Dukstein and O'Brien, 1995; Fritz and Knippenberg, 2018). The KPMG Women's Leadership Study (2015) finds over 60 percent of females aspire to senior positions, but more than half were reluctant due to lack of self-belief.

### **2.3.3 Self-efficacy**

Athanasopoulou et al. (2018) find that females with high potential frequently have low self-beliefs (self-efficacy), do not promote themselves, concentrating on what they lack, rather than what they possess. The requirement to build women's self-beliefs (self-efficacy) and confidence is imperative for career development (Holton and Dent, 2016; Athanasopoulou et al., 2018). Gino et al. (2015) find that women believe greater negative outcomes (such as conflict) are associated with career progression than men. Kim et al. (2020) find that women with high self-efficacy work far harder, expecting this will result in career progression, whereas men put their effort into strategic career development. This clearly shows that training for career development is required for females. The KPMG Women's Leadership Study (2015) find over 60 percent of women aspire to senior roles, but more than half were hesitant due to lack of confidence.

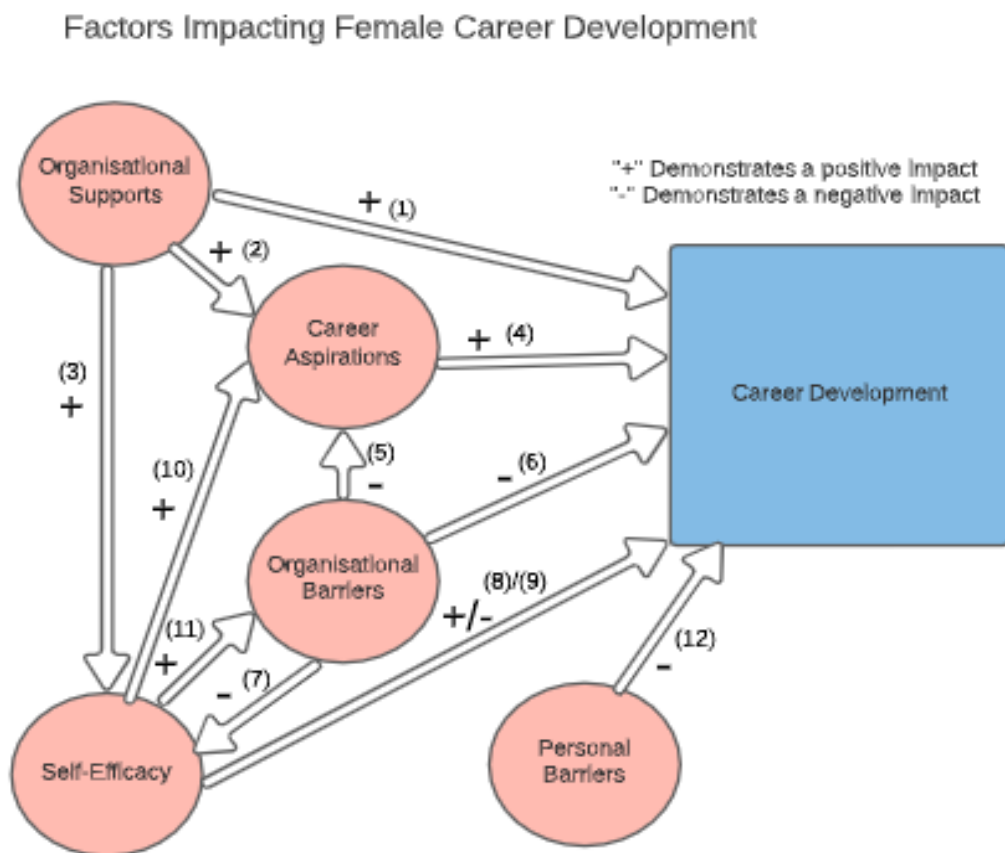
This lack of self-efficacy demonstrated by females is further presented within accounting career literature. Women are found to lack self-belief within their career and what they have to offer (Barker and Monks, 1998). Tinsley and Ely (2018), describe investigating a Big Four accounting firm to explain the low numbers of females reaching partnership. This firm believed women chose family over partnership roles. The investigation finds women equally aspirational towards partnership as men but apprehensive about being held to a higher account than men, should they not prove successful. Women are therefore reluctant to promote themselves due to possible career repercussions, if they fail to succeed.

### **2.4 Summary of the career development factors arising in the literature**

While self-efficacy is an important factor in the literature on female career development, it also interacts with other factors arising in literature. Organisational supports impact positively on self-efficacy (Lent et al., 2003; Baron and Morin, 2010). Self-efficacy positively impacts upon career aspirations (Nauta et al., 1998). Self-efficacy can mitigate organisational barriers that

may exist (Bandura, 1977; Hackett and Betz, 1981; Lent et al., 2000), while organisational barriers can impact negatively on self-efficacy (Lent et al., 2003). These interconnecting relationships highlight the significant influence of self-efficacy on the career development of females. Therefore, the influence of self-efficacy must be considered when exploring the underrepresentation of female accountants in senior positions. The relationships between the various career factors associated with female career development that arose in the literature are presented in **Figure 1**.

**Figure 1: Representation of the factors impacting the career development of females**



Source: Author

The relationships that have been presented in **Figure 1** between the various factors within female career development are summarised in **Table 2**.

**Table 2: Relationships between the various factors within female career development**

Relationship between the various factors within female career development demonstrated in <b>Figure 1:</b>		
(1)	Organisational supports impact positively on career development	(Lent et al., 2000; Whiting et al., 2015; Adapa et al., 2016; Tinsley and Ely, 2018; Vidwans and Plessis 2019; 2020)
(2)	Organisational supports impact positively on career aspirations	(Dukstein and O'Brien, 1995; Fritz and Knippenberg, 2018)
(3)	Organisational supports impact positively on self-efficacy	(Lent et al., 2003; Baron and Morin, 2010)
(4)	Career aspirations impact positively on career development	(Buse et al., 2013; Fritz and Knippenberg, 2018; Jones and Iyer, 2020)
(5)	Organisational barriers impact negatively on career aspirations	(Adapa et al., 2016; Jones and Iyer, 2020)
(6)	Organisational barriers impact negatively on career development	(Barker and Monks, 1998; McKeen and Bujaki, 1998; Kornberger et al., 2010; Flynn et al., 2015; Whiting et al., 2015; Cohen et al., 2020; Padavic et al., 2020)
(7)	Organisational barriers impact negatively on self-efficacy	(Lent et al., 2003)
(8)	High self-efficacy impacts positively on career development	(Betz and Hackett, 1981; Athanasopoulou et al., 2018; Sullivan and Mahalik, 2000; Dickerson and Taylor, 2000)
(9)	Low self-efficacy impacts negatively on career development	(Hackett and Betz, 1981)
(10)	Self-efficacy impacts positively upon career aspirations	(Nauta et al., 1998)
(11)	Self-efficacy impacts positively on organisational barriers	(Bandura, 1977; Hackett and Betz, 1981; Lent et al., 2000)
(12)	Personal barriers impact negatively on career development	(Hackett and Betz, 1981; Matsui et al., 1989; Jost, 1997; KPMG, 2015)

This section discussed the organisational and personal factors identified in the literature on female career development; organisational barriers, organisational supports, personal barriers, career aspirations and self-efficacy. Literature provides evidence of various factors that create barriers and hinder female accountants' career development. Organisations are aware of this, and many organisations put supports in place, to assist female accountants overcome such obstacles and enable their career development. Organisational factors in the form of barriers and supports have been extensively researched. Yet the underrepresentation of females at senior levels persists. What is absent, is an understanding of the influence of self-efficacy in the career development of female accountants and the learning sources which form and continually influence these self-efficacy beliefs. Since female accountants remain underrepresented at senior levels, it is crucial to explore this previously less researched area, to obtain a greater understanding of this phenomenon. Further understanding can assist individuals and organisations to take appropriate action to remedy the gender gap that exists at a senior level.

### **Section 3 Self-efficacy theory**

The career paths of females are very different to those of males (Osipow, 1973; Betz and Hackett, 1981; Betz and Fitzgerald, 1987), yet research has not explained or resolved the gender gap that persists at a senior level. Farmer's findings from 1976 ring true, almost half a century later, that women fail to reach their career potential regarding ability, talent, and interests. Research shows that low self-efficacy beliefs with respect to one's career, can be more relevant than ability in restricting career progress (Hackett and Betz, 1981).

#### **3.1 Introduction to self-efficacy theory**

Self-efficacy theory was introduced in 1977 by the esteemed Canadian psychologist Albert Bandura. Self-efficacy is described as an individual's beliefs with regard to their ability, to successfully perform a certain task or behaviour (Bandura, 1977). Every individual possesses self-efficacy beliefs, generally considered at either a high or low level. Self-efficacy theory has been applied in literature to many disciplines such as psychology, health, education and, from 1981, to career development. Together with capability and self-motivation, efficacy expectations are a major determinant of people's choice of activities, amount of effort provided and persistence in dealing with difficult situations. Bandura (1977) presents various assumptions such as, self-efficacy beliefs can be improved through the application of four learning sources contained in self-efficacy theory (these learning sources will be discussed later in this section). Self-efficacy beliefs influence choices e.g., individuals are more likely to partake in tasks/behaviours in which they feel competent and avoid those in which they do not. Self-efficacy beliefs determine the level of effort and persistence provided by individuals. Self-efficacy theory views individuals as agents who control their progress and can achieve outcomes through their behaviours (agentic control arose in career development literature as a personal barrier).

Even when an individual is highly capable, outcomes cannot occur unless the individual believes in their ability to perform the required task/behaviour, ensuring self-efficacy is frequently more relevant to achieving outcomes than ability is (Lent et al., 1987; Hackett and Lent, 1992; Betz et al., 1996; Rigotti et al., 2020). Bandura (1977) argues that improved self-efficacy assists individuals to cope with challenges/barriers that may arise, which is pertinent to female career development where organisational and personal barriers were discussed.

Self-efficacy is not constant over time. Learning experiences continue to impact upon self-efficacy beliefs (Byars and Hackett, 1998). Bandura (1977) identifies four learning sources to improve self-efficacy, which represent the constructs of self-efficacy theory. These learning sources are performance accomplishments, vicarious experiences, social persuasion, and physiological factors. Performance accomplishments are the achievements that individuals attain from succeeding in tasks. Vicarious experiences are witnessing the successful experiences/behaviours of others, particularly those whom an individual can identify readily with. Social persuasion is the encouragement and support received from various sources. Physiological factors are the fears and stressors that may be felt by an individual, resulting in avoidance of a situation (e.g., not applying for a role due to the fear factor, regardless of ability). Self-efficacy learning sources will be discussed further in the context of findings arising from two studies on female and male senior level STEM participants (Zeldin and Pajares, 2000; Zeldin et al., 2008). In these studies, it transpired that the learning sources for senior females within STEM careers differed to those of senior males and differed to that determined in self-efficacy theory (Bandura, 1977). Self-efficacy scholars have called for practical learning interventions to improve the self-efficacy of females (Fitzgerald and Crites, 1980; Betz and Hackett, 1981; Lent and Hackett, 1987; Betz and Schifano, 2000). Prior to the design of such interventions for female accountants, it is necessary to determine the influences that impact upon self-efficacy.

### **3.2 Self-efficacy pertaining to career development**

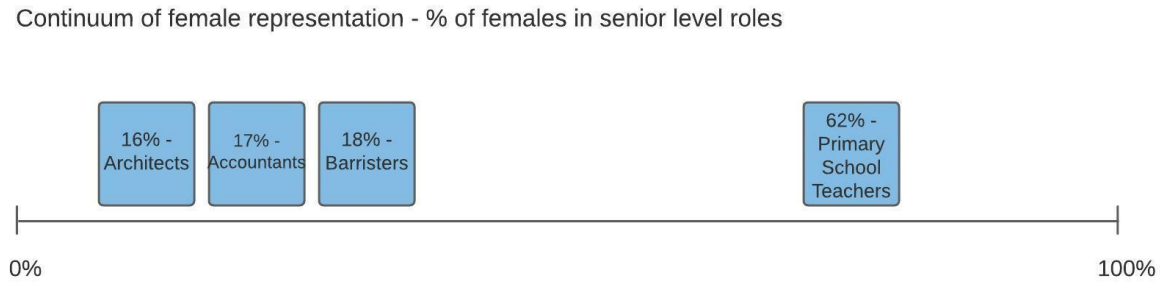
Hackett and Betz (1981) bring the application of self-efficacy theory to the career domain, particularly in the context of women. Their study focussed on self-efficacy in explaining the limitations of career choices for women. Previous studies on careers of females suggest substantial differences between the career development of males and females, which has not been explained by existing theory (Osipow, 1973). Hackett and Betz suggest that self-efficacy may contribute to the restricted career options as well as lower numbers of females in senior roles.

Betz and Hackett (1981) find that female self-efficacy is considerably weaker for non-traditional than traditional female occupations but largely the same for men for both traditional and non-traditional male occupations, despite women and men being equally proficient. For the career domains demonstrated in **Figure 2**, primary teachers fall into the traditional category,



while architects, accountants and barristers fall into the non-traditional category for females (Betz and Hackett, 1981). **Figure 2** presents a continuum demonstrating the percentage of females in senior roles amongst primary teachers (as school principals), architects (as firm principals), accountants (as partners) and barristers (as senior counsel).

**Figure 2: Continuum to represent % of females in senior roles in various career domains**



**Source: Maguire, 2021 (Registration Body for Architects in Ireland), Catalyst, 2020, Bar of Ireland Annual Report 20/21, CSO women and men in Ireland/Education, 2019**

Interestingly this continuum shows a low percentage of females holding senior positions in non-traditional roles and a high percentage of females holding senior positions in traditional roles. However, this must be examined in conjunction with the membership percentage of females in each of these career domains, which are presented in **Table 3**.

**Table 3 - Female membership and occupation of senior roles in various career domains**

	Architects	Accountants	Barristers	Teachers
Females Occupying Positions at Senior level	16%	17%	18%	62%
Female Membership in Career Domain	29%	37%	36%	86%

**Source: Maguire, 2021 (Registration Body for Architects in Ireland), Catalyst, 2020, FRC, 2021, Bar of Ireland Annual Report 20/21, CSO women and men in Ireland/Education, 2019**

**Table 3** demonstrates that females across both traditional and non-traditional career domains are far less represented in senior roles, relative to their membership in each career domain demonstrated. The underrepresentation of females in senior positions is relevant to all of these

career domains, which supports the findings of the World Economic Forum's Global Gender Gap Report (2021), that females in the workplace only hold 27 percent of managerial positions.

Betz and Hackett (1981) explain the importance of increasing female's self-efficacy beliefs, to expand their interests and options and ultimately enable the achievement of success, satisfaction in their careers and assist them to deal with challenges that may arise. This suggests the impact self-efficacy may have on an individual's career outcomes, job satisfaction and ability to cope with difficulties that may present themselves as a career develops.

Hackett et al. (1985) developed a taxonomy of competencies relevant for women seeking career advancement in academia, which could be adapted for other career areas. Subsequently a taxonomy relating to leadership self-efficacy was developed (Anderson et al., 2008). Bandura (1986; 1997) instructs that self-efficacy be examined within specific domains as one could possess high self-efficacy in one area, such as running but low self-efficacy in another, such as career advancement. As self-efficacy is a person's beliefs concerning his or her ability, to successfully perform a given task, these taxonomies will be beneficial for future stages of this study, since they have already identified the tasks pertaining to senior level positions. Anderson and Betz (2001) developed a scale to measure the four learning sources of self-efficacy, which may prove beneficial for the design and implementation stages of this study.

In 2000, Zeldin and Pajares studied senior female STEM workers to investigate the self-efficacy learning sources that influenced their career outcomes (the four learning sources have been previously discussed). They find vicarious experiences and social persuasion the most influential self-efficacy learning sources for these female participants. This contrasts with Bandura's postulation that performance accomplishments are the most effective learning source (Bandura, 1977). This finding is very interesting, particularly as a further study in 2008 by Zeldin et al. on senior level STEM males, find performance accomplishments the most effective learning source for this sample (in accordance with self-efficacy theory). This presents stark differences in the learning influences that shape self-efficacy for men compared to women within STEM careers. The authors question whether this may apply for male dominated career areas in general, but further research would be required to establish whether this is the case (Zeldin et al., 2008). Very few studies have investigated self-efficacy learning sources or tested the findings of Zeldin and Pajares (2000) to determine whether females in

other career domains experience differences in the learning influences that formulate self-efficacy, to that postulated in self-efficacy theory by Bandura (1977). No studies have researched the self-efficacy learning sources of female accountants. Considering the substantial impact self-efficacy plays within the career development of females, it is of the utmost importance to understand the sources of self-efficacy beliefs, in addition to the influence of these self-efficacy beliefs on the career development of female accountants.

Extensive empirical research on self-efficacy has been undertaken and studies which contribute to female career development are presented in **Appendix 3**.

### **3.3 Interaction of self-efficacy with other career development factors**

Scholars discuss that self-efficacy is frequently more relevant in achieving outcomes than ability is (Lent et al., 1987; Hackett and Lent, 1992; Betz et al., 1996, Rigotti et al., 2020). Increasing self-efficacy can impact upon career development directly (Sullivan and Mahalik, 2000) for example low self-efficacy beliefs subscribing to fewer females occupying senior roles (Hackett and Betz, 1981). It can also impact upon career development indirectly through the various relationships between self-efficacy and the other factors identified within female career development and demonstrated in **Figure 1** and **Table 2**. Increased self-efficacy can enable individuals to cope with challenging factors (Bandura, 1977; Hackett and Betz, 1981; Lent et al., 2000) and the literature on female accountants presented various such challenges in the form of barriers. Self-efficacy positively impacts upon career aspirations (Lent et al., 1986; Nauta et al., 1998). This is important as Jones and Iyer (2020) find the aspirations of female accountants far lower than those of male accountants, for partnership progression. Therefore, improving self-efficacy can positively contribute to increasing the aspirations of female accountants. Barriers and supports were found to impact on self-efficacy (Lent et al., 2003), which means that organisational supports positively impact self-efficacy and organisational barriers negatively impact self-efficacy. Baron and Morin (2010) reinforce this finding regarding positive supports, as they postulate a supportive work environment impacts positively on self-efficacy. This demonstrates the complexity of self-efficacy and how it is subject to change, depending on the influences impacting upon it.

Low self-efficacy beliefs have contributed to less female representation at a senior level (Hackett and Betz, 1981). The self-efficacy of men and women appear to present differently

time and again and this is demonstrated by men applying for a job if they can do a few of the tasks, whereas women tend not to apply unless they can do every single task (Quinn, 2012; Hartman and Barber, 2020). Bandura (1988) discusses individuals restricting their career options, believing themselves incapable, even when this is not true. He describes this as a self-imposed limitation due to self-disbelief, rather than inability, which women are particularly vulnerable to (Quinn, 2012; Anderson-Gough et al., 2005). Athanasopoulou et al. (2018) find that females do not promote themselves, concentrating on what they lack, rather than what they possess. The efficacy beliefs of women may be more vulnerable to reduction by circumstances and events than those of men (Hackett et al., 1990). Females require assistance to develop self-efficacy in certain areas to be in control of their career development (Hackett and Betz, 1995). Gender role socialisation beliefs can result in lower self-efficacy and subsequently less than potential career outcomes (Hackett and Betz, 1981). However, self-efficacy theory has explained how self-efficacy can be improved (Bandura, 1977) and increasing self-efficacy can directly impact upon career development (Betz and Hackett, 1981; 1983; Athanasopoulou et al., 2018; Sullivan and Mahalik, 2000). These studies demonstrate the significance of self-efficacy within the career development of females.

### **3.4 Research gaps identified in literature**

Female underrepresentation is highly relevant in the accounting domain, with females holding only 17 percent of partnership roles throughout Europe (Catalyst, 2020). It is known for many decades that low self-efficacy beliefs play a role in explaining the low numbers of females occupying senior positions and women not reaching their full capabilities within their careers (Hackett and Betz, 1981). While self-efficacy has been largely researched for STEM females, it has not been extensively researched in the accounting arena, despite research acknowledging how important a role it plays within one's career. This provides a research gap to study the influence of self-efficacy in the underrepresentation of female accountants in senior positions.

Few studies have examined the learning sources of self-efficacy, despite the role of these sources in forming self-efficacy beliefs (Bandura, 1977). Not only have these learning sources contributed to the formation of self-efficacy beliefs, they continue to adapt and adjust self-efficacy, which does not remain constant over time. Bandura (1977) presents these learning sources as performance accomplishments, vicarious experiences, social persuasion, and physiological factors. Examples of performance accomplishments may include obtaining

promotions, achieving exam success, and successfully learning difficult tasks. Examples of vicarious experiences may include senior/successful females in the workplace, parents/siblings who have achieved/overcome difficulties, teachers/lecturers whom an individual may aspire to and other identifiable role models. Examples of social persuasion may include the support and encouragement received from various sources such as spouse/partner, family, managers, peers, and support groups. Examples of physiological factors may include fear (such as that when applying for a senior role), stress (associated with work or work progression) and negative feelings from a previous unsuccessful experience. Despite the significant findings by Zeldin and Pajares (2000), there is no research on the self-efficacy learning sources for female accountants, which provides a research gap.

Gammie and Whiting (2013) find similarly low representation at the most senior levels, for female accountants working in non-practice roles as in practice roles, after 10-15 years' work experience. Most research studies female accountants in practice roles, resulting in a paucity of research for female accountants in non-practice roles, since this 2013 study. This provides another research gap.

### **3.5 Other theories considered**

Various theories have been considered with respect to this study. The theories which may be considered relevant, in addition to self-efficacy theory, are feminist theory and social cognitive theory.

Feminist theory examines role expectations and power differentials regarding gender and considers inequality, oppression, and power within society (Carr, 2003). Literature informs us that the career paths of females differ to those of males (Osipow, 1973; Betz and Hackett, 1981; Betz and Fitzgerald, 1987). Therefore, studying female career development requires an understanding of situations that take gender into consideration (Hurley, 1999). Role expectations arise in literature in conjunction with gender role socialisation, which can result in less-than-optimal career outcomes (Hackett and Betz, 1981). Power, inequality and/or oppression arises in literature in the context of organisational barriers, which negatively impact upon the career development of females (Padavic et al., 2020). A study focussing on these concepts may find that feminist theory is the most appropriate theory. Likewise, a study focussing on interventions for females to assist them achieve their career potential, would

potentially consider feminist theory (Turner and Maschi, 2014). However, this study is focussing on self-efficacy, which is a personal factor within career development literature. This study is not setting out to place criticism on organisations, societies, or individuals, for the underrepresentation of females at senior levels but rather to obtain the personal accounts of female accountants concerning their perceptions of their career development. Therefore, feminist theory is not appropriate to this particular study.

Social Cognitive Theory (SCT) was introduced by Bandura in 1986, when he extended self-efficacy theory to include master modelling for developing competencies and self-regulation and motivation through goal systems. SCT deals with the triadic relationship between environment, behaviour, and cognition. It provides guidelines on developing individuals' capabilities, self-efficacy, and self-managed behaviour, to enable them to attain their personal goals. SCT explains how individuals manage behaviour by control and reinforcement to achieve their objectives on an ongoing basis. While this is an extremely important and interesting theory, it was deemed more appropriate to an intervention type study assisting females in their career development. Moreover, for this particular study, the additional components of master modelling (to improve capability) and goal systems for self-regulation and motivation have not been identified in the career development literature as particularly relevant. The researcher believes that self-efficacy theory most closely matches the concepts that have arisen from the literature review.

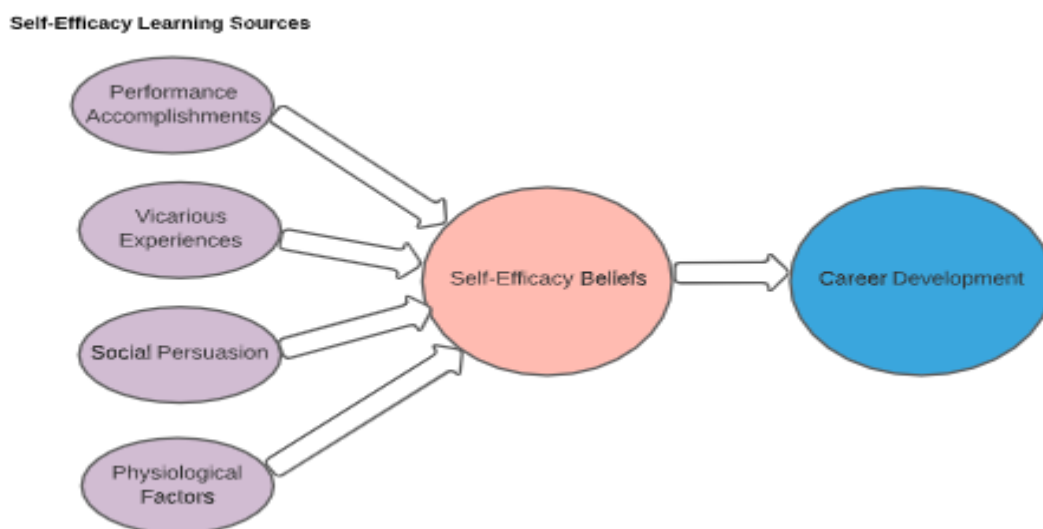
Literature presents the importance of self-efficacy within career development, suggesting it may be more relevant in one's career than ability (Hackett and Betz, 1981). Females tend to have lower self-efficacy than men (Hackett and Betz, 1981; Quinn, 2012). This reduced self-efficacy can result in females not achieving their career potential (Hackett and Betz, 1981; Bandura 1988; Quinn 2012; Athanasopoulou et al., 2018). Even when females possess more qualifications and experience than men, they are found to be paid less and are less represented in senior positions (Dreher and Ashe, 1990; Block and Tietjen-Smith, 2016). Self-efficacy is identified as one of the main factors contributing to differing male and female career development. Therefore, it is important to investigate, concerning the underrepresentation of female accountants. Exploring the influence of self-efficacy, requires researching the learning sources that influence and shape self-efficacy beliefs. These learning sources are detailed

within self-efficacy theory. Therefore, self-efficacy theory is ideally suited to this study of the underrepresentation of female accountants in senior positions.

#### Section 4 Conceptual framework

The significant relevance of self-efficacy within female career development, for example, low self-efficacy beliefs contributing to the underrepresentation of females in senior roles (Hackett and Betz, 1981) was explained by various scholars. To explore the influence of self-efficacy in the underrepresentation of female accountants in senior positions, requires focussing on the self-efficacy element within **Figure 1**. This is the relationship presented between self-efficacy and career development. To determine the influence of self-efficacy on career development, clarification and understanding must be sought on how self-efficacy beliefs were created and continue to be influenced over time. The antecedents of self-efficacy are the self-efficacy learning sources, described in self-efficacy theory (Bandura, 1977), and previously discussed. This focus leads to the conceptual framework, which is presented in **Figure 3**. Within the conceptual framework presented, career development refers to the attainment or non-attainment of senior positions within accounting. Literature on female accountants in practice tends to equate senior positions with partnership roles. This study will explore females in non-practice roles (e.g., Financial Controller or Finance Director positions).

**Figure 3: Conceptual Framework**



Source: Author

Since female accountants remain largely underrepresented in senior roles, despite equality legislation, commitment to diversity and the implementation of various measures, it is important to investigate the less researched area of self-efficacy regarding this phenomenon. This requires the inclusion of the self-efficacy learning sources, which form and influence self-efficacy beliefs (Bandura, 1977). Self-efficacy is not constant over a period as learning sources initially inform and constantly influence these self-efficacy beliefs (Byars and Hackett, 1998), either positively or negatively (Bandura 1977). Self-efficacy theory explains and describes the four learning sources of performance accomplishments, vicarious experiences, social persuasion, and physiological factors. Self-efficacy theory postulates that the most influential learning source is that of performance accomplishments (Bandura, 1977). However, an empirical study by Zeldin and Pajares (2000) on senior level female participants in the STEM arena, find that vicarious learning and social persuasion were the most influential learning sources of self-efficacy for these females, whereas Zeldin et al. (2008) find performance accomplishments the most influential learning source for senior level male STEM participants. This presented possible differing learning influences for males and females. However, the authors were unsure if these findings apply to males and females in all male-dominated career areas or not. It is pertinent to establish what the self-efficacy learning sources are for females in the accounting domain. Scholars have requested that practical interventions be carried out to enable females improve their self-efficacy (Fitzgerald and Crites, 1980; Betz and Hackett, 1981; Lent and Hackett, 1987; Betz and Schifano, 2000). However, this cannot be successfully implemented, unless the influences that develop self-efficacy are firstly determined and understood.

#### **4.1 The development of the research questions from the literature review**

The underrepresentation of females at senior levels is a function of various factors, identified in literature. One of these factors is self-efficacy, which impacts on career development directly (Sullivan and Mahalik, 2000), as improving self-efficacy may increase the numbers of females presenting for senior role opportunities (Dickerson and Taylor, 2000). It can also impact upon career development indirectly through the various relationships identified with the other factors arising from the literature review (organisational barriers, organisational supports, and career aspirations) and presented in **Figure 1**. Due to the importance of self-efficacy within female career development, this study will focus on this particular factor and its learning sources and



influence on the career development of female accountants, with respect to attaining/not attaining senior positions.

Substantial research demonstrates that females frequently possess lower self-efficacy beliefs which can impede their career development (Quinn, 2012; Athanasopoulou et al., 2018). Women are susceptible to believing themselves incapable, even when this is not true (Quinn, 2012; Anderson-Gough et al., 2005). The KPMG Women's Leadership Study (2015) find the majority of females aspire to senior positions, but more than half hesitate due to lack of self-efficacy. Women acknowledge their achievements less than men, even when achievements are exactly the same (Jost, 1997; KPMG, 2015). Athanasopoulou et al. (2018) find that male and female CEOs believe that females with high potential frequently possess low self-efficacy and fail to go forward for promotion by focussing on their deficiencies rather than their attributes. The requirement to build women's self-beliefs and confidence is the most crucial factor for female career development (Holton and Dent, 2016; Athanasopoulou et al., 2018). This abundance of research highlights the importance of self-efficacy with respect to female careers.

However, little is known on the formation of the self-efficacy beliefs of female accountants. Research regarding senior female and male STEM workers find the learning influences that shaped the self-efficacy beliefs of females differed to those of males within STEM careers (Zeldin et al., 2008). The findings for the male participants are consistent with self-efficacy theory (Bandura, 1977) but the findings for the female participants are not. It is imperative to understand the learning sources of self-efficacy for female accountants, as future research to improve self-efficacy within this career domain, will require knowledge of the most effective learning sources. This leads to the development of the following research questions (RQs):

**RQ1:** How have self-efficacy beliefs regarding ability to succeed in a senior position, contributed towards attaining this role for female accountants?

**RQ2:** How have self-efficacy beliefs regarding ability/lack of ability to succeed in a senior position, hindered the attainment of a senior role for female accountants?

**RQ3:** What self-efficacy learning influence most impacts upon the self-efficacy and career development of female accountants?

This section presents the conceptual framework and demonstrates the importance of self-efficacy within career development. As low self-efficacy may contribute to the underrepresentation of females at senior levels (Hackett and Betz, 1981), this is highly relevant for female accountants, who are largely underrepresented in senior roles, despite legislation and various measures to remedy this. It is therefore important to study the insufficiently researched area of self-efficacy in the context of female accountants. This requires the study of the self-efficacy learning sources, which form and influence self-efficacy beliefs (Bandura, 1977).

### **Section 5 Conclusion**

Literature on female career development raised various factors, including self-efficacy. Holton and Dent (2016) find the requirement to build women's self-beliefs and confidence, as the most important factor within their careers. Low self-efficacy beliefs play a role in explaining the poor representation of females occupying senior positions and women not reaching their full capabilities within their careers (Hackett and Betz, 1981). Due to the significance of self-efficacy within female career development it is important to study it further in relation to female accountants, for which little information is known regarding the influence of self-efficacy upon career development. Information is not available on the self-efficacy learning sources for female accountants. Nor whether they are similar to those of females in STEM (Zeldin and Pajares, 2000) or whether they conform with self-efficacy theory postulations (Bandura, 1977). It is imperative to establish the self-efficacy learning sources in addition to the influence of self-efficacy on the career development of female accountants.

Understanding the underrepresentation of female accountants at senior levels can assist organisations and individuals to take positive steps to remedy this phenomenon, so that greater numbers of female accountants may reach senior levels, and ultimately contribute towards closing the gender gap that persists at a senior level.

This study will contribute to theory by expanding the literature on the career development of female accountants by identifying the learning sources that most impacts upon their self-efficacy beliefs and exploring the influence of self-efficacy in their underrepresentation at senior levels. Scholars have sought research to examine within group differences for women in the career domain, rather than between women and men (Lent and Hackett, 1987; Swanson

et al., 1996; Bandura, 1997), which this study will do. This study will incorporate later career stage women, for which there is little research available and participants working in non-practice, as there is no current information concerning female underrepresentation at senior level for non-practice female accountants. Contributing new knowledge with respect to self-efficacy learning sources, the influence of self-efficacy on career development, later career stage and non-practice female accountants, will add new findings to knowledge already in existence regarding female accountants' career development.

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## Appendices

### Appendix 1: Literature pertaining to the career development of females

Author	Key Concepts	Unit of Analysis	Context	Methodology	Findings
Hackett, Betz, and Doty, 1985	Career behaviours and career competencies	Professional females	Female career development	Qualitative – semi structured interviews	Identifies behaviours and competencies relevant to female career progression in academia. This enables future researchers measure self-efficacy by relating self-efficacy to the appropriate behaviour and subsequently using these competencies to test participants' perceived ability to perform these competencies
Eccles, 1987	Cognitive mediation, occupational choices, expectations for success, subjective task value, gender role socialisation, self- schemas, and anticipated role and task demands	N/A	Career development	Development of a theoretical model for female achievement related choices	Develops a model of career achievement for women. Discusses Terman's longitudinal studies on gifted boys and girls and how they fared after 60 years. The women were satisfied with social lives but not with career outcomes and regretted spending so much time on homemaking and insufficient time on their careers
Dreher and Ash, 1990	Total income, promotions, pay level satisfaction and benefits satisfaction	Business school graduates	Mentoring career outcomes	Quantitative – Questionnaire posted to 1000 business school graduates	Found that mentoring resulted in greater income, promotions and both success factors and that males and females experienced parity on quantity of mentoring, yet females reported substantially lower incomes than males, despite similar roles and qualifications
Luzzo and Hutcheson, 1996	Past barriers, future barriers, career goals, career decision making and career maturity	Male and female students	Career development	Quantitative - scales and questionnaire	Women perceived significantly more future occupational barriers than men and over 40% of the women indicated the perception of family related barriers in the past, whereas no men cited such barriers. Highlights that one of the main issues regarding female career development appears to be role conflict
Swanson et al., 1996	Likelihood of barriers, hindrance of barriers, sex, race/ethnicity, self-esteem, self-efficacy, locus of control, career indecision and vocational identity	Various samples of college students	Career development	Quantitative – testing the revised career barrier inventory (CBI)	Authors refined and tested their career barrier inventory and scales. Found women scored higher in sex discrimination, lack of confidence, multi role conflict, career-family conflict, dissatisfaction with career, decision making difficulties and inadequate preparation
Swanson and Woitke, 1997	Internal barriers, external barriers, and self-efficacy	N/A	Career development	Discursive –how SCCT can be applied in practical domains in assessing and intervening regarding barriers	Relationship between self-efficacy and barriers is complex: low self-efficacy can be a personal barrier; low self-efficacy may result in greater perceived external barriers and finally higher self-efficacy may assist in coping with or overcoming barriers
Nauta et al., 1998	Higher level career aspirations, ability, self-efficacy, role models and role conflict	STEM and biological science female students	Career development	Quantitative – mail survey	Positive role models can decrease role conflict and enable a positive relationship between self-efficacy and career aspirations for STEM students and less so for biological science students
Dickerson and Taylor, 2000	Self-limiting behaviour, global self-esteem, task specific self-efficacy, interest in performing a task, willingness to engage in a task,	Female psychology and business students	Female career development	Quantitative – pilot and measures combined with two experiments	Women who believed they possessed the abilities to perform the leadership task (TSSE) task specific self-efficacy, were more likely to choose it and more interested in performing it, whereas those less confident regarding ability were more likely to not choose the leadership task. This shows

	group leader task and importance of ability				that low TSSE may lead to self-limiting behaviour and choosing not to go for leadership roles. Building self-efficacy may prevent this non-choosing of leadership roles
Mainiero and Sullivan, 2005	Career transitions, motivators, non-work demands, career decisions, gender, ethnicity, income, career, education level, age, industry affiliation, corporate politics, early career experiences, career satisfaction and future aspirations	Professional females – study 1, Professionals – study 2 and participants of an executive MBA programme – study 3	Female career model	Mixed methods – two online surveys and detailed online conversations	Many women consider opportunities and challenges then create their own career path and dismiss the concept of linear career progression, rather choosing a non-traditional, self-crafted career to meet personal requirements. In contrast to men, the career development of women involves decisions that consider various factors, that combine into a carefully created package. The authors developed the kaleidoscope model. Many women are aspirational but want to make the career suit their lives, rather than allowing the career to overtake their lives. Three key career issues were identified which women must face: authenticity; balance; and challenge. Challenge was found more important at early career, balance at mid-career and authenticity at later career stage (ABC Model of Kaleidoscope Careers)
Lindley, 2005	Holland theme self-efficacy, outcome expectations and career choice	Students of introductory psychology and political science	Barriers to career development (SCCT theory)	Quantitative – questionnaire and self-report inventories/scales	Revealed that women who have chosen investigative (e.g., physicist, chemist) or conventional (e.g., accountant, financial analyst) careers, both of which are largely male dominated experience far more barriers than women who have chosen social careers. Positive relationships were found between barriers and expected outcomes. Women who have chosen these investigative or conventional careers generally persist in their careers despite substantial barriers experienced
Fulton et al., 2006	Gender, likelihood of running, election prospects, perceived benefits of winning a seat, costs of conducting a campaign, opportunity costs, having children and being married	Female and male state legislators	Career development	Quantitative – historical data from the candidate emergence study (CES) which formed part of a larger study of potential candidates' decision making regarding running for the US House in the elections of 1998	Finds that women are less ambitious for promotion than men due to work-family demands but still just as likely to run for the House. The positive expected benefits of office reduce the negative effect of these lower ambitions
Linehan and Scullion, 2008	Mentoring, networking, and career development	Female senior managers	Career development	Qualitative – interviews	Women explain lack of career development to work-family role conflict and organisational practices/lack of (e.g., mentoring, networking and the exclusion of women)
Ashby and Schoon, 2010	Ambition value, expectations, education achievements, gender, social status, earnings, parental aspirations, and parental educational aspirations	Females and males in full time employment at the age of 34 from the BCS 1970	Career success	Quantitative – data from the 1970 British Cohort longitudinal Study of children born in a particular week in April 1970	For females, teenage career aspirations and ambition predict adult social status attainment and earnings. For males, career aspirations predicted social status attainment and ambition value predicted earnings. At age 34, females had achieved a higher education, and level of occupational status than males but lower weekly earnings than males
Baron and Morin, 2010	Executive coaching, utility judgement, learning goal orientation, commitment, work support and self-efficacy	Junior and mid-level managers	International manufacturing company	Quantitative - study of a leadership development program using three training methods	Self-efficacy substantially increased due to training. Also finds that organisational supports had a positive impact on self-efficacy
Varkey et al., 2012	Academic skills, self-efficacy, and academic career satisfaction	Female medical faculty	Female mentoring and career development	Longitudinal peer mentoring programme (over 12 months)	Mentoring had a positive effect on academic skills, output of research and self-efficacy for female academics. Demonstrates how training can improve self-efficacy and career outcomes for women

Yaxley, 2013	Drivers, barriers, opportunities, advancement, gender, career experiences, change agents, career opportunities and upcoming females	Snowball technique to identify females who worked in PR and began their careers in the 1970s/1980s	Female career experiences	Qualitative – telephone/skype interviews	Interviewees portrayed agency and self-efficacy. Role models (of both gender) impacted positively upon career advancement. These women did not act as role models for younger females coming up the line and instead strongly criticised them
Buse et al., 2013	Years worked as an engineer, having children, married or not, average age, career history, fulfilment, expectations, career beliefs regarding the pros and cons of an engineering career for women, opting out, self-efficacy expectations, outcome expectations, identity, adaptability, engagement, and difficulties faced	Female engineers who persisted in their career and those who left (identified through the personal network of the lead researcher)	Retention of females in engineering and other careers	Qualitative - interviews	Women who remained in engineering roles showed high self-efficacy, a good work-life balance, identified strongly as an engineer and were challenged and motivated by their work. They could adapt and develop, despite challenges and discrimination presented
Ely et al., 2014	Career success, career importance, gender, family, attitudes, and experiences	Harvard business graduates	Career development	Quantitative - over 25,000 HBS graduates	Males and females showed similar aspirations, (men are more likely to achieve theirs) and both believe female progression is impeded by females choosing family over career. Men generally expect their careers to be prioritised over their partners' (and this usually happens), while women expect their careers to be equal in priority to those of their partners' (and they often are not). Women are frequently less satisfied with their careers and their work-family balance than men. While up to a third of women take career breaks for family, most return to work
Sandler, 2014	Leadership, barriers, and self-belief	N/A	Female leadership	Literature review	States that organisations need to address unseen barriers to women's career development, understand the qualities women possess (which may be different to those of men) and develop women in their careers. Also states that women must take ownership to push themselves and improve their self-belief
Gino et al., 2015	Life goals, power, positive outcomes, negative outcomes, desirability of promotion and attainability of promotion	Executives in high-power positions, recent MBA graduates, undergraduates, and online panels of working adults	Career advancement	Quantitative – 9 studies undertaken using different samples and surveys	Women listed more life goals in life and less related to power in work, than men did. Women viewed senior positions as less desirable but just as attainable but perceived greater role conflict arising from high-level positions. Men and women have different ideas of the actual experience of holding a senior level position
KPMG Women's Leadership Study, 2015	Leadership, aspiration, ambition, socialisation, and influences	Professional and student females	Female leadership	Quantitative – online survey of more than 3,000 working and college women	60 percent of women aspired to work in senior roles but over half feel reluctance due to lack of confidence. Recognises confidence building, leadership training, and networking with women leaders, as vital to improving women's career progression
Holton and Dent, 2016	Self-awareness, networking, career planning, role of others, making and taking opportunities, culture attitude, gender mix, talent	Working women	Career development	Mixed methods – interviews and questionnaire	Women need to build their self-beliefs and self-confidence to progress their careers. They need support, networking, taking ownership over their careers, availing of opportunities, supportive work environments, mentoring and development. Half the women believed that it is more difficult for

	management, senior management, and mentoring/development				women to progress than men in their organisation and that women are judged differently regarding leadership styles and behaviours
Noland et al., 2016	Corporate performance, leadership, and gender	Global survey of 21,980 firms from 91 countries	Female leadership and progression	Quantitative - compiled a global dataset from Reuters profiles of publicly traded firms in late 2014. Evidence from a Global Survey. PIIIE Working Paper 16-3	This global survey of 21,980 firms found women in corporate senior positions may improve organisational performance, significantly. Report states that when a disproportionate burden of childcare is put on women, this creates a barrier to female career advancement
Athanasopoulou et al., 2018	Career progression, contextual factors, and personal factors	Female and male CEOs	Female leadership development	Qualitative - interviews with 12 female CEOs and 139 males	Male and female CEOs believe women with strong potential possess low self-belief and fail to put themselves forward for progression unless they meet every single requirement. Female CEOs believe that taking a few years out of a career does not negatively impact within the context of a lifelong career
Fritz and Knippenberg, 2018	Work life initiatives, leadership aspiration (both intention and behaviour) and gender	Full time workers with at least 3 years' experience	Female leadership aspiration	Quantitative - online survey	Found that work-life initiatives may positively impact on leadership aspirations for both males and females but particularly so for females
Gram et al., 2018	Empowerment	Females	Female empowerment	Develops a framework for empowerment concepts to enable measurement	This links empowerment and self-efficacy and states that barriers to empowerment are internal. An individual is empowered when they feel that way regardless of actual circumstances. Also points out that measuring self-efficacy is forward looking rather than backward looking
Kim et al., 2020	Gender, self-efficacy, equality climate, work effort, career development, promotion, job satisfaction, work stress and turnover intentions	Employees (surveyed in organisations employing 100+)	Female progression examining work effort V career development	Quantitative – data from a 2008 South Korean employee and organisational survey	Men with high self-efficacy put strategic career development effort, leading to promotion but women with high self-efficacy put in additional work effort, leading instead to stress, turnover plans, and lower job satisfaction. Even though women with high self-efficacy working in gender supportive environments, may still end up unfulfilled by hard work and negative outcomes
Aymans et al., 2020	Career barriers, self-efficacy, career optimism, lecturer support and gender	Psychology students	Gender and career optimism	Quantitative –online survey	Finds no differences in career optimism between males and females, but methods differ e.g., practical information (which may benefit male students) and enhance self-efficacy (which may benefit females)
Ely and Padavic, 2020	Work-family conflict, career advancement, staff turnover and gender	Employees in a global consulting firm	Career development	Qualitative - conducted 107 interviews	Finds that women are not impeded in careers due to work-family conflict but because they were encouraged to adapt their roles e.g., going part time or take non advancing career roles. The real issue was substantial overwork within the organisation which contributed to gender inequality
Han and Noland, 2020	Corporate leadership and females	N/A	Female leadership	Policy Brief – Peterson Institute for International Economics	Outlines the benefits of including more women on boards such as skills, better oversee of management enabling higher profitability and valuation and encouragement of more women moving up the ranks. Organisations without gender diversity exclude half the available talent and will be at a disadvantage to competitors who are gender diverse
Marks et al., 2020	Educational barriers, career barriers, coping self-efficacy, social class and meaning in life	Female adults	Career development	Quantitative – online survey	Finds a substantial negative relationship between educational and career barriers and coping self-efficacy.

Hartman and Barber, 2020	Gender, self-efficacy, work engagement and career aspirations	Male and female adults	Female career development	Quantitative – online survey	Found no difference between occupational self-efficacy and work engagement between men and women. Men demonstrate greater career aspirations than women. Although women may believe they can achieve the most senior roles, they may not act on this. If they do, organisations create barriers for them (Acker, 1998, 2008). Men will promote themselves even without skills or experience, whereas women need to feel completely competent in a role before promoting themselves for it
Padavic et al., 2020	Gender Inequality, work–family narrative, 24/7 work culture and stalled advancement	Staff within a US global consulting firm	Female career development	Qualitative – interviews (case study)	Finds that the “work–family explanation” does not only impact upon women and female underrepresentation is made worse by the provision of flexible work arrangements, which in fact impede progression. The real issue is a crippling work culture

## Appendix 2: Literature pertaining to the career development of female accountants

Author	Key Constructs	Unit of Analysis	Context	Methodology	Findings
Anderson et al., 1994	Gender, family structure, physical appearance, relations with staff, technical knowledge, future career success, normal advancement, fast track advancement and dismissal	Auditors from Big Six accounting firms (males and females)	Career progression	Quantitative - instrument	Found that having a family is found to be negative for women's advancement to partnership but not for males. Found existence of a glass ceiling with regard to female advancement
Barker and Monks, 1998	Gender, career progression, obstacles - work hours, remuneration, progression, professional socialising, flexible work arrangements, discrimination, childcare, job satisfaction and skills	Members of the Institute of Chartered Accountants in Ireland	Career progression	Quantitative- questionnaire	Found men and women similarly aspirational regarding partnership/directorship roles, but women lack self-confidence regarding their work and achievements. Barriers for female accountants include: working hours, absence of family supportive environments and elimination from male networks. The authors also contend that flexible work arrangements being offered are not enough, that they must also be culturally acceptable within the organisation
McKeen. and Bujaki, 1998	Practice, industry, self-employed, marriage status, having children, career breaks, flexible work arrangements, maternity leave, family friendly environment, working from home, part-time work, promotion, mentoring, salaries and power structures	Male and female accountants who graduated from a Canadian business school	Career development	Quantitative - questionnaire	Women believed the most important initiatives for them were flexible working arrangements, which were also largely the same for men but less important. The authors stress how organisational culture must change so that such initiatives will not impede career advancement. They found mentoring more applicable in practice than industry. Men believed women were excluded from networking, women agreed more strongly. Both males and females leaving accountancy practice for work in industry found their new environment just as stressful and the similarly long hours. Men who left practice tended to perform better financially and advance quicker
Kanter and Roessner, 1999 X 2	Gender, leadership, progression, and barriers	Female accountants who left Deloitte and a sample of Deloitte staff	Career development	Discursive	Due to very low numbers of females nominated for partnership and high female staff turnover, the CEO of Deloitte, Mike Cook established a taskforce to retain and advance females. Catalyst was hired to investigate and found that most women left to work somewhere else because Deloitte was a male dominated work environment where women were undervalued, supports and assignments were benefiting men but not women and the crippling long work hours hindered a work-life balance. When a highly respected female partner agreed with the findings, the senior leadership team took notice and decided that action was required. Deloitte introduced a women's initiative in 1993 which established mandatory workshops, operational changes supported from the top down, full accountability, personalised flexible work arrangements supported by the organisation, flexible travel policies and an overhaul of policies for gender bias. In 1995 offices were benchmarked against each other and Deloitte won a Catalyst award as one of the best organisations for gender equality. Turnover dropped, females achieving partnership increased and a culture of work-life balance was introduced
Kornberger et al., 2010	Flexibility initiative, valued work, competence, organisation rewards, managing staff, promotion, relationships with partners and clients	Managers and directors within an accounting firm	Gender domination	Qualitative – field study of semi structured interviews and observation of managers and directors	While exploring the effects of a flexible work initiative (developed to retain and advance females into senior roles), the authors find it actually reinforced gender barriers. Despite the firm's commitment to developing females' careers, the percentage of them who achieved senior positions remained low and decreased at the manager to director level (the percentage of female directors reduced). The policy became gender biased through the organisations operations and structure. The issue was that the path to partnership required undivided commitment, the client as portrayed by the organisation was not realistic but a crafted phenomenon (Anderson-Gough et al., 2005). Flexibly was associated with not providing a sufficient service to the client

Jeacle, 2011	Gender, accounting and lived experience of an extraordinary woman	One of the first Scottish female accountants – Helen Lowe	Career development of female accountants	Qualitative – archival firm’s records, correspondence, and accounting ledgers	Helen Lowe, one of the first Scottish female accountants, believed to have left her accounting firm after being passed over for partnership promotion, set up her own practice in 1928. She built up a highly successful business and worked full time up until her death, a few weeks short of her 100th birthday in 1997. She used gender positively to develop her new business, despite working in times when the accounting profession was highly male dominated
Dambrin and Lambert, 2012	Rarity of women at the highest ranks of accounting, glass ceiling, organisational obstacles (organisational knowledge, working conditions, clients), working hours, career responsibilities, career prospects, commitment, satisfaction, alternative opportunities, gender, social conditioning, role-conflict, gender socialisation and part-time and flexitime	Accountants	Rarity of females in senior accounting roles	Reflexive review of gender and accounting research papers	Authors dismiss the notion that women do not want to advance in the accounting profession, as women are not necessarily free to make this choice. The careers of female accountants will only change when gender bias is changed. If men were allowed and expected within work and the larger society to take a larger role in family life, accountancy firms would significantly change
Millar, 2013	Having children, supportive/unsupportive partner, male dominated firm culture, firm policies, area of work and progress achieved	Female partners from Big Four	Females achieving partnership roles	Qualitative – semi structured interviews	Finds participants believe that the gender gap is down to a choice by females of family over career. The experiences of the partners show the difficulty of obtaining a work-life balance. To succeed requires the hunger to advance, a supportive spouse, ability to work hard and possessing strong mentors. Interviewees believe the work life balance has to be manageable, otherwise they would choose family (if it came to the crunch). They resisted criticism of the actions or attitudes of their organisations and stated that gender did not hinder their careers (but their interviews told a different story). The women were satisfied despite challenges and difficulties
Gammie and Whiting, 2013	Practice, non-practice/industry, family status, working hours, flexibility, networking, career progression, salary, gendered work environment, career movement (remain in accounting practice, leave accounting practice), working practices and maternity leave	Female accountants from industry and practice	Career development	Mixed methods - questionnaire and interviews (with partners and women who left accountancy firms)	Finds that females who reached senior leadership roles were 17% within practice and 15% within industry. Authors query if gender inequality exists for women in general or just female accountants. The main reason for leaving practice was for more challenging work, better work environments and career progression and salary. Flexibility was the least important reason (bearing in mind these women left within three years of qualifying, so flexibility may be relevant to their life stage). Hours worked seem to be the same in both practice and industry, but industry afforded more flexibility and less hierarchy
Flynn et al., 2015	Career progression, career prospects, gender related barriers, glass ceiling, networking, and flexible work arrangements	Female and male accountants from the four main accounting bodies in Ireland	Career development	Quantitative – postal questionnaire (including open ended questions)	Finds that participants did not perceive gender-related barriers in their career progression, despite the fact that they exist from the study (perception is not equating to reality). Women having children, is perceived as a personal choice and impedes career progression. This focus on a woman’s choice is an organisational barrier/glass ceiling. Maternity leave perceived to impede women’s progression and men largely did not avail of parental leave, thus not impacting career progression. Generally flexible work not subscribed to and when it was, it was not related to having children. Finds that women advance in Irish accounting firms by adapting to patriarchal organisational values and cultures and when they become mothers, they are excluded from this group
Whiting et al., 2015	Professional accountancy firms, gender, discrimination, structural barriers (working hours, client demands), work preferences,	Partners of public accounting firms in	Female partnership prospects	Mixed methods - experimental survey of partners in Australia, NZ and the UK, online questionnaires,	Women’s perception of preferences and organisational structural barriers largely resulted in the lack of female partners, gender discrimination against women at the partnership time of career was only found in metropolitan large non-Big 4 firms. Fatherhood does not enhance promotional prospects for partnership

	promotion to partner, motherhood and fatherhood	Australia, NZ, and the UK		followed by interviews with 16 of the partners	
Adapa et al., 2016	Gender inequality, structures, hierarchies, identity, flexibility, and content specificity	Accountants from small and medium sized firms in regional New South Wales	Career development	Qualitative - interviews	Men explain the lack of female accountants' progression to women having lower capabilities than men. More men than women mention family-career conflict for women. Men in senior roles believe they hold stereotypical attitudes towards female capability. Women in small firms report lower structural barriers to progression than women in medium sized firms. Structured bias seems to have seeped into the identity of these women
Brody et al., 2016	Gender, competency, family commitments, career success, promotion opportunities, pay raises, job assignments and salaries	Undergraduate and graduate students from a US university	Career development	Quantitative - survey	Results were that students perceived large gender differences, but most expect women to have equal promotion opportunities and pay raises, similar job assignments and similar salaries to men
AICPA, 2017	Gender, progression, percentage of partners, flexible work arrangements, mentoring, sponsorship, gender initiatives, minority initiatives, diversity, and succession plans	CPAs in the US	Career development	Quantitative - survey	Reported that 22% of partners are females and that smaller firms have higher percentages of female partners. 89% of firms had some kind of work arrangement. Of the initiatives provided by firms, mentoring was the highest at 45%, followed by sponsorship and gender initiatives at 12% and 11% respectively. When firms provided initiatives, they believed that they were very successful
Guthrie and Jones, 2017	Same gender mentoring, cross gender mentoring, informal mentoring, formal mentoring, career development, role modelling and social support	Males and females from a public accountant firm	Career development	Quantitative - questionnaire	Found that mentoring was more successful for females when informal. Gender pairing only relevant when mentoring was formalised for females. Males fare better in same gender mentoring. Therefore, the relationship aspect is pertinent for females and gendering for males
Tinsley and Ely, 2018	Gender, leadership, and work-family	Males and females in a Big Four accounting firm	Career development	Discursive	One of the situations discussed in this study pertained to the authors being tasked with investigating the explanation for the rarity of female partners at a Big Four accounting firm. The organisation believed the explanation was work-family role conflict, but the authors found that while both women and men were equally aspirational, men were more likely to achieve such positions. Women were apprehensive about such roles as they feared the impact to their career and believed that women are judged more severely than men would be, should they not succeed
AICPA, 2019	Firm size, partnership percentages, modified work arrangements, mentoring, sponsorship, diversity, succession plans, gender, pay parity and bias	CPAs from 1129 firms in the US	Career development	Quantitative - survey	Female partnership is now 23% (up from 22% in 2017). Results show 53% of female partners in small firms of 10 or less CPAs compared to 16% in firms of 100 or more CPAs. 39% of firms monitor pay parity by gender and most of these acts on these results. One fifth of firms provide unconscious bias training (59% of the largest firms)
Vidwans and Plessis, 2019; 2020	Career crafting, organisational constraints, gender constraints, family constraints, environmental constraints, agency, career goals and career progression	Male and female accountants from practice and academia in New Zealand	Career development	Qualitative - interviews	Found that female accountants took an agentic approach to deal with challenges within their career and through career crafting they managed their various commitments and roles. Self-efficacy is required to do this. Found that men did not have to juggle in this manner



Anderson, 2020	Gender, full time alternative work arrangements, part time alternative work arrangements, traditional work arrangements, pursued for future engagement, assigned to less challenging work, manager promotion prospects, partner promotion prospects and formal and informal measures of evaluation	Male and female high-level accounting students from a large university	Career development	Quantitative - instrument and questionnaire	Found that participants believe that females would be evaluated equally. Contradicted Johnson et al. (2008) as found no gender differences with work arrangements provided. Perceive that flexible work arrangements are sought by both men and women, that using AWAs would impact the informal evaluations of promotion to manager or partner (but not the formal). Found that accounting recruits perceived that use of the part-time, reduced work load AWA would negatively affect performance evaluations on all four measures of evaluation
Cohen et al., 2020	Gender, performance evaluation, glass ceiling, professional development, mentoring, networking, support from senior male leaders, being married, having children, bias, high rank, ethnic minorities and public accounting/private (industry)	Female accounting professionals from practice and industry	Career progression	Quantitative	Found bias against female promotions, lack of mentoring, networking and important assignments and a lack of support from male senior leaders. Females in industry are more likely to perceive a glass ceiling in their organisations and that women are not treated the same as men regarding performance evaluations, professional development opportunities and support from senior leaders. Almost 40% of participants believe there is a glass ceiling in their organisation
Jones and Iyer, 2020	Gender, aspirations, home-work and work-home conflicts, flexibility, participation in flexible arrangements, family status (married/single, dependent children/no children), mentoring and leadership programme	Male and female accountants (below partner level) from a large accounting firm	Career development	Quantitative - online questionnaire	Found the aspirations of females were significantly lower than those of males with regard to becoming partner. Employees who perceive work-life conflict or utilise flexible arrangements have lower partnership aspirations. Perceptions of flexibility and firm initiatives provided have a significant positive impact on aspirations. Career progression, particularly for females, is impacted by work-life/family conflict, flexible work arrangements, role models and leadership programmes
Vidwans and Cohen, 2020	Gender, role expectations, career pathways, support, career goals, family goals and career strategies	Male and female accountants from Big Four firms and academia in New Zealand	Career development	Qualitative - interviews	Found that an agentic approach in taking control of one's career and dealing with challenges is particularly required for women. Barriers are both organisational, societal and personal

### Appendix 3: Empirical research on self-efficacy and/or career development

Author	Key Concepts	Unit of Analysis	Context	Methodology	Findings
Betz and Hackett, 1981	Educational self-efficacy, occupational self-efficacy, interest, consideration (intent), traditional occupations and non-traditional occupations	College females and males	Female career development	Quantitative – questionnaire and college test scores examined	Females found to possess lower self-efficacy with regard to non-traditional occupations, whereas males had equal levels of self-efficacy for both traditional and non-traditional occupational categories
Hackett, Betz, and Doty, 1985	Career behaviours and career competencies	Professional females	Female career development	Qualitative – semi structured interviews	Identifies behaviours and competencies relevant to female career progression in academia. This enables future researchers measure self-efficacy by relating self-efficacy to the appropriate behaviour and using these competencies provided to test participants' believed ability regarding performing these competencies (self-efficacy beliefs)
Frayne and Latham, 1987	Self-management through self-efficacy and outcome expectations, employee attendance, reaction and learning measures	Unionised state government employees	Absenteeism reduction	Quantitative – intervention over eight weeks	Outcome expectancies alone will not change required behaviour, as self-efficacy must also exist to overcome barriers preventing employees attending work. Training increased self-efficacy in this regard and ultimately improved work attendance (the higher the self-efficacy the greater the attendance). This positive effect was still in existence when tested after a 3-month period
Gist, 1989	Self-efficacy, generation of ideas, cognitive training method and lecture-based training method	Scientific R&D managers in a federal agency	Career training	Quantitative - field experiment, investigating the impact of two training methods	Participants in cognitive modelling training performed far better than those in lecture based training for the creation of ideas. They also possessed increased self-efficacy. Demonstrated the importance of cognitive based training for employers
Whiston, 1993	People task self-efficacy (mentoring, negotiating, instructing, supervising, diverting, persuading, speaking/signalling, serving, taking instruction) and thing task self-efficacy (setting up, precision work, operating/controlling, driving/operating, manipulating, tending, feeding/off bearing, handling)	Employed females from an urban and rural community in the US representing traditional and non-traditional roles	Female self-efficacy in traditional and non-traditional occupations	Quantitative – scales and measures	Found that employed women have higher self-efficacy for tasks required for working with people than for tasks required for working with things, which may influence women's choice of occupation. Demonstrates that gender stereotyping of the job may result in gender difference in self-efficacy and be a determinant between women who enter traditional and non-traditional occupations
Juntunen, 1996	Occupational options – traditional, non-traditional, neutral, educational self-efficacy, career self-efficacy, career desirability, career probability, sex-role orientation, and counsellor effectiveness	Undergraduate females	Career counselling (feminist V traditional approach)	Mixed methods – scales, testing and treatment condition	Applying a feminist approach to career counselling had a far better effect on both career and educational self-efficacy than using a traditional approach for all career groups (traditional, non-traditional, and neutral)
Swanson and Woitke, 1997	Internal barriers, external barriers, and self-efficacy	N/A	Career development	Discursive – describes how SCCT can be applied in practical domains in assessing and intervening regarding barriers	Relationship between self-efficacy and barriers is complicated: low self-efficacy can be a personal barrier; low self-efficacy may result in believing greater external barriers are present and higher self-efficacy may assist in overcoming barriers

Lent et al., 2000	Career barriers, supports, career behaviours and career outcomes	N/A	Career development	Theoretical development of SCCT	Finds that few studies have considered career supports within SCCT yet hypothesised that they may play a more important role in career development than barriers do
Zeldin and Pajares, 2000	Performance accomplishments, social persuasion, vicarious experiences, physiological factors, and self-efficacy	STEM females	Self-efficacy and career development	Qualitative – semi structured interviews with 15 STEM females	Contrary to prior hypotheses that performance accomplishment is the most influential factor on self efficacy, this study found that social persuasions and vicarious experiences were the main self-efficacy learning sources for these senior STEM females. Suggested that this may be particularly applicable for females in non-traditional occupations, but this required further testing
Sullivan and Mahilik, 2000	Career decision making self-efficacy, vocational exploration, and vocational commitment	Female students	Career self-efficacy	Quantitative – scales testing and an intervention which was activity based and discursive	Found that participants in the intervention group which included Bandura's (1977) four self-efficacy learning sources demonstrated higher career decision-making self-efficacy, vocational exploration, and commitment, in comparison to the control group. These results remained the same after testing six weeks later
Anderson and Betz, 2001	Self-efficacy sources (four sources), social self-efficacy, confidence, shyness, anxiety, and depression	Psychology students	Career development	Quantitative – the first sample evaluated the scale to measure the four self-efficacy sources and the second to test outcomes	Developed a scale to measure the four learning sources of social self-efficacy. Found that performance accomplishments, social persuasion, and physiological factors, (direct learning experiences), were more influential than vicarious experiences on social self-efficacy
Lent et al., 2003	Engineering, self-efficacy, coping self-efficacy outcome expectations, interests, goals, persistence, perceived supports and barriers	Engineering students	Career development	Quantitative – series of tests and measures	Finds that supports and barriers impacted goals and persistence indirectly by impacting upon self-efficacy rather than directly as previously postulated in social cognitive career theory, which is what Bandura (1986) had hypothesised
Lindley, 2005	Holland theme self-efficacy, outcome expectations and career choice	Students of introductory psychology and political science	Barriers to career development (SCCT theory)	Quantitative – questionnaire and self-report inventories/scales	Revealed that women who have chosen investigative (e.g., physicist, chemist) or conventional (e.g., accountant, financial analyst) careers, both of which are largely male dominated experience far more barriers than women who have chosen social careers. Positive relationships were found between barriers and expected outcomes. Women who have chosen these investigative or conventional careers generally persist in their careers despite substantial barriers experienced
Zeldin and Pajares, 2008	Performance accomplishments, social persuasion, vicarious experiences, physiological factors, and self-efficacy	STEM males	Self-efficacy and career development	Qualitative – semi structured interviews with 10 STEM males. Cross comparison with (Zeldin and Pajares, 2000) study on STEM females	Results support prior hypotheses that performance accomplishment is the most influential learning source on self efficacy, which was tested on senior STEM males. However, this differs to the Zeldin and Pajares (2000) study on STEM females, which found that social persuasions and vicarious experiences were the main sources of their self-efficacy beliefs. Sources of self-efficacy for males and females in STEM differ significantly (authors suggest this may be particular to non-traditional occupations)
Scott and Ciani, 2008	Career decision making self-efficacy, vocational identity, gender, self-appraisal, gathering occupational information, goal selection, planning and problem solving	Undergraduate students from a career exploration course	Female career development (career decision making self-efficacy and vocational identity)	Quantitative - surveys	This programme resulted in increasing women's beliefs of efficacy for career planning and problem solving. Students also reported higher feeling of vocational identity following the programme, but women reported a significantly lower sense of vocational identity at both the first and second testing. It is not transparent whether this was because of choice and/or confidence in their major or some other factor
Ballout, 2009	Career commitment, subjective career success (salary and career satisfaction), self-efficacy (high and	Banking employees from	Career commitment	Quantitative – questionnaire	Found that career commitment predicted both objective (level of salary) and subjective (career satisfaction) career success only for employees with mid to high self-efficacy but not for those with low self-efficacy

	low levels), gender, work experience and education	three Lebanese cities	and career success		
Abele and Spurk, 2009	Occupational self-efficacy, career advancement goals, objective career success (salary and status) and subjective career success (career satisfaction)	Full time professionals with academic qualifications	Impact of self-efficacy and career goals on objective and subjective career success	Quantitative – longitudinal study with questionnaires post-graduation, after 3 years and after 7 years	Found that occupational self-efficacy measured at career entry stage had a positive impact on salary and status after three years and a positive impact on salary change and career satisfaction seven years later. Career-advancement goals at career entry positively impacted salary and status after three years and positively impacted status change after seven years, but negatively impacted career satisfaction after seven years. Women earned less money than men and this difference was highly significant three years after work commencement and remained so after seven years of work experience. Women’s work tasks appear similar to those of men, yet they earned less, and this wage gap was not due to differences in career-advancement goals, occupational self-efficacy, or the area of occupation. Gender had no impact on career satisfaction. Women earn lower salaries but are similarly satisfied with their careers as men
Baron and Morin, 2010	Executive coaching, utility judgement, learning goal orientation, commitment, work support and self-efficacy	Junior and mid-level managers	International manufacturing company	Quantitative - study of a leadership development program using three training methods	This paper studied a leadership development program using three training methods: classroom seminars, action learning groups, and executive coaching. Study found a large increase from pre-training to post training self-efficacy
BarNir et al., 2011	Entrepreneurial role models, entrepreneurial career intention, gender, entrepreneurial self-efficacy, educational background, and weekly hours worked	College students close to career decision making stage	Entrepreneurs hip as a career choice	Quantitative – survey	Found that role models have a major positive effect on intention and that gender moderates this impact and self-efficacy mediates it. For women, role models had a stronger influence on self-efficacy, which then influenced entrepreneurial career intention
Fitzmaurice, 2012	Positive affect, self-esteem, general self-efficacy, job satisfaction, age, and gender	Irish adults in full time employment	Ireland during an economic recession	Quantitative – questionnaire	General self-efficacy and positive affect were found to be significantly related to job satisfaction, whereas self-esteem was not. Found that females reported far greater job satisfaction than males and older participants reported greater job satisfaction than younger
Buse et al., 2013	Years worked as an engineer, having children, married or not, average age, career history, fulfilment, expectations, career beliefs regarding the pros and cons of a female engineering career, opting out, self-efficacy expectations, outcome expectations, identity, adaptability, engagement, and difficulties faced	Female engineers who persisted in their career and those who left (identified through the personal network of the lead researcher)	Retention of females in engineering and other careers	Qualitative - interviews	Women who persisted in engineering careers demonstrated high levels of self efficacy and work-life balance, their identity was that of an engineer and they were motivated by the challenges of their work. They possessed an ability to adapt, persist and progress, even though they worked in a male dominated environment which presented challenges such as discrimination. Women who left engineering were less able to overcome barriers and believed they were forced into an engineering career. Those who remained as engineers were more likely to be unmarried and have less children
Spurk and Abele, 2014	Subjective career success, objective career success, current occupational self-efficacy, future occupational self-efficacy, ability (grade point average), gender, work hours and math discipline	Mathematical graduates in Germany	Career success and development	Quantitative – questionnaires at various intervals over a 9 year period (longitudinal structural equation modelling)	Created and tested a model of subjective career success (SCS) and examined the ongoing interactive relationship between occupational self-efficacy, objective, and subjective career success. SCS found to positively relate to occupational self-efficacy, which in turn relates to continued success. Since occupational self-efficacy is broader in scope, it enabled a broad range of people working with different specific job requirements, and in different positions to be compared. Individuals with high occupational confidence show higher levels of job satisfaction, job performance, job security, work engagement, work hours, status, and salary

Foley and Lytle, 2015	Life satisfaction, work satisfaction, extraversion, neuroticism, conscientiousness, self-efficacy, discrimination and seeking a new job	Adults who participate in the US longitudinal Health and Retirement Study	Career development of older working adults	Quantitative - data from the Health and Retirement Study 2008 and 2010 interviews	Found that self-efficacy and life satisfaction were positively related to work satisfaction, but conscientiousness was not significantly related to self-efficacy. Discrimination was strongly related to work satisfaction. Self-efficacy was measured through questions regarding perceived ability rather than through scales. This study examined older working adults, for which SCCT was not previously tested
Northington, 2018	Self-appraisal, occupational information, goal selection, planning and problem solving, gender and career self-efficacy	College students from a private and public college taking a career development course	Career decision making self-efficacy and career development	Quantitative – scales used before attending and after completion of the career development course	The rise in career decision self-efficacy scores largely impacted on the self-efficacy of students. Scores increased overall, as well as on each subscale, suggesting the course provided enough information about the various aspects of career choice to improve students' confidence
Hunt et al., 2019	Entrepreneurial self-efficacy, The four self-efficacy learning sources (enactive mastery, vicarious experience, social persuasion and psychological arousal) and control group	Female coaches and female entrepreneurs acquired through snowballing	Female entrepreneurial self-efficacy	Mixed methods – questionnaire, coaching development programme and interviews	Coaching relationships had a positive impact on entrepreneurial self-efficacy, compared to the control group in terms of enactive mastery, vicarious experience, social persuasion, and psychological arousal. This suggests that coaching is a development intervention which can be used to enhance self-efficacy beliefs of female entrepreneurs
Elliott et al., 2020	Self-efficacy, entrepreneurial intent, gender, and impact of the programme	Female participant student mentors	Female entrepreneurial self-efficacy in STEM	Qualitative – semi structured interviews at two points in time	Found that a gender-sensitive mentorship program can develop entrepreneurial identity among women engineers so that they perceive success and identify as entrepreneurs.
Marks et al., 2020	Educational barriers, career barriers, coping self-efficacy, social class and meaning in life	Female adults	Female career development	Quantitative – Online survey	Found a significant negative relationship between educational and career barriers and coping self-efficacy
Rigotti et al., 2020	Career related self-efficacy, subjective career success (self-rated success and career satisfaction and excessive demands), transformational leadership and emotional irritation	Employees of 11 organisations in Germany	Career related self-efficacy and career success	Quantitative – longitudinal online survey at time zero and after one year	Found that career-related self-efficacy boosted career satisfaction but not self-rated success. In contrast, self-rated success heightened career-related self-efficacy but career satisfaction did not. Hypothesises that through increased career-related self-efficacy caused by (self-rated) success, that career satisfaction also increases
Hartman and Barber, 2020	Gender, self-efficacy, work engagement and career aspirations	Male and female adults	Female career development	Quantitative – Online survey	Found no difference between occupational self-efficacy and work engagement between men and women. Men demonstrate greater career aspirations than women. Although women may believe they can achieve the most senior roles, they may not act on this. If they do, organisations create barriers for them (Acker, 1998, 2008). Men will promote themselves even without skills or experience, whereas women need to feel completely competent in a role before promoting themselves for it

## Preface to Paper 2 – Methodology and Research Design

The methodology and research design paper (Paper 2) commenced in November 2021 for presentation to the examiners in October 2022. Various measures were taken prior to the submission of this paper to improve the overall research study which are briefly described below:

- The interview guide: To strengthen the study, a senior academic with policy writing experience was asked and agreed to act as an expert reviewer of the interview guide. This resulted in various suggestion (which are detailed in Paper 2, Appendix 3). Following the expert review, the title of the study was adjusted from “Why are female accountants underrepresented in senior positions?; The influence of self-efficacy” to “The influence of self-efficacy on the career development of female accountants”. The adjusted title focuses on career development, rather than underrepresentation, which better reflects the overall research study and interview guide. In Paper 1 the researcher understood that physiological factors were the negative feelings and beliefs which influenced the self-efficacy of individuals, as this was largely presented in literature. The researcher developed her understanding of physiological factors and felt that such factors could encompass both positive and negative feelings and beliefs, which was taken into consideration in the interview guide (in Paper 2). Also, in Paper 1 the researcher understood that social persuasion was the support and encouragement received from others. However, this understanding developed to include support and encouragement received from oneself (self-talk) which was taken into consideration in the interview guide as presented in paper 2.
- Research questions: The study was presented in June 2022 at the IAFA Doctoral Colloquium. Reflecting on the feedback received, amendments were made to the research questions from three questions (as presented in Paper 1) which were:
  - RQ1:** How have self-efficacy beliefs regarding ability to succeed in a senior position, contributed towards attaining this role for female accountants?
  - RQ2:** How have self-efficacy beliefs regarding ability/lack of ability to succeed in a senior position, hindered the attainment of a senior role for female accountants?
  - RQ3:** What self-efficacy learning influence most impacts upon the self-efficacy and career development of female accountants?

to two questions (as presented in Paper 2) which are:

**RQ1:** What self-efficacy learning sources impact the self-efficacy beliefs of female accountants?

**RQ2:** How do self-efficacy beliefs impact the attainment/non-attainment of senior positions for female accountants?

- Number of interviews: The researcher had difficulty deciding the appropriate number of semi-structured interviews to undertake. The researcher reviewed the literature and consulted with Professor Ingrid Jeacle, who suggested that at least 30 interviews should be considered for this particular study. This is discussed in Paper 2, Section 4.

Presenting this study at the IAFA (Irish Accounting and Finance Association) Doctoral Colloquium, receiving feedback, and winning two awards, provided external validation to the researcher. This resulted in greater self-confidence and self-efficacy that the researcher was conducting good quality research.

The examiners passed Paper 2 subject to minor adjustments. The suggestions and recommendations from the examiners were very helpful in improving this paper. One such recommendation, was to better explain the rationale for choosing participants aged 46 and over. This helped the researcher to carefully consider and ultimately ensure sufficient explanation and justification for this decision (with respect to participants' career stage) was presented in the study. The paper presented here reflects the feedback and subsequent revisions, following that examination in October 2022.

Participant Name: Michelle Gleeson 20091525

Supervisors: Dr Anne-Marie Ivers, Dr Collette Kirwan and Dr Mick Rock

Date: 28 November 2022

## RESEARCH PAPER SERIES

### Paper 2:

#### METHODOLOGY AND RESEARCH DESIGN

#### “The influence of self-efficacy on the career development of female accountants”

#### Abstract

This paper presents the research approach for this study which explores the influence of self-efficacy on the career development of female accountants. Literature suggests that self-efficacy, which is self-belief regarding one’s ability to carry out a task (Bandura, 1977), largely impacts female career development (e.g., Betz and Hackett, 1981; Sullivan and Mahalik, 2000; Dickerson and Taylor, 2000). Females frequently demonstrate lower self-efficacy than males (Quinn, 2012), particularly in traditionally male careers such as accounting (Betz and Hackett, 1981). Low self-efficacy can result in the failure to reach career potential (Hackett and Betz, 1981; Bandura, 1988; Quinn, 2012; Athanasopoulou et al., 2018). To explore the influence of self-efficacy on career development, requires investigating the learning sources that inform self-efficacy beliefs, which this study seeks to do. Semi-structured interviews will be used to capture the personal experiences of participants. Participants will be later career stage female accountants, working in industry roles. This study will contribute to theory by extending knowledge concerning female accountants’ self-efficacy for which little research exists (Byrne et al., 2014). The outcomes of this study will provide new insights into the influence of self-efficacy on female career progression and as a result, such insights may lead to the improved representation of female accountants in senior positions.

Paper word count: 7945



## **Ethical Declaration**

I declare that this proposal is wholly my own work except where I have made explicit reference to the work of others. I have read the relevant notes, DBA Handbook and procedures on conducting academic writing and research and hereby declare that this proposal is in line with these requirements. I have uploaded the entire proposal as one file to Turnitin on Moodle, examined my 'Originality Report' by viewing the detail panel listing of percentages behind the overall 'Similarity Index', and have addressed any matches that exceed 3 percent. I have made every effort to minimise my overall 'Similarity Index' score and the number of matches occurring.

Name: Michelle Gleeson

Date: 28 November 2022

## Section 1 Introduction

This paper presents the research design for this study which explores the influence of self-efficacy on the career development of female accountants. Literature demonstrates that females are just as ambitious as males (Barker and Monks, 1998; Ely et al., 2014) and they possess the qualities and characteristics required for senior roles equally to males (Davidson and Dalby, 1993; Hyde, 2005). Yet they consistently remain underrepresented in senior positions, occupying only 27 percent of managerial positions in the workplace (World Economic Forum's Global Gender Gap Report, 2021). In the accounting arena, which is the focus of this study, females and males enter the profession in equal numbers (Cohen et al., 2020). Yet, across Europe females occupy only 17 percent of partnership positions (Catalyst, 2020).

Literature on the career development of females extensively documents that females face challenges that impact their progression into senior positions (e.g., Barker and Monks, 1998; Flynn et al., 2015; Cohen et al., 2020; Padavic et al., 2020). Through the literature review, Paper 1 presented organisational and personal factors impacting female career development. Organisational factors (e.g., organisational barriers and organisational supports) have been extensively researched with respect to females attaining (or not attaining) senior positions. However, personal factors such as self-efficacy have received less attention. To extend our understanding, Hackett and Betz (1981) suggest that self-efficacy has particular relevance within female career development. Bandura (1977) describes self-efficacy as an individual's beliefs with regard to their ability to successfully perform a given task or behaviour. Research reveals that females are more likely to demonstrate lower self-efficacy than males (Hackett and Betz, 1981; Quinn, 2012), particularly in traditionally male career areas such as accounting (Betz and Hackett, 1981). This finding was reinforced by Barker and Monks (1998), who find that Irish female accountants possess lower self-belief in their work, compared to men. Low self-efficacy can restrict an individual reaching their career potential (Hackett and Betz, 1981; Bandura, 1988; Quinn, 2012; Athanasopoulou et al., 2018). If females are unable to reach their career potential, this can result in a lack of career fulfilment, less than optimal financial security (Hackett, 1995; Brannon et al., 2021) and society and organisations being denied the abilities of a large percentage of its citizens (Pajares and Zeldin, 1999; Balance for Better Business, 2021). While self-efficacy has been researched in the career development of females in STEM, it has not been extensively researched in other career domains, including the accounting arena (Byrne et al., 2014).

It is important to note that self-efficacy is not constant over time. Self-efficacy theory identifies four learning sources which initially inform and continue to impact upon self-efficacy beliefs (Byars and Hackett, 1998), either positively or negatively (Bandura, 1977). Thus, these learning sources provide both the source of self-efficacy beliefs and the means by which self-efficacy beliefs can be improved (Betz and Schifano, 2000). The four learning sources are performance accomplishments, vicarious experiences, social persuasion, and physiological factors. Performance accomplishments are the achievements individuals attain from personal successes. Vicarious experiences are witnessing the successes of others, particularly those whom an individual readily identifies with. Social persuasion is the encouragement and support received from others. Physiological factors are the fears or stress that an individual may feel, possibly resulting in avoidance of a situation (e.g., not applying for a role due to fear, regardless of ability). These learning sources have attracted attention in explaining the development of self-efficacy (Lent et al., 1991; Lent et al., 1996; Anderson and Betz, 2001). In order to explore and sufficiently comprehend the influence of self-efficacy on career development, it is imperative to investigate the learning sources that have impacted and informed such self-efficacy beliefs.

Prior studies, which are predominantly quantitative in nature, have examined self-efficacy and/or the self-efficacy learning sources. These studies provide interesting findings which challenge prior thinking (e.g., the learning sources of males and females may differ (Lopez et al., 1997; Usher and Pajares, 2006)). Such quantitative findings provide opportunities for subsequent qualitative studies, to delve further into specific areas of interest identified. One such qualitative study by Zeldin and Pajares (2000) investigated senior female STEM employees and find that vicarious experiences and social persuasion were the most influential self-efficacy learning sources for female participants. A subsequent qualitative study by Zeldin et al. (2008) find performance accomplishments the most effective learning source for senior male STEM employees. These two qualitative studies demonstrate differences in the learning sources that influence self-efficacy for females, compared to males, within STEM careers. Zeldin et al. (2008) query whether this finding may apply to male dominated career areas in general, but suggest further research is required to investigate this. Usher (2009) proposes that self-efficacy learning sources may be impacted by gender, ethnicity and whether the career type in question is traditional or non-traditional. Therefore, it is imperative to understand the specific learning sources, which influence self-efficacy, within other career domains.

Research has not explored the learning sources which form and influence the self-efficacy beliefs of female accountants, nor explored the influence of self-efficacy on the career development of female accountants. Therefore, the objective of this study is to identify the self-efficacy learning sources and subsequent influence of self-efficacy on the career development of female accountants. To achieve this objective, the following research questions (RQs) have been developed:

- **RQ1:** What self-efficacy learning sources impact the self-efficacy beliefs of female accountants?
- **RQ2:** How do self-efficacy beliefs impact the attainment/non-attainment of senior positions for female accountants?

Researchers believe it is important to improve the self-efficacy beliefs of females (Fitzgerald and Crites, 1980; Betz and Hackett, 1981; Lent and Hackett, 1987; Betz and Schifano, 2000). Self-efficacy theory describes how self-efficacy can be improved (Bandura, 1977), through interventions utilising the self-efficacy learning sources, which were previously discussed. To facilitate our understanding regarding how to improve the self-efficacy of female accountants, it is imperative to comprehend how female accountants' self-efficacy beliefs are informed. Prior research suggests the learning sources that impact the self-efficacy of females may differ to those of males and differ to what is proposed by theory (Zeldin et al., 2008; Usher, 2009). While the self-efficacy learning sources that impact females in STEM careers has been studied, research does not exist for females in other career domains, including accounting careers. Thus, RQ1 seeks to identify what learning sources impact the self-efficacy beliefs of female accountants. RQ2 seeks to investigate how individuals' self-efficacy beliefs influence the attainment/non-attainment of senior positions. In order to answer this question self-efficacy is initially explored. Subsequently individuals' experiences and perceptions will be investigated pertaining to their personal career development, working in a senior position and what may encourage more females into such senior positions.

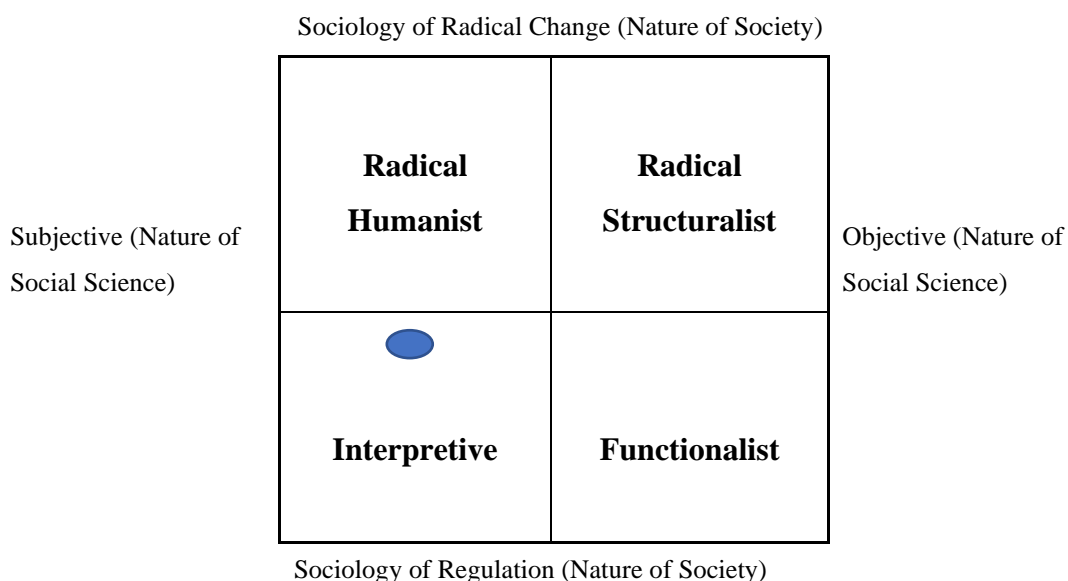
This paper proceeds as follows. Section 2 discusses the philosophical positioning of the study. Section 3 explains why semi-structured interviews are most appropriate to the study, followed by a detailed discussion of the research design. This encompasses the *a priori* interview themes identified from the literature, the interview guide, and the approach for conducting interviews. Section 4 describes participant selection, followed by the planned data analysis process in

Section 5. Section 6 discusses ethics before addressing the limitations in Section 7 and the trustworthiness of the study in Section 8. Finally, Section 9 provides the conclusion.

## **Section 2 Research philosophy**

Research philosophy is the combination of beliefs and assumptions held about the creation of knowledge (Saunders et al., 2015). Burrell and Morgan (1979) categorise research philosophy into two areas the nature of society and the nature of social science. The nature of society considers the contrasting perspectives of the sociology of regulation (associated with the need for order in human matters) and the sociology of radical change (associated with human freedom from dominating structures). The nature of social science is categorised as either subjective or objective. Subjectivity is concerned with interpreting rather than measuring truths, where reality is the result of human reasoning activities (Johnson and Duberley, 2003) and knowledge comes from human experiences (Evered and Louis, 1981). Within the subjective domain the researcher is a necessary part of the study (Adcroft and Willis, 2008). In contrast, objectivity positions the world as external and independent of the researcher (Adcroft and Willis, 2008), seeking verifiable evidence as the only acceptable knowledge, which will subsequently be generalisable. Burrell and Morgan (1979) believed that research was frequently concerned only with the nature of social science, in other words subjective or objective research, where the nature of society's regulation-radical change dimension was frequently ignored. To address this, Burrell and Morgan (1979) incorporated the contrasting views on the nature of society (regulation/radical change) and the nature of social science (subjective/objective). Incorporating these four dimensions created the four separate sociological paradigms for the analysis of social theory, which are presented in Figure 1.

**Figure 1: Four paradigms for the analysis of social theory (Burrell and Morgan, 1979, p. 22)**



Each paradigm shares features with another, with respect to one dimension, on its vertical or horizontal axes, but differs with respect to the second dimension. As such, this creates the requirement for four distinct categories or paradigms, each possessing a unique set of assumptions. Burrell and Morgan (1979) make no presumption that any paradigm or set of assumptions is superior to any other. They simply observe that each paradigm views the world in a particular way, as demonstrated in Table 1, thereby presenting different ways to study research problems (Burrell and Morgan, 1979).

**Table 1: Brief explanation for each of the four paradigms (Burrell and Morgan, 1979)**

Paradigm	View of the world (Burrell and Morgan, 1979)
Radical Humanist	Concerned with freedom from constraints and seeks radical change while viewing the social world from a perspective which tends to be nominalist, anti-positivist, voluntarist and ideographic
Radical Structuralist	Committed to radical change and emancipation, arising from conflicts and crises (political and economic) and approaches these concerns from a standpoint which tends to be realist, positivist, determinist and nomothetic (practical solutions to practical problems)
Interpretive	Concerned with understanding the world as it is. Seeks explanations within the frame of reference of the participant. In its approach to social science, it tends to be nominalist, anti-positivist, voluntarist and ideographic
Functionalist	Characterised by a concern for providing explanations of the status quo and approaches this from a standpoint which tends to be realist, positivist, determinist and nomothetic

In the context of this study, the nature of society informs assumptions about how female accountants interact and are treated within society, which is pertinent to exploring the career development of female accountants. The nature of social science informs assumptions about how female accountants can be studied within their career environments (either objectively or subjectively). The researcher leans towards interpretivism, which sees society as regulated but naturally evolving, while seeking to understand the world as it is subjectively (Burrell and Morgan, 1979).

## **2.1 Philosophical assumptions for the proposed study**

A researcher must address the matters of philosophy, methodology and technique and all three must be consistent with each other and the research question (Singh, 2015). Researchers have been advised to first examine their own philosophy, which largely influences their research interests (Holden and Lynch, 2004) and to subsequently examine the research topic and research questions to consider the philosophical paradigm most appropriate to the research study. The research topic and research questions for this study developed from personal interests, work experience, the literature review, and the personal philosophical assumptions of the researcher. The investigative nature of the research questions in this study are concerned with female accountants' judgements of their self-efficacy and their personal career experiences. As such the research questions involve uncovering beliefs and experiences that are unique to each female and their work environment, rather than placing an emphasis on the generalisability of findings. Therefore, the conceptual framework, research questions and research approach pertaining to the study are consistent with an interpretive philosophy.

Interpretive researchers seek to understand the world as it is subjectively, with the researcher being part of the research and involved from the inside (Evered and Louis, 1981). Interpretivism is concerned with understanding, rather than measurement. Interpretivism is appropriate when seeking to understand the complex actions of humans and attempting to capture the many different realities of individuals (Hasan, 2016). Capturing different realities is very important in this study. While the participants will all be female accountants at a similar career stage, the researcher acknowledges that this may not result in similar career experiences. Even when individuals share similar experiences, they may interpret these experiences differently (Haynes, 2008) as findings are specific to a context (Adcroft and Willis, 2008).

This study seeks an understanding of females' perspectives in their particular work environments. Taking an interpretive approach to this study views participants as individuals, who encounter their own unique experiences, while the researcher strives to represent these individual experiences (Gioia and Pitre, 1990). Self-efficacy researchers have called for more qualitative studies to complement quantitative research of self-efficacy beliefs (Schunk, 1991; Pajares, 1996). A qualitative approach is ideal for obtaining in-depth stories from participants' perspectives (Merriam, 1988, as cited in Pajares and Zeldin, 1999).

## **2.2 Research approach in prior self-efficacy studies**

Prior scholars have undertaken quantitative studies testing self-efficacy or the self-efficacy learning sources, which resulted in interesting findings. For example, researchers initially found performance accomplishments the most effective self-efficacy learning source (Lent et al., 1991; Lopez and Lent, 1992; Luzzo et al., 1999), as suggested in self-efficacy theory (Bandura, 1977). Further studies explored this concept and discovered that a combination of self-efficacy learning sources impacted self-efficacy, rather than simply performance accomplishments alone (Anderson and Betz, 2001) and that the learning sources of males and females may differ (Lopez et al., 1997; Usher and Pajares, 2006). As such, prior quantitative studies have identified avenues for more in-depth examination. To further enhance understanding, qualitative studies can delve deeper and focus on particular concepts which have been unearthed through quantitative studies. A qualitative method complements both the research questions and the interpretive philosophical assumptions held by the researcher.

## **Section 3 Research design**

A research design is described as the detailed plan or approach which will ultimately result in answering the research questions (Crowe and Sheppard, 2012). Qualitative research incorporates various research methods such as observations, documented studies (using documents, drawings, photos, or videos), focus groups and interviews (Leech and Onwuegbuzie, 2008). To elicit information about the personal experiences of female accountants, focus groups and interviews were both considered by the researcher. The information sought is about individuals' self-efficacy learning sources and the influence of self-efficacy on career development. As self-efficacy beliefs, learning sources and career development are unique to individuals, one-to-one interviews are deemed most appropriate.



An interview approach provides the opportunity for the researcher to develop a connection with participants and probe their experiences, feelings and views on the issues being discussed. Focus groups consist of group interviews allowing discussion between participants. The disadvantages of focus groups include the possibility of not obtaining information from members of the focus group who have not contributed to discussions and the group setting can reduce the depth of the data collected (Onwuegbuzie et al., 2009). One-to-one interviews on the other hand provide the opportunity for each participant to contribute equally to the study and facilitate capturing more in-depth data. An interview approach will contribute to female accounting research, which tends not to utilise personal narratives to represent the individual experiences and perceptions of females (Wallace, 2009).

### **3.1 Semi-structured interviews**

Interviews can be open/unstructured, semi-structured or structured. Open/unstructured interviews do not have set questions but allow the interview to ebb and flow around a topic of conversation (Qu and Dumay, 2011). The interviewer asks questions pertaining to the circumstances and context of each interview. This approach was not deemed appropriate for this particular study, as there are specific themes for which the researcher seeks information, so some structure is required. Structured interviews are scripted and consist of pre-established questions asked in the same order and permit limited categories of responses (Qu and Dumay, 2011). The main advantage is that researcher bias is reduced but the richness of data is also reduced, when compared with more open interview approaches (Qu and Dumay, 2011). A structured interview is therefore deemed too prescriptive to obtain the richness of data required.

Semi-structured interviews require the preparation of questions according to previously identified themes for which the interviewer seeks to obtain information, together with probes to evoke more detailed participant responses (Qu and Dumay, 2011). This interview type allows interviewees the freedom to reply in their own individual way and the interviewer, with skill, can obtain valuable insights (Schunk, 1991; Pajares, 1996) and possibly unearth previously unknown knowledge (Qu and Dumay, 2011). Semi-structured interviews are deemed most appropriate to a research study which seeks information from interviewees' perspectives (Qu and Dumay, 2011). As such, semi-structured interviews are aligned to a study exploring an individual's perceptions of their self-efficacy beliefs. Conducting semi-structured interviews aim to understand how participants perceive and interpret their experiences in the

appropriate context (Qu and Dumay, 2011). Using semi-structured interviews gives a voice to female participants and allows for individual narratives to emerge (Zeldin and Pajares, 2000). Scholars have called for studies to give females a voice concerning their career experiences, to build and extend theory (Mainiero and Sullivan, 2005; O’Neil and Balimoria, 2005).

### **3.2 Interview guide**

An interview guide, as presented in Appendix 1, outlines the areas of interest or themes that the researcher wishes to obtain information on (Qu and Dumay, 2011; Yaxley, 2013). It can range from being very scripted to fairly loose (Qu and Dumay, 2011). The researcher has designed open-ended questions within a semi-scripted interview guide, which is consistent with a semi-structured interview approach. By designing the questions as open-ended, this provides guidance to the interviewer, while allowing participants to tell their stories without too much interference from the interviewer (Buse et al., 2013; Yaxley, 2013; Elliott et al., 2020). Open-ended questions are considered more appropriate to exploratory research (Goetz and LeCompte, 1981), as in this study. This approach provides participants the freedom to provide their own narratives (Pajares and Zeldin, 1999; Zeldin and Pajares, 2000; Buse et al., 2013; Yaxley, 2013; Elliott et al., 2020). Allowing participants to provide their own narratives assists in achieving richness of data (Kelliher, 2005; Johnson and Kyriacou, 2006; Wallace, 2009; Gibbert and Ruigrok, 2010; Tucker and Parker, 2018; Elliot et al., 2020). The themes which developed from the literature review, the conceptual framework and research questions are:

**Theme 1:** Self-efficacy beliefs

**Theme 2:** Self-efficacy learning sources

**Theme 3:** Career development

Self-efficacy lies at the heart of this study. To explore the self-efficacy learning sources (as previously explained in Section 1, paragraph 3) and the impact of self-efficacy beliefs on career development, the researcher deems it important to explore the self-efficacy beliefs of each interviewee. Investigating self-efficacy beliefs at the outset assists in providing context for further exploration of self-efficacy within career development. The theme ‘self-efficacy learning sources’ corresponds to RQ1 (i.e. what self-efficacy learning sources impact the self-efficacy beliefs of female accountants). The theme ‘career development’ is connected to RQ2

(i.e. how do self-efficacy beliefs impact the attainment/non-attainment of senior positions for female accountants) and encompasses the collection of data pertaining to the perceptions and career experiences of each individual. Individuals' perceptions (positive and negative) pertaining to working in a senior position will be explored. Participants will be questioned on whether their career has developed according to their expectations and the importance of their career within their lives. The impact of being a female upon individuals' career development and their thoughts about encouraging more female accountants into senior positions will also be investigated within this theme.

Baker (2003) provides guidance for designing interview questions such as ensuring brevity, avoiding duplication, sticking to major points, avoiding biased wording, and avoiding vagueness or possible misunderstanding. A balance must be struck between every question serving a purpose and maximising the interview opportunity. Appendix 2 demonstrates the mapping of the interview questions to literature and the research questions, within the themes identified. In the next sub-sections, the interview questions will be discussed and categorised according to the themes previously listed above.

### **3.2.1 General background questions**

General questions will be asked of each participant to both ease the participant into the interview process and build rapport. The background questions will culminate with asking participants to discuss what led them to a career in accounting and their aspirations towards attaining a senior position (see Interview Guide in Appendix 1).

### **3.2.2 Theme 1: Self-efficacy beliefs**

As previously discussed, assessing participants' self-efficacy beliefs at the beginning of the interview schedule will inform and contextualise the subsequent questions in the interview guide. When analysing results, it will be useful to consider findings in conjunction with the level of self-efficacy determined in this category for each participant.

Schyns and von Collani (2002) believed that task specific self-efficacy scales did not accommodate people working in different organisations or at different grades within the same organisation. As a result, these researchers developed an occupational self-efficacy scale,

which is more general than existing task specific scales but enables self-efficacy measurement across different jobs and organisations. Occupational self-efficacy investigates an individual's belief in their ability to successfully perform their work (Abele and Spurk, 2009). Rigotti et al. (2008) further adapted this occupational self-efficacy scale, resulting in a six-item scale, which has received significant support in the literature (Hirschi, 2012; Rigotti et al., 2020; Omonona et al., 2020; Hartman and Barber, 2020). This occupational scale is adapted in this study by asking participants four open-ended questions to gauge their self-efficacy beliefs, thus aligning with the interpretative nature of the study. Open-ended questions allow the researcher to elicit greater detail and depth of understanding of respondents' self-efficacy beliefs in a career context. Schunk (1991) recommends extending the assessment of self-efficacy beyond scales, by allowing participants describe their perceived confidence pertaining to tasks or situations. Probes are included to categorise responses into a broad matrix (encompassing high, medium, or low), to facilitate future data analysis. The interview questions to assess self-efficacy within this study are mapped to the occupational self-efficacy scale (Rigotti et al., 2008) presented in Table 2.

**Table 2: Interview questions derived from the occupational self-efficacy scale (Rigotti et al., 2008)**

<b>Interview questions</b>	<b>Occupational self-efficacy scale items (Rigotti et al., 2008)</b>
Can you describe how well your prior career experience may have prepared you for a (future) senior position? Probe: Very well (high)/well (medium) or not so well (low)?	My past experiences in my job have prepared me well for my occupational future
Can you describe how confident you feel in your ability to meet the demands/difficulties associated with a (future) senior position? Probe: High/medium or low?	I can remain calm when facing difficulties in my job because I can rely on my abilities Whatever comes my way in my job, I can usually handle it I feel prepared for most of the demands in my job
Can you describe your ability to problem solve effectively in a (future) senior position? Probe: High/medium or low?	When I am confronted with a problem in my job, I can usually find several solutions
Can you describe how effectively you have achieved the goals you set for yourself? Probe: High/medium or low?	I meet the goals that I set for myself in my job

Within this theme the concept of self-efficacy evolving over time/career stages and the impact of challenges on the self-efficacy of individuals will be explored. The interview questions pertaining to these concepts are justified and mapped to the literature and presented in Table 3.

**Table 3: Remaining interview questions within the ‘self-efficacy beliefs’ theme**

<b>Interview questions</b>	<b>Justification/literature</b>
Can you discuss how your belief in your ability as an accountant has evolved over time? Probe: Compared to e.g., early (up to 35) or mid-career stage 36-45?	Literature demonstrates that females are less confident than males until they reach the age of 40, when confidence levels equal those of males. After 60 female confidence levels surpass those of males (Zenger and Folkman, 2019). While confidence is not the same as self-efficacy, this study seeks to establish if self-efficacy evolves with age/career stage
Can challenges/conflicts impact your perceptions of your ability as an accountant? Probes: Arising from events/people? Internal or external?	Literature demonstrates that female self-efficacy is vulnerable to change, more so than that of males (Hackett et al., 1990)

### 3.2.3 Theme 2: Self-efficacy learning sources

Self-efficacy scholars have called for research to assist learning interventions to improve the self-efficacy beliefs of females within their careers (Fitzgerald and Crites, 1980; Betz and Hackett, 1981; Lent and Hackett, 1987; Betz and Schifano, 2000). To design such

interventions for females, it is necessary to determine the learning sources that impact self-efficacy within the relevant career domain such as accounting. RQ1 seeks to identify what self-efficacy learning sources impact the self-efficacy beliefs of female accountants (these four learning sources have been discussed in Section 1). The interview questions developed to address RQ1 have been derived largely from a previous qualitative study which examined the self-efficacy learning sources that impacted senior females in STEM careers (Zeldin and Pajares, 2000). When Zeldin et al. (2008) subsequently examined the self-efficacy learning sources that impacted senior males in STEM careers, they find that the self-efficacy learning sources of females differ to those of males within the same career domain. Zeldin et al. (2008) speculate whether these findings may apply in other career domains that are male dominated, but this has not been researched in the area of accounting. To study the self-efficacy learning sources of females in the accounting domain, the interview questions used by Zeldin and Pajares (2000) are adapted for use in this study, as presented in Table 4.

**Table 4: Interview questions: self-efficacy learning sources**

<b>Self-efficacy learning source</b>	<b>Interview questions</b>	<b>Interview questions used by Zeldin and Pajares (2000)</b>
Performance accomplishments	What achievements have you experienced that influenced you as an accountant? Prompt: Exam successes/promotions/awards	What experiences contributed to your decision to pursue your occupation?
Vicarious experiences	How have others influenced/impacted you as an accountant? Prompt: Role models/successes of others (not just females e.g., peers/friends/teachers/parents/siblings etc)	How were you influenced by others?
Social persuasion	What support/feedback did you receive that influenced you as an accountant? Probes: From adults as a child/peers/line manager/spouse/mentors/clients or yourself? Which was the strongest?	What did people (family/teachers/peers/and culture) say to you as you were pursuing mathematics (science or technology)? What sort of sociocultural messages did you get?
Physiological factors	What personal feelings or beliefs do you possess about career progression that influenced you as an accountant? Prompt: E.g., confidence, fear, self-assurance, apprehension/anxiety etc	How would you describe your feelings and beliefs about mathematics (science or technology) as you were pursuing it?

### **3.2.4 Theme 3: Career development**

Davidson and Dalby (1993) find that female accountants' personality profiles differed to both male accountants and also to the general female population, therefore studies focussed specifically on female accountants are merited. Bandura (1988) discusses individuals restricting their career options, believing themselves incapable, even when this is not true. Research demonstrates that women have a greater tendency to do this (Anderson-Gough et al., 2005; Quinn, 2012; Athanasopoulou et al., 2018). The theme 'career development' explores participants' perceptions of working in a senior position to probe how self-efficacy impacts the attainment or non-attainment of senior positions, thus addressing RQ2. This theme continues by asking participants if females are well represented in senior roles in their organisation/industry and what they believe would encourage more female accountants into senior positions. To obtain sufficient information, to answer RQ2, this study aims to explore additional areas identified in literature, such as the importance of career, career experiences and career reflections. The questions pertaining to the theme of 'career development' and the justification for including them are presented in Table 5.

**Table 5: Interview questions: career development**

<b>Interview questions</b>	<b>Justification for including</b>
<p>Will you talk about the importance of your career within your life?</p> <p>Possible probes: Job satisfaction/fulfilment? Identify as an accountant?</p>	<p>Research finds that women see their career as one element of their lives, whereas men possess single-minded devotion to their career (Eccles, 1987). Buse et al. (2013) find that female engineers identified as engineers and they were very motivated by their career challenges</p>
<p>Can you tell me if your career has developed according to your expectations/plan?</p> <p>Possible probes: Did you direct your career/or wait for opportunities to arise? Reached potential? What does success mean? Setbacks?</p>	<p>Scholars have also sought research to examine within group differences for women within career domains, rather than between women and men (Lent and Hackett, 1987; Swanson et al., 1996), particularly in the area of accounting (Davidson and Dalby, 1993; Barker and Monks, 1998; Wallace, 2009)</p>
<p>How has your belief in your ability impacted your career?</p> <p>Possible probes: Assisted or hindered career development? Enabled you to overcome difficulties/obstacles?</p>	<p>Bandura (1988) discusses individuals restricting their career options, believing themselves incapable, even when this is not true. Research demonstrates that women have a greater tendency to do this (Anderson-Gough et al., 2005; Quinn, 2012; Athanasopoulou et al., 2018). Women judged the value of their work lower than men, despite the work being the same (Jost, 1997)</p>
<p>What do you believe is expected by your organisation to succeed in a senior position?</p> <p>Possible probes: Accept/challenge expectations? Overall strategic approach e.g., work harder or put in more career development effort? Personality traits that you perceive would help succeed in a senior position?</p>	<p>Men and women have different ideas of the actual experience of holding a senior-level position (Gino et al., 2015). Men with high self-efficacy put in strategic career development effort, leading to promotion but women with high self-efficacy put in additional work effort, leading instead to stress, turnover plans, and lower job satisfaction (Kim et al., 2020)</p>
<p>What are the positive and negative aspects of working in a senior position?</p> <p>Possible probes: What enticed you/would entice you to work in a senior position? What would discourage you? What is the biggest impediment (if any)?</p>	<p>Gino et al. (2015) assert that women may overestimate the negative consequences associated with senior positions compared to men.</p>
<p>How has being a female impacted your career development?</p> <p>Possible probes: Positively or negatively? Ability to adapt/persist in a male environment? Are your achievements/ experience valued by your organisation? Supportive organisational environment? Do you feel you deserve a senior position?</p>	<p>Davidson and Dalby (1993) find that female accountants' personality profiles differed to both male accountants and also to the general female population, therefore studies focussed specifically on female accountants are merited. Even when individuals share similar experiences, they can ascribe different meanings to them (Haynes, 2008). Women judged the value of their work lower than men, despite the work being the same (Jost, 1997)</p>
<p>Do you believe that females are underrepresented in senior positions in your organisation/industry?</p> <p>Prompt: Why do you hold that view?</p>	<p>Research finds females in industry roles are similarly underrepresented at senior levels (Gammie and Whiting, 2013), as females in practice roles</p>
<p>What do you think might be done to encourage more female accountants into senior positions?</p> <p>Possible probes: What can women themselves do? What can organisations do?</p>	<p>Research finds females in industry roles experience more barriers to progression (Cohen et al., 2020) than females in practice roles</p>
<p>If you were starting your career again, would you take the same path?</p> <p>Possible probes: Do anything differently? Regrets? Advice to someone new starting in accounting?</p>	<p>Eccles (1987) refers to Terman's longitudinal study which finds that females expressed regret for choosing homemaking over their careers</p>



### 3.3 Interview guide review and interview piloting

The researcher strives to ensure the interview questions obtain the required information necessary to address the research questions. At the same time the researcher does not want to lead or prompt the interviewees. To help achieve these aims, an expert review of the interview guide has been completed and interview piloting will be conducted in the next few weeks with two later career stage female accountants. King (2004, as cited in Nowell et al., 2017) speaks about researchers consulting experts in the context of data analysis. This study adopted this idea of consulting an expert but instead applied the concept to the data planning stage. Caley et al. (2014) describe an expert as someone with thorough, trustworthy knowledge of a certain area, which most individuals would not possess. The expert review for this study was conducted by a female accountant who is a highly esteemed lecturer and researcher in accounting (and female career progression). Appendix 3 documents the expert reviewer's suggestions and the subsequent actions taken in this study.

### 3.4 Interview medium: Face-to-face and online

Tucker and Parker (2018) highlight the importance of selecting the appropriate interview medium. They assert that face-to-face interviews are generally considered the most superior technique. Researchers also support online interviews and suggest that interviewers who possess experience using such a medium, may obtain a greater richness of data (Tucker and Parker, 2018). The researcher intends prioritising face-to-face interviews in order to maximise the ability to build rapport between the interviewee and interviewer. Online interviews will also be used, should participants prefer this medium, thereby meeting the research call to use alternative interview channels to progress qualitative accounting research (Tucker and Parker, 2018). The advantages of face-to-face and online interviews are presented in Table 6.

**Table 6: Advantages of face-to-face and online interviews**

<b>Advantages of face-to-face interviews</b>	<b>Advantages of online interviews</b>
Generally considered the most superior technique for richness of data (Tucker and Parker, 2018)	Captures non-verbal cues and emotions (Solarino and Aguinis, 2020)
More opportunities to build relationships and network (FTSE Women Leaders Review, 2022)	Less intimidating as interviewees are more relaxed in their own space (FTSE Women Leaders Review, 2022)
Less impersonal and transactional than online (FTSE Women Leaders Review, 2022)	Meets research calls to use alternative interview channels for advancing the qualitative tradition in accounting research (Tucker and Parker, 2018)

### **3.5 Conducting interviews**

The researcher as the interviewer must form a bond with each interviewee, listen carefully and remain objective. The interviewer must seek clarification and draw attention to matters the interviewee may be attempting to avoid (Ahrens and Dent, 1998). It is impossible to remove the researcher completely from the research study (Yaxley, 2013; Prior et al., 2018). Haynes (2008) suggests the researcher use commonality with participants to create a bond and encourage them to open up and reveal their experiences. The researcher, as a later career stage accountant, hopes this commonality will assist participants to open up more in interviews. At the same time the researcher must remain aware of any possible bias and constantly examine this to avoid unduly influencing the study. Potential researcher bias will be discussed further in Section 7.

Solarino and Aguinis (2020) advise that offering assurances of anonymity and neutrality encourages participants to provide honest responses. Anonymity will be agreed with participants in the consent form and again at the start of the interview. It can be further demonstrated by not seeking specific names and demonstrating discretion during interactions with participants. As professional transcription services are being used, a confidentiality agreement will be signed with the service provider, which will be further discussed in Section 6. The researcher will document their post interview reflections immediately following each interview, according to the interview reflections template presented in Appendix 4. It is expected that each interview will take approximately 45 minutes.

### **Section 4 Participant selection and recruitment**

Female accountants are the focus of this study because they are underrepresented in senior positions. This is despite the fact that females and males enter the accounting profession in equal numbers and have done so for over three decades (Cohen et al., 2020). There is no presumption on behalf of the researcher that participants may have similar career encounters simply because they are all female accountants with comparable longevity of career experience. In fact, it is expected that even when individuals share similar experiences, they can ascribe different meanings to them (Haynes, 2008). Scholars have sought research to examine within group differences for women within career domains, rather than between women and men (Lent and Hackett, 1987; Swanson et al., 1996), particularly in the area of accounting

(Davidson and Dalby, 1993; Barker and Monks, 1998; Wallace, 2009), which this study seeks to do.

The criteria for inclusion in this study is that participants are later career stage female accountants, working in industry. A number of considerations led to this population of interest as the preferred choice. O'Neil and Bilimoria (2005) find that females' careers develop in specific age-related phases. These phases consist of early career (aged 24-35), mid-career (aged 36-45) and later career stages (aged 46-60)<sup>3</sup>. Later career stage female accountants are more likely to possess the required experience and potentially had the opportunities, to progress their careers. Thus, focussing on participants, who are at a later stage in their career, will help provide insights into how self-efficacy beliefs impact female accountants' attainment or non-attainment of senior positions, as required for RQ2. Studying later career stage females will contribute to literature, as research mainly focusses on early and mid-career stage females.

Prior studies focus largely on female accountants working in practice. Female accountants in industry experience more barriers to progression (Cohen et al., 2020) and are similarly underrepresented at senior levels (Gammie and Whiting, 2013) than females in practice. Industry continues to pose considerable challenges to female accountants' career progression, yet studies focus less on female accountants working in industry. Due to the dearth of research, an incomplete picture emerges of the experiences of female accountants in industry, which warrants further exploration. In this sense, later career stage female accountants working in industry, represents an appropriate sample to explore *the influence of self-efficacy on the career development of female accountants* (i.e. the dissertation title). Table 7 presents literature that helped inform the participant selection strategy for this study.

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<sup>3</sup> The researcher will adopt this age categorisation pertaining to later career stage, without imposing the upper age limit, particularly as the trend in current times is to extend the age of retirement.

**Table 7 Literature which helped inform participant selection strategy**

<b>Study</b>	<b>Findings</b>	<b>Relevance to this study</b>
Zenger and Folkman (2019)	Find that females are less confident within their careers than males until the age of 40, when levels of confidence merge, while over the age of 60, female confidence surpasses that of males	While confidence is not the same as self-efficacy, this is an interesting finding and further informed the decision to interview later career stage females
Barker and Monks (1998)	Irish female accountants averaging 35 years of age possess lower self-belief in their work, compared to men	However, it is not known if female accountants' self-efficacy improves as their career develops, as little research exists involving females in later stages of their careers, which this study seeks to explore
O'Neil and Bilimoria (2005)	Females with 10 – 20 years' work experience were found to be dissatisfied with their organisations and careers, largely due to their work-life balance	By selecting later career stage participants, the influence of this possible period of dissatisfaction, as a result of work-life balance may be less pronounced (Although work-life balance is an important factor influencing an individual's thoughts on their career, it is not the subject of this study)
Kahn et al. (2014)	Find that having children impacts the representation of females in the workforce but this impact is eliminated by the time women are in their 40s and 50s	By selecting later career stage participants brings participants into the age category which eliminates the effect on the representation of females in the workplace, due to having children
O'Neil and Bilimoria (2005)	Females in later career stages encountered their professional lives diminishing their personal lives at points during their careers. As their careers develop these females reclaimed their careers within their lives as opportunities without losing sight of themselves in the process	By selecting participants who are later career stage provides the possibility of greater richness of experience to draw from

RQ2 asks how self-efficacy beliefs impact the attainment/non-attainment of senior positions for participants, therefore it is important to define senior positions within the study. Literature on female accountants in practice tends to equate senior positions with partnership roles. An equivalent description of senior positions in industry is not clearly defined in literature. This study will equate senior positions to those of Finance Director (and Financial Controller, where Finance Director does not exist)/CEO positions. In identifying participants, efforts will be made where possible to invite representation from different industry sectors.

Potential participants will be contacted initially by an invitation email (see Appendix 5), accompanied by an information sheet (see Appendix 6). The four main accounting bodies in Ireland have agreed to assist with disseminating invitations to participate. Certified Public Accountants (CPA) Ireland will distribute the invitation email and information sheet to targeted members. Association of Chartered, Certified Accountants (ACCA) Ireland will send the invitation email and information sheet to their 30 female panel members (panel members serve on the ACCA disciplinary and regulatory committees) and also advertise and encourage participation with the research study on social media. Chartered Accountants Ireland (CAI) will approach female members on behalf of the researcher and Chartered Institute of Management Accountants (CIMA) Ireland have also agreed to assist and their level of assistance is currently being discussed. Potential participants will also be contacted through the researcher's professional and personal networks and referrals obtained from participants. Thus, a combination of self-selection and snowballing sampling techniques will be utilised. The email inviting participants to partake in this study specifies that potential female participants are qualified accountants, 46+ and working in industry roles.

Determining the number of interviewees is important. Many researchers continue interviews until the saturation point is reached (Adapa et al., 2016). Saturation is explained as the point of time in a study when no new learnings or themes are emerging from the data (Guest et al., 2006; O'Dwyer, 2004). As such, this saturation point is considered far more important than adhering to a pre-determined number of interviews (Ross-Gordon and Brown-Haywood, 2000). Notwithstanding this, there exists general guidelines, advising the number of interviews required. For example, Tucker (2021) as an experienced editor and reviewer suggests that incorporating more than 20 interviews provides greater confidence in findings. Caution is advised against ceasing data collection too soon in case relevant data are not included in the research study (Mason, 2010). An experienced researcher will possibly obtain richer data in fewer interviews than a less experienced researcher (Mason, 2010). The researcher met with the esteemed scholar and editor Professor Ingrid Jeacle (2022), who advised (in her capacity as editor and researcher), that at least 30 interviews should be considered when interviews are the only data source. Incorporating this advice and the recommendations of other scholars, the researcher proposes to interview between 25 and 32 participants. A final decision cannot be made until data collection and analysis is underway and the concept of saturation is considered within the study.

## **Section 5 Qualitative data analysis**

Data analysis will commence armed with *a priori* themes identified from the literature. In addition, codes, categories, and themes emerge from the data sources and the researcher must demonstrate this process (Nowell et al., 2017). Gehman et al. (2018) describes this as an abductive process and advises that connecting prior theoretical knowledge to the study, enhances the richness of findings.

### **5.1 Data analysis operationalisation**

The researcher will document their post interview reflections immediately following each interview (see template in Appendix 4), for consideration with transcripts during data analysis. Eisenhardt (1989) strongly advises the recording of researcher's reflections as they occur, which helps form a stronger chain of evidence within the study (Voss et al., 2002). The researcher considered the option of using professional transcription versus self-transcribing. Professional transcription was chosen to provide additional time to dedicate to data analysis. Using professional transcription services raises issues pertaining to data protection. This has been considered and will be further discussed in Section 6. For interviews which may be conducted online, transcriptions will be available through the software utilised, e.g., Microsoft Teams or Zoom. Interview recordings will be sent for professional transcribing following each face-to-face interview, rather than waiting for all interviews to be completed. Transcripts will be shared with participants to obtain further clarification or interpretation where appropriate (Zeldin and Pajares, 2000). Interview transcriptions, reflective log entries and post interview reflections will be input into NVivo software.

The dataset consists of the interview transcripts and recordings, the researcher's reflective log, post interview reflections and memos (Saldana, 2015). Braun and Clarke (2006) recommend researchers to read through the entirety of data at least once before commencing the coding process, as ideas and patterns begin to emerge when researchers are familiar with entire datasets. Once all transcripts, post interview reflections and reflective log entries are read, the transcripts will be re-read while listening to the interview recordings. The reason for this is to capture tone, expression, and emotion of the respondents (O'Dwyer, 2004). During this reading the researcher will prepare interview transcript memos within NVivo (see template in Appendix 7). The interview transcript memos will note any emerging codes, themes, and observations, in addition to the *a priori* themes presented in the interview guide. Preparing

memos assists in providing a strong audit trail of the data analysis process (Halpren, 1983, as cited in Nowell et al., 2017). Each memo will be dated, and cross referenced to the data source.

Following these two readings of the complete dataset and having listened to the interview recordings, an initial framework of themes will be prepared, incorporating the *a priori* themes presented in the interview guide and the subsequent themes and codes emerging from the interview transcript memos. These themes and codes identified are used to assist the next round of data coding, but the researcher will remain open to new themes and codes developing from the data (O'Dwyer, 2004). NVivo maintains a codebook (O'Dwyer, 2004; Saldana, 2015), which will briefly describe each code and cross reference to the relevant data source. This codebook will assist keeping an audit trail and also ensure that no code is dismissed or neglected prematurely. Codes can be initially established in NVivo and easily added to while progressing through the dataset (e.g., transcripts, post reflection notes and memos). NVivo allows the coding of the same section of data to more than one code as well as linking elements of the dataset such as the transcript, post interview reflections and memos. NVivo provides enhanced benefits such as ensuring the researcher has not missed anything which would impact upon findings, reinforcing consistency of coding, providing confidence that other researchers could replicate the findings and supporting an audit trail of the process (O'Kane et al., 2021).

Coding is an ongoing cycle and may require four or more rounds in order to generate meaning from the data (Saldana, 2015). Re-listening to interviews while reviewing transcripts, memos, reflections, and codes, improves the trustworthiness of the coding system (Usher, 2009), providing greater assurance to the reader. Codes sharing similar characteristics will be grouped into categories (Saldana, 2015). This is described as axial coding (Leech and Onwuegbuzie, 2008). Labelling these categories with terms provided by participants is suggested (Gehman et al., 2018). Some codes may not fall into any category. Rather than delete such codes they will be included under a miscellaneous theme (Braun and Clarke, 2006), for further analysis, which may ultimately justify inclusion or dismissal.

For less experienced researchers it may be difficult to know when to cease the analysis process. O'Dwyer (2004) suggests ceasing when data is extremely familiar, and few new themes are emerging. The researcher must demonstrate how themes emerged from the various rounds of data analysis (Nowell et al., 2017). Providing detail about the data progression from the initial

data sources right up to the findings, helps demonstrate rigour in the study (Gehman et al., 2018). It is advised to return to the original dataset and compare it to the developed themes to ensure that conclusions are strong and have developed from the data (Lincoln and Guba, 1985). Clarity about the data analysis process and development of findings is necessary to achieve transparency and rigour (Grodal et al., 2021).

The next step is to report findings. Braun and Clarke (2006) advise writing about each theme, the story it tells and how this fits into the overall context. To assist this process, direct quotes will be provided to support findings (King, 2004, as cited in Nowell et al., 2017). The quotes provided will be selected to demonstrate the complicated stories within the data and provide credibility for the reader (Braun and Clarke, 2006). Gehman et al. (2018) advise to incorporate as much richness as possible so that the findings reported ring true for readers.

## **Section 6 Ethical assessment of the proposed research study**

The ethical assessment of the study will ensure that ethical considerations are at the forefront throughout the process (Crowe and Sheppard, 2012). Ethical approval will be sought from SETU Business School<sup>4</sup>. Participants will be presented with and asked to sign a consent form (see Appendix 8). The consent form details; participant anonymity, permission to record interviews and participant withdrawal from the study. Punch (1986, as cited in Qu and Dumay, 2011) advises the right of participants to understand the essence of the study and this is addressed by the information sheet provided to all participants (see Appendix 6).

The utmost care will apply in handling interview recordings and transcripts. All data will be held on a work laptop, which is password protected and to which no-one, other than the researcher, has access to<sup>5</sup>. Each participant will be assigned a pseudonym for use during data analysis and the presentation of findings. This will assist with anonymity in the study. The data protection policy of the transcribing organisation will be investigated and discussed. Once satisfied with all data protection matters a confidentiality agreement will be signed with the

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<sup>4</sup> The researcher's workplace has confirmed that additional ethical approval is not required from University College Cork

<sup>5</sup> A data protection impact statement is currently being prepared to support the upcoming application for ethical approval



transcription service provider<sup>6</sup>. Should any interviews be particularly sensitive or confidential, the researcher will self-transcribe such interviews. The organisations which participants work for, as well as organisations who may play a role in identifying potential participants, will have their anonymity respected. Transcripts will be shared with participants to ensure accurate interpretation and presentation of their experiences within the research (Zeldin and Pajares, 2000). The data pertaining to the study will be held for a period of 10 years following the submission of the Doctoral Thesis or any publications, as currently prescribed under the SETU Data retention schedule.

The research topic may result in the discussion of matters that are sensitive and/or upsetting for the participants. The researcher will remain empathetic and consider the needs of participants at all times. She will be alert to the possible requirement during an interview to pause or cease the recording. A list of supporting agencies and their contact information will be brought to each interview and provided to participants should this be required (see Appendix 9). The researcher has put in place a personal plan to cope with difficult or upsetting information which may arise.

With respect to the researcher, their role and potential bias in the study should be considered (McGrath and O'Toole, 2012). Belonging to the same category as participants may help build relationships and give participants the comfort to open up more in interviews (Haynes, 2008). However, the researcher is very conscious that this fact may also present possible bias, so this matter is discussed in Section 7.

## **Section 7 Limitations**

This study focuses on later career stage females. Since this group are underrepresented in female accounting literature, their oral narratives can add value and new perspectives to the existing literature. Focussing on only one career stage is a possible limitation. However, including females from many different career stages would reduce the potential depth of the study.

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<sup>6</sup> At this time third party transcription service providers are being researched. The confidentiality agreement will be designed and signed with the transcription service provider prior to contacting participants.

Possible researcher bias has been mentioned previously. The researcher is a later career stage female accountant who until recently has largely worked in industry. This commonality could result in researcher bias towards what participants say<sup>7</sup>. To help address possible researcher bias, the researcher will record reflections post interview, to capture interviewer observations of the interview. These reflections will subsequently be compared to the interview transcripts and any differences will be investigated (McGrath and O’Toole, 2012). McGrath and O’Toole (2012) advise that potential researcher bias be examined and accounted for within the study. This will be addressed through regular discussions with supervisors, regarding the findings emerging from the data and to ensure sufficient regard has been given to alternative interpretations and perspectives.

Researcher bias may be less prevalent if an alternative research design was chosen. Focus groups may reduce the possibility of researcher bias, as the researcher plays a less prominent role (Doyle, 2004, as cited in Qu and Dumay, 2011). Structured interviews may also reduce the possibility of researcher bias due to pre-established questions, permitting limited categories of responses, being completely scripted and asking the same questions in the same order (Qu and Dumay, 2011). However, the researcher carefully considered the various qualitative techniques and interview formats and deemed semi-structured interviews most appropriate for this study, which seeks information from interviewee’s perspectives (Qu and Dumay, 2011). Upon consideration, the benefit of richness of data when interviewees are free to provide their own narratives (Pajares and Zeldin, 1999; Zeldin and Pajares, 2000; Buse et al., 2013; Yaxley, 2013; Elliott et al., 2020), outweighed the possible risk of bias within this study.

Voss et al. (2002) advise caution when attempting to form general conclusions from studies on individuals. This study does not set out to unearth findings that will be applicable to all females, but rather to learn more about the influence of self-efficacy on female accountants’ career development to contribute to existing literature.

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<sup>7</sup> I was awarded a certificate for Epigeum Research Integrity Training, Arts and Humanities (encompassing researcher bias) in December 2020. To further reinforce these learnings, I undertook unconscious bias training (for lecturers undertaking research) in SETU in September 2021.

## **Section 8 Trustworthiness**

Lincoln and Guba (1985) describe the importance of trustworthiness in research presenting the experiences of individuals within particular contexts. The authors explain trustworthiness as encompassing: credibility; confirmability; dependability and transferability. Credibility represents the confidence in the findings of the study. Confirmability is the extent to which findings are formed from participants' experiences and perceptions and not from the influence of the researcher. Dependability is the extent to which findings are consistent and the study and subsequent findings could possibly be replicated by another researcher. Transferability demonstrates that findings have use in other contexts, aside from the context from which they originated. Lincoln and Guba (1985) make various suggestions to improve trustworthiness. The proposed steps which will be taken in this study to address the four aspects of trustworthiness are mapped to these suggestions in Table 8.

**Table 8: Suggestions (Lincoln and Guba, 1985) and measures to improve trustworthiness**

<b>Element of trustworthiness impacted</b>	<b>Suggestions to improve trustworthiness (Lincoln and Guba, 1985)</b>	<b>Measures this study will implement to improve trustworthiness</b>
Credibility	<p>Spend sufficient time in the field to become really familiar with context and any abnormal data</p> <p>Peer debriefing allows analysis and highlights aspects of the study that were not sufficiently presented by the researcher</p> <p>Referential adequacy e.g., recordings (as these can be examined at future dates for comparison against findings to ensure appropriate interpretation)</p> <p>Member checking of data to ensure correct representation of their realities</p>	<p>Ample time will be given for each interview to fully capture context and any possible anomalies</p> <p>Debriefing with supervisors to ensure attention has been given to alternative interpretations/ perspectives and to challenge findings emerging from the data</p> <p>Peer reviews sought/will be sought at conferences e.g., IAFA Doctoral Colloquium 2022 and 2023 and EEA PhD Forum and Conference 2023</p> <p>Recording of all interviews (if permitted by participants) to enable rechecking throughout data analysis</p> <p>Transcripts will be shared with participants to obtain further clarification or interpretation where appropriate (Zeldin and Pajares, 2000), resulting in an honest representation of individual's experiences</p>
Transferability	<p>Provide sufficient description to support findings (authors advise that sufficient thick descriptions and data are provided so that users can make transferability judgements)</p>	<p>Direct quotes will be provided to support findings (King, 2004, as cited in Nowell et al., 2017). Quotes provided will demonstrate the complicated stories within the data and provide credibility for the reader (Braun and Clarke, 2006)</p> <p>Participants will represent a range of employment levels (with reference to seniority), thus including a broader range of perspectives and assisting transferability</p> <p>Participants will be selected from a range of industry sectors, thus further improving transferability</p>
Dependability	<p>Keep a strong audit of the process and the findings and return to the original dataset and compare it to the developed themes to ensure that conclusions are strong and have developed from the data</p>	<p>A detailed audit trail pertaining to all aspects of the study will be maintained</p> <p>Detail on the data analysis process from the initial data sources right up to findings will be provided (Nowell et al., 2017; Gehman et al., 2018)</p> <p>A comparison of themes and findings to the original dataset will be demonstrated to ensure that conclusions are justifiable and have emerged from the data</p>
Confirmability	<p>Confirmability is enhanced by the audit trail, triangulation and maintaining a reflexive journal</p>	<p>A reflexive journal has been maintained since the study commenced and will continue to be maintained throughout the study</p> <p>A detailed audit trail pertaining to all aspects of the study will be maintained</p> <p>Supervisors' opinions will be sought at each meeting, pertaining to coding of data and subsequent findings to ensure data is portrayed sufficiently and within the correct context</p> <p>Inclusion of direct quotes from participants when reporting findings (Braun and Clarke, 2006; Johnson, 2020) to further improve confirmability of findings and themes</p>

Software can be utilised to further promote the trustworthiness of qualitative research such as examining code frequency, checking code consistency, comparisons to objective criteria and providing an audit trail. The researcher will use NVivo to carry out and document data analysis. NVivo will maintain an audit trail of the data analysis process. This will provide further reassurance to support consistency, provide confidence to readers that it is possible to replicate the data analysis process and findings and demonstrate that nothing has been missed which could impact upon the findings of the study (O’Kane et al., 2021).

## **Section 9 Conclusion**

The objective of this study is to identify the self-efficacy learning sources and the ensuing influence of self-efficacy on the career development of female accountants. The exploratory nature of the research questions, aimed at capturing individuals’ real-life experiences, aligns with an interpretive approach. An interpretive approach in turn, aligns the conceptual framework, research questions and research techniques pertaining to this study. Semi-structured interviews will be used to gain an understanding of the self-efficacy learning sources that impact upon individuals and explore how self-efficacy influences career development. The interview guide is designed to provide guidance to the interviewer, whilst also allowing participants to tell their personal stories without too much obtrusion from the interviewer (Buse et al., 2013; Yaxley, 2013; Elliott et al., 2020). A rigorous data collection and data analysis approach has been designed, aimed at ensuring the research questions are addressed and trustworthiness is demonstrated.

This study will contribute to knowledge with respect to the self-efficacy of female accountants working in industry, for which little research currently exists. This study aims to contribute to practice by providing a better understanding of self-efficacy by identifying the learning sources that impact upon female accountants’ self-efficacy beliefs, which is not currently known. It also aims to contribute to practice by extending knowledge on female accountants’ self-efficacy, for which little research exists (Byrne et al., 2014). A greater understanding of self-efficacy can assist future interventions to improve female self-efficacy, ultimately improving the representation of female accountants in senior positions. Research suggests that improved self-efficacy and a greater representation of females in senior positions benefits individuals, organisations, and society. Individuals with higher self-efficacy achieve greater potential

(Hackett and Betz, 1981), thus resulting in greater career fulfilment and improved financial security for individuals (Hackett, 1995). Organisations benefit from greater female representation in senior levels with increased company profits (Noland et al., 2016; Han and Noland, 2020), improved ethical outcomes (Dawson, 1995), a better educated workforce (PwC, 2014) and improved collaboration and decision making (Rosener, 1990; Kray and Kennedy, 2017; Ballantine et al., 2016). Society benefits with more females in senior positions, since the abilities and talents of a greater representation of its citizens are being utilised (Pajares and Zeldin, 1999).

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## Appendices

### Appendix 1: Interview guide

<b>Interview Questions</b>
<b>General questions:</b> 1a Age qualification achieved 1b Qualifying body 1c Type of organisation and number of staff in organisation 1d Current employment role 1e Length of time in current role (grade/level) 1f Length of time in current organisation 1g Age bracket (40-49, 50-59, 60-69, 70+) 1h Can you tell me what led you to a career in accounting? 1i Did you always aspire/do you aspire to a senior position such as Finance Director(or Financial Controller)/CEO? <b>Prompt</b> - Why/why not? <b>Probe:</b> Do you believe that achieving a senior position is possible?
<b>Theme 1 (Self-efficacy beliefs):</b> 2 Can you describe how well your prior career experience may have prepared you for a (future) senior position? <b>Probe:</b> Very well (high)/well (medium) or not so well (low)?
3 Can you describe how confident you feel in your ability to meet the demands/difficulties associated with a (future) senior position? <b>Probe:</b> High/medium or low?
4 Can you describe your ability to problem solve effectively in a (future) senior position? <b>Probe:</b> High/medium or low?
5 Can you describe how effectively you have achieved the goals you set for yourself? <b>Probe:</b> High/medium or low?
6 Can you discuss how your belief in your ability as an accountant has evolved over time? <b>Probe:</b> Compared to e.g., early (up to 35) or mid-career stage 36-45?
7 Can challenges/conflicts impact your perceptions of your ability as an accountant? <b>Probes:</b> Arising from events/people? Internal or external?
<b>Theme 2 (Self-efficacy learning sources):</b> 8 What achievements have you experienced that influenced you as an accountant? <b>Prompt:</b> Exam successes/promotions/awards
9 How have others influenced/impacted you as an accountant? <b>Prompt:</b> Role models/successes of others (not just females e.g., peers/friends/teachers/parents/siblings etc)
10 What support/feedback did you receive that influenced you as an accountant. <b>Probes:</b> From adults as a child/peers/line manager/spouse/mentors/clients or yourself? Which was the strongest?
11 What personal feelings or beliefs do you possess about career progression that influenced you as an accountant? <b>Prompt:</b> E.g., confidence, fear, self-assured, apprehension/anxiety etc
<b>Theme 3 (Career Development):</b> 12 Will you talk about the importance of your career within your life?

<p><b>Possible probes:</b>  Job satisfaction/fulfilment?  Identify as an accountant?</p>
<p>13 Can you tell me if your career has developed according to your expectations/plan?  <b>Possible probes:</b>  Did you direct your career/or wait for opportunities to arise?  Reached potential?  What does success mean?  Setbacks?</p>
<p>14 How has your belief in your ability impacted your career?  <b>Possible probes:</b>  Assisted or hindered career development?  Enabled you to overcome difficulties/obstacles?</p>
<p>15 What do you believe is expected by your organisation to succeed in a senior position?  <b>Possible probes:</b>  Accept/challenge expectations?  Overall strategic approach e.g., work harder or put in more career development effort?  Personality traits that you perceive would help succeed in a senior position?</p>
<p>16 What are the positive and negative aspects of working in a senior position?  <b>Possible probes:</b>  What enticed you/would entice you to work in a senior position?  What would discourage you?  What is the biggest impediment (if any)?</p>
<p>17 How has being a female impacted your career development?  <b>Possible probes:</b>  Positively or negatively?  Ability to adapt/persist in a male environment?  Are your achievements/ experience valued by your organisation?  Supportive organisational environment?  Do you feel you deserve a senior position?</p>
<p>18 Do you believe that females are underrepresented in senior positions in your organisation/industry  <b>Prompt:</b> Why do you hold that view?</p>
<p>19 What do you think might be done to encourage more female accountants into senior positions?  <b>Possible probes:</b>  What can women themselves do?  What can organisations do?</p>
<p>20 If you were starting your career again, would you take the same path.  <b>Possible probes:</b>  Do anything differently?  Regrets?  Advice to someone new starting in accounting?</p>

## Appendix 2: Interview questions mapped to research questions and literature

### General questions

Interview questions	Research questions	Justification
1a Age qualification achieved 1b Qualifying body 1c Type of organisation and number of staff in organisation 1d Current employment role 1e Length of time in current role (grade/level) 1f Length of time in current organisation 1g Age bracket (40-49, 50-59, 60-69, 70+) 1h Can you tell me what led you to a career in accounting? 1i Did you always aspire/do you aspire to a senior position such as Finance Director(or Financial Controller)/CEO? <b>Prompt</b> - Why/why not? <b>Probe</b> : Do you believe that achieving a senior position is possible?	RQ1/RQ2	Necessary to establish rapport, obtain background information and create context  KPMG (2015) find over 60 percent of college and professional females aspire towards senior roles but more than half were hesitant due to a lack of self-belief. Jones and Iyer (2020) identify that the aspirations of female accountants are far lower than those of male accountants (24 percent of females compared to 46 percent of males) for attaining partner level. Self-efficacy positively impacts upon career aspirations (Nauta et al., 1998)

### Theme 1: Self-efficacy beliefs

Interview questions	Research questions	Justification/literature
2 Can you describe how well your prior career experience may have prepared you for a (future) senior position? <b>Probe</b> : Very well (high)/well (medium) or not so well (low)?	RQ1/RQ2	My past experiences in my job have prepared me well for my occupational future (Occupational self-efficacy scale (Rigotti et al., 2008))
3 Can you describe how confident you feel in your ability to meet the demands/difficulties associated with a (future) senior position? <b>Probe</b> : High/medium or low?	RQ1/RQ2	I can remain calm when facing difficulties in my job because I can rely on my abilities Whatever comes my way in my job, I can usually handle it I feel prepared for most of the demands in my job (Occupational self-efficacy scale (Rigotti et al., 2008))
4 Can you describe your ability to problem solve effectively in a (future) senior position? <b>Probe</b> : High/medium or low?	RQ1/RQ2	When I am confronted with a problem in my job, I can usually find several solutions (Occupational self-efficacy scale (Rigotti et al., 2008))
5 Can you describe how effectively you have achieved the goals you set for yourself? <b>Probe</b> : High/medium or low?	RQ1/RQ2	I meet the goals that I set for myself in my job (Occupational self-efficacy scale (Rigotti et al., 2008))

<b>Interview questions</b>	<b>Research questions</b>	<b>Justification/literature</b>
<p>6 Can you discuss how your belief in your ability as an accountant has evolved over time?  <b>Probe:</b> Compared to e.g., early (up to 35) or mid-career stage 36-45?</p>	RQ1	Literature demonstrates that females are less confident than males until they reach the age of 40, when confidence levels equal those of males. After 60 female confidence levels surpass those of males (Zenger and Folkman, 2019). While confidence is not the same as self-efficacy, this study seeks to establish if self-efficacy evolves with age/career stage
<p>7 Can challenges/conflicts impact your perceptions of your ability as an accountant?  <b>Probes:</b>  Arising from events/people?  Internal or external?</p>	RQ1	Literature demonstrates that female self-efficacy is vulnerable to change, more so than that of males (Hackett et al., 1990)

### **Theme 2: Self-efficacy learning sources**

<b>Interview questions</b>	<b>Research questions</b>	<b>Interview questions used by Zeldin and Pajares (2000)</b>
<p>8 What achievements have you experienced that influenced you as an accountant?  <b>Prompt:</b> Exam successes/promotions/awards</p>	RQ1	What experiences contributed to your decision to pursue your occupation?
<p>9 How have others influenced/impacted you as an accountant?  <b>Prompt:</b> Role models/successes of others (not just females e.g., peers/friends/teachers/parents/siblings etc)</p>	RQ1	How were you influenced by others?
<p>10 What support/feedback did you receive that influenced you as an accountant.  <b>Probes:</b>  From adults as a child/peers/line manager/spouse/mentors/clients or yourself?  Which was the strongest?</p>	RQ1	What did people (family/teachers/peers/and culture) say to you as you were pursuing mathematics (science or technology)? What sort of sociocultural messages did you get?
<p>11 What personal feelings or beliefs do you possess about career progression that influenced you as an accountant?  <b>Prompt:</b> E.g., confidence, fear, self-assurance, apprehension/anxiety etc</p>	RQ1	How would you describe your feelings and beliefs about mathematics (science or technology) as you were pursuing it?

### Theme 3: Career development

Interview questions	Research questions	Justification
<p>12 Will you talk about the importance of your career within your life?</p> <p><b>Possible probes:</b> Job satisfaction/fulfilment? Identify as an accountant?</p>	RQ1/RQ2	Research finds that women see their career as one element of their lives, whereas men possess single-minded devotion to their career (Eccles, 1987). Buse et al. (2013) find that female engineers identified as engineers and they were very motivated by their career challenges
<p>13 Can you tell me if your career has developed according to your expectations/plan?</p> <p><b>Possible probes:</b> Did you direct your career/or wait for opportunities to arise? Reached potential? What does success mean? Setbacks?</p>	RQ1/RQ2	Scholars have also sought research to examine within group differences for women within career domains, rather than between women and men (Lent and Hackett, 1987; Swanson et al., 1996), particularly in the area of accounting (Davidson and Dalby, 1993; Barker and Monks, 1998; Wallace, 2009)
<p>14 How has your belief in your ability impacted your career?</p> <p><b>Possible probes:</b> Assisted or hindered career development? Enabled you to overcome difficulties/obstacles?</p>	RQ2	Bandura (1988) discusses individuals restricting their career options, believing themselves incapable, even when this is not true. Research demonstrates that women have a greater tendency to do this (Anderson-Gough et al., 2005; Quinn, 2012; Athanasopoulou et al., 2018). Women judged the value of their work lower than men, despite the work being the same (Jost, 1997)
<p>15 What do you believe is expected by your organisation to succeed in a senior position?</p> <p><b>Possible probes:</b> Accept/challenge expectations? Overall strategic approach e.g., work harder or put in more career development effort? Personality traits that you perceive would help succeed in a senior position?</p>	RQ2	Men and women have different ideas of the actual experience of holding a senior-level position (Gino et al., 2015). Men with high self-efficacy put strategic career development effort, leading to promotion but women with high self-efficacy put in additional work effort, leading instead to stress, turnover plans, and lower job satisfaction (Kim et al., 2020)
<p>16 What are the positive and negative aspects of working in a senior position?</p> <p><b>Possible probes:</b> What enticed you/would entice you to work in a senior position? What would discourage you? What is the biggest impediment (if any)?</p>	RQ2	Gino et al. (2015) assert that women may overestimate the negative consequences associated with senior positions compared to men.
<p>17 How has being a female impacted your career development?</p> <p><b>Possible probes:</b> Positively or negatively? Ability to adapt/persist in a male environment?</p>	RQ2	Davidson and Dalby (1993) find that female accountants' personality profiles differed to both male accountants and also to the general female population, therefore studies focussed specifically on female accountants are merited. Even when

Interview questions	Research questions	Justification
Are your achievements/ experience valued by your organisation? Supportive organisational environment? Do you feel you deserve a senior position?		individuals share similar experiences, they can ascribe different meanings to them (Haynes, 2008). Women judged the value of their work lower than men, despite the work being the same (Jost, 1997)
18 Do you believe that females are underrepresented in senior positions in your organisation/industry <b>Prompt:</b> Why do you hold that view?	RQ2	Research finds females in industry roles are similarly underrepresented at senior levels (Gammie and Whiting, 2013), as females in practice roles
19 What do you think might be done to encourage more female accountants into senior positions? <b>Possible probes:</b> What can women themselves do? What can organisations do?	RQ2	Research finds females in industry roles experience more barriers to progression (Cohen et al., 2020) than females in practice roles
20 If you were starting your career again, would you take the same path. <b>Possible probes:</b> Do anything differently? Regrets? Advice to someone new starting in accounting?	RQ1/RQ2	Eccles (1987) refers to Terman's longitudinal study which finds that females expressed regret for choosing homemaking over their careers

### **Appendix 3: Expert review findings**

The Office of the First Minister and Deputy First Minister commissioned a team to investigate, report and advise the Northern Ireland Public Sector on improving the gender imbalance at executive level. Having studied this report, I believed that one of the authors was ideally experienced to provide an expert review of my interview guide. An expert is described as a person with detailed, dependable knowledge in a certain area, not possessed by most individuals (Caley et al., 2014). King (2004, as cited in Nowell et al., 2017) refers to consulting experts for advice pertaining to data analysis. I embraced the idea of having an expert review, but at the earlier data planning stage, since this was my first time designing an interview guide. This individual very kindly agreed to carry out an expert review of my interview guide during late July/early August 2022 and within this review, they considered the research questions, abstract (Paper 2) and the supporting mapping of the interview questions to literature. On 3 August 2022 the expert reviewer met with me via zoom to discuss their findings and provide suggestions. Below are the expert reviewer's suggestions and the corresponding follow up:

#### **Expert suggestion 1:**

The title ('Why are female accountants underrepresented in senior positions?; The influence of self-efficacy') is about underrepresentation, but the research questions are about female career development/progression. It was suggested this is examined further in the context of the overall study and that there is possibly a need to link underrepresentation and career development/progression.

#### **Researcher follow up:**

This study has been undertaken as female accountants are underrepresented in senior positions. The research objective has been consistent throughout Papers 1 and 2: To identify the self-efficacy learning sources and subsequent influence of self-efficacy on the career development of female accountants. Having considered this suggestion and discussed this with my supervisors, it is believed that the title is potentially misleading, as the study and research questions are not necessarily going to provide the answers as to why female accountants are underrepresented in senior positions. However, it is hoped that the study will provide learnings which may lead to the improved representation of female accountants in senior positions. To clearly represent this distinction, and ensure the title indicates what the study is about, the title was changed from:

#### **Why are female accountants underrepresented in senior positions?; The influence of self-efficacy**

to:

#### **The influence of self-efficacy on the career development of female accountants**

#### **Expert suggestion 2:**

Senior positions should possibly exclude Financial Controller and only include Finance Director and CEO. It is important to explain the term senior position to participants.

#### **Researcher follow up:**

This point was considered and discussed with my supervisors and we are of the opinion that the title a role is given often depends on the organisation in question. In some organisations, finance director roles do not exist. Therefore, it is important to ensure the definition of senior position can be adapted accordingly. Paper 2 states: "Literature on female accountants in practice tends to equate senior positions with partnership roles. An equivalent explanation of senior positions in industry is not clearly defined in literature. This study will equate senior



positions to those of Finance Director (and Financial Controller, where Finance Director does not exist)/CEO positions”.

**Expert suggestion 3:**

The profile of participants and the sectors to include in the study (e.g., participants from industry, education, public sector) were discussed. It was suggested that including too many sectors could potentially weaken the study, due to insufficient representation from any of these individual sectors and advised that the study concentrate on one sector, such as industry.

**Researcher follow up:**

As a paucity of research exists with respect to the self-efficacy and career development of female accountants in industry, the study will focus on female accountants in this particular sector. All supervisors agreed with this.

**Expert suggestion 4:**

To follow from suggestion #1, the expert reviewer did not see many interview questions directly related to underrepresentation, thus the study will not answer why female accountants are underrepresented in senior positions.

**Researcher follow up:**

After speaking with the expert reviewer, the researcher was very clear on the focus of the study and in a position to review and finalise the interview questions and interview guide. Amending the title, as discussed above, ensured that the reader was also clear on the focus of the study.

**Expert suggestion 5:**

We discussed the idea of piloting the interview guide with female accountants and/or female academics. The expert reviewer suggested piloting with one accountant and one academic, believing this combination could provide the best possible experience and feedback and ultimately contribute better to the overall study.

**Researcher follow up:**

The researcher took this suggestion on board and discussed with her supervisors. It is believed that it is important to pilot with female accountants, so that the researcher obtains the maximum benefit from conducting pilots. It is believed that the expert review has fulfilled the requirement for an academic critique.

**Expert suggestion 6:**

Initially the interview question pertaining to the ‘Self-efficacy theme’ incorporated an indicator on a scale of 1 to 10. It was suggested to change from the indicator to a matrix of high, medium, or low, to better support the qualitative nature of the study.

**Researcher follow up:**

This point was taken on board and the relevant research questions adapted accordingly to incorporate a matrix of high, medium, or low.

**Expert suggestion 7:**

Caution was expressed around not including females representing all possible career stages.

**Researcher follow up:**

The researcher acknowledges this point and has given considerable thought to the selection of participants and undertaken extensive research to support the decision to focus on females at a later career stage. The rationale for including this particular career stage of females is documented in Paper 2 (see Section 4). The researcher feels that she can strongly defend this decision.

## **Appendix 4: Interview reflections template**

Dated:

Interview reference:

Observations

Feelings/emotions/attitudes:

Rapport:

Points to consider later:

## Appendix 5: Invitation letter

Dear Accountant,

I would like to invite you to participate in my doctoral research study, as part of the DBA<sup>8</sup> (Doctorate in Business Administration) programme at South East Technological University (SETU). I am studying the career development of female accountants to better understand their underrepresentation in senior positions.

I am a qualified accountant and chartered tax advisor with over 20 years' experience largely in industry. I moved into an academic role a little over three years ago and am both personally and professionally interested in the career development of females. My intention is to interview female accountants (aged 46 and over), working in industry positions to extend literature about female accountants at this career stage. This will involve being interviewed (face-to-face or online) and speaking about various experiences that impacted on your career from your perspective and in your own words.

I hereby attached an information sheet to explain any queries or concerns you may have. I also attach a consent form, which needs to be signed by both you as interviewee and me as researcher/interviewer. All information provided will be anonymised in the study. We can then organise a suitable time to meet over the coming weeks.

Your contact information:

Name: \_\_\_\_\_

E-mail address: \_\_\_\_\_ Mobile phone number: \_\_\_\_\_

I would very much appreciate if you could return this form to me at the following e-mail address: [michelle.gleeson@ucc.ie](mailto:michelle.gleeson@ucc.ie)

Thanking you,

Michelle Gleeson

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<sup>8</sup> Within this programme I am being supervised by Dr Collette Kirwan, Dr Mick Rock, and Dr Anne-Marie Ivers.

## **Appendix 6: Information sheet**

**Researcher's name:** Michelle Gleeson

**Project title:** The influence of self-efficacy on the career development of female accountants.

**Purpose of this research:** This study examines the influence of self-efficacy (self-belief) on the career development of female accountants. It is anticipated that the outcomes of this study will provide insights on female accountants' self-efficacy and career development. A better understanding of self-efficacy may ultimately improve the representation of female accountants at senior levels and assist in closing the gender gap that exists at this level.

**Who is being asked to participate?** Female accountants working in industry roles aged 46 and over.

**Do I have to participate?** No but your participation would be greatly appreciated. Your valuable career experiences and personal perceptions could help provide a better understanding concerning the career development of female accountants and ultimately assist in improving the representation of female accountants in senior positions in industry.

**Can I leave the study?** Yes, you can leave the study at any time up to the two week deadline following the sharing of your transcript with you.

**What would my participation in the study involve?** A face-to-face interview (or online if you prefer) which generally lasts up to 45 minutes with possible follow up clarification (by email or phone).

**What are the benefits of participating?** To further research on the career development of female accountants in industry roles, for which little information is available.

**How will data gathered be stored, protected, and used in the study?** Data will be held on the researcher's work laptop (to which no-one else has access) and is password protected. The data protection protocols of the third party transcription service provider will be investigated, and a confidentiality agreement discussed and signed. Consent forms will be provided, reviewed, and signed by participants and the researcher, prior to conducting interviews. Face-to-face interviews will be professionally transcribed, by a third party transcription service provider. Individuals and organisations will be anonymised, and individuals assigned a pseudonym, so they cannot be identified within the study. Data will be held for a period of 10 years following the submission of the DBA Thesis or any publications, as currently prescribed under the SETU Data retention schedule.

**Can I verify aspects of the work and view a summary of the findings?** Yes, your interview transcript will be sent to you once complete, so that adjustments can be made if you wish, within a two week time period.

## **Appendix 7: Interview transcript memo template**

Dated:

Interview reference:

What resonated upon reading the transcript?

Comments on initial themes (including codes pertaining to themes):

**Theme 1:** Self-efficacy beliefs

**Theme 2:** Self-efficacy learning sources

**Theme 3:** Career development

New possible codes/themes identified:

Cross-referencing:

Other observations:

## Appendix 8: Consent form

I have read and understood the information sheet provided and by choosing to give consent:

*(please tick the box)*

- 1) I am voluntarily participating in this study.
- 2) I grant permission to record my interview.
- 3) I grant permission to transcribe my interview.
- 4) I understand that I can withdraw from the study at any point  
(up to two weeks post receipt of transcript as per information sheet).
- 5) I understand that my own and my organisation's details will be  
anonymised.
- 6) I understand that the anonymised data will be cited in  
the project/thesis and other publications.

### Signed:

\_\_\_\_\_  
Participant

\_\_\_\_\_  
Date

\_\_\_\_\_  
Researcher

\_\_\_\_\_  
Date

## **Appendix 9: List of supporting agencies**

### **General information/support:**

- Employee assistance programmes may be on offer within organisations. Interviewees will be directed to in-house supports where appropriate

### **Women's support:**

- Back To Work Connect (education and career hub to help women who have taken time out to raise their families get back into the work force) Tel: 089 4057839 Email: [info@backtoworkconnect.ie](mailto:info@backtoworkconnect.ie)

### **Health:**

- Free online stress control classes (HSE) <https://www.hse.ie/eng/about/who/healthwell-being/about-us/free-online-stress-control-classes.html>
- Wellwoman Centre (primary health care services, family planning, counselling, and sexual health services) Tel: [01 874 9243](tel:018749243) Email: [info@wellwomancentre.ie](mailto:info@wellwomancentre.ie)

### **Mental health:**

- Samaritans Ireland Tel: Freephone 116123 or 01 6710071 Email: [jo@samaritans.org](mailto:jo@samaritans.org)
- Aware Tel: 01 661 7211 Email: [info@aware.ie](mailto:info@aware.ie)
- GROW Tel: [0818 474 474](tel:0818474474) Email: [info@grow.ie](mailto:info@grow.ie)
- Shine Tel: [01 8601610](tel:018601610) Email: [info@shine.ie](mailto:info@shine.ie)
- Mental Health Ireland Tel: 01 2841166 Email: [info@mentalhealthireland.ie](mailto:info@mentalhealthireland.ie)

### **Preface to Paper 3 – Design Implementation**

Paper 3 - Design implementation commenced in October 2022 for presentation to the examiners in April 2023. This paper was very much a practical paper as it discussed the operationalisation of the design that was presented in Paper 2, the pilot interviews and presented the preliminary findings from the first six participant interviews. Adjustments made to this study following Paper 2 are briefly described below:

- NVivo: Paper 2 (page 104) stated that reflective log entries would be input into NVivo (along with transcripts and post interview reflections). However, it was not feasible to input reflective log entries, as this is a working document and is continuously being updated. Rather than preparing the interview transcript memos in NVivo, as stated in Paper 2 (page 104), these were prepared in Microsoft word and uploaded to NVivo when the transcripts and post interview reflections were uploaded.
- Transcriptions: For interviews conducted online, Paper 2 had stated the intention to use transcriptions available through the software utilised, e.g., Microsoft Teams or Zoom. It transpired that such transcriptions required considerable editing. Since professional transcription services had been chosen to free up time for data analysis, the researcher made the decision to use professional transcribers for both face-to-face and online interviews.
- Terminology: The term female is used in Paper 1 and Paper 2. Feedback from the EAA doctoral mentoring programme in 2023 suggested that the term “woman/women” is more appropriate and personal than the term “female” (unless using as an adjective such as female accountants). The researcher incorporated this adjustment in terminology, which was applied to all subsequent work. A footnote was inserted on page 1 of Paper 3 to explain this change.

The examiners passed Paper 3, subject to minor adjustments. The researcher found the comments and recommendations of the examiners very insightful and beneficial. One such recommendation was to better explain the description provided about the “messiness” of the data during data analysis. This challenged the researcher to provide a deeper explanation of this aspect of the data analysis process. This paper presented incorporates the feedback of the examiners from April 2023 and the subsequent revisions that ensued.



Participant Name: Michelle Gleeson 20091525

Supervisors: Dr Anne-Marie Ivers, Dr Collette Kirwan and Dr Mick Rock

Date: 31 May 2023

## **RESEARCH PAPER SERIES**

### **Paper 3:**

## **DESIGN IMPLEMENTATION**

### **“The influence of self-efficacy on the career development of female accountants”**

#### **Abstract**

This paper describes the initial design implementation and presents the preliminary findings for this study which explores the influence of self-efficacy on the career development of female accountants. Semi-structured interviews seek to capture the personal stories and career experiences of participants, who are later career stage female accountants, working in industry. In operationalising the research design, learnings were made, and the design was amended accordingly. Analysis of six narratives to date reveal thought provoking preliminary findings. Participants perceive they possess high self-efficacy, while also indicating little desire for progression into the most senior roles in their organisations. Self-efficacy, which possibly evolves over time, may influence how women deal with overcoming barriers and balance work/life. Narratives portray little support provided by organisations which is important, as support is a learning source that impacts upon individual’s self-efficacy beliefs. Findings tentatively suggest that women may be less inclined to seek credit for their hard work and have less opportunities to network, both of which may hinder their career development. Data collection and data analysis are at a very early stage and initial findings will be considered as part of ongoing data analysis. This study will improve our understanding of the relevance of self-efficacy theory in influencing the career development of female accountants.

Paper word count: 8325

## **Ethical Declaration**

I declare that this proposal is wholly my own work except where I have made explicit reference to the work of others. I have read the relevant notes, DBA Handbook and procedures on conducting academic writing and research and hereby declare that this proposal is in line with these requirements. I have uploaded the entire proposal as one file to Turnitin on Moodle, examined my 'Originality Report' by viewing the detail panel listing of percentages behind the overall 'Similarity Index', and have addressed any matches that exceed 3 percent. I have made every effort to minimise my overall 'Similarity Index' score and the number of matches occurring.

Name: Michelle Gleeson

Date: 31 May 2023

## Section 1 Introduction

This paper describes the initial design implementation for this study, which explores the influence of self-efficacy on the career development of female accountants. Super (1990) describes career development as career preparation, career choices, commencing work and adapting to work situations throughout the career life span. This is a sufficiently broad interpretation to include all possible events within a career such as progression/lack of, leaves of absence/career breaks, career moves and achievements/lack thereof. Literature provides evidence that several factors impact female career development such as organisational barriers, organisational supports, self-efficacy, personal barriers, and careers aspirations. Organisational factors in the form of barriers and supports have been extensively researched. Yet the underrepresentation of women<sup>9</sup> at senior levels persists. Globally women in the workplace hold 31 percent of leadership positions (World Economic Forum, 2022). Female underrepresentation is highly relevant in the accounting domain, with women holding only 17 percent of partnership roles throughout Europe (Catalyst, 2020). In a review of 25 years of accounting research on gender, “. . .much has changed and yet little has changed” (Haynes, 2017, p. 110). As scholars continue to research the barriers preventing female accountants’ career progression (e.g., Cohen et al., 2020; Jones and Iyer, 2020; Vidwans and Cohen, 2020), this study seeks to explore another perspective. What has received less attention is the focus on how female accountants perceive their ability to develop their careers and progress into senior positions. Self-efficacy theory provides the framework to better understand how participants perceive themselves in their work environments. Semi structured interviews are most appropriate to a study seeking information from interviewee’s perspectives (Qu and Dumay, 2011), while giving a voice to participants and allowing for individual narratives to emerge (Zeldin and Pajares, 2000).

Participants will be later career stage female accountants, working in industry. While female accountants working in industry experience more barriers to progression (Cohen et al., 2020) and are similarly underrepresented at senior levels (Gammie and Whiting, 2013), studies focus less on this cohort. O’Neil and Bilimoria (2005) find women’s careers develop in age-related phases which include early career (aged 24-35), mid-career (aged 36-45) and later career (aged

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<sup>9</sup> It has come to the researcher’s attention that using “woman/women” is more appropriate and personal than “female” (unless using as an adjective e.g., female accountants, female career development). In Papers 1 and 2 “female” was used.

46-60)<sup>10</sup> stages. Arnold and Clarke (2016) explain that by the age of 45 most individuals' career development tends to level off, according to the traditional career stage approach. Thus, studying participants, who most likely have had the opportunity and required experience to progress within their careers, will help provide insights into how self-efficacy beliefs impact female accountants' attainment or non-attainment of senior positions.

Self-efficacy is described as an individual's beliefs about their ability, to successfully perform tasks or behaviours (Bandura, 1977). Self-efficacy is not static as learning sources contribute to both forming self-efficacy beliefs and adapting these self-efficacy beliefs over time: i) performance accomplishments, ii) vicarious experiences, iii) social persuasion and iv) physiological factors (Bandura, 1977). Self-efficacy and the self-efficacy learning sources have been researched from the perspective of women in STEM careers. Little research has been conducted in the accounting arena. Vidwans and Whiting (2022) find that pioneer women forged accounting careers in the early 20th century, despite significant barriers, with self-efficacy contributing to their career development. This suggests that self-efficacy plays a significant role in career development, even within the most difficult of circumstances. It is important to further explore the influence of self-efficacy in career development and understand the learning sources that influence self-efficacy beliefs. Therefore, the following research questions (RQs) have been developed:

- **RQ1:** What self-efficacy learning sources impact the self-efficacy beliefs of female accountants?
- **RQ2:** How do self-efficacy beliefs impact the attainment/non-attainment of senior positions for female accountants?

This paper develops and implements the data collection and analysis process for the two pilot interviews and first six participant interviews. Data collection was undertaken in December 2022 and data analysis undertaken from December 2022 to March 2023. Lincoln and Guba (1985) emphasise the importance of trustworthiness in research which presents the experiences of individuals. The authors explain trustworthiness as encompassing credibility, confirmability, dependability, and transferability. Measures have been used to improve the overall

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<sup>10</sup> The researcher utilises this age categorisation with respect to later career stage, without imposing the upper age limit. The direction in Ireland is to extend the age of retirement/facilitate individuals to work longer.

trustworthiness of the study, such as sharing transcripts with participants (Zeldin and Pajares, 2000), maintaining a reflective journal, detailed documentation of the data analysis process (Nowell et al., 2017; Gehman et al., 2018) and incorporating direct quotes from participants when presenting the findings, to enhance the credibility of the study (Braun and Clarke, 2006). Preliminary findings from the data collected and analysed are presented. These initial findings will serve to provide guidance for future data collection and analysis, as the study progresses.

This paper proceeds as follows. Section 2 explains the piloting process and the ensuing modifications made to the study. Section 3 discusses participants, how participants were accessed, matters pertaining to participant inclusion (or exclusion) and the profile of interviewees, interviewed to date. Section 4 describes the data collection and analysis process. This is followed by a detailed discussion of the initial findings in Section 5. Finally, Section 6 provides the conclusion and future steps.

## **Section 2 Piloting**

Piloting was conducted to achieve the following: to assess whether the interview questions capture the necessary information to address the research questions and to provide an opportunity for the researcher to gain experience of conducting participant interviews. For the pilot interviews, the researcher identified two women, both of whom are later career stage accountants but do not work in industry. Selecting individuals not working in industry allowed the objectives for conducting pilot interviews to be achieved, while ensuring the pool of potential study participants was not depleted. Both pilot interviewees have vast career experience, so the researcher values their feedback and insights. Table 1 demonstrates the profile of the pilot interviewees.

**Table 1: Profile of pilot interviewees**

<b>Pilot interviewees*</b>	<b>Pilot conducted</b>	<b>Age category</b>	<b>Age qualification obtained</b>	<b>Professional body membership</b>	<b>Organisation type</b>
Ruth	October 2022	50-59	26	Chartered Accountants Ireland	Academia
Ailish	November 2022	50-59	24	Chartered Accountants Ireland	Academia/Education

\* Pilot interviewees were assigned a pseudonym

## **2.1 Pilot operationalisation**

The first pilot interview was conducted face-to-face and was audio recorded. The second pilot interview was conducted online through Microsoft Teams and was video<sup>11</sup> and audio recorded. Both recordings were transcribed/edited by the researcher shortly after each interview. The recordings were listened to, while reading the transcriptions, to ensure that meaning was captured sufficiently (O’Dwyer, 2004). By conducting one interview face-to-face and one online, it was possible to gain experience of both approaches. Traditionally face-to-face interviews were considered most appropriate to obtain richness of data but when interviewers possess experience using online mediums, greater richness of data is obtained (Tucker and Parker, 2018). Face-to-face interviews may provide greater opportunities to build relationships with interviewees, while online interviews may result in interviewees being more relaxed, in their own environment (FTSE Women Leaders Review, 2022). The researcher did not notice any difference in the richness of data collected between both interview mediums (differences in the ability to build rapport could not be determined as both women were already known to the researcher). The researcher was satisfied with her role as interviewer and that sufficient piloting had been completed, prior to commencing the fieldwork.

## **2.2 Pilot outcomes and modifications to study**

Ruth requested clarification about some interview questions and suggested that the provision of information in advance of the interview, pertaining to the interview topics, would have assisted with her answers. Based on this feedback, the researcher prepared the following four general topic areas for dissemination to interviewees, in advance of the interview:

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<sup>11</sup> When recording on Microsoft Teams a transcript is provided which requires considerable editing.

- Career development and experiences
- Individuals/experiences/factors that influenced your self-belief as an accountant
- Career progression and perceptions with respect to career progression
- Female accountants' representation in senior positions

Ruth suggested that an individual's placement within their family is important and may impact upon self-efficacy beliefs. Ailish also mentioned place in family as pertinent, when addressing the interview questions on self-efficacy learning sources. The researcher decided to capture this information in the general information section of the research guide as question 1h "Where are you placed in your family (e.g., eldest, middle or youngest)?".

Following these pilot interviews and resulting data analysis, minor adjustments were made to the interview guide. For example, within Q10 the term "advice" was changed to "support". In addition, "clients" and "line managers" were included as possible sources of support, in the probe for Q10 (these adjustments were incorporated into the final Paper 2 submission). Based on the pilot study a more significant adjustment was deemed necessary. The researcher believed that the questions pertaining to the self-efficacy learning sources were not concise enough. The study by Zeldin and Pajares (2000), from which the self-efficacy learning sources questions were adapted, (see Section 3.2.3 in Paper 2), did not reference self-efficacy. In designing the original interview questions, the researcher was conscious not to lead participants. However, the researcher believes that these questions are pertinent to this study and must be sufficiently focussed, or else the required information may not be attained. Thus, the term self-belief was included in these four questions pertaining to the self-efficacy learning sources. Self-belief is used within the definition of self-efficacy (Bandura, 1977). The researcher feels there is no valid reason not to state self-belief, and that utilising this term, will not lead participants. The reflections and learnings resulting from the pilot interviews are presented in Table 2.

**Table 2: Reflections and learnings from pilot interviews**

<b>Pilot Interviewees</b>	<b>Reflections</b>	<b>Learnings</b>
Ruth	Indicated high self-efficacy but contradicted somewhat in personal narratives	Participant sought clarification on some questions Participant mentioned place in family could be pertinent
Ailish	Indicated high self-efficacy but contradicted somewhat in personal narratives	Researcher did not feel that the questions on self-efficacy learning sources were clear enough for participant Participant mentioned menopause and the significant impact of this on careers Participant also mentioned place in family as relevant to the self-efficacy learning sources

### **Section 3 Sourcing potential participants**

Ethical approval was obtained from South East Technological University, subject to suggestions, which largely focussed on specifying the storage and security of data within the remit of the study. These suggestions were addressed immediately, and the data protection impact assessment was updated (see Appendix 1). As discussed in Paper 2, potential participants would be identified through the researcher’s professional and personal networks and referrals obtained from participants, as well as through the four professional accounting bodies. Thus, using a combination of self-selection and snowballing sampling techniques. After receiving ethical approval, the researcher invited the four accounting bodies to proceed with contacting targeted members, as previously agreed. This communication invited potential participants to partake in this study. Email communications issued, included the invitation letter, information sheet and consent form.

Sourcing potential participants commenced rather slowly initially. In November, Chartered Accountants Ireland (CAI) suggested putting an announcement in their e-newsletter inviting members who met the criteria, to participate in this study. Unfortunately, quite a number of women volunteering to partake, did not meet the criteria, as they worked in public sector roles or academia etc (the criteria for inclusion in this study is that participants are later career stage female accountants, working in industry). A manager from the Association of Chartered Certified Accountants (ACCA) requested a LinkedIn reference to the study, to distribute within their network. The researcher put an invitation on LinkedIn to female accountants, who met



the criteria, to participate in this study. The Chartered Institute of Management Accountants (CIMA) as well as ACCA used this LinkedIn post to encourage female accountants within their networks to support the study. Certified Public Accountants (CPA) issued an email to their targeted members in early December. This CPA email and CAI newsletter announcement, together with the researcher's LinkedIn message, were particularly successful at the outset and resulted in numerous offers to support the study from potential participants.

### **3.1 Considerations with respect to participant inclusion**

Two matters became apparent very quickly. Most potential participants requested an online interview. The impression was that individuals are exceptionally busy and possibly feel that less commitment is required for online interviews and some individuals stated that they preferred online, as they work largely from home. The second matter was that the definition of industry within the study needed further clarification. This was required as many potential participants presented various scenarios e.g., women who recently moved into or out of industry, women who work in more than one position (e.g., both employee and self-employed) and women who work in non-profit organisations. Initial investigation found that, while industry is referred to in research, it is not universally defined. CAI, ACCA, CPA, Irish Auditing and Accounting Supervisory Authority (IAASA) and the International Federation of Accountants (IFAC) were contacted to determine if they had a definition of industry. CPA categorises the for-profit sector into practice, financial services, and industry (Kavanagh, 2022). Likewise, CAI suggested the segments of practice, financial services, and industry (Riordan, 2022). ACCA confirmed their general categorisation of accounting into industry, financial services, practice, and public sector (Clifford, 2022). They advised that IAASA categorise industry and financial services into the category of "Business". Thus, while the accounting bodies did not offer a definition of industry, it seems that what it does not include (i.e., practice and public sector) is generally accepted.

A review of research was undertaken to obtain further clarity and precedence concerning the criteria for inclusion. Gawel and Mroczek-Dabrowska (2021) define industry based on the EC classification of economic activities, which is *La nomenclature statistique des activités économiques dans la Communauté européenne*, otherwise known as NACE Rev. 2 (Eurostat, 2006), which is presented in Appendix 2. This classification proved useful, as it highlighted

certain careers e.g., working in membership, such as professional accounting bodies, as organisations which might not normally be identifiable within industry. As membership organisations are included in NACE Rev. 2, the researcher is categorising such organisations within industry for this study. The Central Statistics Office (CSO) (nd) use institutional sectors to categorise the economy in terms of institution type. The institutional sectors used for reporting statistics in Ireland are:

- Non-financial corporations (non-financial service organisations)
- Financial corporations (financial services)
- Non-profit institutions serving households (e.g., charities, clubs etc)
- Government (local and central)
- Households

Government and households are not relevant to this study. Certain non-profit institutions could potentially be relevant. However, should funding be fully/mostly received from Government sources, this may indicate a leaning towards public sector, rather than industry. After review with supervisors, it was decided that non-profit organisations would justify inclusion within industry, where: such institutions are largely non-government funded and operate in a manner consistent with other organisations, within the category of industry (e.g., prepare year-end accounts, have a board of directors/trustees and where staff are appointed through an interview process). This requires that non-profit organisations for whom potential interviewees work, must firstly be screened, to determine qualification within this study's definition of industry. Therefore, industry, financial services and qualifying non-profit institutions are all considered within the category of industry for this study. Appendix 3 presents the reasoning behind including each participant, as well as excluding individuals who did not qualify for inclusion in this study.

### **3.2 Profile of interviewees**

Table 3 presents the profile of the first six participants who were interviewed and whose data was analysed for this paper. Pseudonyms<sup>12</sup> were assigned to each individual. Interviews lasted between 23 minutes and 45 minutes (average 32 minutes) and all participants consented to

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<sup>12</sup> Each participant was given the choice of choosing their own pseudonym or allowing the researcher select one for them. Two of the participants chose their own pseudonym.

having their interview audio recorded and transcribed. The interview time does not include the time taken to speak with interviewees both before and after each interview, which is discussed in Section 4.1 (second paragraph).

**Table 3: Profile of participants**

<b>Participant**</b>	<b>Age bracket</b>	<b>Approximate age qualification achieved</b>	<b>Professional body membership**</b>	<b>Current Role</b>	<b>Organisation type</b>	<b>How participant was accessed</b>
Eloise	50-59	38	CPA	Credit Controller	Farming	CPA email
Elizabeth	50-59	21	CAI	Director	Financial Services	CAI newsletter
Kate	40-49	28	CPA	Head of Finance	Pharma	CPA email
Marie	50-59	24	ACCA	Director	Professional body/Membership organisation	CPA email
Catherine	50-59	35	CPA	Director	Technology	CPA email
Julie	40-49	22	ACCA	Head of Function	Financial Services	Personal contact

\*\* One participant holds two professional accounting qualifications. Only the first attained is included to preserve anonymity

## **Section 4 Data collection and analysis process**

Prior to each interview the researcher gathers as much detail as possible about the interviewee including their career background, current position, and qualifications. This is done in advance of the interview to avoid wasting valuable interview time obtaining this information.

### **4.1 Interview process**

Interviews were conducted in December 2022. Of the six interviews conducted, two were face-to-face and the remaining four online. Apart from the first face-to-face interview feeling slightly more formal initially, the researcher did not experience any difference in the richness of data or the ability to build rapport between online and face-to-face interviews. This is likely due to the fact that most individuals, including the researcher, are now extremely proficient at conducting business online. Tucker and Parker (2018) suggest that the richness of data improves as individuals become more experienced using mediums, such as online platforms.

Steps were taken to build rapport (Haynes, 2008). Prior to commencing recording, the researcher chatted with each interviewee, introduced the study, spoke about consent, participant verification (of transcripts), anonymity and provided participants the opportunity to ask any questions they may have. This informal conversation differed between each participant and typically took 10 minutes. Gathering information prior to the interview about career background, current position and qualifications assisted commencing this initial conversation. This provided the opportunity to relax interviewees and commence building a connection between the interviewee and interviewer. Interviewees are asked to share their personal experiences, and this can be achieved more naturally when individuals feel some connection with the other party and view them as a person, rather than simply an interviewer. While the dynamic with each interviewee differed, the researcher's accounting experience proved to be beneficial in creating such a connection. Immediately after each interview, the researcher had another brief chat with each interviewee, which typically lasted 5-10 minutes. This provided the opportunity for participants to ask any questions they may have, reflect on matters that arose within the interview and discuss what happens next. This also helped strengthen the connection between interviewer and interviewee, and in general, participants expressed their willingness to help with queries that may arise post interview.

Immediately after each interview, post interview reflections were documented, as advised by Eisenhardt (1989). Recording such reflections assists in forming a stronger chain of evidence within the study (Voss et al., 2002). Post interview reflections record initial impressions or interesting points from each interview. Over the period of conducting the six interviews, the researcher refined the prompts and probes used in the interview guide, as presented in Appendix 4.

## **4.2 Data analysis**

During November 2022, the researcher further investigated transcription service providers and their data protection processes. Two transcription service providers were selected, and confidentiality agreements signed with both<sup>13</sup>. Once all six interviews were conducted and the first transcripts were received from the transcribing service provider, data analysis commenced

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<sup>13</sup> Both transcription service providers were recommended by scholars known to the researcher. A confidentiality agreement was signed with one transcribing service provider in November 2022 and with the second transcribing service provider in February 2023.

and continued until March 2023. As described in Paper 2 the transcripts, post interview reflections and reflective log entries were initially read for each interview. The transcripts were then read again as interview recordings were played, in order to capture the meaning of each interviewee (O'Dwyer, 2004). During this second reading, transcript memos were prepared (prior to uploading the dataset to NVivo). These transcript memos documented codes emerging from the data and any other observations of the interviewer regarding the interview. Halpren (1983, as cited in Nowell et al., 2017) suggests that preparing memos strengthens the audit trail of the data analysis process. As discussed in Paper 2, following two readings of the full dataset, and listening to the interview recordings, an initial framework of codes was prepared. Codes were initially categorised using the *a priori* themes presented in the interview guide. While these themes were useful to provide an initial structure, the researcher ultimately chose not to categorise the codes according to the *a priori* themes when inputting into NVivo. This decision was taken to allow themes to emerge naturally through the narratives of the interviewees. The interview transcripts, post interview reflections and transcript memos were all uploaded to NVivo, and the initial framework of codes was set up within NVivo. Reflective log entries were not uploaded but referred to as the data analysis was undertaken.

With the data uploaded to NVivo, a third reading of the dataset was conducted, and the coding of the data commenced. The initial codes already identified were used to assist various rounds of data coding, while the researcher remained receptive to new codes emerging from the dataset (O'Dwyer, 2004). As coding progressed additional codes were established in NVivo. Within NVivo each coded portion of text is referenced to the data source. Frequently data was coded to more than one code. The researcher re-listened to the recordings for both the fourth and fifth readings of the dataset to further improve the trustworthiness of the coding system (Usher, 2009). During these readings and re-listening to recordings, further codes were added. For the sixth reading of the dataset, the researcher considered the possibility of new or other existing codes for each segment of data, to ensure that all potential interpretations of data were considered. During this process the supervisors were updated and were constantly on hand to provide guidance and coaching.

The next stage of analysis involved scrutinising the data within each code on NVivo. The researcher examined whether the data was appropriately coded, whether it would be better coded elsewhere and whether further codes were required. This process lasted a number of

days and resulted in 27 additional codes being set up. The total codes at this time were 79. At this stage, the initial categorisation of codes commenced. Categorisation involves grouping codes with similar characteristics into broader categories or subthemes (Saldana, 2015). Such categorisation would assist further rounds of coding within such categories, while the researcher remained disposed to new codes and themes emerging from the data (O'Dwyer, 2004).

The next phase involved taking each of the categories individually (with corresponding codes) and going through the complete dataset, to ensure each category was adequately considered in respect of all data. This required examining the whole dataset numerous times to sufficiently analyse each category. During this stage of the process, 16 new codes were set up in NVivo.

At this stage the data would be best described as messy and somewhat overwhelming. Data was frequently coded to various codes, and it was difficult to establish how to make sense of the volume of codes that existed. Gioia et al. (2013) assure that being overwhelmed with the volume of data is a normal part of this process and assert that getting lost in the data, is essential, before coming out the other end. To commence making some sense of the data, tables were developed for each code, with brief notes pertaining to each participant (see sample demonstrated in Appendix 5). Visually presenting the data in code tables, by category, provided some structure and a starting point to commence writing. To develop the themes further, the researcher commenced writing about each category, believing that writing would ultimately enable the themes to surface. Many drafts were written, and continuous refinements made. As writing continued, the categories were subsumed into broader themes and findings began to take shape gradually. Once these preliminary themes were developed, they were compared against the original dataset, to ensure that findings made sense relative to the original data collected (Lincoln and Guba, 1985). Clear documentation has been maintained about the data analysis process and development of findings to demonstrate transparency and rigour (Grodal et al., 2021).

## **Section 5 Preliminary findings**

It is important to bear in mind that the themes emerging from the data analysis, relate only to the data collected and analysed for the first six interviews. Each theme is labelled where possible with terminology provided by participants, as suggested by Gehman et al. (2018),

which is identifiable by the use of quotation marks. Appendix 6 presents the data analysis operationalisation of codes, categories, and themes.

## **5.1 Background and context of individuals**

Participants were asked a series of questions to ease them into the interview, gain insight into their personal reasons for their career choice and understand a little about the environment that existed when they made their career decisions.

### **5.1.1 “The right path”**

A wide range of personal experiences account for career entry decisions such as the influence of others, a brief interaction, and the desire for a secure career in less affluent times. In the case of Elizabeth, a family friend came to visit her home. As he was an accountant, she told him about her interest in accounting and he provided her with support and information. She credits him with leading her to her accounting career. “It was through this man .... who really put me on the right path for that”.

It is important to contextualise Ireland in the 1980s and early 1990s when these women finished secondary school. This period presented a difficult economic environment, as the economic boom did not commence until the mid-1990s, and there was high unemployment. For Kate, who grew up in inner city Dublin, there were few opportunities, which meant she had to get a job when she left school, “I grew up in inner city Dublin, so we didn’t have as many opportunities....so, I went straight to work”. While working in this job (retail), she discovered her talent for numeracy. She commenced studying for the accounting technician and ultimately a CPA accounting qualification, both qualifications for which she studied by night. While participants encountered fewer women in their accounting classes and may have been less encouraged in school to study accounting, perceptions of accounting as a male dominated career environment did not arise in the responses. This may suggest that at the time, similar to now, there were few, if any, structural or perceived entry barriers into the profession for women. While participants experienced different career entry decisions their narratives all indicate self-belief (self-efficacy) in their ability to obtain the necessary qualification for entry into the accounting profession.

### **5.1.2 Perceptions of progression**

Despite demonstrating ambition in their stories and experiences, interviewees generally expressed little desire to progress to a more senior position, to that which they currently hold. Only Kate and Catherine aspired to progress further, but not to the most senior positions within their own organisations. Kate's reluctance to progress within her organisation, is because such a move requires a skillset in science, rather than accounting, which she does not possess. Catherine explains that she does not aspire to a Chief Financial Officer role, due to the skillset required, but also because of the demands such a position brings:

But I think something like a CFO of a company this size, I don't think I have the skill sets, nor do I have the appetite to bring that kind of pressure or stress on me. Now to be a CFO in a smaller company, then yes....

Participants were prompted as to whether they felt they had reached their career potential and most participants believed they had not, despite expressing little desire to progress into more senior levels within their own organisations. Participants' stories speak about progression requiring a different skillset, the responsibility attaching to more senior positions and wanting a life outside of work. There are many possible explanations for not aspiring to progress within one's own organisation. Having a life outside work may conflict with career progression, which is discussed further in Section 5.3.1. External influences, such as the lack of support and encouragement received from organisations, may be a relevant factor with respect to individuals' preference for further career progression and is discussed in Section 5.2.4. It is also possible that individuals at later career stage are less likely to desire further career progression, despite generally reporting both high levels of self-efficacy and perceptions of not having achieved their career potential. If so, this may have implications for organisations. Opportunities for progression at earlier career stages may entice talented individuals to reach their career potential. These possibilities will be further explored as the study progresses.

### **5.2 Self-efficacy within career development**

Participants were asked a series of questions to explore their self-efficacy beliefs and the self-efficacy learning sources which influenced these self-efficacy beliefs. The term self-belief rather than self-efficacy is used within the interview guide (Section 2.2 explained that the term self-belief is used within the definition of self-efficacy (Bandura, 1977)).



### 5.2.1 Self-efficacy beliefs

As discussed in Paper 2, participants were asked four open-ended questions to gauge their self-efficacy beliefs. Probes were included to categorise responses into a broad matrix (encompassing high, medium, or low). Table 4 presents the responses received from the six initial interviewees.

**Table 4: Self-efficacy matrix of responses from participants**

Participant	Current Role	Can you describe how well your prior career experience may have prepared you for a senior position?	Can you describe how confident you feel in your ability to meet the demands/difficulties associated with a senior position?	Can you describe your ability to problem solve effectively in a senior position?	Can you describe how effectively you have achieved the goals you set for yourself?
Eloise	Credit Controller	Medium-High	Medium	High	High
Elizabeth	Director	Medium	High	High	High
Kate	Head of Finance	High	High	High	High
Marie	Director	High	High	High	High
Catherine	Director	High	High	High	Medium
Julie	Head of Function	High	High	High	High

In general, participant responses indicate perceptions of high levels of self-efficacy at the time of interview. This is quite revealing as it provides an indication of how they perceive their ability associated with a senior position. This will be borne in mind as interviews progress to see if such perceptions are supported in the narratives of participants. Catherine explains how effectively she has achieved the goals she set for herself. Her main goal was to obtain her CPA accounting qualification. However, in that process she took a break for a few years. Since it took her longer to obtain her qualification than anticipated, she felt her effectiveness in achieving her goals warranted a categorisation of medium (as demonstrated in Table 4). "...my main goal was to get my CPA ..... the medium comes from the pace I took to reach that goal.... and I think I took the long way around at times". Catherine is quite hard on herself in this judgement and this concept of being hard on yourself arises at times within the narratives

of participants.

Interviewees were asked how their self-belief in their ability impacted their careers. While participants had largely categorised themselves as possessing high self-efficacy beliefs, low self-efficacy seems to feature within their narratives at times. Catherine feels that her lack of self-belief impacted negatively on her earlier career development, when she took positions that were not challenging for her. Marie believes that women lack confidence in their ability to take on the required responsibility of senior roles and are therefore less likely to push themselves forward for progression. Elizabeth speaks about her self-belief in environments outside her own organisation, in situations where she believes she does not have a lot to contribute:

But even though I'm senior in my organisation, there are some situations that I'm in where I feel I wouldn't have much to contribute. And that's not within my organisation....But if you were at a meeting with the banks' CEOs for example, it's hard to push yourself forward in a group like that....

While the rich data portrays instances of lower self-efficacy when participants talk about occurrences within their careers, such circumstances only arise from time to time, so do not necessarily contradict the perceptions individuals have of possessing high self-efficacy. However, this may indicate that self-efficacy is sometimes vulnerable or can be challenged and may possibly hinder female career progression at times. What is largely absent from participants' narratives, is the existence of support and encouragement (i.e. the learning source of social persuasion) within organisations to assist in times of lower self-efficacy. As discussed in Paper 1 organisational support both improves self-efficacy and positively impacts career development. Career progression may be less attractive to individuals if they perceive that organisational support is insufficient.

### **5.2.2 Self-efficacy evolving over time**

Participants were asked whether self-belief evolves with career stage. Each participant felt that their self-belief had improved over time, which they attribute to age or experience. Marie attributes her evolving self-belief to experience. She explains that she always had belief in her ability as an accountant, but that working in a senior position requires a lot more than technical expertise. She feels there is a requirement to believe in yourself as a senior manager and this is developed through experience, working in the role.

Julie feels that her self-belief improved within the age category of 36-45. She speaks about giving her younger self career advice on how important self-belief is within career development, while ability is an added bonus for progression. She explains that many individuals who possess great ability do not possess self-belief. “And if you have ability with self-belief, then you can go even further. But so many people with huge ability don't have the self-belief for some reason”. Kate perceives that her self-belief improved with age and experience, which peaked when returning to work after having her youngest child. While she came back into the same position, she took on greater responsibility and a more strategic role within the organisation:

Then I had my family and that's the years where it's sort of a bit flat. And after my last child, it was eight years ago now this month, that's really where I came back, and I really see the peak. I came back nearly in a completely different role. Even though it was the same position, I came back in a different role, took on more responsibility. Very much had a key role in running the company. So, I would say probably around 41 is really when it started to peak.

It is difficult to determine if this adjustment for Kate is attributable completely to age or possibly to another reason (e.g., change in life circumstances, such as having had her youngest child). Did she unconsciously decide that it was time to refocus on career development? Throughout the stories recounted, the initial findings cautiously indicate that self-efficacy may evolve with age/experience/circumstances.

### **5.2.3 Self-efficacy learning sources**

There are four self-efficacy learning sources which inform and continuously impact upon self-efficacy beliefs (Bandura, 1977). Performance accomplishments are the achievements that individuals attain from successes. Vicarious experiences are witnessing the successes/achievements of others, particularly those whom an individual readily identifies with. Social persuasion is the encouragement and support received from others. Physiological factors are the feelings and beliefs of individuals. Participants were asked to discuss the impact on their self-belief as an accountant with respect to each of these learning sources. With the exception of one participant who had no instance of the achievements or successes of others

impacting her self-belief, every individual discussed impacts upon their self-belief for each of the four possible learning sources. A number of interviewees spoke of achievements or successes in work that impacted their self-belief. Catherine describes a particularly challenging IT implementation project that she worked on, which had to be completed within a very strict deadline. She feels that completing this project within the required timeframe both assisted her career development and improved her self-belief:

It was a very, very tough project with two and a half years to do it in. Ideally, we probably would have needed an extra year to do it, but you know, in multinationals you don't get that benefit..... I think that definitely helped accelerate my career. But it accelerated the belief in myself as well.

While social persuasion often refers to the support and encouragement received from others, it can arise from oneself, which is referred to as self-talk (Feltz et al., 2008, as cited in Shipherd, 2019). Julie speaks about how she supports herself through self-talk. She initially questions her ability and then reminds herself how others can succeed, without great ability. This spurs her on to tell herself that if they can succeed, then she most certainly can also. She explains that the more she does this, the more successful this approach is. She is possibly a little hesitant towards the end when she asserts that it is true, but adapts this slightly, to say that it is mostly true. This maybe suggests a little less self-efficacy at times:

So, at times you would be thinking, oh my goodness am I capable of doing this or this is a big change, that sounds like a big role, am I able for it? But you know I'm quite a pragmatic person and I have seen so many people succeed without massive ability. And I'm a big believer in telling myself, you know what, if they can do it, I can do it.... And the more I tell myself that, it's worked, but it's true, for the most part it's true.

Catherine presents two examples of support (negative and positive) from line managers. The first is from a line manager in her earlier career. This manager impacted negatively upon her self-belief due to their management style. "That manager certainly micromanaged me and probably dented a lot of my confidence as an accountant...". This was very difficult for Catherine and resulted in her moving from that team. The second is from a manager she had later in her career. This manager impacted positively on her self-belief, through developing and

coaching, which resulted in multiple promotions for Catherine. "...her coaching and developing of me definitely instilled more self-belief and has helped me get through two rounds of promotions". This demonstrates how impactful support provided within the workplace can be, whether furnished positively or negatively. Catherine mentions later that she would probably handle that negative experience better if it happened today. This suggests that her increased self-efficacy (which she believes improved in her early 40s) would enable her to better deal with a difficult situation.

This study seeks to explore what self-efficacy learning sources impact the self-efficacy beliefs of female accountants. Each woman had various learning sources that impacted her self-belief. The researcher sought to distinguish which learning source mostly resonated for each individual. To eliminate possible researcher interpretation bias, each interviewee was reminded of the four learning sources discussed (three in the case of one interviewee) and asked to reflect as to which largely influenced their self-belief as an accountant. Support/feedback resonated more for three interviewees, achievements for two interviewees and personal feelings/beliefs for one interviewee. Table 5 presents a summary of the self-efficacy learning sources which impacted upon participants, together with the learning source that resonated most for each participant.

**Table 5: Self-efficacy learning sources which influenced participants' self-efficacy**

<b>Participant</b>	<b>Personal achievements (Performance accomplishments)</b>	<b>Achievements or successes of others (Vicarious experiences)</b>	<b>Support/feedback (Social persuasion)</b>	<b>Personal feelings/beliefs (Physiological factors)</b>	<b>Learning source which resonated most for each participant</b>
Eloise	Going back/commuting to college and passing exams	Peers in college and work	Self-talk, friends, and family	Lack of belief	Family (social persuasion)
Elizabeth	Led a project for the organisation	Role model of mentor and female board member	Family friend, mentor, and CEO	Personalising	Leading the successful project (performance accomplishments)
Kate	Qualifying and studying by night. Appointed into senior role (high turnover, highly regulated industry).	Progression of peers	Mentors	Ambition	Ambition (physiological factors)
Marie	Qualifying/passing exams and promotions and success in new positions		Senior manager and board of directors	Lack of fear	Promotions and success in new positions (performance accomplishments)
Catherine	Implementation of IT project in very short timeframe	Different skill sets of mentors and team member's progression	Senior managers and support of mentors	Confidence	Coaching by senior manager (social persuasion)
Julie	Nominated for various awards/courses for high achievement	Sister and friends	Self-talk and peers	Capability	Self-talk (social persuasion)

Mentors did not feature largely in the stories that participants told. Elizabeth experienced mentoring for the first time at a later career stage. Kate had two mentors in her prior role who she spoke highly of. "... the two mentors were excellent. They really trained me up to a gold standard, professionally". Catherine working in a large organisation, had a different experience of mentorship within her career. Her approach of having different mentors to develop different skills or strengths is very insightful and certainly not the experience conveyed by other interviewees:

And I think sometimes people think that you could only have one mentor. I'm kind of against that. At one stage I had three or four mentors on the go because a different mentor

would bring a different strength or more of a development that I wanted to get, or I saw that skill set in that person.

While stories were relayed where individuals (e.g., senior managers) were supportive (social persuasion) within organisations, such support seems to have occurred on an ad-hoc basis and was not a constant feature according to the narratives of participants. Participants rarely spoke of their self-belief being influenced by the successes and achievements of others within organisations in more senior roles (vicarious experiences). This demonstrates a paucity of organisational influence positively impacting the self-belief of these women. The dearth of role models and support within organisations is possibly relevant to how individuals develop within their careers and may reduce individuals' aspirations for career progression. Ongoing interviews and data analysis will provide further insights about the self-efficacy learning sources which impact later career stage female accountants.

### **5.3 Women working in industry**

This category explores the importance of careers, balancing work and the personal lives of participants, the impact of being a woman on career development and what is hindering female career progression.

#### **5.3.1 “Work/life balance”**

Career is/has been very important for all participants. Elizabeth identifies strongly as an accountant and demonstrates the pride she feels as an accountant, “I’m so proud to be one. It was so hard to get it and such an achievement for me personally ....because yes, I’m totally defined.....I am an accountant to the tips of my fingers, my brain works that way”. While Elizabeth’s narrative portrays how important her career is to her, she also explains that her family takes priority, which is echoed by Kate and Marie. Julie feels that her career was more important up to about five years ago, but that her personal life is more important to her now. This suggests that participants may have to choose somewhat between their personal lives (life) or their careers. This choice is evident when Marie speaks about sacrificing career opportunities to attain the work-life balance that she wanted. It was important for her to be at home in the evenings to spend time with her children, thus missing out on potential career opportunities. This choice between life and career can cause difficulty for participants at times. Kate speaks

about not fully switching off from work, when on annual leave and how work can encroach upon family time. “Even when you are on holidays you are constantly in your head, checking your phone. Sometimes it takes you away from your family life as well”. Catherine explains how she sets boundaries within her role to strike a balance between her life and career. “You know, there are certain things I am more than happy to do, but there are certain things that I won’t. So, if I’m holidays, I’m on holidays, family time is family time, that kind of thing”. She makes a very valid point that as a senior manager, she must lead by example with respect to work/life balance. “But I can’t tell my team, family time is family time, if I’m not doing it myself”.

While career is largely important in these women’s lives, choices may be required between personal life and career, which may reduce aspirations for progression, thus negatively impacting female career development. Whether this is influenced by organisational factors, is not yet clear. How each individual manages these choices, seems to vary. Catherine portrays having directed her work/life balance by establishing boundaries within her workplace. Direction (agency) is a factor in self-efficacy theory. Thus, self-efficacy may be relevant to this concept of having to balance life and career and will be further explored as the study progresses.

### **5.3.2 Gender based work challenges**

When asked how being a woman has impacted their careers, participants recounted a variety of personal experiences. Eloise believes that it has not impacted her career because in her organisation, gender is irrelevant, as long as the job gets done. Kate speaks warmly of her own organisation’s supportive culture and feels that being a woman has not impacted her career development. Yet, she describes the difficulty being heard, as a woman in a male dominated environment, external to her organisation. “Because sometimes you can go into a boardroom and your voice is not heard, because it is male dominated. I have been in meetings outside this organisation where you do have a challenge to actually be heard”. Marie feels that being a woman has never held her back in her career. Yet her story asserts that if being a woman was the reason for not getting a particular job, then it was not the job for her. “If it was a reason for me not to get a job, I think I was probably glad I didn’t get it or wouldn’t have taken it anyway. It wouldn’t have been for me”. In Marie’s story there may be an acceptance, which is possibly



dealt with, by avoiding such roles/organisations. In self-efficacy theory avoidance of a situation is a result of lower self-efficacy in a particular instance.

Julie describes a previous organisation, as being very supportive until she returned from maternity leave. She felt then that her career was restricted, and she was not afforded the same opportunities anymore. "...until I went on maternity leave and then that experience was horrendous. Other than that, and I never got the same opportunities again. And it was not for lack of...it took years to build back up..." She explained that this was because she was "pigeonholed" due to having a young child. Julie went abroad for extended periods of training, while on maternity leave, to demonstrate her commitment to her career after becoming a parent. While this story portrays Julie's perception of how the organisation saw her as a new mother, the reality for her, was that her career progression was stalled. Julie later speaks about regretting not standing up for herself better at that difficult time. It is possible that as her self-efficacy evolved, she could better deal with difficult situations or barriers encountered. Elizabeth tells a story of how she felt as "the little woman", when she started her position, amongst three men. She speaks about expressing her opinions and developing her role to completely transform her standing within her organisation:

I developed that role way; way more than they had expected. So, I think I was kind of the little woman, sitting on the side a little bit, or certainly that's how I felt at times. But I don't like to be the little woman sitting on the side. So, I would make my views known obviously. That's completely changed now. We have a new CEO, we have a new management team. And while I would have been considered the baby on the team, now I'm not, now I'm considered number two on the team to the CEO.

This response of challenging and taking direction (agency) is an assumption within self-efficacy theory and would indicate higher self-efficacy in this situation. Considering external influences, the organisation in question may have a role to play in women's career experiences in industry and ultimately possibly impact their career progression. From the personal perspective, how participants deal with their individual circumstances differs. Elizabeth demonstrates high self-efficacy where she challenges and changes how she is perceived. Thus, self-efficacy may play an important role in how women deal with barriers or challenges within their work environments.

### 5.3.3 “Women tend to hold back more”

Through the narratives of participants, various explanations emerged as to what may hinder the career progression of female accountants. Julie explains that when it comes to progression in her organisation, the male CEO will have built relationships with the male candidates through their shared interest in sport. She believes this affords men with an advantage for career progression. “And then when the opportunities come, they already know the person they are interviewing, they already have a bit of background there, they already have some context. So, you know they are comfortable with that person already”. Sports or networking arises in other narratives. Marie speaks about a culture of socialising and playing golf, that women do not view as possible career opportunities, in the same way men might, thus possibly restricting their career development:

I think the opportunities are not as easy as they are for men to play golf or whatever. It’s not that women don’t play golf, but I don’t know that they would see it as a business generating thing as much as men would.

In Catherine’s experience as a senior manager, she speaks about women possessing lower self-belief. She believes that women do a lot of the hard work behind the scenes, but do not seek the credit for this effort. “...in general women tend to hold back more – they also tend to do a lot of the heavy lifting in the background but shy away from looking for the credit for the work”. Julie discusses how in her view hard work can go unrecognised. She believes that individuals need be aware that some aspects of work are more visible and more important for career progression, thus requiring more effort and work. She refers to “working smart”:

...hard work I think gets you so far, and a lot of hard work goes completely unseen. I think you learn to work smart...But then there are elements of your job that are more important than others and more visible. And you tend to be able to identify what’s important and what’s not important and what’s worth spending extra time on.

These narratives suggest that women may not view networking as a potential career opportunity and may not always seek credit for their hard work, thus being disadvantaged with respect to career progression. Not seeking credit or holding back may indicate a possible lack of self-

efficacy. It is also possible that women are working harder and thus assuming greater responsibility, that may not be completely necessary. If so, this greater responsibility may be discouraging women from seeking further progression and could somewhat explain reduced aspiration for further career development. Considering the external influence, it is unclear at this point if the organisation infers demands on women to work harder and assume greater levels of responsibility. Ongoing exploration will provide greater insights on this matter.

## **Section 6 Conclusion**

Data analysis was undertaken from December 2022 to March 2023. An interesting observation to emerge is that women, in some instances, may choose not to seek further career progression for reasons that include concerns about responsibility, lack of skill set and the desire to have a life outside work. Individuals demonstrate a requirement at times to choose between personal life and career. Agency (which is implied in self-efficacy) may assist in achieving this work/life balance. While narratives portray the learning sources that impact upon individuals, they also demonstrate a perceived paucity of support (social persuasion) from influential individuals in organisations and little impact from observing the successes of those in senior roles (vicarious experiences). This is important as social persuasion, and vicarious experiences are learning sources that impact upon individual's self-efficacy beliefs and are largely absent from the organisational perspective. Self-efficacy may influence how women deal with barriers or challenges encountered as female accountants working in industry. Findings cautiously suggest that self-efficacy may evolve and improve over time. These personal and organisational factors may impact career development.

As data collection and analysis continues the interview guide will be continuously reviewed and adjusted if appropriate (Gioia et al., 2013). The next nine interviews have been conducted and data analysis about to re-commence. An additional 15 (approximately) interviews will be conducted and analysed. Saturation will determine when to cease data collection.

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## **Appendices**

### **Appendix 1: Data protection impact assessment**

#### **Data management and storage protocols:**

The data within this research study falls within the category of personal data. Ethical approval was sought and provided by SETU. Permission to obtain, process and publish data findings will be obtained from participants in the consent form in accordance with GDPR.

One document will be held on file which identifies each participant with their pseudonym (which will be used throughout the research study). This document will be held on the work laptop of the researcher, which is password protected and to which no other individual has access. To protect the identity of participants, all individuals will be assigned a pseudonym prior to data analysis, to assist with maintaining the anonymity of participants. All individuals and any organisations mentioned will be anonymised within the research study. Participants will be provided with their transcripts in order to make adjustments/clarifications which is discussed below (measures to protect participants).

The data protection protocols of the third party transcription service provider will be investigated. A confidentiality agreement will be discussed and signed by the researcher and the third party transcription service provider.

The researcher is bound by their professional code of conduct as a member of the Irish Tax Institute and the code of ethics as a member of ACCA which incorporates: Integrity, objectivity, professional competence and due care, confidentiality, and professional behaviour.

The potential harm to participants is low risk. It relates to the possibility of sensitive and/or upsetting matters being discussed, which is discussed below (measures to protect participants).

The researcher will hold all data pertaining to the study on the hard drive of their work laptop which is password protected and to which no-one else has access. This data will be backed up weekly (and following each interview) to the researcher's workplace shared drive. This shared drive cannot be accessed by anyone other than the researcher. Data will be held for a period of 10 years following the submission of the Doctoral Thesis or any publications, as currently prescribed under the SETU Data retention schedule.

#### **Measures to protect participants:**

Withdrawal from the study, should this be desired by participants is addressed by the information sheet provided to all participants.

Validation of information will be sought from participants to ensure accurate interpretation and presentation of their experiences within the research by providing participants with their transcript and allowing them time to make required adjustments and/or amendments within a reasonable time period (two weeks).

The research topic may result in the discussion of matters that are sensitive and/or upsetting. The researcher will remain empathetic and consider the needs of participants at all times throughout the study. She will be alert to the possible requirement during an interview to pause



or cease the recording, should this be appropriate. A list of supporting agencies and their contact information will be brought to each interview and provided to participants should this be required.

Belonging to a similar category as participants may help build relationships and enable participants to open up more in interviews (Haynes, 2008). However, the researcher is very conscious that this fact may also present possible bias, so this matter is discussed in Section 8 – Limitations of Paper 2.

## **Appendix 2: Statistical classification of economic activities throughout the EC**

### **NACE Rev. 2**

A Agriculture, forestry, and fishing

B Mining and quarrying

C Manufacturing

D Electricity, gas, steam, and air conditioning supply

E Water supply, sewerage, waste management and remediation activities

F Construction

G Wholesale and retail trade, repair of motor vehicles and motorcycles

H Transportation and storage

I Accommodation and food service activities

J Information and communication

K Financial and insurance activities

L Real estate activities

M Professional, scientific, and technical activities

N Administrative and support service activities

O Public administration and defence; Compulsory social security

P Education

Q Human health and social work activities

R Arts, entertainment, and recreation

S Other service activities

T Activities of households as employers; Undifferentiated goods-and services-producing activities of households for own use

U Activities of extraterritorial organisations and bodies

### Appendix 3: Explanation for inclusion and exclusion of potential participants

**Notes:**

- All women are accountants and meet age requirement, unless otherwise stated.
- Excluded women are not assigned pseudonyms and are categorised as E1, E2 etc

Participant	Include (Y/N)	Inclusion due to work eligibility	Reason for exclusion and date of exclusion
Eloise	Y	Farming	
Elizabeth	Y	Financial Services	
Kate	Y	Pharma	
Marie	Y	Membership organisation	
Catherine	Y	Technology	
Julie	Y	Financial Services	
Martina	Y	Membership organisation	
Karen	Y	Technology	
Jane	Y	Retail	
Carol	Y	Financial Services	
Susan	Y	Financial Services	
Mary	Y	Multinational	
Frances	Y	Multinational	
Emer	Y	Qualifying non-profit	
Molly	Y	Financial Services	
E1	N		Public sector 28/11/22
E2	N		Public sector 28/11/22
E3	N		Academia outside Ireland 29/11/22
E4	N		Industry but working in Australia 1/12/22
E5	N		Public sector 2/12/22
E6	N		Public sector 5/12/22
E7	N		Non-profit but it is an academic organisation 5/12/22
E8	N		Was in the public sector and now in practice 5/12/22
E9	N		Practice in the US 5/12/22
E10	N		Public sector 5/12/22
E11	N		Public sector 5/12/22
E12	N		Industry but mid-career stage 5/12/22
E13	N		Self-employed 16/12/22
E14	N		Non-profit but largely government funded 26/01/23
E15	N		Self-employed 25/01/23
E16	N		Public sector 27/03/23
E17	N		Early career stage 27/03/23

## Appendix 4: Adjustments to prompts and probes in the interview guide

Question 1h: (Where are you placed in your family (e.g., eldest, middle, or youngest)?) was included after the pilot interviews were undertaken, prior to commencing fieldwork.

Questions 9-12 (self-efficacy learning sources): As discussed in Section 2.2 influenced you as an accountant, was adapted to, influenced your self-belief as an accountant, as an outcome of conducting the pilot interviews

Question 10: (How have others influenced/impacted your self-belief as an accountant?) was further refined after the second interview to ensure clarity for the interviewees. This question now reads as: How have the achievements or successes of others influenced/impacted your self-belief as an accountant?

Q21: Having completed three interviews I felt that some women state that women have lower self-belief, but I am not getting the detail of how this has impacted them or their career. So, I will include a new question should this be relevant or appropriate within the interview (Q21 You have suggested that lower self-belief hinders female career development, so can you explain how you think this occurs – only asked if this arises in the interview).

Q13: The probe: Do you direct your career or wait for opportunities to arrive was moved from Q14 into Q13 after the fourth interview, as it seemed to arise naturally here within participants' narratives. A further probe was added to ask how they manage their career to fit in with the rest of their life? if it is deemed appropriate in the interview.

Q1: Prior to conducting interview five, I believe that if the interviewee is in a senior position already, it may be appropriate to split question 1j as follows: Did you always aspire to this position and do you aspire to a more senior position such as Finance Director (or Financial Controller)/CEO?

Question 14: (How has your belief in your ability impacted your career?) was brought into the self-efficacy beliefs section of the interview guide after reviewing the first six interviews (as it appeared to flow better here). It is now question 7.

The above adjustments are reflected in the interview guide as demonstrated below:

Interview Questions
<b>General questions:</b>
1a Age qualification achieved
1b Qualifying body
1c Type of organisation and number of staff in organisation
1d Current employment role
1e Length of time in current role (grade/level)
1f Length of time in current organisation
1g Age bracket (40-49, 50-59, 60-69, 70+)
1h Where are you placed in your family (e.g., eldest, middle, or youngest)?
1i Can you tell me what led you to a career in accounting?
1ji) Did you always aspire to this position (if in a senior position)
1jii) Do you aspire to a more senior position such as Finance Director (or Financial Controller)/CEO?
<b>Prompt</b> - Why/why not?
<b>Probe:</b> Do you believe that achieving a senior position is possible?

<p><b>Theme 1 (Self-efficacy beliefs):</b>  2 Can you describe how well your prior career experience may have prepared you for a (future) senior position?  <b>Probe:</b> Very well (high)/well (medium) or not so well (low)?</p>
<p>3 Can you describe how confident you feel in your ability to meet the demands/difficulties associated with a (future) senior position?  <b>Probe:</b> High/medium or low?</p>
<p>4 Can you describe your ability to problem solve effectively in a (future) senior position?  <b>Probe:</b> High/medium or low?</p>
<p>5 Can you describe how effectively you have achieved the goals you set for yourself?  <b>Probe:</b> High/medium or low?</p>
<p>6 Can you discuss how your belief in your ability as an accountant has evolved over time?  <b>Probe:</b> Compared to e.g., early (up to 35) or mid-career stage 36-45?</p>
<p>7 How has your belief in your ability impacted your career?  <b>Possible probes:</b>  Assisted or hindered career development?  Enabled you to overcome difficulties/obstacles?</p>
<p>8 Can challenges/conflicts impact your perceptions of your ability as an accountant?  <b>Probes:</b>  Arising from events/people?  Internal or external?</p>
<p><b>Theme 2 (Self-efficacy learning sources):</b>  9 What achievements have you experienced that influenced your self-belief as an accountant?  <b>Prompt:</b> Exam successes/promotions/awards</p>
<p>10 How have the achievements or successes of others influenced/impacted your self-belief as an accountant?  <b>Prompt:</b> Role models/successes of others (not just women e.g., peers/friends/teachers/parents/siblings etc)</p>
<p>11 What support/feedback did you receive that influenced your self-belief as an accountant.  <b>Probes:</b>  From adults as a child/peers/line managers/spouse/mentors/clients or yourself?</p>
<p>12 What personal feelings or beliefs do you possess about career progression that influenced your self-belief as an accountant?  <b>Prompt:</b> E.g., confidence, fear, self-assured, apprehension/anxiety etc</p>
<p><b>Theme 3 (Career Development):</b>  13 Will you talk about the importance of your career within your life?  <b>Possible probes:</b>  Identify as an accountant?  Do you direct your career or wait for opportunities to arise?  How do you manage your career to fit in with the rest of your life?  Job satisfaction/fulfilment?</p>
<p>14 Can you tell me if your career has developed according to your expectations/plan?  <b>Possible probes:</b>  Reached potential?  What does success mean?  Setbacks?</p>
<p>15 What do you believe is expected by your organisation to succeed in a senior position?  <b>Possible probes:</b>  Accept/challenge expectations?  Overall strategic approach e.g., work harder or put in more career development effort?</p>

<p>Personality traits that you perceive would help succeed in a senior position?</p>
<p>16 What are the positive and negative aspects of working in a senior position?  <b>Possible probes:</b>          What enticed you/would entice you to work in a senior position?          What would discourage you?          What is the biggest impediment (if any)?</p>
<p>17 How has being a woman impacted your career development?  <b>Possible probes:</b>          Positively or negatively?          Ability to adapt/persist in a male environment?          Are your achievements/ experience valued by your organisation?          Supportive organisational environment?          Do you feel you deserve a senior position?</p>
<p>18 Do you believe that women are underrepresented in senior positions in your organisation/industry  <b>Prompt:</b> Why do you hold that view?</p>
<p>19 What do you think might be done to encourage more female accountants into senior positions?  <b>Possible probes:</b>          What can women themselves do?          What can organisations do?</p>
<p>20 If you were starting your career again, would you take the same path?  <b>Possible probes:</b>          Do anything differently?          Regrets?          Advice to someone new starting in accounting?</p>
<p>21 Possible question (if appropriate) You have suggested that lower self-belief hinders female career development, so can you explain how you think this occurs?</p>

## Appendix 5: Sample of tables formulated for each code

### Code: Agency

1	Both – opportunities arose cos put yourself in the way of them. Quote
2	Directed (not in first 10 years) from 36/41 on (in line with confidence growing)
3	Directed as she made choices
4	Directed
5	Opportunities arose before needed to direct (direction comes across e.g., way perceived as a woman and she took control and changed this. Developed role way more than expected – little woman quote. Getting coaching to help with CV and interview prep as wasn't going to make a fool of herself
6	Pushed herself

### Code: Work hard or strategically

1	Worksmart – need to work hard but lot hard work goes unseen...element more visible..need identify what's worth spending extra time on
2	Both initially working hard, last 10-15 years more strategic approach/ So I worked hard at that and stabilised everything and all that. Then it was like, ok, I'm hungry for more, and you look for more opportunities.
3	Strategic – more than work hard (training up and stuff like that)
4	Mix – align yourself to leaders. Suggestions..how to improve/develop the company
5	Both now (working hard in earlier career, both for the last 5 years or so). So, I think I was kind of the little woman, sitting on the side a little bit, or certainly that's how I felt at times. But I don't like to be the little woman sitting on the side. So, I would make my views known obviously. That's completely changed now.
6	Work hard - it's a lot of hard work and I read up on Excel. I use Microsoft Excel a lot, and I have set up a lot of reporting systems here for the people here. So yeah, I'd be very competent...hard work, you are constantly.... just constantly learning.

## Appendix 6: The categorisation of preliminary themes, categories, and codes

Codes	Categories	Themes
Age bracket Age qualified Place in family Organisation size Professional body Sacrifices or difficulties to get there What led to accounting Empathy Hard on yourself Humour Rapport and feelings Self-aware Determination Vulnerable	Background information  Accounting journey  Characteristics	“The right path”
Aspiration for a more senior role Attitude to senior role: <ul style="list-style-type: none"> <li>• Positives</li> <li>• Negatives</li> </ul> Expectations or plans General ambition Organisational expectations Reached potential Responsibility weighs Quotes Contradictory statements Observations	Perceptions of senior positions       Miscellaneous	Perceptions of progression
High self-efficacy: Prior career experience Demands and difficulties Problem solving Achieved goals Value your worth Conflict and challenge Impacts career development Lower SE impacting career	Exploring self-efficacy	Self-efficacy beliefs
Evolving SE Turning point	Developing self-efficacy	Self-efficacy evolving over time
Performance accomplishments Vicarious experiences Social persuasion Physiological factors Biggest impact	Exploring learning sources	Self-efficacy learning sources
Take the same path Advice to younger self Regrets Identify as an accountant Importance of career Career and life fit <ul style="list-style-type: none"> <li>• Work impacting on personal life</li> <li>• Life impacting career</li> </ul> Agency Forging own career path	Looking back  Balancing work and life  Direct career	“Work/life balance”
Accounting tough or easy Desire to do a good job	Women in industry	Gender based work challenges



Impact being a woman Recognise achievements Recognising weaknesses Work hard or strategically Change in culture What women can do What organisations can do	What can be done	
Networking Mentorship Not taking credit and holding back Organisation hindered Representation Supportive organisation What's preventing progression	Women's progression	"Women tend to hold back more"

## **Preface to Paper 4 – Findings**

Paper 4 - Findings commenced in April 2023 for presentation to the examiners in November 2023. Following the passing of Paper 3, further clarification was sought with respect to the inclusion of two participants and the themes which were presented in Paper 3 significantly developed. These points are described below:

- **Participant inclusion:** Further clarification was required with respect to the inclusion of two participants. These participants were both self-employed, therefore do not meet the criteria of working in industry. However, they both had previously worked in industry and are/were senior members of professional accounting bodies in Ireland. The professional accounting bodies were included in the definition of industry (see Paper 3, Section 3.1). Upon reflection and discussion with supervisors it was believed that their significant work experience, which did include industry, as well as their experience having served on councils of professional accounting bodies, would be highly beneficial to this study.
- **Development of themes:** The themes presented in Paper 3 significantly developed during the period up to the presentation and submission of Paper 4, as part of the data analysis process. This development of themes over the various phases of data analysis is demonstrated in Paper 4 (Table 2).

The examiners passed Paper 4 subject to minor revisions. The suggestions, challenges, and recommendations of the examiners were very useful for improving and strengthening this paper. One such challenge provided by the examiners was to properly explain self-doubt and explore whether self-doubt is something that emerges and then disappears, or if it is something that always exists. This helped the researcher to go back to the data to fully explore how participants experience self-doubt and to re-engage with the literature on this concept. It assisted in clarifying the concept of self-doubt within the study, as explained in Section 4.2.2. Paper 4 encompasses the revisions made following the feedback of the examiners in November 2023.

Participant Name: Michelle Gleeson 20091525

Supervisors: Dr Anne-Marie Ivers, Dr Collette Kirwan and Dr Mick Rock

Date: 11 December 2023

## RESEARCH PAPER SERIES

### Paper 4: Findings

#### **“The influence of self-efficacy on the career development of female accountants”**

#### **Abstract**

The purpose of this study is to identify the self-efficacy learning sources and influence of self-efficacy on the career development of female accountants. Women are underrepresented in senior positions, holding between 21 percent and 32 percent of partnership positions across the Big 4 accounting firms in Ireland (Malone, 2023). Literature demonstrates that self-efficacy is an important factor in the career development of women (e.g., Betz and Hackett, 1981; Sullivan and Mahalik, 2000; Athanasopoulou et al., 2018). While studies have been conducted on the self-efficacy of women working in STEM and teaching, few studies explore the self-efficacy of women in accounting (Byrne et al., 2014). Semi structured interviews were conducted with 31 participants, who are later career stage female accountants, working in industry. Findings demonstrate that generally all four learning sources influence self-efficacy. While participants generally possess high self-efficacy, many experience self-doubt and draw on various self-efficacy learning sources to overcome such self-doubt. Perceived gender inequality can negatively impact self-efficacy. High self-efficacy in turn can assist individuals to manage perceptions of gender inequality. This study contributes to the literature on self-efficacy, with respect to later career stage female accountants in an Irish context and by demonstrating how high self-efficacy influences career development. This study contributes to practice, by highlighting where women can be better supported to improve their self-efficacy and consequently, their career development.

Paper word count: 9557

## **Ethical Declaration**

I declare that this paper is wholly my own work except where I have made explicit reference to the work of others. I have read the relevant notes, DBA Handbook and procedures on conducting academic writing and research and hereby declare that this proposal is in line with these requirements. I have uploaded the entire paper as one file to Turnitin on Moodle, examined my 'Originality Report' by viewing the detail panel listing of percentages behind the overall 'Similarity Index', and have addressed any matches that exceed 3 percent. I have made every effort to minimise my overall 'Similarity Index' score and the number of matches occurring.

Name: Michelle Gleeson

Date: 11 December 2023

## Section 1 Introduction

Women are underrepresented in senior positions, holding only 31 percent of global leadership positions in the workplace (World Economic Forum, 2023). In Ireland, women occupy 30 percent of senior executive roles (CSO, 2023). In the domain of accounting, women hold between 21 percent and 32 percent of partnership positions across the Big 4 accounting firms in Ireland (Malone, 2023). While comparative current figures are not available for female accountants working in industry, which is the focus of this study, research suggests they are similarly underrepresented to female accountants in practice (Gammie and Whiting, 2013). Literature highlights several factors that influence female career development, which are discussed in detail in Paper 1. They are organisational barriers, organisational supports, personal barriers, career aspirations and self-efficacy. Self-efficacy is an individual's beliefs, that they can successfully perform a given task or behaviour (Bandura, 1977; Betz and Hackett, 1981; Hackett and Betz, 1981). Self-efficacy is not fixed, as learning sources contribute to initially forming self-efficacy beliefs and then adapting these self-efficacy beliefs over time.

Four learning sources are identified in the literature: i) performance accomplishments, ii) vicarious experiences, iii) social persuasion and iv) physiological factors (Bandura, 1977). Extensive research has investigated organisational factors (e.g., Barker and Monks, 1998; Flynn et al., 2015; Tinsley and Ely, 2018; Vidwans and Du Plessis, 2020; Cohen et al., 2020; Padavic et al., 2020; Hardies et al., 2021; Brannan et al., 2021; PwC, 2023). Despite the insights gained from the research, recommendations made, and changes implemented in practice, women remain underrepresented at senior levels. Less developed in literature is an understanding of the influence of self-efficacy (which is a personal factor, as discussed in Paper 1, Section 2.3) in the career development of female accountants and the learning sources which form and continually influence these self-efficacy beliefs. A better understanding may help women improve their self-efficacy, facilitate their career development, and provide insights for organisations and professional bodies to support female career development. To achieve a better understanding of the influence of self-efficacy on female career development, the following research questions (RQs) have been developed:

- **RQ1:** What self-efficacy learning sources impact the self-efficacy beliefs of female accountants?

- **RQ2:** How do self-efficacy beliefs impact the attainment/non-attainment of senior positions for female accountants?

Vidwans and Whiting (2022) study women who forged accounting careers in the early 20th Century, despite not being permitted as members of accounting bodies and facing significant barriers. Vidwans and Whiting (2022) identify that self-efficacy plays an important role in female career development, even under the most difficult of circumstances. Extending the work of Vidwans and Whiting (2022), the objective of this study is to explore the self-efficacy learning sources and influence of self-efficacy on the career development of female accountants.

This paper proceeds as follows. Section 2 describes participant selection and profiles. Section 3 presents the data collection and analysis process. Section 4 presents the findings. This is followed by a brief discussion and conclusion in Section 5.

## **Section 2 Participant profiles**

Participants in this study are later career stage female accountants, working in industry. Paper 3 explained that female accountants working in industry experience more barriers to career progression than women in practice (Cohen et al., 2020) and are similarly underrepresented in senior positions, compared to women in practice (Gammie and Whiting, 2013). Literature focuses more on female accountants working in practice and less on those working in industry. O'Neil and Bilimoria (2005) suggest women's careers develop in age-related phases, early career (aged 24-35), mid-career (aged 36-45) and later career (aged 46-60)<sup>14</sup> stages, and Arnold and Clarke (2016) find that career development is accelerated up the age of 45. It is therefore important to study participants over the age of 45 (i.e., later career stage), who are likely to have had the opportunities to progress. Women in the later career stage category are also likely to possess experiences, to provide insights into how self-efficacy beliefs impact female accountants' attainment or non-attainment of senior positions.

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<sup>14</sup> The study utilises this age categorisation with respect to later career stage, without imposing the upper age limit. The direction in Ireland is to extend the age of retirement/facilitate individuals to work longer.

As described in Paper 3, participants were identified through the researcher's professional and personal networks, referrals secured from participants and through the assistance of the four professional accounting bodies in Ireland (a combination of self-selection and snowballing sampling techniques). The Certified Public Accountants (CPA) email to targeted members and the Chartered Accountants Ireland (CAI) newsletter announcement, both encouraging members to participate, together with the researcher's LinkedIn messages (as explained in Paper 3, Section 3), were particularly successful in sourcing potential participants. In selecting the remaining participants, careful consideration was given to each participant's experience and whether they satisfied the criteria for selection. The criteria for inclusion is that participants are later career stage female accountants, working in industry. Appendix 1 presents the rationale for including each participant and the rationale for excluding each of the 21 individuals who did not qualify for inclusion in this particular study. Table 1 presents the profile of the 31 participants who were interviewed and whose data were analysed. Participant names used throughout the thesis are not the interviewees' real names. To maintain anonymity, pseudonyms were assigned to each individual.

**Table 1: Profile of participants**

	<b>Participant</b>	<b>Age bracket</b>	<b>Age qualified</b>	<b>Professional body membership</b>	<b>Current Role</b>	<b>Organisation type</b>	<b>Organisation size (Note 1)</b>	<b>How participant was accessed</b>
1	Julie	40-49	22	ACCA	Head of Function	Financial Services	Large	Personal contacts
2	Catherine	50-59	35	CPA	Director	Technology	Large	CPA email
3	Marie	50-59	24	ACCA	Director	Membership organisation	Small	CPA email
4	Kate	40-49	28	CPA	Head of Finance	Pharma	Medium	CPA email
5	Elizabeth	50-59	21	CAI	Director	Financial Services	Small	CAI newsletter
6	Eloise	50-59	38	CPA	Credit Controller	Farming	Medium	CPA email
7	Martina	50-59	25	CPA	Senior Executive	Membership organisation	Small	CPA email
8	Karen	50-59	37	CPA	Head of Finance	Technology	Small	CPA email
9	Jane	40-49	29	CPA	Financial Controller	Retail	Medium	CPA email
10	Kelly	50-59	24	CPA	Financial Controller	Financial Services	Small	CPA email
11	Susan	50-59	27	CAI	Senior Analyst	Financial Services	Large	CAI newsletter
12	Molly	40-49	25	CPA	Global Manager	Multinational	Large	CPA email
13	Frances	40-49	46	CAI	Analyst	Multinational	Large	LinkedIn
14	Emer	50-59	40	CPA	Accountant	Not for profit	Medium	LinkedIn
15	Mary	50-59	25	ACCA	Head of Function	Financial Services	Large	LinkedIn
16	Jill	50-59	21	CAI	Head of Function	Financial Services	Large	Snowballing
17	Megan	40-49	24	CAI	Director	Multinational	Medium	LinkedIn
18	Helena	40-49	23	ACCA	CFO	Software	Small	LinkedIn
19	Olivia	40-49	23	CAI	Global Head	Financial Services	Large	LinkedIn
20	Anna	50-59	33	CPA	CEO	Financial Services	Small	CPA email
21	Brenda	50-59	25	CAI	C-suite Executive	Financial Services	Large	Snowballing
22	Ellen	60-65	26	ACCA	Senior Accountant	Financial Services	Large	Snowballing
23	Niamh	50-59	25	ICAEW	Head of Function	Financial Services	Large	Snowballing
24	Caroline	40-49	24	CAI	Head of Reporting	Pharma	Large	Snowballing
25	Una	50-59	21	ACCA	Head of Function	Financial Services	Large	Snowballing
26	Abby	50-59	24	ACCA	Executive Director	Financial Services	Large	Snowballing
27	Elaine	50-59	27	CIMA	Finance Director	Agricultural	Medium	LinkedIn
28	Linda	50-59	27	ACCA	Director	Not for profit	Medium	Snowballing
29	Geraldine	40-49	35	CIMA	Accounting Manager	Logistics	Large	LinkedIn
30	Alice	60-69	34	CIMA	Senior Executive	Membership organisation	Small	Personal contacts
31	Chloe	50-59	21	CIMA	Senior Finance Manager	Multinational	Large	Personal contacts

**Note 1** – The Department of Enterprise Trade and Employment’s classifies organisation size by employee number: Small: up to 49, Medium: 50-249 and Large: 250+



### **Section 3 Data collection and analysis**

Semi-structured interviews are deemed appropriate for a study seeking information from interviewees' perspectives (Qu and Dumay, 2011), providing a voice to participants, and allowing for the narratives of individuals to develop (Zeldin and Pajares, 2000). Interviews commenced in December 2022 and were completed in July 2023. No difference was generally perceived by the researcher between interviews conducted over the period December 2022 and July 2023. The only difference observed by the researcher was that the interviews became longer. This is attributed to the developing interview skills of the researcher. The total number of participants interviewed was 31 and the average length of each interview was 45 minutes. Interview time does not include the time taken to speak with interviewees both before and after each interview, (see Paper 3, Section 4.1 for further details on the interviewing process). Participants largely expressed a preference for online rather than face-to-face interviews (28 interviews were conducted online and three face-to-face). Interviews were professionally transcribed, apart from two which were transcribed by the researcher<sup>15</sup>. Self-efficacy researchers often use the term self-belief, rather than self-efficacy (e.g., Wood and Bandura, 1989; Zeldin and Pajares, 2000; Morris and Usher, 2011). In line with the aforementioned scholars, the researcher believes the term self-belief is more widely used and understood by individuals, thus Paper 3, Section 5.2 explained that the term self-belief rather than self-efficacy is used within the interview guide. The terms self-efficacy and self-belief are used interchangeably throughout the remainder of the paper.

The data collection and analysis of the first six interviews were incorporated into Paper 3. When analysing the dataset for Paper 3, the researcher analysed the six interviews as a block. This provided variety and contrast within the dataset, which facilitated deep analysis. As such, the researcher decided to continue data analysis in blocks of six (seven for the final (fifth) block). Table 2 summarises the themes that developed from each block and phase of data analysis and Appendix 2 presents the data analysis operationalisation of codes, themes, and subthemes.

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<sup>15</sup> One interview was transcribed by the researcher on the specific request of the participant and the other was transcribed by the researcher as the professional transcriber was encountering a particularly busy period and would be slow in completing this transcript.

**Table 2: Themes developing from each block and phase of data analysis**

Block analysed (and corresponding phases*)	Interviewees included	Development of themes and subthemes (which are presented as bullet points) as data analysis progressed
1 (phases 1 & 2) 2 (phases 1 & 2)	1-6 7-12	“The right path” Perceptions of progression Self-efficacy beliefs Self-efficacy evolving over time Self-efficacy learning sources “Work/life balance” Gender based work challenges “Women tend to hold back more”
3 (phases 1 & 2) 4 (phases 1 & 2) 5 (phases 1 & 2)	13-18 19-24 25-31	“The right path” Significance of career Factors affecting progression Self-efficacy beliefs Self-efficacy evolving over time Self-efficacy learning sources “Work/life balance” Gender based work challenges “Women tend to hold back more”
Phases 3 & 4	1-31	Self-efficacy beliefs <ul style="list-style-type: none"> <li>• Perceived self-efficacy</li> <li>• Self-doubt</li> <li>• Evolving self-efficacy</li> </ul> Self-efficacy learning sources Self-efficacy and work/life conflict Self-efficacy and workplace challenges
Phase 5	1-31	High self-efficacy <ul style="list-style-type: none"> <li>• Self-doubt</li> <li>• Evolving self-efficacy</li> </ul> Self-efficacy learning sources Other themes – Organisational expectations Other themes – Gender challenges
Phase 6	1-31	Self-efficacy beliefs <ul style="list-style-type: none"> <li>• High self-efficacy</li> <li>• Self-doubt</li> <li>• Evolving self-efficacy</li> </ul> Self-efficacy learning sources <ul style="list-style-type: none"> <li>• All learning sources generally impact self-efficacy</li> </ul> Most influential learning source <ul style="list-style-type: none"> <li>• Significance of physiological factors</li> <li>• Significance of social persuasion</li> <li>• Performance accomplishments less prominent</li> <li>• Vicarious experiences not the most influential</li> </ul> Perceptions of gender inequality Other factors <ul style="list-style-type: none"> <li>• Desire/lack of desire to further progress</li> <li>• Women perceive men to have higher self-belief</li> <li>• Women judge themselves quite harshly</li> </ul>

\* Phases refer to phases of thematic analysis as detailed in Table 3

Thematic analysis was the method used to analyse the data, as outlined by Braun and Clarke (2006). These authors describe thematic analysis as a method for recognising, analysing, and reporting themes within data. As expressed by Braun and Clarke (2006), a theme captures the essence of the data with respect to the research questions and speaks for some level of meaning within the dataset. Thematic analysis requires probing across the dataset to search for repeated patterns of explanation. Braun and Clarke (2006) stress the importance of writing, which commences from the start of data analysis and is an ongoing process.

Three of the four main themes, self-efficacy beliefs, self-efficacy learning sources and most influential learning source were *a priori* themes. Interview questions were specifically designed to elicit information on these themes to address and answer the research questions. However, new more fine-grained findings developed within these themes such as self-doubt and how it interacts with self-efficacy. Findings about the learning sources which most resonated for participants are interesting, and at times differ, to those identified in the literature. The theme “perceptions of gender inequality” developed from the data, as did two of the subthemes within “other factors” i.e., participants judging themselves harshly at times and participants often perceiving their self-belief as lower than that of their male counterparts.

The data analysis process operationalised for this study is detailed in Table 3 and mapped to Braun and Clarke’s (2006) phases and description of the process. The data analysis process extended beyond that detailed in Paper 3, Section 4.2 and this additional analysis is encompassed in phases five and six of Table 3. Phase five involved re-reading and re-analysing the transcripts, reflections, and memos. Themes adjusted and developed as writing and refinements continued. Phase six involved reviewing all codes within NVivo. Data coded to multiple codes were reconsidered, to ensure the most appropriate coding, and ultimately this reduced the number of codes. Themes were continuously reviewed and related back to the research questions. Despite the voluminous data obtained from the 31 interviews, the researcher sought to capture all participants’ voices and experiences within this study.

**Table 3: Phases of Thematic Analysis**

<b>Phase (Braun and Clarke, 2006)</b>	<b>Description of the process (Braun and Clarke, 2006)</b>	<b>Data analysis process operationalised</b>
Phase 1: Familiarizing yourself with your data	Transcribing data (if necessary), reading and re-reading the data, noting down initial ideas	Readings 1-2 of transcripts: Record reflections immediately post interview Check transcript to interview recording Conduct two readings of complete dataset Complete transcript memos
Phase 2: Generating initial codes	Coding interesting features of the data in a systematic fashion across the entire data set, collating data relevant to each code	Readings 3-6 of transcripts: Code to existing and new codes for reading three of transcripts Re-listen to recordings while coding (readings four and five) Consider new/other existing codes for each segment of data (sixth reading) to ensure all potential interpretations of data were considered
Phase 3: Searching for themes	Collating codes into potential themes, gathering all data relevant to each potential theme	Scrutinise the data within each code on NVivo Develop tables for codes to provide visual structure to provide initial structure Use tables to commence initial categorisation of codes Take each category individually (with corresponding codes) and go through the complete dataset Write about each category to enable themes to develop As writing continues, categories subsumed into initial themes
Phase 4: Reviewing themes	Checking if the themes work in relation to the coded extracts and the entire data set, generating a thematic 'map' of the analysis	Many reiterations of writing about themes As writing continues, themes adapt Compare themes against the original dataset (ensure that findings made sense relative to the original data collected (Lincoln and Guba, 1985))
Phase 5: Defining and naming themes	Ongoing analysis to refine the specifics of each theme, and the overall story the analysis tells, generating clear definitions and names for each theme	Re-read and re-analysed all 31 transcripts/reflections and memos By going back to the complete dataset time and again, themes adjust as findings develop from ongoing data analysis Continuous writing and editing Detailed participant quotes chosen to enrich the stories being told
Phase 6: Producing the report	The final opportunity for analysis. Select vivid, compelling extract examples, final analysis of selected extracts, relating back of the analysis to the research question and literature, producing a scholarly report of the analysis	Re-read and re-analysed all codes in NVivo to ensure all themes considered, what codes could be combined/eliminated and ensure sufficient quotes were included to tell the stories Themes reviewed to see if they answered the research questions – this process was conducted numerous times over a period Eventually through many rounds of data analysis, writing and reviewing themes, themes condensed and related back to research questions Worked to ensure all participant voices were included within study Findings written and edited (continuously)

Paper 2 explained saturation, as the point of time in a study, where no new learnings or themes are emerging from the data (Guest et al., 2006; O'Dwyer, 2004). After conducting interview 26, the researcher felt that new insights were no longer arising in the field. It was decided to continue with the remaining interviews organised and examine possible data saturation during the data analysis process. New codes were not required when analysing the last block of interviews (Block 5 (Table 2)). This does not imply that these interviews did not add value to this study. These subsequent interviews provided valuable participant experiences and helped highlight and reinforce findings for this study.

## **Section 4 Findings**

This section presents the key findings which developed from this study. The presentation of the findings begins with what led participants to their accounting careers. Subsequent subsections provide further details of participants' career development, structured within the final themes of self-efficacy beliefs, self-efficacy learning sources, most influential learning source and perceptions of gender inequality.

### **4.1 What led to a career in accounting?**

At the beginning of the interview, participants were asked what influenced their decision to become accountants. This eased them into the interview and obtained background information about their choice of career. A diverse range of reasons and experiences account for career entry decisions. Emer and Anna were recording the sales and outgoings for their small family business and farm by the age of 12, which ignited their love of accounting. Anna explains, "I was doing my Dad's accounts from the time I was 11 or 12. I was writing up his bank books and doing, like, bank reconciliations before I knew what a bank reconciliation was". Megan's father worked in a public sector accounting environment and brought work for her to "tick and bash". This exposure, combined with accountant role models in her family, led Megan to study accounting. Jill recalls a really good accounting teacher in school who inspired her and developed her love of accounting. Her father was not keen on this development as he hoped she would become a teacher. He set about dampening her aspiration to study accounting by sending her to speak with a local accountant (who later became a senior leader within one of the Irish accounting bodies). In recalling the story Jill laughed, "He sent me to completely the wrong person", as she was more enthused than ever after meeting this man. While participants

encountered different experiences which led to accounting, their stories generally demonstrate an enjoyment of accounting and determination to study it, as demonstrated by Marie:

All I knew was I could do accountancy in school, I liked accountancy, it's something that came easy to me. People came in and tried to talk to us about doctors. I knew I didn't want to be a doctor, nurse, scientist, anything in that sphere. Engineering, that kind of stuff wasn't really anything that floated my boat, but knew I wanted to make something of myself at the same time.

#### **4.2 Theme 1 - Self-efficacy beliefs**

Having recalled the circumstances and reasons which led to their career entry into accounting, the researcher deemed it important to gauge participants' self-efficacy beliefs, to inform and contextualise findings as they develop from the data analysis process. Paper 2 described the adaptation of Rigotti et al.'s (2008) six item occupational self-efficacy scale to ask participants four open-ended questions to indicate their self-efficacy beliefs pertaining to a senior position. Table 4 identifies the four questions and the matrix of responses from participants, who are asked to rate their perception of self-belief, as either high, medium, or low, following each open-ended question. Terminology such as high, medium, and low may indicate measurement. While self-efficacy is generally referred to in literature in such terms, the categorisation is not objective, as it asks individuals to indicate from their subjective perspective, whether they perceive their self-belief as high, medium, or low. Participants were not guided on an interpretation of high, medium, or low but were free to interpret this themselves, thus keeping their responses subjective. While table 4 presents the matrix of responses from participants, Appendix 3 presents extracts of the more detailed responses received from interviewees. These more detailed responses to the four open-ended questions will be discussed in Section 4.2.1.

**Table 4: Self-efficacy matrix of responses from participants**

<b>Participant</b>	<b>Current Role</b>	<b>Can you describe how well your prior career experience may have prepared you for a senior position?</b>	<b>Can you describe how confident you feel in your ability to meet the demands or difficulties associated with a senior position?</b>	<b>Can you describe your ability to problem solve effectively in a senior position?</b>	<b>Can you describe how effectively you have achieved the goals you set for yourself?</b>
Julie	Global Leader	High	High	High	High
Catherine	Director	High	High	High	Medium
Marie	Director	High	High	High	High
Kate	Head of Finance	High	High	High	High
Elizabeth	Director	Medium	High	High	High
Eloise	Credit Controller	High-medium	Medium	High	High
Martina	Senior Executive	High	High-medium	High	High
Karen	Head of Finance	High	High	High	High
Jane	Financial Controller	High	High	High-medium	High-medium
Kelly	Financial Controller	High	High	High	High
Susan	Senior Analyst	High	High	High	High
Molly	Global Manager	High	High	High	High
Frances	Analyst	Medium	High	Medium	Medium
Emer	Accountant	High	High	High	Medium
Mary	Head of Function	Medium	High	High	High-medium
Jill	Head of Function	High	Medium	High	High
Megan	Director	High	High	High	High
Helena	CFO	High	High	High	High-medium
Olivia	Global Head	High	High	High	Medium
Anna	CEO	High	High	High	High
Brenda	C-suite Executive	High	High	High	High
Ellen	Senior Accountant	High	High	Medium	High
Niamh	Head of Function	High	High	Medium	High
Caroline	Head of Reporting	High	High	High	High
Una	Head of Function	High	Medium	Medium	High
Abby	Executive Director	High	High	High	High
Elaine	Finance Director	High	High	High	High
Linda	Director	High	High	High	High
Geraldine	Accounting Manager	Medium	Medium	Medium	High
Alice	Senior Executive	High	High	High	High
Chloe	Senior Finance Manager	High-medium	High	High	High
<b>Total: 31 participants</b>		<b>High: 25 High-medium: 2 Medium: 4 Low: 0</b>	<b>High: 26 High-medium: 1 Medium: 4 Low: 0</b>	<b>High: 25 High-medium: 1 Medium: 5 Low: 0</b>	<b>High: 24 High-medium: 3 Medium: 4 Low: 0</b>

#### **4.2.1 High self-efficacy**

Most participants' self-categorisations of their self-efficacy beliefs are in the high category, as demonstrated in Table 4. This provides an indication of how participants perceive their self-belief in a career context, with respect to working in a senior position. The first question queries

how well prior career experience prepared participants for a senior position. Elaine categorises her self-belief as high in this regard and explains that she strategically chose roles in order to meet perceived shortfalls (of experience), to progress her career. “Every position I was ever in, it was probably targeted, or even the company was targeted. And it’s getting a certain amount of experience and then looking at, where were my gaps, what did I need to do”. Linda took a similar approach and directed her career. She explains that she did not obtain every position or opportunity that she sought but learnt from such experiences. She stresses that it is up to individuals to seek positions themselves, rather than expect to be offered them. “...the disappointments, but you learn from them, and you find out how to do it next time. So, never wait for someone to give you a job is my motto. If you want something, go, and get it yourself”. Geraldine believes that she has gained significant technical experience throughout her career to date but categorises how prepared she is for a senior position as medium. She categorises as medium, as she feels that she needs to improve her communication skills, to portray the appropriate image that she believes is required in a more senior position:

So, I feel that I’ve learned a lot of things along the way. But I think also what I’m trying to get better at, is my communication. Because whilst I know things and I can do things and I’m technically able, it’s that sort of gravitas, you know, being able to, I don’t know, project this image of like you’re competent and be able to speak well and communicate well.

The second question asks participants about their confidence in their ability to meet the demands/difficulties associated with a senior position. Susan perceives her ability as high. She explains that at a recent job interview she believed she could accomplish both the interviewer’s role and likely his manager’s role also. “I went for an interview recently in X [large Irish financial services organisation] and I know I could do those jobs absolutely. The job of the guy who was interviewing me and probably his boss”. Una explains that her role has become far busier. She finds that the expectations within teams are ever-growing, that individuals leave jobs more frequently and generally require more direct management. Because of such increasing pressure on her as a senior manager, this impacts her confidence in her ability as a senior manager and rates her self-belief as medium for this question:



Whereas I feel there's a lot more handholding happening now and especially since Covid, and with people working from home. It's not as conducive in relation to teamwork. Now my team are really pretty good at coming in and coming together. But we've had quite a lot of turnover in the last two years, because a lot of people want to change, and they've done a lot of change in relation to jobs and roles. So, all of that has put more pressure on senior leadership in relation to keeping it all going.

Participants are asked to describe their ability to problem solve effectively in a senior position for the third question. Caroline categorises her self-belief as high, because she focuses on identifying potential issues on a timely basis and encourages her team to do the same. This enables their team to work together to minimise problems, which is a far more successful approach than “firefighting down the line, when something comes, and you don't really have the time to do it”. Karen worked in contract roles, and she feels that her ability to go into new organisations and learn quickly assists her self-belief, which she rates as high. “So, I think because of my experience of moving around, I'm fine with being hit with things. I really don't (pause) it's a problem, let's see how we can solve it”. Ellen considers herself a good problem solver but categorises her self-belief as medium, due to her approach of having to “digest the problem first”.

The final question exploring self-efficacy beliefs asks participants to describe how effectively they have achieved the goals they set for themselves. Martina categorises her self-belief as high and recognises that some goals are achieved in a timely manner, whereas others may “take a little bit longer”. Eloise feels her self-belief is high in this regard but also acknowledges that to achieve her goals, a lot of hard work is required, “Very effectively, but it's a lot of hard work”. Catherine has set herself increased goals, particularly over the last decade, to achieve continuous progression within her career. She feels that her effectiveness in achieving goals is medium, as she believes she took longer at times to achieve these goals. “I think I took the long way around at times hence adding to the medium”.

Overall, a general picture emerges where participants perceive high self-belief in their ability to work in senior positions. High, medium, and low are subjective indications of participants' self-belief, therefore it is important to dig deeper. To delve further, participants were asked

how their self-belief evolved over time, how their self-belief impacted their careers and whether conflicts or challenges impacted their self-belief.

#### **4.2.2 Self-doubt**

As participants' stories developed, it transpired that high self-efficacy was not consistent throughout their careers, which is probably to be expected, as self-efficacy is constantly changing. Self-doubt tends to emerge, and imposter syndrome is frequently mentioned by interviewees. Braslow et al. (2012) describes self-doubt as doubt about an individual's feelings about their ability. It tends to indicate the opposite of possessing self-belief, in self-efficacy literature (e.g., Wood and Bandura, 1989; Usher and Pajares, 2008). Niamh explains, "you go through many, many years of imposter syndrome and you doubt yourself, you do doubt yourself along the way. And you know, things will happen, and I will question myself". Despite the existence of self-doubt, participants are progressing in their careers, thus finding ways around such self-doubt. Participants seem to achieve this by drawing on their self-efficacy learning sources. Learning sources and their impact on self-efficacy will be discussed in detail in Section 4.3. Niamh believes that her resilience and sense of fortitude, which are her feelings and beliefs about herself (physiological learning source), enables her to deal with self-doubt when it arises. Alice speaks about family, her husband, colleagues, and mentors, providing her with support and encouragement (social persuasion learning source). When Alice finds herself in situations that cause self-doubt, she draws from these sources of support to reinstate her self-belief. "It absolutely does make you doubt yourself, but you'll go to the people in your life, that will reinforce your self-belief and give you that sense of self again". Molly believes that self-talk (social persuasion learning source) influences her self-belief, and she uses self-talk to cope with challenges that she encounters:

Don't get me wrong, there will be things that will happen in life and in your career, that people will try and knock your confidence and knock you back. I could not let that happen. I mean I always had to pick myself up and keep going.

The rich data portrays instances of participants possessing self-doubt during their careers. These feelings of self-doubt appear to exist as part and parcel of participants' careers and can surface time and again. Literature suggests that women are particularly prone to self-doubt

(Wood and Bandura, 1989; Anderson-Gough et al., 2005; Quinn, 2012) which can hinder their career development (Bandura, 1988; Wood and Bandura, 1989). The ability of individuals to cope with self-doubt appears to be an important factor, which they achieve by drawing on the various self-efficacy learning sources. These learning sources and their impact on self-efficacy will be discussed in detail in Section 4.3.

### 4.2.3 Evolving self-efficacy

Participants were asked whether their self-belief evolved over the course of their careers. Two participants were unable to speak about their self-belief evolving (one felt that they still struggled with their self-belief). Four participants felt that they always possessed high self-belief. Brenda says that her self-belief developed from her encouraging mother. “Probably always there...I have the most amazing mother... I was aware that there was a sense that the boys might achieve more. But it was counterbalanced by my mother who kept telling me how great I was”. She jokingly relays that as she continued to progress in her career, her mother now asks her, “Why do you keep going? Go and mind your children”. Of the participants interviewed, 24 felt that their self-belief evolved with experience or time (and one participant felt it evolved due to their personal circumstances). Table 5 presents the categories of evolving self-efficacy and the number of participants within each of those categories. It also probes further into the 24 participant responses who felt that self-efficacy evolved with experience/time to explore if they could determine when this occurred.

**Table 5: Categories of evolving self-efficacy**

<b>Categories of evolving self-efficacy</b>	<b>Number of participants</b>
Experience/time	24
Always there	4
Circumstances	1
Cannot say	2
<b>Total number of participants</b>	<b>31</b>
<b>Probing further on experience/time category by age</b>	
In their 40s	14
In their 30s	4
In their 20s	2
No age indicated	4
<b>Total number of participants</b>	<b>24</b>

Marie feels that her self-belief evolved with experience and time, “most of it was just through hard work. But yes, self-belief would have evolved over the years and in this role that I’m in... Where I wouldn’t have had much confidence when I started out”. Kate perceives that her self-belief peaked when returning to work after having her youngest child. Although she came back into the same position, she took a more strategic role within the organisation:

Then I had my family and that’s the years where it’s sort of a bit flat. And after my last child, it was eight years ago now this month, that’s really where I came back, and I really see the peak. I came back nearly in a completely different role. Even though it was the same position, I came back in a different role, took on more responsibility. Very much had a key role in running the company. So, I would say probably around 41 is really when it started to peak.

Kate describes her feeling of ambition (physiological factor) as her most important learning source. It is possible that after having her youngest child, she re-focused on this ambition, thus improving her self-belief. For Caroline, feedback and obtaining validation (social persuasion) within the workplace is the learning source which most resonates for her. She moved to a very supportive organisation that provides considerable, and various forms, of feedback and this career move was the point at which she feels her self-belief really evolved:

So, then I moved into this role. And I think a lot of it then comes to do with the feedback that you get and then I suppose the work that you’re doing and how fulfilled you feel with that. And then I suppose as you’re going along, in terms of when you’re working with other people, the environment that you’re in I suppose, and how comfortable you feel in being able to speak up and being able to challenge things yourself, if something comes along and you’re not too sure about that.

Of the 31 participants, 14 perceived that their self-belief improved in their 40s. This demonstrates that self-efficacy may be lower in early or mid-career stage for women. It appears that self-efficacy improves and evolves, largely over time or with experience. This highlights where organisations and professional accounting bodies can assist, particularly at earlier career stages where self-efficacy could possibly be lower.

### **4.3 Theme 2 - Self-efficacy learning sources**

Literature identifies that self-efficacy beliefs are derived from the four self-efficacy learning sources. These learning sources initially inform self-efficacy beliefs and continuously impact upon self-efficacy beliefs (Bandura, 1977). The four learning sources include performance accomplishments, vicarious experiences, social persuasion, and physiological factors (Bandura, 1977). Paper 2 detailed how the interview questions were modelled on a previous qualitative study which examined the self-efficacy learning sources that impacted senior women in STEM careers (Zeldin and Pajares, 2000).

#### **4.3.1 All learning sources generally impact self-efficacy**

Participants were asked to discuss the impact of each of these four learning sources on their self-belief as an accountant (one question for each learning source<sup>16</sup>). Four participants appear to have experienced little to no impact from the achievements or role modelling of others (vicarious experiences). The types of industry these four women work in are all very different, so there was no pattern with respect to industry type. Three of the four women worked in large organisations, where there would more likely be possibilities for observing the achievements/role modelling of others, so the industry size does not appear to explain this finding. From the responses provided by participants, no pattern appears to exist. Two participants simply explain that while they admired others, they did not feel that the achievements/role models of others impacted their self-belief. Caroline states “I suppose people that I would maybe have interacted with along the way. Not necessarily that it would have impacted my self-belief. Maybe I looked at them thinking that’s how I would like to act...”. Literature does not state that every individual must be influenced by all four self-efficacy learning sources. It is how each individual interprets and perceives their own learning source influences, that ultimately impacts their self-efficacy (Bandura, 1977; Bandura, 1997, Usher and Pajares, 2008; Morris et al., 2017; van Rooij et al., 2019). At this point, except for the four participants previously discussed, each interviewee discussed impacts upon their self-belief for each of the four learning sources. In other words, all four learning sources generally impact upon self-efficacy beliefs. Appendix 4 summarises participants’ responses with respect

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<sup>16</sup> The interview questions were phrased in a way that was understandable and academic terminology was avoided.

to each learning source. For the remainder of Section 4.3, findings are presented with respect to each of the four learning sources.

#### **4.3.2 Performance accomplishments**

Performance accomplishments refer to the personal achievements or successes that influence an individual's self-belief. Several interviewees speak of passing their accounting exams and obtaining membership of their professional body as an achievement or success that influenced their self-belief, as described by Frances:

Completing my chartered exam and being an associate of the Institute. I think that was the biggest of my achievements because it was a long journey, I mean, especially when you're working full-time. If you work in one of those Big 4 you get a lot of time off, but when you're working in a company itself you don't get any time off.

Julie speaks about nominations for awards and courses within the workplace. It was the occurrence of being nominated that helped Julie realise and appreciate her career achievements. She believes that this realisation and personal acknowledgement of her high achievements had a positive impact on her self-belief:

I suppose I have been nominated for various different awards and courses during my time in X [large financial services organisation], so they would be kind of leadership courses, that you would only get the opportunity to avail of for high achievement. And then at moments like that you kind of get the opportunity to stand back and go, ok well I must be doing something right if that's being acknowledged.

Mary left self-employment and secured a new managerial role in financial services during difficult financial times (approximately 10 years ago). She found herself surrounded by younger colleagues, while those closer to Mary's age were in more senior roles and less available to Mary. What initially may appear an achievement (securing a new role, during difficult financial times), was perceived by Mary negatively. While recognising that she possessed greater skills, she saw herself as less successful in putting herself forward and promoting herself. This perceived lack of success for Mary negatively impacted her self-belief:

But since then, my self-belief has been quite low, to be honest with you. When I came back into the corporate world and you know, I was looking around and I could see gosh, there's people here who have less skills than me but are just better at presenting themselves and better at, you know, just honing in on what they're good at and going for it.

### **4.3.3 Vicarious experiences**

Vicarious experiences are witnessing the successful experiences/behaviours of others, particularly those to whom an individual can identify readily with. This learning source incorporates role models who impact upon individuals. Kelly's husband is also an accountant, and she feels that as his career progressed, witnessing his achievements improved her self-belief and her ability to progress also:

Well, I suppose the fact, my husband is actually, he trained as an accountant as well... But I think the two of us have progressed together. So, as his career has moved on, then that would give you the knock on and the confidence then to go and say, well I can do better too.

Susan speaks about a senior woman who came to work in her organisation, who influenced her in a role model capacity, when she was in her 20s:

Our boss retired, the finance director, and he was replaced by this woman who was only 30 and I would have been about 27 or something at the time. She was a couple of years older than me, but she was a couple of ranks above me when she was coming in. She had amazing self-belief, and she came into this male dominated world. She had fairly extensive experience working in London and other organisations. She had made her mark in X [large Irish financial institution] and she became my mentor.

The fact that this was a young successful woman, coming into what was a male dominated environment, seemed to particularly impact positively upon Susan. Her role model is a woman, of similar age to herself and Bandura (1977) suggests that similarity with a role model may

have greater influence on an individual's self-efficacy. While this occurred very early in Susan's career, this influence still stands out as being very impactful upon her self-belief.

#### **4.3.4 Social persuasion**

Social persuasion is the support and encouragement received from various sources, both external and internal (e.g., self-talk). When Megan commenced working in a Big Four accounting firm, she felt overwhelmed and believed that others were better than her, simply because they were more vocal. One day a director brought Megan into her office and said "Megan I've been watching you for the last year or two, you're the best of all these intakes. You've the best results, the best performance but you're kind of shying away from that and you're not putting yourself forward". She (the director) enrolled Megan on a course to help her improve her assertiveness. However, Megan firmly believes that it was this woman's support, rather than the assertiveness training that really helped improve her self-belief. Niamh feels that support within the organisation is important to prompt and guide her career development, "I've needed people, all the way along, I've needed sponsors and advocates to tap me on the shoulder".

Support provided can be both positive and negative for participants. Although Catherine generally encountered supportive managers during her career development, she recalls one particular manager. "I was in my finance role and that manager certainly micromanaged me and probably dented a lot of my confidence as an accountant". This experience negatively impacted her self-belief at the time and resulted in Catherine moving roles within the organisation. Abby had a similar experience with a manager, "I've worked for somebody who really was terrible, and she made me feel terrible. I retreated into my shell. I hated what I was doing, I was probably miserable". Abby speaks about how this experience negatively impacted her self-belief and that she needed assistance from others to help her overcome this.

While social persuasion often refers to the support and encouragement received from others, it can arise from oneself, which is referred to as self-talk (Feltz et al., 2008). Various instances are portrayed where participants support themselves through self-talk, as demonstrated by Julie, when she supports her career development:



I have seen so many people succeed without massive ability. And I'm a big believer in telling myself, you know what, if they can do it, I can do it. I have that experience I can do it. And the more I tell myself that, it's worked.

In this example, Julie provides self-encouragement about her experience and ability. This assists her self-belief with respect to her career. Participants' narratives portray how social persuasion can arise from sources that are both internal (self-talk) or external and can present as either a positive or negative learning source for individuals, depending on the situation.

#### **4.3.5 Physiological factors**

Physiological factors are the feelings and beliefs that may be felt by an individual. Negative feelings, such as fear, may result in an individual avoiding a situation e.g., not applying for a promotion, even if they possess the ability. Alternatively, confidence could enable an individual to apply for a promotion, even if they may not possess the required ability. Such feelings or beliefs arose within narratives as both positive and negative influences. Anna speaks about the influence of her feelings and beliefs, in particular her instinct and how this guides her within her work. She feels that being guided by instinct is not necessarily congruent with how an accountant has been trained:

At this stage of my life, the feelings, and beliefs. I would see that they [feelings e.g., gut instinct] would sort of have led me along my path, if you know what I mean, without me always realising why. I work very much from my gut. I know it sounds mad as an accountant but sometimes you're presented with a loan and it's perfect, the paperwork is perfect, everything is perfect, but you feel there's something wrong. And sometimes you're presented with a slip of paper that says "I want this loan and I'll pay it back" [laughs], but you know that's the one to go with.

Ellen explains the significance of her feelings and beliefs. Her sheer drive and determination motivate her and allow her to remain focussed and able to move onto the next challenge:

Okay, I suppose I always have a belief that I have to keep going and I have a really good survival instinct. I also feel I have to do something to live and survive and maybe I just

don't know when enough is enough. But it's always that I must go onto the next thing. So, I never feel I've achieved enough and that motivates me...The survival and the determination. Yes, that has to be number one, that drives everything for me.

Demonstrating how personal feelings or beliefs impact negatively, Olivia sometimes feels that she does not measure up to the perceived female senior manager, appearance wise. She echoes how most women likely feel at times "I have bad hair days and I think I kind of look like the plain Irish girl". This negative feeling arises because women can be judged harshly on appearance which can place additional pressure on an individual. The result can somewhat negatively impact self-belief:

I've seen some of the senior women when you look at, I suppose the, what the perception of a senior leader would be... She usually looks like a supermodel type and corporate and everything. And I remember kind of thinking I'm not the slimmest and I have bad hair days and I think I kind of look like the plain Irish girl.... And I hate that ... it doesn't hold me back, but certainly at times I'd say it has slowed me a little bit.

Having provided participants with the opportunity to reflect and consider how each learning source has influenced their self-belief, the researcher sought to explore which of the four learning sources resonated most deeply for each individual.

#### **4.4 Theme 3 - Most influential learning source**

To eliminate possible researcher interpretation bias, each interviewee was reminded of the four learning sources discussed (three in the case of four interviewees) and asked to reflect as to which learning source largely influenced their self-belief as an accountant. Table 6 presents a summary of the most influential learning sources for participants. The individual responses received from participants about the self-efficacy learning source which resonated most for them, is also included in Appendix 4.

**Table 6: Summary of the most influential learning sources for participants**

<b>Learning Sources (LS)</b>	<b>Number of participants identifying LS as most influential</b>
Personal achievements (Performance accomplishments)	6
Achievements or successes of others/role models (Vicarious experiences)	0
Personal feelings/beliefs (Physiological factors)	14
Support/encouragement (Social persuasion)	13
<b>Total number of participants</b>	<b>33</b>
<b>Probing further on support and encouragement (social persuasion)</b>	
Organisational	6
Personal	4
Organisational and personal combined	3
<b>Total number of participants</b>	<b>13</b>

Table 6 demonstrates that physiological factors (personal feelings/beliefs) resonated more for 14 interviewees, social persuasion (support/encouragement) for 13 interviewees and performance accomplishments (successes/achievements) for six interviewees. Two participants jointly chose two learning sources, which totals 33 responses, for the 31 participants. Vicarious experiences (successes/achievements of others or role models) did not resonate most for any of the participants.

#### **4.4.1 Significance of physiological factors**

The learning sources that inform self-efficacy beliefs are complex as participants draw on a diverse range of sources, experiences, and contexts for each learning source category. Physiological factors emerge as a strong learning source for individuals. Feelings/beliefs that are spoken about include resilience, determination, ambition, confidence, independence, pragmatism and feelings of conflict and harmony. For Linda, independence (feelings and belief – physiological factor) is the learning source which mostly impacts her self-belief. She feels that she developed this from a young age. Her mother passed away when she was a young girl, and her father raised the four children. Her older siblings also took great care of her. She feels that to avoid creating any hassle for her father, she became very independent:

My Mum died when I was very young, so I was three or four. I suppose my Dad was an incredible man. He brought up the four of us. But you can imagine the chaos in our house with four kids. But my brothers and sister really looked after me. I think I had an independence. I genuinely believe, you know, I can't put my hand on it, but I think it was

down to the fact that I had to just get on with things and do things. Because Dad was working, and you couldn't be causing trouble. You just had to get up and do it yourself.

This independence provided her with a strong work ethic and drive, which has positively impacted Linda's self-efficacy within her career. Elaine similarly speaks about a personal experience. Her parents were unwell, and she and her siblings took care of them for many years. These personal circumstances helped the development of her feelings of resilience, confidence, and drive (physiological factor), which she feels is her most influential learning source. "We minded them. We did everything for them and that's why I'm driven. It's a lot to do with my own personal life". This resilience, confidence, and drive (feelings and beliefs) positively influence Elaine's self-belief and she says, "So, I don't see anything as being that I can't achieve it. I think I can achieve anything I want to".

#### **4.4.2 Significance of social persuasion**

Social persuasion (support/encouragement) emerges as a prominent learning source and participants explain where such support arises. For six individuals this came from within organisations (e.g., managers, colleagues, and teams). Una feels that her line manager has had such an influence on her career progression, that she would not be in her current position only for him. He champions and believes in her and this in turn improves her self-belief. "My current manager, my boss, is a huge believer of me and has been for the last ten years or more ...I think if it wasn't for him, I wouldn't be in the position I am at the moment". For four individuals this came from personal sources (e.g., family members). Jane's most influential learning source was the support and encouragement of her uncle. As an accountant, he encouraged and helped her to commence her accounting studies and remained a constant source of support throughout her career. For three individuals this support came from a combination of organisational and personal sources. Susan's support originated from many sources. These include a prior female colleague who encouraged her to study accounting, a prior influential female senior manager, and a group of women who she became friends with when she began studying accounting. This group of friends have remained a source of support throughout her career. "I would have joined that group when I was about 25 and to this day, they would still be my friends. That group has been there the whole way along".

#### **4.4.3 Performance accomplishments less prominent**

Performance accomplishments emerges as a reasonably strong learning source for individuals. For Chloe, obtaining the global senior role that she desired and subsequently being recognised as a subject matter expert within her organisation, resonates as her most impactful learning source:

I suppose that [obtaining her senior global role] and also, I think realising too that you know, I suppose people kind of reach out to you and see you as an SME, a Subject Matter Expert on something and say, “God, she knows what she’s talking about”, and stuff like that.

#### **4.4.4 Vicarious experiences not the most influential**

Participants did not identify vicarious experiences (achievements or successes of others/role models) as the learning source which mostly resonated for them. There are various possible explanations for this. There may be an absence of women who have attained senior positions, thus limiting the number of potential role models (Morris and Usher, 2011). Participants may not identify with those who are in senior positions (van Rooij et al, 2019), as their career and work/life experiences may differ. Vicarious experiences may be less impactful at later career stage, or once self-efficacy beliefs have been largely formed. These possibilities will be considered further as the study progresses.

Further exploration of the 33 responses pertaining to the learning source that resonates most, 27 of these are from personal sources (13 feelings and beliefs, six achievements and eight support sources). Looking at this from the organisational perspective, only nine responses are sourced from organisations. Three sources of support combine personal and organisational, so are included in both categories (personal and organisational). This indicates how important the personal aspect is for participants, which may be partly due to organisational support being less prevalent.

#### **4.5 Theme 4 – Perceptions of gender inequality**

Participants raise instances of perceived gender inequality (perceptions of being treated less favourably than men in the workplace, i.e., because of gender) encountered within their careers.

Perceived gender inequality is a matter of importance from a practice and research perspective. For the purposes of this study, the focus is on how this may influence and be influenced by self-efficacy. Chloe mentions the occurrence from time to time of women being tasked with certain jobs, “but they’ll ask women to do stuff for example, set up that meeting, whereas they wouldn’t ask a guy”. Helena believes that men’s opinions are valued more in the workplace, even when working at board level:

But ultimately you know, I have to say, have a conversation about something, probably over a number of times for it to happen, whereas they [her male colleagues] might only have to do it once or twice. There’s definitely a different tone if you know what I mean, or temperature in terms of when a man says something, it carries a bit more weight.

Jill feels that women are not even expected to attain senior positions and when they do, they are not supported or treated as equals in such roles, “I’m not sure how seriously they take women at that level... You’re there but I’m not sure how much you’re really treated as an equal in the room, or at the table”.

The impact of perceived gender inequality can negatively influence self-belief. Jane is a senior manager, whose peers are mostly men. Within her work environment she constantly feels she is treated with less respect. This feeling of unequal treatment has adversely impacted her self-belief:

... Self-belief as an accountant, I’d say I struggle with it. And this sounds mad, but I struggle with it, from a male perspective... But I definitely still believe in myself, that men are treated with more respect, and I would struggle to feel that I ever believed, that I am as good.

Helena speaks about being made to feel less deserving as a woman in her senior role and how this feeling can negatively impact her confidence:

I’m not going to lie, when you get older, you do realise, there’s a certain amount of gas lighting that exists. That male colleagues wouldn’t maybe experience in the same way.

And there's certainly an element of maybe guilt tripping or... that's certainly been my experience. So those kind of things do affect my confidence.

When participants describe perceived gender inequality, it clearly affects them. Helena describes how it damages her confidence. Jane feels that she struggles with her self-belief due to ongoing perceived gender inequality. At times the tone in which participants describe their feelings of gender inequality is somewhat matter of fact, and it appears as if there is almost a resigned acceptance that this is part of their career development experience. Such perceived gender inequality can damage self-efficacy beliefs. Narratives portray that high self-efficacy can assist participants in managing perceived gender inequality encountered. Helena demonstrates high self-efficacy by fighting this negative feeling and not allowing anyone make her feel that she does not deserve her senior position:

But at the same time, I do have to say to myself, I have as much a right to do this as the other person on the C-Suite and I have as much right to be here. So that always, that's always my kind of centre of gravity, if you like. It's like I'm not going to have anybody, you know, make me feel like I don't deserve to be here. But it does take a while to, you know, bring yourself back up.

Elizabeth perceived that she was treated differently by her three male colleagues when she commenced in her position. She refused to be recognised as “the little woman” and demonstrates high self-efficacy by developing her role to completely transform her standing within the organisation:

I developed that role way; way more than they had expected. So, I think I was kind of the little woman, sitting on the side a little bit, or certainly that's how I felt at times. But I don't like to be the little woman sitting on the side. So, I would make my views known obviously. That's completely changed now. We have a new CEO; we have a new management team. And while I would have been considered the baby on the team, now I'm not. Now I'm considered number two on the team to the CEO.

Having taken ownership by developing her position and changing her perception within the organisation, this action positively impacted Elizabeth's self-belief. In other words, Elizabeth's

self-efficacy assisted her to grow both her position and how she was perceived within the organisation. In turn, the success of her action (performance accomplishment) further reinforced her self-efficacy beliefs.

When Emer's line manager left the organisation, she was promoted into his role. However, the organisation refused to increase her salary, even though the previous manager had been on a significantly higher salary. Following an unsuccessful salary negotiation, Emer agreed to work for a year to prove herself in the new role, believing she would be in a better position to renegotiate her salary, once this period was up. However, despite implementing improvements within the organisation, Emer's organisation still refused the salary increase the following year:

I set about working incredibly hard for 12 months to achieve, and tidy up, and do all the expectations that, you know, we'll say achieve the expectations I set myself to get to that point. And lo and behold I was met with the same answer. So, my resolve to that was actually, I left the company. Rightly or wrongly, I felt it was a breach of principle.

Emer left this role at a particularly difficult time financially for her family e.g., her children were going to college and there were car loans and the mortgage to be paid. She felt very disappointed and let down by her organisation. However, she stuck to her values and walked away from an organisation who she felt did not value her worth or afford her equality. Emer portrays self-efficacy in this action, as her self-belief in her ability does not falter, even when she feels unequally treated by her organisation.

Kelly felt she was underpaid and undervalued in a previous role because she was a woman, so she requested a pay rise from her manager. He refused and argued with her. Kelly walked out of the job, saying, "that's fine, I'll pack my pencil case, and I'll go home. So, and that's what I did, until he rang me". This action demonstrated self-efficacy, as Kelly maintained her self-belief in her ability (and her value), within her role. Her approach resulted in a pay increase, and she returned to work.

Perceived gender inequality in the workplace may potentially reduce an individual's self-efficacy. On the other hand, stories emerge of participants exhibiting high self-efficacy when taking action to manage perceived unequal treatment incurred within their organisations.



#### **4.6 Other factors**

Other factors emerging from the interviews that may be relevant will need to be further explored as the discussion chapter progresses. Such factors include participants judging themselves harshly at times, many participants expressing no desire to progress further and participants often perceiving their self-belief as lower than that of their male counterparts. These factors need to be explored further, after revisiting the literature, to consider their relevance to the research questions. This will be conducted as the discussion chapter develops.

#### **Section 5 Discussion and conclusion**

This study set out to identify the self-efficacy learning sources and subsequent influence of self-efficacy on the career development of female accountants. Participants largely categorise themselves as possessing high self-efficacy, thus indicating their perceptions of their ability pertaining to a senior position. However, their experiences when described in more detail, suggest a more complex picture. Many participants also experience self-doubt and appear to draw on the self-efficacy learning sources to deal with such self-doubt and restore their self-efficacy. While it is possible that the existence of self-doubt may impact individuals' career journeys, it does not appear to prevent career development, since participants return to the self-efficacy learning sources to overcome this possible impediment and progress within their careers. These findings help inform RQ2: *How do self-efficacy beliefs impact the attainment/non-attainment of senior positions for female accountants?*

Most participants believe their self-efficacy has evolved over their careers, largely with time or experience. This concept of evolving or improving self-efficacy is understandable, as self-efficacy is not constant due to the impact of the four self-efficacy learning sources. Social persuasion (support and encouragement) and physiological factors (feelings and beliefs) were the self-efficacy learning sources that resonated most for participants. Analysing participants' responses suggest that personal sources (e.g., feelings/beliefs, achievements, and sources of support) emerge as more influential from this study, than organisational sources (e.g., role models, mentors, supportive managers) on participants' self-efficacy beliefs. What emerged as a potential subgroup were the participants who experienced particularly supportive work environments (organisational support), which appeared to stem from either the culture of the organisation or individual supportive managers. This potential subgroup who experienced such organisational support was explored to see if a pattern existed relative to organisation size or

type. However, participants who experienced supportive environments represented a variety of organisational types and organisation sizes. Thus, no pattern was found to exist. These detailed findings relate to RQ1: *What self-efficacy learning sources impact the self-efficacy beliefs of female accountants?* and help us to understand the nature of the relationship between the learning sources and self-efficacy.

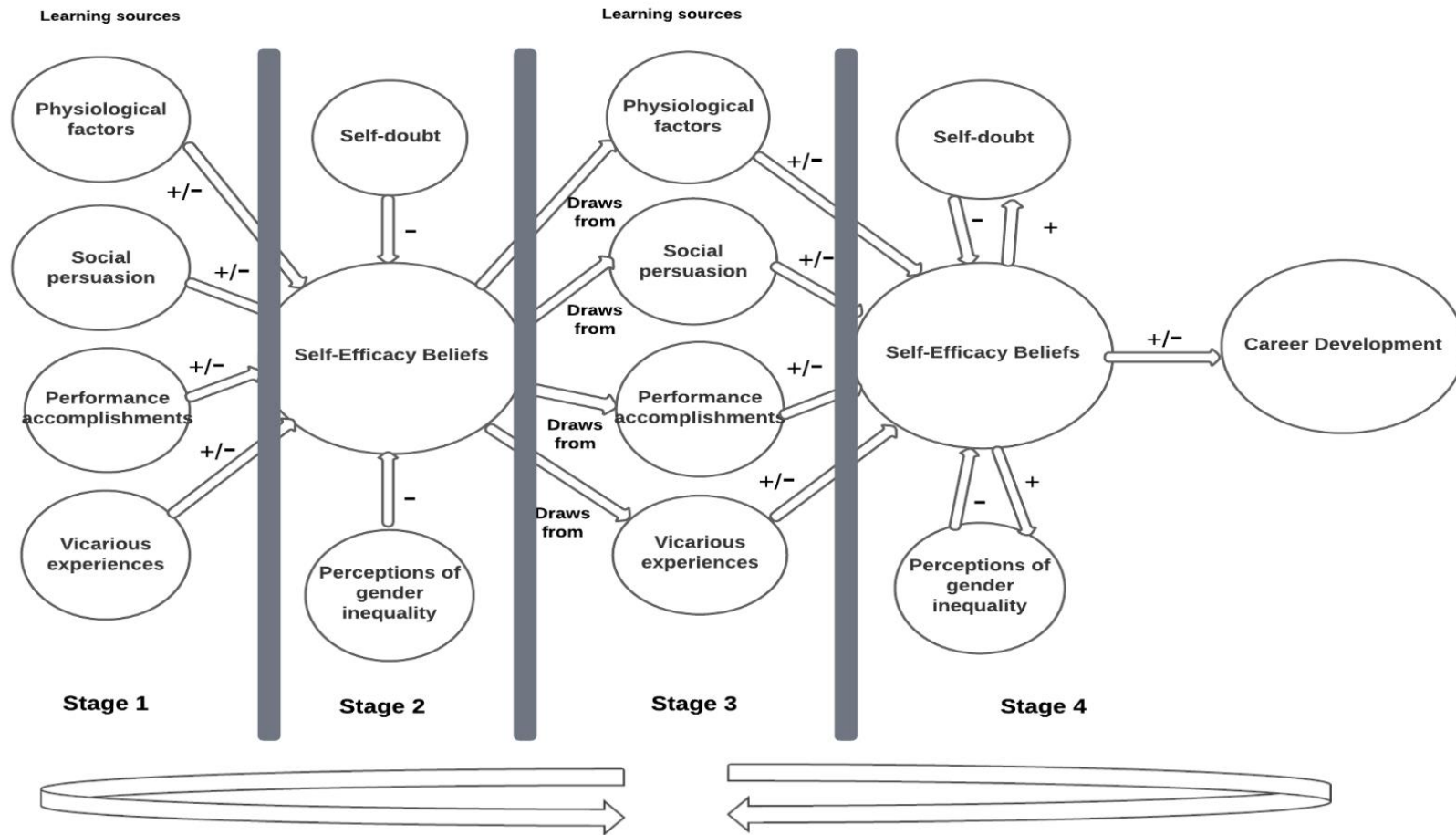
Participants speak about perceived gender inequality in the workplace. While this is an important concept, this study considers how it interacts with self-efficacy. Perceived gender inequality appears to manifest in feelings of “less than” and can have negative ramifications upon participants’ self-efficacy. At times participants’ stories demonstrate high self-efficacy when they take action to manage perceived unequal treatment encountered. These findings further help to inform RQ2. Table 7 structures the findings within the study and maps them to the relevant research questions.

**Table 7: Mapping of findings to research questions**

<b>RQs</b>	<b>Findings</b>	<b>Findings</b>	<b>Findings</b>	<b>Findings</b>	<b>Findings</b>
<b>RQ1:</b> What SE learning sources impact SE beliefs?	Generally, all four learning sources influence SE beliefs	Significance of physiological factors (feelings and beliefs)	Significance of social persuasion (support and encouragement)	Performance accomplishments (successes and achievements) less prominent	Vicarious experiences (Role models/ successes/achievements of others) not the most influential for anyone
<b>RQ2:</b> How SE beliefs impact the attainment/non-attainment of senior positions?	Perceived self-efficacy beliefs generally high and generally evolve over time	Self-doubt can negatively impact self-efficacy	Participants draw on the learning sources to overcome self-doubt	Perceived gender inequality can negatively impact self-efficacy	High self-efficacy helps manage perceived gender inequality

What has emerged is that women’s career development appears complex, which is supported by literature (e.g., Fitzgerald and Crites, 1980; Mainiero and Sullivan, 2005; Vidwans and Du Plessis, 2020; Jogulu and Franken, 2023). Figure 1 presents a framework which portrays the relationships which evolved from the findings between self-efficacy, the learning sources and career development (as well as self-doubt and perceptions of gender inequality).

Figure 1: Framework to illustrate the influence of self-efficacy on career development



This framework (divided into four stages) seeks to demonstrate the continuous and evolving relationships between self-efficacy and the four learning sources and between self-efficacy and career development. Stage 1 portrays that each learning source generally impacts upon self-efficacy beliefs. Stage 2 demonstrates how self-doubt and perceptions of gender inequality can both reduce self-efficacy beliefs. When this occurs Stage 3 illustrates how individuals draw from the self-efficacy learning sources to restore their self-efficacy beliefs (how they do this, appears very much an individual process). From participants stories it appears this may occur time and again throughout one's career. Stage 4 portrays how self-efficacy impacts career development. Self-doubt and perceptions of gender inequality can negatively impact self-efficacy. High self-efficacy can assist in dealing with these negative influences (of self-doubt and perceptions of gender inequality), demonstrated by the positive relationship between self-efficacy and both self-doubt and perceptions of gender inequality (in Stage 4). Career development is not a static destination point. Paper 1 provided Super's (1990) description of career development as career preparation, career choices, commencing work and adapting to work situations throughout the career life span. This is a sufficiently broad interpretation to include all possible occurrences within a career such as progression/lack of, leaves of absence, career breaks, career moves/changes and achievements/lack thereof. In other words, career development is not a final endpoint, but part of an ongoing process. The circular arrows attempt to demonstrate that the relationships portrayed are constantly occurring and evolving. The findings suggest that self-efficacy plays an important role firstly by impacting career development directly. Secondly self-efficacy, together with the self-efficacy learning sources, play an important role in assisting individuals to manage self-doubt and perceptions of gender inequality encountered.

This study aims to contribute to the literature on self-efficacy, with respect to later career stage female accountants working in industry. The findings from the study extend prior research about how self-efficacy influences career development, such as individuals drawing on learning sources to overcome self-doubt and self-efficacy helping to manage occurrences of perceived unequal treatment in the workplace. The findings extend the literature about the self-efficacy learning sources that may impact upon individuals. It contributes to practice by accentuating how women develop their self-efficacy. This highlights possible areas for improvement, such as the provision of additional organisational and/or professional body supports and role models for women, particularly during career stages or circumstances, where

self-efficacy may be lower. The contributions, recommendations and future research avenues will be further developed. The next stage of the study will revisit the literature to situate and discuss the findings in the context of existing literature.

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## Appendices

### Appendix 1: Explanation for inclusion and exclusion of potential participants

#### Notes:

- Inclusion criteria are later career stage female accountants working in industry (industry is explained in Paper 3, Section 3.1 as industry, financial services, and qualifying non-profit institutions) in Ireland
- While participants are assigned a pseudonym, excluded women are not assigned pseudonyms and are categorised as E1, E2 etc

Participant	Include (Y/N)	Organisation type (meets the definition of industry)	Rationale for exclusion and date excluded
Julie	Y	Financial Services	
Catherine	Y	Technology	
Marie	Y	Membership organisation	
Kate	Y	Pharma	
Elizabeth	Y	Financial Services	
Eloise	Y	Farming	
Martina	Y	Membership organisation	
Karen	Y	Technology	
Jane	Y	Retail	
Kelly	Y	Financial Services	
Susan	Y	Financial Services	
Molly	Y	Multinational	
Frances	Y	Multinational	
Emer	Y	Qualifying non-profit	
Mary	Y	Financial Services	
Jill	Y	Financial Services	
Megan	Y	Multinational	
Helena	Y	Software	
Oliva	Y	Financial Services	
Anna	Y	Financial Services	
Brenda	Y	Financial Services	
Ellen	Y	Financial Services	
Niamh	Y	Financial Services	
Caroline	Y	Pharma	
Una	Y	Financial Services	
Abby	Y	Financial Services	
Elaine	Y	Agriculture	
Linda	Y	Not for profit	
Geraldine	Y	Logistics	
Alice	Y	Membership organisation	
Chloe	Y	Multinational	
E1	N		Public sector 28/11/22
E2	N		Public sector 28/11/22
E3	N		Academia outside Ireland 29/11/22
E4	N		Industry but working in Australia 1/12/22
E5	N		Public sector 2/12/22
E6	N		Public sector 5/12/22
E7	N		Academic organisation 5/12/22
E8	N		Practice 5/12/22
E9	N		Practice in the US 5/12/22
E10	N		Public sector 5/12/22
E11	N		Public sector 5/12/22
E12	N		Industry but mid-career stage 5/12/22

<b>Participant</b>	<b>Include (Y/N)</b>	<b>Organisation type (meets the definition of industry)</b>	<b>Rationale for exclusion and date excluded</b>
E13	N		Self-employed 16/12/22
E14	N		Non-profit government funded 26/01/23
E15	N		Self-employed 25/01/23
E16	N		Public sector 27/03/23
E17	N		Early career stage 27/03/23
E18	N		Practice (mid-career) 28/03/23
E19	N		Working in India 29/3
E20	N		Practice 30/03/23
E21	N		Academia 11/05/23

## Appendix 2: Data analysis categorisation of codes, themes, and subthemes

Codes	Themes	Subthemes
Age bracket Age qualified Place in family Organisation size Professional body Sacrifices or difficulties to get there What led to accounting Changing role of accounting Accounting tough or easy Headhunted Women value more than just work Identify as an accountant Importance of career Practice training or industry Rapport and feelings Determination Take the same path Advice to younger self Regrets		These codes and categories provide an introduction and background section to present to the reader and introduce participants
Prior career experience Demands and difficulties Problem solving Achieved goals Value your worth Agency Imposter or self-doubt Evolving SE Does having children impact involvement of SE Conflict and challenge Impacts career development	Self-efficacy beliefs	High self-efficacy  Self-doubt Evolving self-efficacy
Performance accomplishments Vicarious experiences Social persuasion Physiological factors Biggest impact	Self-efficacy learning sources	All self-efficacy learning sources generally impact self-efficacy
Biggest impact	Most influential learning source	Significance of physiological factors Significance of social persuasion Performance accomplishments less prominent Vicarious experiences not the most influential for anyone
Impact being a woman Politics in organisations Women as managers Women written off – bias (age or having families) Men not respecting women Excluded	Perceptions of gender inequality	
Career and life fit Aspiration for a more senior role Attitude to senior role Expectations or plans General ambition	Other factors	Desire/lack of desire to further progress



### Appendix 3: Extracts of detailed responses received pertaining to self-efficacy beliefs

Participant	Can you describe how well your prior career experience may have prepared you for a senior position?	Can you describe how confident you feel in your ability to meet the demands/difficulties associated with a senior position?	Can you describe your ability to problem solve effectively in a senior position?	Can you describe how effectively you have achieved the goals you set for yourself?
Julie	High: I had a huge amount of opportunity to grow into leadership roles and through different avenues	High: I realise actually the depth of knowledge and experience that I have	High: So, I'm very good at looking at the noise and the complexity and boiling it down into a simple strategy	High: In terms of how much it's within my control, I would be very focused on achieving
Catherine	High: ...has really allowed me to see different parts of the business and get that broad experience	High: I might see an external CFO role, in a smaller company	High	Medium: A lot of this is outside of the individual's control and I think I took the long way around at times
Marie	High: I started from the ground up where I trained in practice and saw it from a trainee level	High: Having said that, the technicalities of the job, I don't think there's anything in it that I couldn't do	High: I think the key to problem solving is to take your head out of it, take a step back	High: We do set challenging targets for ourselves
Kate	High: And I had two very good mentors who are actually ACA qualified. They really prepared me	High: I like to be challenged. I like being busy, I like being needed. So, we face each challenge as a team	High: Avoid overreacting because it's not going to get us anywhere	High: It's really through hard work and dedication, and education
Elizabeth	Medium: Prepared me well, I wouldn't say very well, because it was a big step up	High: It's ok how can we fix it now and then you look back and say we can make things better	High: So that's what I do best, problem solving, because I've a very analytical mind	High: Yes, I feel I have achieved them all
Eloise	High-medium: If I was going for a senior role somewhere else, then I wouldn't	Medium: Yes, I'd be confident enough I could do it, but it wouldn't be for me at this age	High: Yeah, I couldn't see an issue with it. But I mean I suppose the last couple of years has thrown us	High: Very definitely, but it's a lot of hard work...
Martina	High: Certainly being able to communicate at senior level...certainly CPA has helped me do that	High-medium: At this stage in my life, I would feel comfortable in my own skin yes, and in any environment	High: For me problem solving is about recognising there's a problem, finding out all the information and the data that's	High: So, you have to bring other decision makers around a table with you...

<b>Participant</b>	<b>Can you describe how well your prior career experience may have prepared you for a senior position?</b>	<b>Can you describe how confident you feel in your ability to meet the demands/difficulties associated with a senior position?</b>	<b>Can you describe your ability to problem solve effectively in a senior position?</b>	<b>Can you describe how effectively you have achieved the goals you set for yourself?</b>
			relevant and then you know, making a decision	
Karen	High: Absolutely, without a shadow of a doubt	High: When you get to a certain age, you are not that young person anymore	High: Because in finance, things are constantly changing. Especially as a company grows and you are dealing in new jurisdictions	High: Luckily, when I put my mind to something, I would get it
Jane	High: So yes, I'm well experienced	High: So, they told me I was going into a mess, they just didn't tell me how bad the mess was, and how horrific it was	High-medium: I'd always say I like to think outside the box	High-medium: if I decide that I'm going to do something ...I give it everything. So, I stick to it, I do it
Kelly	High: Yeah because the experience that I have had to date	High: Yes, I can deliver. The only concerns that I would have would be say, on some of the technical issues	High: Yes, problem solving that would be fairly key	High: I would reach the goals in terms of when I started with the company...
Susan	High: Because my experience in the larger organisation was pretty extensive ...	High: My appetite for it is really what's not there... I went for an interview recently in X and I know I could do those jobs absolutely	High: I have a lot of experience of thinking on my feet, taking a lot of people's opinions on board, and working my way through solutions	High: That's a tricky one and it's only tricky because I would say that I have achieved them but...
Molly	High: you have the background...but the job I do is transferable between companies	High: I think that I would be confident in a senior position, I would be confident in dealing with other senior management because I've done it for so long	High: I'd say my ability to problem solve is high but it's particularly because of the role I do	High: I've moved up so far on the ladder, so to speak. Has it made me want more? Yes
Frances	Medium: I'm lacking some knowledge because I'm not coming from the Big Four	High: I've been put into challenges before, and I always came out in one piece	Medium: I didn't have the chance to have a lot of hands-on things because I just qualified recently	Medium: Because I still haven't reached the goal, the final goal. I still haven't found my dream position
Emer	High: Put in at the grass roots level...So, I'd got a good grounding	High: Because invariably I meet my deadlines	High: I've always been a big picture person, and it's not just about an accounts department	Medium: I've a good sense of my worth...I would say that worth was

Participant	Can you describe how well your prior career experience may have prepared you for a senior position?	Can you describe how confident you feel in your ability to meet the demands/difficulties associated with a senior position?	Can you describe your ability to problem solve effectively in a senior position?	Can you describe how effectively you have achieved the goals you set for yourself?
				somewhat offset with job satisfaction
Mary	Medium: because I'll tell you where my gaps are...	High: At director level I would think I'd have, yeah, the skills	High: I think I am a good problem solver	High-medium: There are times where I kind of go, well, maybe I should have set a much more ambitious goal
Jill	High: Nobody in the business had ever gotten the role before me. It had always been somebody from outside the business	Medium: In terms of the actual job itself I feel very confident. There's a huge people management part of my job, that's the part that I don't feel as confident about	High: I think it's good	High: I knew what I wanted, I went after it and got it
Megan	High: The accountancy experience kind of lends well then for that commercial acumen and oversight	High: I don't tend to get too stressed about it. I'm quite methodical and organised in terms of planning for it	High: It comes down to experience, it comes down to working 20 odd years	High: I'd be quite determined. I suppose in terms of setting goals and seeking to achieve those I'd be tough on myself I guess
Helena	High: I've held senior finance positions so obviously I've a good background there	High: I've good abilities. I'm quite resilient and you have to be to, I suppose, get to this level	High: I would say it's quite strong	High-medium: It depends what day of the week you ask. I'd probably say the lower end of high if that makes sense
Olivia	High: I think probably from early years in accountancy I think I had a good foundation for that	High: I think I'm quite good at ranking urgency, I'm good at fighting fires and multitasking	High: I am a problem-solver... I'll try and come up with a couple of different solutions as well	Medium: So, I've achieved goals that I've set out for myself, but it was with a lot of sacrifice
Anna	High: I was trained at X...I worked in all different parts but it was a great experience	High: It doesn't mean I know everything and I don't pretend to know everything	High: When you're in that position that's your job. The day-to-day stuff is not what you're worried about, it's the things that go wrong...	High: So, probably more so I would say one of my skills is my ability to adapt and change direction
Brenda	High	High: Yes, I am very confident in that	High: Yes, that is high as well	High: Yes, high but where do you stop your ambition? I will put that as high



<b>Participant</b>	<b>Can you describe how well your prior career experience may have prepared you for a senior position?</b>	<b>Can you describe how confident you feel in your ability to meet the demands/difficulties associated with a senior position?</b>	<b>Can you describe your ability to problem solve effectively in a senior position?</b>	<b>Can you describe how effectively you have achieved the goals you set for yourself?</b>
Ellen	High: Each career change is a building block	High: When you get to a certain age, you've seen the majority of challenges	Medium: I'm a good problem solver, but I'd have to digest the problem first	High: I'd say hard work and maintaining relationships has delivered the goals
Niamh	High: Exceptionally well. I have global experience. I am technically...	High: You keep going, one foot in front of the other and you get validation from people whose opinion you value more	Medium: I'm not the most creative of people but I will try to get the right people in the room	High: Those short-term goals are all milestones on a path to get to where I want to be
Caroline	High: The Chartered Accounting training that I got (in Big 6)	High: Have a good team around you as well, which I do	High: Trying to identify issues pro-actively... and encouraging other people to do the same	High: I felt that I could be doing better for myself and I could be more fulfilled...
Una	High: You have to be much more strategically focused. You have to show very strong leadership skills	Medium: There's a lot more handholding happening now...all of that has put more pressure on senior leadership	Medium: To be innovative... You need extra resources and that can be hard in an environment, where the bottom line is key	High: I'm continually moving in the right direction for achieving goals
Abby	High - it's when you start having those heads of roles, where you're responsible for a function	High: Women, a lot more than men, have that imposter syndrome	High: There's always learning opportunities and there'll be always another challenge that will really get the aul brain cells working	High: I think I would have achieved the goals I've set. Probably would have had to recalibrate those along the way because things happen
Elaine	High: And it's getting a certain amount of experience and then looking at, where were my gaps, what did I need to do?	High: I could just pick up anything and I know straight away if there's a problem and I know the answer to it	High: With experience when you get to a level you have to not leave the detail behind...	High: We mightn't be where we want to be, but we are here, so how do we get out of it and how do we get to the end game
Linda	High: If you're waiting for someone else to get you a role it's not going to happen, you have to go out there and get it yourself	High: If it wasn't challenging, I wouldn't be happy in the role. If I wasn't working in an environment where there was support, I probably wouldn't stay	High: So, it's bringing in the right people and listening to them and working through it	High: There's still things I want to get done but it's timeliness in allowing it
Geraldine	Medium: So, I feel that I've learned a lot of things along the way. But I think also what I'm	Medium: My only worry about it is meeting the demands of the senior people coming to you and asking you questions	Medium: Yeah, that's probably where I perceive a weakness of mine is problem-solving	High: So, yes, I would say that things that I have set out to achieve, that I have achieved

<b>Participant</b>	<b>Can you describe how well your prior career experience may have prepared you for a senior position?</b>	<b>Can you describe how confident you feel in your ability to meet the demands/difficulties associated with a senior position?</b>	<b>Can you describe your ability to problem solve effectively in a senior position?</b>	<b>Can you describe how effectively you have achieved the goals you set for yourself?</b>
	trying to get better at, is my communication			
Alice	High: I think, this may sound a bit biased but being a woman and having a family and working, that teaches you to multi-task	High: Also, a certain age and level of maturity, you know yourself, you know what you're capable of	High: Don't assume that you know it all because you don't	High: I usually am able to put the effort and application into achieving what I want to achieve
Chloe	High-medium: I would have gone in at quite a junior level and worked my way up, albeit you work, you don't just get promoted	High: I won't lie, it can be very challenging	High: It's all about kind of being well-prepared	High: Well, I suppose we do annual kind of goal-setting objectives and stuff like that

#### Appendix 4: Participants' responses with respect to the self-efficacy learning sources

Participant	Personal achievements (Performance accomplishments)	Achievements or successes of others (Vicarious experiences)	Support/encouragement (Social persuasion)	Personal feelings/beliefs (Physiological factors)	Most influential learning source
Julie	Nominations for various awards/courses	Sister and friends	Self-talk and peers	Pragmatism	Pragmatism
Catherine	Implementation of tough IT project	Role models of mentors, team's progression	Senior managers and mentors	Confidence	Coaching by senior manager
Marie	Qualifying, promotions and success in work	N/A	Senior manager and board of directors	Lack of fear	Promotions and success in work
Kate	Qualifying, appointed into senior role	Progression of peers	Mentors	Ambition	Ambition
Elizabeth	Led a project in organisation, developed her role and altered her position within the organisation	Role models (mentor and female board member)	Family friend, mentor, and CEO	Personalising	Leading the successful project
Eloise	Study and exam success	Peers in college and work	Self-talk, friends, and family	Lack of belief	Support of family
Martina	Successes in business	Inspiring people from early career	Trainee boss and support from leadership programme	Determination	Determination
Karen	Establishing finance function and new reporting	Success of previous senior managers	Prior boss in early career	Internal conflict	Prior boss in early career
Jane	Success of further studies	Team's enjoyment of work and her father losing his job	Uncle very supportive	Determination	Uncle very supportive
Kelly	Milestones achieved in work	Husband's career progression	Uncle	Fear	Support of uncle
Susan	Standing up for her beliefs and being proved right	Previous female finance director	Previous female FD and group of female accountants	Imposter syndrome and perfectionism	Previous female finance director and group of female accountants
Molly	Outcomes of work successes	N/A	Self-talk and support from sisters	Determination	Support from sisters
Frances	Qualifications	Mother (also an accountant)	Managers in prior roles, partner, and family	Improving confidence	Manager in prior organisation

<b>Participant</b>	<b>Personal achievements (Performance accomplishments)</b>	<b>Achievements or successes of others (Vicarious experiences)</b>	<b>Support/encouragement (Social persuasion)</b>	<b>Personal feelings/beliefs (Physiological factors)</b>	<b>Most influential learning source</b>
Emer	Improving processes in work	Organisation that maximised efficiencies	Prior managing director and senior management	Fear (knowing her limits)	Improving processes in work
Mary	Qualifications, set-ups, Return to work (negative)	Ex business partner, friend, mentees' successes	Negative/forceful feedback	Harmony between family life and career	Belief in family life
Jill	Getting into a Big4 firm and being a council member	Eddie Macken - success and personality	Father and feedback from work	Huge determination	Determination
Megan	College achievements, Big4 role and being headhunted	Success of mentees	Mentors, feedback, prior manager, and self-talk	Determination, passion, and ethics/culture of organisation	College achievements, Big4 role and being headhunted
Helena	Promotions	Senior managers and previous CFO	Parents, prior senior managers (mentors) and CFO	Inner resources/resilience	Inner resources/resilience
Olivia	Qualifications, promotions and being headhunted	Mentees, managers, colleague, and senior women	Mother, husband, mentors, female manager, and colleague	Negative view of female senior leaders and work/life conflict	Work/life conflict
Anna	Role in FS when jobs were very difficult to obtain	Her granny and Oprah	Her granny and flatmate	Trusting her gut instinct	Trusting her gut instinct
Brenda	Milestones, successes, balancing W/L	Female role models (even if infrequent)	Mother, managers, culture of organisation	Resilience, confidence, learn from mistakes, curiosity	Resilience, confidence, learning and curiosity
Ellen	Qualifications, accolades, and parenthood	Successful women and businesses people	Family and husband. Good child-minding	Determination, survival, and ability to keep going	Determination, survival, and ability to keep going
Niamh	Passing exams, promotions and developing roles	Success of female CEOs	Support from work, husband, mentor	Resilience and fortitude	Resilience and fortitude
Caroline	Various promotions and projects	N/A	Feedback	Very diligent and committed	Feedback (upward the most important)
Una	Pushing herself outside her comfort zone	Father as a role model	Line manager champions her	Fear of confrontation	Line manager champions her
Abby	Promotions, senior roles in various bodies	N/A	Prior managers, colleague, external support	Confidence	Confidence and mentoring
Elaine	Successful projects and reputation built in work	Example provided explains social persuasion	Bosses and supportive company culture	Resilience, confidence, and drive	Resilience, confidence, and drive
Linda	Becoming a source of expertise	Staff progressing and prior VP (role model)	Sister mentored her, prior VP, and supportive network	Independence and drive	Independence and drive
Geraldine	Developing a new role and other achievements	Mentee reaching a senior position	Managers, stakeholders, partner, and aunt	Fear of disappointing others	Support of partner and her prior manager

<b>Participant</b>	<b>Personal achievements (Performance accomplishments)</b>	<b>Achievements or successes of others (Vicarious experiences)</b>	<b>Support/encouragement (Social persuasion)</b>	<b>Personal feelings/beliefs (Physiological factors)</b>	<b>Most influential learning source</b>
Alice	Success of difficult project and recognition for this	Mostly men who had career successes	Mentors, family, husband, and colleagues	Self-doubt and confidence to overcome it	Success of project, recognition for this and support of others
Chloe	Promotion/becoming a subject matter expert (SME)	Others progressing within work	Colleagues from last role and self-talk	Fear of presentations and compliance issues	Becoming a SME and the recognition which resulted

## **SECTION THREE**

### **Discussion, Conclusions and Recommendations**

### **Preface to Section Three – Discussion, Conclusions and Recommendations**

This discussion, conclusions and recommendations chapter commenced in September 2023 and incorporates adjustments made to this study following Paper 4, which are briefly described below:

- **Themes and subthemes:** Paper 4 identified subthemes (categorised within the themes as “other factors”), which included desire/lack of desire to further progress, women perceive men to have higher self-belief and women judge themselves quite harshly. When Paper 4 was presented and submitted, it was unclear if these subthemes were relevant to this study, so the researcher undertook to further explore them (see Paper 4, Section 4.6). The subtheme, women perceive men to have higher self-belief, is briefly discussed in Section 2.2.1 of the next chapter. Upon further exploration the other two subthemes were not deemed relevant to the research questions, so are not further explored in this discussion, conclusions, and recommendations chapter.
- **Framework:** As the discussion developed, the framework presented in Paper 4, illustrating the influence of self-efficacy on the career development of female accountants, was adjusted. This adjusted framework is presented in the next chapter. An explanation of the adjustments made are briefly described in Table 1.

**Table 1: Adjustments to the framework presented in Paper 4**

<b>Framework Paper 4 (page 213)</b>	<b>Framework Section Three (page 257)</b>
Framework demonstrated how individuals draw from the learning sources to restore their self-efficacy beliefs (when experiencing self-doubt).	As the discussion developed, it became clear that participants draw only from social persuasion and physiological factors to overcome self-doubt. This has been appropriately represented in the updated framework with the arrows from self-doubt to both learning sources (instead of arrows from self-efficacy).
Framework demonstrated perceptions of gender inequality negatively impacting self-efficacy.	Work-based challenges replaces gender inequality in the updated framework to encompass a broader range of challenges discussed by participants, such as work/life conflict as well as gender-based injustices.
Framework demonstrated how individuals draw from the learning sources to restore their self-efficacy beliefs upon experiencing perceived gender inequality.	<p>Leading from the above, the framework has been developed to include the relevance of agentic action when participants deal with work-based challenges.</p> <p>In turn agentic action creates learning source experiences, specifically performance accomplishments and physiological factors, which then restore self-efficacy beliefs. The updated framework demonstrates these adjustments.</p> <p>The framework also demonstrates how individuals use agentic action to direct their career, as demonstrated by the arrow from agentic action to career development.</p>
<p>The framework presented four stages to illustrate how self-efficacy influences the career development of female accountants.</p> <p>Self-doubt and perceived gender inequality is represented again in stage 4.</p>	<p>As the framework was adapted to include agentic action, it now demonstrates five stages to better reflect how self-efficacy influences the career development of female accountants.</p> <p>Self-doubt and work-based challenges are no longer represented in the final stage of the framework, as these concepts belong to the recurring process, incorporating stages 1-4.</p>
	The term restored self-efficacy replaces self-efficacy, in stage 5 (previously stage 4) of the framework, to better reflect the lived career experiences portrayed by participants.



## Section 1 Introduction

This research study has explored “*the influence of self-efficacy on the career development of female accountants*”. Paper 4 gave a detailed analysis of the findings and mapped these findings to the two research questions. This chapter presents the integration of Paper 4’s findings alongside the literature, whilst also developing insights, conclusions, and recommendations.

In Ireland, while the representation of women at board level is improving, the representation of women in senior leadership positions is improving less quickly than anticipated (Balance for Better Business, 2023). The representation of women in senior management positions in Ireland, has in fact fallen, between 2023 and 2024 (Grant Thornton, 2024). From an accounting perspective, Jeacle (2011) identified that a century after they were first permitted as members of the accounting profession, women are still not achieving career success. In Ireland, women hold between 21 percent and 32 percent of partnership positions across the Big 4 accounting firms (Malone, 2023). Throughout Europe women hold only 17 percent of partnership positions (Catalyst, 2020). Despite the accounting profession becoming more feminised since the 1970s (Whiting et al., 2015), women remain underrepresented in senior positions. Literature suggests that self-efficacy is a factor contributing to this underrepresentation of women (e.g., Betz and Hackett, 1981; Hackett and Betz, 1981; Dickerson and Taylor, 2000; Sullivan and Mahalik, 2000; Athanasopoulou et al., 2018).

Self-efficacy is an individual’s beliefs regarding their ability to successfully perform a given task or behaviour (Bandura, 1977). Lower self-efficacy could restrict career development when individuals believe themselves incapable, even when they are in fact quite capable (Bandura, 1988). This is a self-imposed limitation due to a lack of self-belief<sup>17</sup>, rather than inability (Bandura, 1988), which women are particularly vulnerable to (Quinn, 2012; Anderson-Gough et al., 2005). Research finds that women possess lower self-efficacy than their male counterparts in traditionally male dominated careers (Betz and Hackett, 1981; Matsui et al., 1989; Tellhed et al., 2017). Barker and Monks (1998) studied men and women who were

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<sup>17</sup> Self-efficacy researchers often use the term self-belief, rather than self-efficacy (e.g., Wood and Bandura, 1989; Zeldin and Pajares, 2000; Morris and Usher, 2011). The terms self-efficacy and self-belief are used interchangeably throughout the remainder of this chapter.

members of the Institute of Chartered Accountants in Ireland and find that women lacked self-belief compared to men in the study. Athanasopoulou et al. (2018) find that women do not promote themselves because they concentrate on what they lack, rather than what they possess. Thus, self-efficacy is often more relevant to achieving successful outcomes [such as career progression] than ability is (Lent et al., 1987; Hackett and Lent, 1992; Betz et al., 1996; Rigotti et al., 2020). Low self-efficacy beliefs have contributed to the underrepresentation of women at senior levels (Betz and Hackett, 1981; Hackett and Betz, 1981; Dickerson and Taylor, 2000; Sullivan and Mahalik, 2000; Athanasopoulou et al., 2018).

Self-efficacy is not constant over time as learning experiences continuously impact upon self-efficacy beliefs (e.g., Bandura, 1977; Byars and Hackett, 1998). Self-efficacy theory identifies four learning sources which impact self-efficacy including performance accomplishments, vicarious experiences, social persuasion, and physiological factors (Bandura, 1977). Klassen et al. (2011) reviewed teaching self-efficacy over an 11-year period. These authors believed that self-efficacy research in the teaching domain was hindered, by a lack of focus on the self-efficacy learning sources. Research on the self-efficacy learning sources has developed since then. Studies have been conducted on the self-efficacy learning sources in the career domains of STEM (e.g., Zeldin and Pajares, 2000; Zeldin et al, 2008), academia (e.g., Morris and Usher, 2011) and teaching (e.g., Gale, 2021; Bellemans and Devos, 2023; Marschall, 2023; Yim, 2023). Yet, to the best of the researcher's knowledge, no study has explored the learning sources that influence the self-efficacy of women in an accounting career context. Self-efficacy generally has been less researched in the domain of accounting than it has in other career areas (Burnett et al., 2010; Byrne et al., 2014; Beatson et al., 2020). Research finds that self-efficacy is an important factor in women's career development and women not reaching their full capabilities within their careers (Hackett and Betz, 1981). Therefore, to improve the career lives and career development of women in an accounting context, a better understanding about the learning sources that influence female accountants' self-efficacy beliefs and how self-efficacy impacts their career development is required.

This chapter proceeds as follows. Section 2 discusses the findings of the study presented in Paper 4 in the context of the literature and the research questions. The implications for individuals, organisations and professional accounting bodies are explained in Section 3.

Section 4 presents the contribution to knowledge and practice. The limitations of this study and recommendations for future research are detailed in Section 5 and the concluding remarks are presented in Section 6.

## **Section 2 Discussion of findings**

This research study explores the influence of self-efficacy on the career development of female accountants. Paper 4 presented findings which developed over many rounds of data analysis. These findings will be discussed relative to each of the two research questions. Barker and Monks (1998) stated that Irish accounting research requires analysis at an individual level, which this study sought to undertake. In total, 31 female accountants working in Ireland were interviewed for this study. Participants were working in various industry types and represented different organisation sizes (small, medium, and large). Later career stage female accountants were chosen for this study, as women at this career stage generally possess the experience and have had the opportunities to progress in their careers. Therefore, these women can furnish insights from their lived experiences, as to how self-efficacy beliefs impact the attainment or non-attainment of senior positions (RQ2) as well as the self-efficacy learning sources that influenced their self-efficacy beliefs (RQ1). Jeacle (2011) believes that learnings from literature are largely with respect to women in practice and very little is known about women's career progression outside of practice. Research suggests that female accountants working in industry face even more barriers to career progression than women in practice (Cohen et al., 2020) and are similarly underrepresented to female accountants in practice (Gammie and Whiting, 2013). While it seems that industry presents challenges for female accountants' career progression, studies focus less on women working in industry in accounting. Due to a lack of research, an incomplete picture exists of the career development and lived experiences of female accountants in industry, which justifies further exploration. Siboni et al. (2016) call for qualitative research of women working in accounting across various types of organisations. Since very little research explores female accountants in industry or indeed female accountants at later career stage, findings from this study will contribute to the knowledge that already exists.

## 2.1 RQ1 - what self-efficacy learning sources impact self-efficacy beliefs?

Bandura (1977) identified four learning sources in self-efficacy theory which include performance accomplishments, vicarious experiences, social persuasion, and physiological factors, which are briefly explained in Table 1.

**Table 1: The four learning sources that impact self-efficacy beliefs (Bandura, 1977)**

Learning sources (Bandura, 1977)	Description	Examples
Performance accomplishments	Personal successes and achievements	Perceptions of successes or achievements increase self-belief, while perceived failures may decrease self-belief (Bandura, 1997). Examples of performance accomplishments may include exam successes, project implementations and promotions.
Vicarious experiences	Successes and achievement of others or role models of others	Observing another succeed, raises an individual's self-belief about their own ability to succeed. This learning source is particularly impactful when the individual identifies with the other person/persons carrying out the behaviour (Bandura, 1977). Examples include senior/successful colleagues in the workplace, parents/siblings who have achieved/overcome difficulties, teachers/lecturers whom an individual may aspire to and other identifiable role models.
Social persuasion	Encouragement and support received from others and oneself	Social persuasion refers to the support and encouragement received from oneself or others. Examples may include spouse/partner, family, managers, peers, support groups and oneself, which is described as self-talk (Feltz et al., 2008). Bandura (1997) suggests that self-efficacy can be negatively impacted more easily than positively impacted, by the messages received from others.
Physiological factors	Individual's personal feelings and beliefs	Physiological factors refer to an individual's feelings and beliefs. Negative feelings, such as apprehension, could result in the avoidance of a situation e.g., not putting oneself forward for a job, even if the individual is well capable of the work. While positive feelings such as confidence could enable an individual to apply for a job, even if that job is above the abilities of the individual concerned.

Self-efficacy learning sources impact self-efficacy beliefs by initially forming and constantly influencing self-efficacy over time (e.g., Bandura, 1977; Bandura 1997; Klassen and Chiu, 2010; Shipherd et al., 2021). Literature identifies that the career domain is particularly relevant when determining the learning sources that most influence self-efficacy beliefs (Zeldin et al., 2008). While recent studies have focused on the learning sources of self-efficacy in teaching (e.g., Gale, 2021; Bellemans and Devos, 2023; Marschall, 2023; Yim, 2023), the learning sources of self-efficacy have not been largely researched outside of student groups, STEM, or teaching. Beatson (2024) asserts that no studies examine the sources of self-efficacy in accounting. Her recent study (working paper) investigates the self-efficacy learning sources of

male and female first year accounting students in New Zealand. At this point in time, no study has explored the learning sources of self-efficacy for women in accounting careers.

This study asked participants about the influence on their self-efficacy for each of the four learning sources. Each interviewee recalled the impact each of the four learning sources had on their self-efficacy beliefs, apart from four participants who identified little or no impact from vicarious experiences (achievements/successes/role models of others). In other words, all four learning sources generally impacted the self-efficacy beliefs of these female accountants. This is important, as potential future interventions seeking to improve female accountants' self-efficacy should include all four learning sources, as all four learning sources are relevant for this cohort. To put this into context some prior interventions to improve self-efficacy in other career domains have not incorporated all four learning sources for various reasons (e.g., Frayne and Latham, 1987; Luzzo et al., 1999; Palmer, 2006; Tschannen-Moran and McMaster, 2009; Barton and Dexter, 2020). Although all four learning sources influence the self-efficacy beliefs of participants in general, physiological factors and social persuasion emerge as the most significant learning sources.

### **2.1.1 Significance of physiological factors**

Many prior studies find physiological factors (feelings and beliefs) less significant than the other learning sources upon self-efficacy beliefs (e.g., Zeldin and Pajares, 2000; Morris and Usher, 2011; Gale et al., 2021). Nonetheless, in this study physiological factors emerge as a particularly strong learning source for individuals. While positive feelings improve participants' self-efficacy, there are also instances of negative feelings reducing their self-efficacy. However, participants mostly describe positive feelings and beliefs, contrary to prior literature which generally focuses on negative feelings and beliefs (e.g., Palmer, 2006; Usher and Pajares, 2009; Zheng et al., 2017). Participants speak about feelings and beliefs, such as determination, confidence, resilience, conflict, and ambition. Participants' stories about the development of their feelings and beliefs and how they impact their self-efficacy are specific to individuals and their personal circumstances. Caroline describes her feelings of diligence and commitment, which ensure that "if I'm doing something I wouldn't want to do half a job..." She explains that her work "needs to get 100% of the way and that's just the way that I am and the way that I think and how I work, I suppose". Because of her diligence, she

developed high confidence in the quality of her work and this confidence ultimately improves her self-belief. Abby similarly speaks about confidence impacting her self-belief. She describes how this confidence has prompted her to apply for positions, “So, definitely there are times where I felt, oh, I’m the best person for this job, I have to apply... So, you had that belief...”.

Previous studies which find physiological factors less significant, explore the career domains of teaching/academia (e.g., Morris and Usher, 2011; Gale et al., 2021; Bellemans and Devos, 2023), STEM (Zeldin and Pajares, 2000; Zeldin et al., 2008) and athletics (Shipherd et al., 2021). Morris and Usher (2011) and Bellemans and Devos (2023) find that although physiological factors influenced self-efficacy, they did not, or rarely featured, as the most impactful influence on self-efficacy. These two prior studies explored lecturers in the United States and primary school principals in Belgium. Unlike previous findings about the significance of physiological factors, in this current study of female accountants, participants place great emphasis on physiological factors as a learning source. As a result, the relevance of physiological factors upon self-efficacy beliefs may be specific to an accounting context. Beatson (2024) (working paper) conducted a quantitative study on male and female first year accounting students. This recent study found that while physiological factors were a significant learning source for the self-efficacy of male students, they were not a significant learning source for the self-efficacy of female students. This difference in the significance of physiological factors between female accounting students and the female accountants in this study may be attributed to career progression.

Women who seek progression may rely more on their feelings and beliefs to deal with various challenges encountered, as they attempt to progress within their accounting careers. Participants’ narratives do portray challenges encountered. Brenda had a previous manager who she found very difficult to work with. His management approach influenced Brenda negatively. However, her resilience helped her to deal with this challenging situation. “...there was one manager, if I hadn’t self-belief I’d have gone and sat in the corner and curled up you know... There is no doubt that resilience and having an innate sense of self-belief, without that it would have been tough”. What this means is, the development of personal feelings and beliefs, such as determination, may serve as a mechanism that participants use to overcome challenges that arise, which enables them to achieve career progression. Given the significance of physiological factors on participants’ self-efficacy beliefs it is important that women are

empowered to develop and improve their feelings and beliefs such as resilience and determination.

### **2.1.2 Significance of social persuasion**

Research finds that women report stronger social persuasion influences (support and encouragement) than men (e.g., Lopez et al., 1997; Zeldin and Pajares, 2000; Anderson & Betz, 2001; Usher, and Pajares, 2006; Zeldin et al., 2008; Bellemans and Devos, 2023; Beatson, 2024). Similarly in this study, many participants indicate that social persuasion is also a prominent learning source influencing their self-efficacy beliefs. Participants' responses demonstrate that social persuasion can arise from organisational and/or personal sources. The level of support received from organisational sources differed for participants. Few participants described ongoing supportive work environments within their careers. Most participants received only sporadic organisational support (i.e. occurred on an ad-hoc basis or when they encountered a particular supportive manager, either male or female). Jill feels that women are generally unsupported at a senior management level. "I think you're not expected to be at that level, I don't think you get a huge amount of support at that level, and I think it's hard, I think it is a bit of a man's world then". These results support the literature which finds that women receive less organisational support than men, as they progress within their careers (e.g., Ellemers, 2014; Faniko et al., 2021).

Delving deeper to determine why participants feel they are less supported in the workplace, their narratives suggest that they are excluded from organisational support systems, such as networking. Karen explains that she is not invited to various events within her organisations. "I've watched men being invited to golf tournaments, football matches, drinking sessions...and you are sitting in the office going, I'm here too you know". Research similarly finds that women are excluded from networks within their organisations (e.g., Barker and Monks, 1998; Linehan and Scullion, 2009; Cross, 2010; Chartered Accountants Worldwide, 2023). It appears that being excluded from networks within organisations denies participants opportunities for support. Informal mentoring appears to be one such opportunity for support which naturally develops through networking and mentoring did not feature largely in the stories of participants. Flippin (2017) suggests that women may not recognise the benefits of networking for career progression. Instead, participants recognise where women may miss out when they

are excluded from networking, as described by Abby. “And I think sometimes for women, the men seem to have it a little bit more, because they’re out on the golf course or they go for the pint or they talk about football, perfect icebreaker”. In this current study, it appears that women are excluded from organisational networks, which results in less organisational support being provided to them.

Participants consist mostly of individuals who attained senior positions, irrespective of whether, or not, they received organisational support. This finding is not consistent with literature, which suggests that organisational support is a requirement for women to flourish within their careers (e.g., Flippin 2017; Tinsley and Ely, 2018; Chauhan et al., 2022). If participants are progressing even when organisational support is not provided, it could be argued that organisational support is not meaningful for female accountants. Yet, careful consideration of the findings in this study would suggest otherwise. Participants who did receive organisational support, spoke of valuing such support, even when it occurs only on an ad-hoc basis or when individuals encountered a particular supportive manager. Geraldine took on a new position which required very hard work and very long hours. As a result of her work, she did receive a large salary increase. However, her line manager never acknowledged or complimented her incredibly hard work until she decided to leave the organisation. Despite this, Geraldine considers the support she received from this line manager as one of the most influential learning sources (social persuasion) upon her self-efficacy. Namely, participants indicate at times how much they value organisational support, even if only seldomly provided.

If participants perceive a lack of organisational support, it is possible that they find ways to overcome this and instead seek support from alternative sources. Indeed, participants speak frequently about personal sources of support arising from spouse/partner, family, friends, peer groups, networks and from oneself. Kelly’s uncle, who is also an accountant, has been a constant source of support throughout her career. “I have got a lot of support. I have mentioned that my uncle was an accountant, he would have been very influential...”. Therefore, it could be suggested that when organisational support is absent, female accountants can benefit from support sourced from outside their organisations. Bellemans and Devos (2023) similarly find that support/encouragement was not provided within the workplace but that participants (who were primary school principals) obtained support/encouragement from personal sources (e.g.,



partners). In this prior study, participants averaged 48 years of age (Bellemans and Devos, 2023). Therefore, the ability to find alternative sources of support from personal sources may come with maturity and be particular to later career stage individuals.

This may be relevant for women's career development from a broader perspective, rather than being specific to accounting alone. Women have entered the workforce in increasing numbers over the last few decades and the underrepresentation of women at senior levels is an issue being researched across many career domains and many jurisdictions. Understanding the value that women place on support, identifies an opportunity for individuals and organisations to seek and provide additional support to assist women's career development, which will be further discussed in Section 3. Having discussed the findings that female accountants believe that physiological factors and social persuasion are the most influential learning sources upon their self-efficacy, sections 2.1.3 and 2.1.4 discuss the lesser influence of the remaining two learning sources on the self-efficacy of participants.

### **2.1.3 Performance accomplishments less prominent**

While literature frequently suggests that performance accomplishments are the most effective learning source (e.g., Bandura, 1977; Usher and Pajares, 2006; 2008; 2009; Morris and Usher, 2011; Gale et al., 2021; Bellemans and Devos, 2023; Ford et al., 2023; Marschall, 2023; Beatson, 2024), other studies demonstrate differing results. Research finds that other factors may be relevant, such as career domain (Zeldin et al., 2008; Usher, 2009; Byars-Winston et al., 2017), or gender (e.g., Lopez and Lent, 1992; Usher and Pajares, 2006; Zeldin et al., 2008; Byars-Winston et al., 2017; Bellemans and Devos, 2023; Kyaruzi, 2023). Prior qualitative studies find that women perceive performance accomplishments as less influential on self-efficacy beliefs (e.g., Zeldin and Pajares, 2000; Bellemans and Devos, 2023). In this current study, female accountants similarly perceive performance accomplishments as less impactful on their self-efficacy beliefs. It is important to try to understand why women in accounting careers may perceive performance accomplishments as less influential, particularly as most women in this study have progressed and appear to have experienced various successes and achievements within their careers.

Delving into the stories of participants, many speak about feeling that women (and their achievements) are less recognised or valued, than their male counterparts. Narratives suggest that this is not overtly expressed by organisations, but rather it is perceived by participants. Chloe mentions the occurrence from time to time of women being tasked with certain jobs, “but they’ll ask women to do stuff for example, set up that meeting, whereas they wouldn’t ask a guy”. Anna is the CEO of her organisation. When she attends external meetings (outside her own organisation), as a woman she is perceived as a junior and she laughingly speaks about being asked to make the tea. “When I am with a male colleague, they automatically ask me for the tea. And even when I am the senior person it’s like “are you not taking notes””. Studies find that women receive less recognition for their accomplishments than men do in work (Wilson, 1999; Fels, 2004; Linehan et al., 2009; Ramohai, 2019). If women perceive lesser recognition for their accomplishments than men, this may impact them personally and professionally. The result may be that women are socialised to believe that men are more competent (Tellhed et al., 2017). This may explain why participants at times compare themselves less favourably to their male colleagues. Jill was the first internal appointee, and first woman, into her senior position in her organisation. Despite achieving these two successes, Jill compares herself less favourably to her male predecessors:

I’ve more confidence now, but I still don’t think I’m very confident. Like compared to...  
Like I looked at, I saw a few men do this role before me and they were much more, like  
I feel like an imposter, I really do.

Jill does not elaborate why she should compare herself less favourably to her male counterparts who previously held the position. If women feel less valued in their organisations than their male colleagues, this may result in women valuing themselves less also, even when their achievements surpass those of men (Fels, 2004). Literature supports the finding that women underestimate their own success and achievements (Jost, 1997; Barker and Monks, 1998; Dickerson and Taylor, 2000; Fels, 2004; KPMG, 2015; Tellhed et al., 2017). Undervaluing personal achievements could restrict an individual’s approach and actions with respect to career progression.

If female accountants undervalue their achievements, this may prevent self-promotion or highlighting their successes in the workplace. Participants perceive that women fail to self-

promote and instead wait for recognition of their accomplishments. Brenda believes that women need to “humbly self-promote more”. Research similarly finds that women do not promote themselves, concentrating on what they lack, rather than what they possess (Athanasopoulou et al., 2018). A qualitative study of Irish female managers finds that women believe that their male colleagues self-promote while women feel their work should “speak for them” (Cross, 2010). Participants in this current study believe that self-promotion and the subsequent recognition of success, are important for career progression. Megan explains the importance of receiving recognition for achievements. “...it’s more about making sure that the hard work they do gets recognised and seen and the results.... it’s not politics for the sake of it, it’s more about making sure the work is recognised and visible”. Literature concurs with participants’ perceptions that self-promotion assists career progression. Cross (2010) finds that men’s self-promotion afforded them visibility with the senior management team, which assisted their (men’s) career progression.

A recently presented working paper of a quantitative study of male and female accounting students in New Zealand found that performance accomplishments was the most influential learning source on self-efficacy, regardless of gender (Beatson, 2024). Yet in this current study of later career stage female accountants, performance accomplishments are less significant. The perceived undervaluation of women and their achievements in the workplace, likely attributes to women in accounting placing less value on their own successes and achievements, resulting in the lesser relevance of performance accomplishments as a learning source over time. This may be relevant for women’s career development more broadly, instead of being specific to an accounting context. This may explain why various studies, both qualitative and quantitative, in other career domains find that successes and achievements (performance accomplishments) are the most influential learning source for men but not for women (e.g., Zeldin and Pajares, 2000; Usher and Pajares, 2006; Zeldin et al., 2008; Bellemans and Devos, 2023; Kyaruzi, 2023). The consequences for women who feel less valued than their male colleagues, may hinder women’s career progression. Understanding that women may feel less valued in the workplace is important for organisations, which will be further discussed in Section 3.

#### **2.1.4 Vicarious experiences not the most relevant learning source**

Some studies find that vicarious experiences can be a particularly influential learning source for women's self-efficacy but not for men's (Zeldin and Pajares, 2000; Anderson and Betz, 2001; Zeldin et al., 2008; BarNir et al., 2011). Nevertheless, no female accountant in this study felt that vicarious experiences was the most influential learning source on their self-efficacy. This is in line with the qualitative studies of Morris and Usher (2011) and Bellemans and Devos (2023) in academia and teaching, who find that while vicarious experiences can impact self-efficacy, few participants find vicarious experiences the most influential learning source.

Through the exploration of participants' responses, it seems that vicarious experiences are in fact a potentially important source of self-efficacy. Yet, women in this study experience insufficient opportunities for vicarious experiences to impact their self-efficacy. Narratives suggest that participants may not identify with men in senior positions (e.g., van Rooij et al, 2019). Not identifying with senior men is not expressly stated, but participants indicate the importance of seeing other women succeed, as an impact on their own self-belief. Olivia explains that she really admires a lot of men in her career. Nevertheless, witnessing women succeed in senior positions positively impacts her self-belief. It seems that, as she identifies with them, she can aspire to their successes and achievements:

It's women, and don't get me wrong, there's a lot of men that I really admire but I suppose when I see a woman really thriving at a senior level, it does make you feel - well there's somebody that I could aspire to be.

Participants recognise the potential positive influence of women as role models, but do not appear to have enough female role models to significantly influence their self-belief. The importance of women needing to witness other women succeed, to positively impact their own self-belief is supported in literature (e.g., Nauta et al, 1998; BarNir et al, 2011; Jones and Iyer, 2020). Theory suggests that individuals are most influenced by others in a role model capacity when they identify with that other person (Bandura, 1977). The career domain may be pertinent with respect to the relevance of role models, as Zeldin and Pajares (2000) find that women in senior STEM roles do not place such emphasis on having women as role models. Other

women's successes positively impacting on participants' self-belief, certainly appears important in the accounting career context.

It seems that vicarious experiences are potentially an important learning source, as participants value the successes and achievements of other women. Nonetheless, the opportunities to improve participants' self-belief through vicarious experiences are insufficient, seemingly due to the lack of women as role models in senior positions. The absence of female role models likely explains why vicarious experiences are not considered by any participant as the most influential learning source for their self-efficacy. The underrepresentation of women in senior positions in accounting, provides less vicarious learning source opportunities for women to improve their self-efficacy. Studies find that the availability of role models impacts women's self-efficacy (Matsui et al, 1989; Hunt et al., 2019). Ultimately this could hinder women's career development in accounting (e.g., Gammie et al., 2007; Jones and Iyer, 2020). This may have a wider applicability than the domain of accounting alone and may be relevant in other traditionally male dominated career domains, where women are still underrepresented in senior positions.

### **2.1.5 Interaction of learning sources**

Prior literature has identified how learning sources can combine to impact self-efficacy beliefs (Morris and Usher, 2011; Bellemans and Devos, 2023). While each learning source has been separately discussed, this study similarly finds that learning sources can combine to influence self-efficacy. Olivia speaks about the perceived senior female leader, who is portrayed as a "supermodel type". She feels that women are very much judged on their appearance whereas her male colleagues can "throw on their suit and they're fine. And they can be fat or slim and nobody really takes any notice". Olivia dislikes how this can make her feel bad about herself and negatively impact her self-belief at times. The perceived negative role modelling (vicarious experiences) and resulting negative feelings and beliefs (physiological factors) combine to negatively influence her self-efficacy. When Frances came to Ireland from another European country, she found it difficult to secure a position within accounting. Frances had substantial accounting career experience, so her struggle to obtain the type of role she desired, negatively impacted her self-belief. As she progressed with her accounting studies and passed her exams, her confidence improved, as did her self-belief. The success of passing her exams (performance

accomplishment) resulted in her increasing confidence (physiological factor) and the combined effect improved her self-efficacy. Such examples demonstrate the complex interaction of learning sources upon an individual's self-efficacy.

## **2.2 RQ2 - How self-efficacy impacts the attainment or not of senior positions?**

Literature suggests that self-efficacy is a factor contributing to the underrepresentation of women in senior positions (e.g., Betz and Hackett, 1981; Hackett and Betz, 1981; Dickerson and Taylor, 2000; Sullivan and Mahalik, 2000; Athanasopoulou et al., 2018). Research finds that women have lower self-efficacy than men in traditionally male careers (Betz and Hackett, 1981; Matsui et al., 1989; Tellhed et al., 2017) such as accounting (Barker and Monks, 1998). To assist in exploring how self-efficacy impacts the attainment (or not) of senior positions for female accountants, participants were asked to gauge their self-efficacy beliefs as either high, medium, or low. They largely perceived it as high i.e. their perceptions of their ability to work in a senior position. This is very important as even if individuals are highly capable, desired results [such as progression] cannot occur unless the individual believes in their ability to perform the required task/behaviour, i.e. possesses high self-efficacy. Accordingly, self-efficacy is often more relevant to achieving outcomes than ability is (Lent et al., 1987; Hackett and Lent, 1992; Betz et al., 1996; Rigotti et al., 2020). Participants' own perceptions of their high self-efficacy beliefs are supported throughout their stories. When Susan is asked how well her prior career experience prepared her for a senior position (one of the four self-efficacy belief questions) she gauges this as high and explains how she believes she has the ability and experience for such a role, while unsure whether she has the desire to take on a more senior position. "I'd step into it no bother. I know I've got the experience and I know I'd have the background. It would just be up to me to say yes that's what I want, where I'd like to go next". Participants not only state that their self-efficacy beliefs are high, their general responses within their interviews also support this finding.

Participants believe that high self-efficacy is required to achieve career progression. When Jill was asked about self-belief she said, "...you have to have it, particularly as a woman. I think if you don't have it, you're going no-where at all. If you don't believe in yourself then it's impossible for somebody, you just give off that feeling of [pauses] I think". Literature supports this concept that high self-belief is required for career development (e.g., Dickerson and Taylor, 2000; Athanasopoulou et al., 2018). Most participants in this study believe their self-efficacy

evolved over their careers and suggest that time or experience is needed to develop high self-efficacy beliefs. Marie explains that she always had self-belief in her ability as an accountant and her self-belief in her ability as a senior manager evolved through experience in the role:

I would be quite confident in my skills as an accountant from quite a young age, that I had learned and acquired and understood the accounting piece. The big step up then comes in the ability to operate at management level and to operate at a higher level within, and the self-belief for that comes from being in at the deep end.

Almost half the participants in this study felt that their self-efficacy peaked during their forties. No prior study has explored whether self-efficacy evolves for women in their accounting careers. Zenger and Folkman (2019) studied the evolving confidence levels of business leaders (both women and men). Women's confidence levels started off lower than men's and generally increased and evolved over time (Zenger and Folkman, 2019). Findings from this current study suggest that self-efficacy may evolve over female accountants' careers, like women's evolving confidence levels. When participants speak about their self-efficacy peaking, largely in their 40s, they do not indicate any subsequent decline in their self-efficacy beliefs. What this means is, once they reached a high level of self-efficacy, this high level appears to be generally maintained. This contrasts with Klassen and Chiu (2010) who find that the self-efficacy of teachers peaks with approximately 23 years of career experience and then begins to decline. It is not possible to speculate if evolving self-efficacy differs for accountants than for teachers. What is important for organisations, professional bodies and other networks that strive to advance female accountants into senior positions, is for them to understand that high self-efficacy positively influences career progression (e.g., Dickerson and Taylor, 2000; Athanopoulou et al., 2018) and that women's self-efficacy beliefs evolve over time. Understanding the evolving nature of self-efficacy will facilitate organisations to design and target supports and interventions more effectively aimed at improving the self-efficacy of women in accounting at earlier stages of their career, when their self-efficacy is still developing and evolving. While gauging their current self-efficacy beliefs as high, participants' stories suggest it is changeable due to circumstances, within their accounting positions, which will be further discussed in sections 2.2.1 and 2.2.2.

### **2.2.1 Interaction of self-doubt and self-efficacy**

Self-doubt emerged as a recurring challenge to the self-efficacy beliefs of participants. Self-doubt is explained as doubt about an individual's feelings of their own ability (Braslow et al., 2012). In other words, self-doubt suggests the opposite to possessing high self-belief, in the literature (e.g., Wood and Bandura, 1989; Usher and Pajares, 2008). The findings revealed the key source of self-doubt appears to arise when participants compare themselves to men. When comparing themselves to men in the workplace, many participants seem less sure of themselves and speak of their perception that men generally possess higher self-belief. Kelly says, "I think men have a far stronger belief in and would bluff their way through things". Studies find that women possess lower self-belief than men, particularly in traditionally male dominated careers (Betz and Hackett, 1981; Tellhed et al., 2017) such as accounting (Barker and Monks, 1998). Abby believes that self-doubt may result from being a woman in a largely male dominated work environment. "I think I'd probably doubt myself a little bit, I have that voice on my shoulder...And I think that's maybe, I don't know whether that is a culmination of being a woman in quite a male dominated environment or not". The presence of self-doubt is not necessarily doubt in their own ability in the workplace but socially constructed doubts when participants compare themselves to men. Participants' stories strongly indicate that such self-doubt features for women working in accounting. This finding is supported in the literature which suggests that women are prone to self-doubt (Sandler, 2014), particularly in traditionally male dominated careers (Wood and Bandura, 1989; Tellhed et al., 2017). Hence, the workplace potentially provides a socialising context to reinforce women's perceptions of self-doubt, which is supported in literature (Tellhed et al., 2017).

It is important to explore how this self-doubt impacts the career progression of women in accounting. Many participants speak about stopping to second guess their abilities when faced with career progression opportunities. Olivia believes that women consider the negatives, when an opportunity that they consider more challenging to their current position arises. Their automatic response may be "...no, I won't be able to do that", according to Olivia. Self-doubt and second guessing one's ability could potentially hamper career progression, as recognised in the literature (e.g., Bandura, 1988; Wood and Bandura, 1989). This means that even when an individual possesses the ability for a role, self-doubt may prevent them going forward for the position. Aspects of participants' stories suggest otherwise in this current study. Instead, participants speak about overcoming or dealing with such self-doubt, so it does not prevent



them from progressing within their careers. To the best of the researcher's knowledge, literature has not explored how exactly individuals overcome self-doubt. In this study, participants overcome their self-doubt by drawing on the learning sources of social persuasion (support from oneself or others) and physiological factors (personal feelings and beliefs). When self-doubt arises as a challenge to self-efficacy, participants seek support and encouragement (from themselves or others) or draw from their strong feelings and beliefs to overcome self-doubt and restore their self-efficacy.

Megan encounters self-doubt at times before important meetings (such as board meetings). How she deals with this self-doubt, is by supporting and encouraging herself through self-talk (support from oneself). Engaging in positive self-talk assists Megan to overcome instances of self-doubt. Namely, she draws from the learning source of social persuasion to overcome self-doubt and ultimately does not think that self-doubt negatively impacts her, in her senior role. Alice values the support and encouragement she receives from her family, husband, mentors, and colleagues (social persuasion). When she experiences self-doubt, she goes to these sources of support to re-establish her self-efficacy. "It [challenges or conflict] absolutely does make you doubt yourself, but you'll go to the people in your life, that will reinforce your self-belief and give you that sense of self again". Niamh believes that her feelings of resilience (physiological factors), enables her to deal with self-doubt in challenging times. "But what really got me through was just resilience, just sort of...it was actually self-belief. Self-belief that what I was planning to do and what I needed to do was right and I was going to just get on and do it...". While self-efficacy theory identifies that self-efficacy learning sources initially form and continuously impact self-efficacy beliefs (Bandura, 1977), this study demonstrates how this occurs. When individuals experience self-doubt, particularly during challenging career times, they return to the self-efficacy learning sources of social persuasion and physiological factors, to overcome such self-doubt and reinforce their self-efficacy beliefs.

Literature suggests that self-doubt can hinder women's career development (Bandura, 1988; Wood and Bandura, 1989). While self-doubt can present itself time and again, it seems to not prevent career progression for these female accountants. The interviewees are generally in senior career positions<sup>18</sup>, which suggests that it is possible to overcome self-doubt, so that it

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<sup>18</sup> As explained in Paper 2, Section 4 participants were selected based on career stage (i.e., later career stage) and not based on position/role held.

does not prevent career progression. In other words, drawing from these learning sources helps participants to overcome self-doubt, restore self-efficacy and ultimately achieve career progression. Literature has not previously discussed the relationship between self-doubt and the learning sources to restore self-efficacy beliefs. While the learning sources that participants draw from are social persuasion and physiological factors, this does not suggest that these are the only, or most important learning sources, for overcoming self-doubt. They are simply the most important learning sources for overcoming self-doubt in this sample of female accountants.

### **2.2.2 Interaction of work-based challenges, agency, and self-efficacy**

Participants' stories suggest that other challenges are encountered which can negatively impact their self-efficacy beliefs. These challenges encountered encompass both personal and work-based challenges. While recognising that personal challenges will feed into their career experiences, this study focuses on the work-based challenges. Such challenges can impact individuals' self-efficacy (Hackett and Betz, 1981; Hancock and Hums, 2016). Jane's senior management team are mostly male. She describes how she feels lower self-belief when constantly feeling less respected than her male colleagues. "But I definitely still believe in myself, that men are treated with more respect, and I would struggle to feel that I ever believed, that I am as good". Research also finds that work-based challenges can negatively impact women's career development (Hackett and Betz, 1981; Cohen et al., 2020; Padavic et al., 2020; Faniko et al., 2022). However, participants in this study appear to respond and deal with such challenges through agentic action, so that contrary to literature, it does not impact upon their career development.

Pajares (2002) describes agentic action as individuals taking charge and being involved in their development in the workplace, to attain outcomes or results. Wallace (2009) calls for women's stories and research on personal agency in an accounting context. It is not clear in this study where the ability to take agentic action arises from. Literature suggests that high self-efficacy enables agentic action (Bandura, 1997; Betz, 2000). Section 2.2.2 explained that participants largely perceived their self-efficacy beliefs as high in this study. Agency was an important factor for women in the early 20<sup>th</sup> century, who despite facing significant barriers, succeeded in developing careers in accounting (Vidwans and Whiting, 2022). It is possible that women

who seek progression in accounting are required to possess agency to deal with various challenges encountered within their careers. The work-based challenges encountered by participants tend to fall into the categories of work-life conflict and gender-based injustices.

Participants speak about taking action to manage work/life conflict. This is an important concept as prior studies have demonstrated how cultures of overwork contribute to the underrepresentation of women in senior positions (Ely and Padavic, 2020; Padavic et al., 2020). It appears that rather than relying on their organisations to manage work/life conflict, many participants believe it is up to everyone to control their work/life balance themselves. Olivia explains that while organisations portray that they support work/life balance, the reality can be very different. “Every job spec will say things like oh, we’ve a very strong work/life balance. And the reality is they like to think they do, until people ask for the work/life balance”. Olivia believes individuals “have to be able to actually fight your corner” to achieve their work/life balance. Olivia recognises that as a senior manager she is likely to achieve her demands, whereas individuals less senior, may not. “But I’m very cognisant of the fact that there’s a lot more junior people in the office, who may be fighting for it and getting pushback”. Alice is very clear that individuals must take action to avoid work/life conflict. “Unless you, if you don’t prioritise what’s important to you in your life, somebody else will set your priorities for you. And those priorities could be the making or the breaking of you”.

Agentic action is demonstrated by participants when dealing with gender-based injustices within the workplace. Elizabeth, the only woman on the senior management team in her organisation, felt she was treated as “the little woman” by her male colleagues. Elizabeth was not happy to be perceived as such, “I don’t like to be the little woman sitting on the side”. She demonstrated agency by taking charge of this matter to adapt and change her position and how her role was perceived within her organisation. As a result of her agentic action, she is now seen as the number two to the CEO. When Emer’s line manager left the organisation, Emer was promoted into his role. Despite being promoted, Emer was refused the salary increase that the previous manager had obtained. Emer chose to work in the new role for a year, to prove herself, feeling that she would then successfully obtain the salary increase. Even though Emer implemented improvements within the organisation during that time, she was still refused the salary increase the following year. “I set about working incredibly hard for 12 months to achieve... and do all the expectations that, you know, we’ll say achieve the expectations I set

myself... And low and behold I was met with the same answer”. As a result, Emer left this position. Leaving an organisation because of perceived gender inequality, constitutes agency (Galizzi et al., 2023). Emer demonstrated agentic action by leaving the organisation, despite the negative financial impact leaving this position had on her family:

I left the company, but it was at a huge personal cost at the time. I had kids in college, I had a mortgage, I had a car loan, you know, different things, but I was so aggrieved that I just knew I couldn't, there was no trust in anything going forward. There was a breach of trust, I suppose, and I needed to just get out of there and head off.

Fortunately, after leaving this position Emer secured a contract in another organisation. She really enjoyed working in this new organisation and felt highly valued within this position. “Now, as it happened the next role I went to, I had a very pleasant year. So, I felt rewarded. I felt that the universe gave me back a little bit of space to recover from that”. In this current study, agentic action can improve career outcomes for individuals. In fact, agentic action is demonstrated by participants who largely take charge of their own career development. Linda feels that individuals must take responsibility for directing their own careers. “If you're waiting for someone else to get you a role, it's not going to happen. You have to go out there and get it yourself”. Karen worked in construction in 2008. Her salary and working hours were reduced in 2008 because of the impact of the recession. Her husband had been self-employed, but his business collapsed due to the economic downturn at the time. Karen demonstrated agency by changing the direction of her career to move into an area which she believed was more financially secure:

So, I actually transitioned. I got my foot in the door. I actually emailed companies saying, I will work for you for free to get experience... But I did get my foot in the door. I got into pharmaceutical, then I went into MedTech, now I'm in life science, because I felt, when the next recession comes, I will have sound experience that will carry me through the next recession.

Participants' narratives demonstrate how agentic action positively impacts their career development. Literature similarly highlights the positive influence of agentic action on women's career development (Betz, 2000; Yaxley, 2013; Hancock and Hums, 2016; Vidwans

and Whiting, 2022; Galizzi et al. 2023; Simarasl et al., 2024). Agentic action can assist women to change their career outcomes, albeit recognising that external factors may pose limitations on such agentic action (Yaxley, 2013; Hancock and Hums, 2016; Vidwans and Whiting, 2022; Galizzi et al. 2023; Simarasl et al., 2024). While a recent study finds that agentic action can improve women's self-efficacy (Simarasl et al., 2024), to the best of the researcher's knowledge, it does not explain how exactly this occurs from an individual's perspective.

In this current study, it appears that the results of taking agentic action can provide learning source experiences, which positively influence or restore self-efficacy beliefs. Elizabeth describes the outcome of her agentic action, which altered how she was perceived within her organisation. Because she took control and directed and developed her role, she is no longer seen as the "little woman, sitting on the side" or "the baby on the team" but "now I'm considered number two on the team to the CEO". Elizabeth sees this outcome as a personal success (performance accomplishment) and feels that this success improved her self-belief. That is, her agentic action provided a learning source experience (the personal success of the outcome/action) which increased her self-efficacy. In Emer's situation, she stuck to her values and walked away from an organisation who refused to value her worth or afford her equality. Not sacrificing her sense of worth (feelings and beliefs) positively affected Emer's self-efficacy. The agentic action taken by Emer provided a learning source experience, as she maintained her values and sense of worth (physiological factor), which ultimately improved her self-efficacy. Susan spoke about directors in her organisation having a particular opinion about a course of action that they felt was required. Susan recalls disagreeing with their stance and how difficult it felt to challenge them. Yet, despite the difficulty, she took agentic action and challenged those more senior in her organisation, to argue her point, on a matter of principle. She was ultimately proven right. She perceived her action, which resulted in a success for the organisation, as a personal achievement (performance accomplishments) which improved her self-belief. Her agentic action resulting in a positive outcome created a learning source experience, which positively impacted her self-efficacy. "It would have been sort of little wins over the years where I might have stood up and it was difficult at the time, to directors or whatever, on a point of principle and then subsequently been proven right".

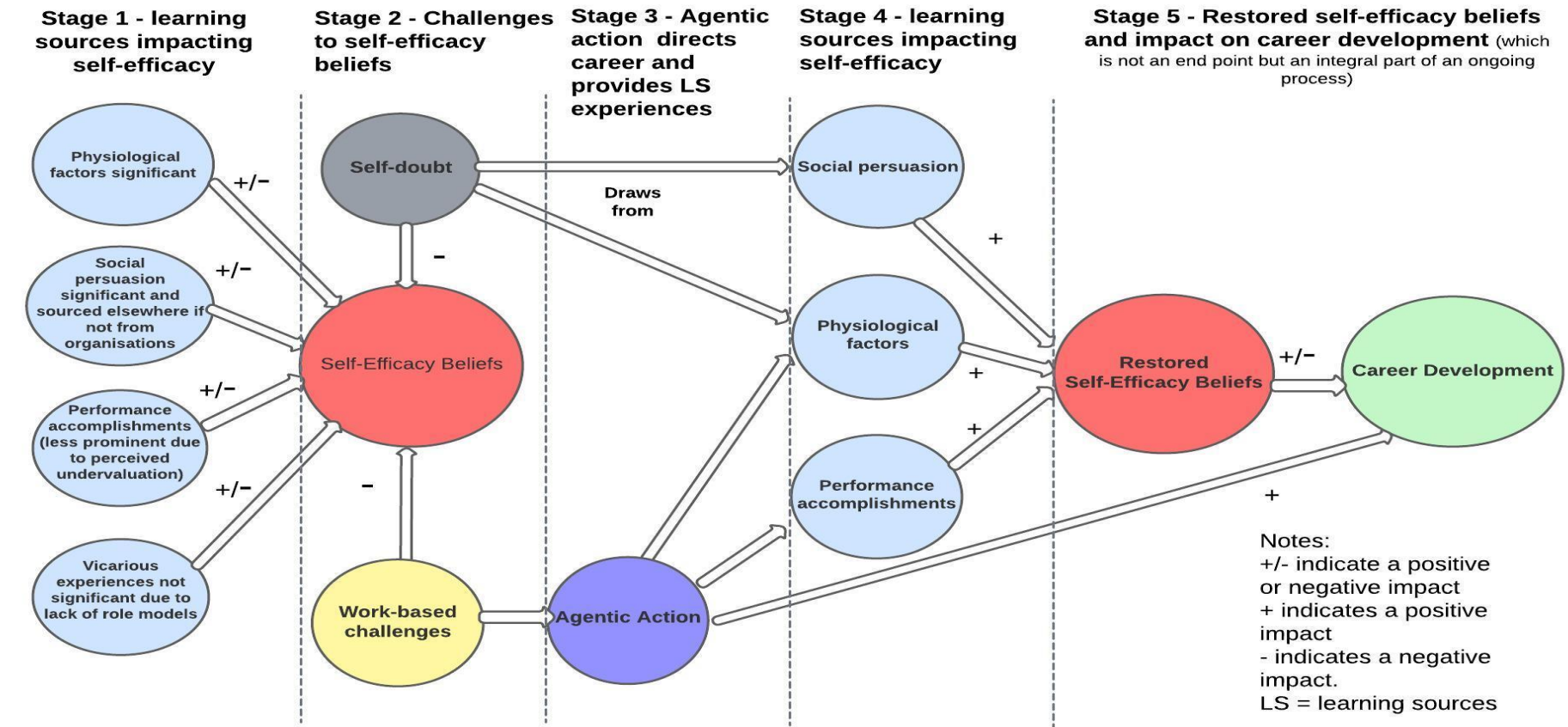
While studies recognise the impact of agentic action on career development (Betz, 2000; Yaxley, 2013; Hancock and Hums, 2016; Vidwans and Whiting, 2022; Galizzi et al. 2023;

Simarasl et al., 2024) literature has not previously demonstrated the interaction between agentic action and the self-efficacy learning sources. What this means is that agentic action not only impacts directly on career development but also indirectly through the self-efficacy learning sources. In summary it seems that participants deal with work-based challenges through their agentic action. The result of their agentic action leads to or creates learning source experiences that positively impact participants' self-efficacy beliefs and enables them to progress within their careers. Accordingly, the challenges encountered by participants inform how self-efficacy impacts their career progression. While the learning source experiences resulting from agentic action in this study are performance accomplishments and physiological factors, this does not suggest that these are the only learning source experiences that result from agentic action. They are simply the learning source experiences that result from the agentic action of this sample of female accountants.

### **2.3 Summary of RQ1 and RQ2**

The relationship between the learning sources, self-efficacy and career development is complex and iterative. Paper 4 presented a framework to demonstrate these various relationships which evolved from the findings of this study. This framework has been further adapted as the discussion developed and this updated framework is now presented in Figure 1 and will be used to summarise RQ1 and RQ2.

Figure 1: Framework to illustrate the influence of self-efficacy on career development



The circular arrows attempt to demonstrate that the relationships portrayed in stages 1 to 4 are constantly repeating



This framework seeks to portray the ongoing evolving relationships between the self-efficacy learning sources, self-efficacy, and career development. Stage 1 demonstrates how for female accountants all four learning sources influence their self-efficacy beliefs. The significance of physiological factors may be specific to the accounting domain, as prior studies find this learning source less significant in STEM (Zeldin and Pajares, 2000; Zeldin et al., 2008), teaching (e.g., Morris and Usher, 2011; Gale et al., 2021; Bellemans and Devos, 2023) and athletics (Shipherd et al., 2021). The significance of social persuasion concurs with literature, which finds that women report stronger social persuasion influences (e.g., Lopez et al., 1997; Zeldin and Pajares, 2000; Anderson & Betz, 2001; Usher, and Pajares, 2006; Zeldin et al., 2008, Bellemans and Devos, 2023). Nonetheless, the support participants receive from organisational sources is quite sporadic. Narratives indicate exclusion from networking, which seems to result in less organisational support for women. When participants lack organisational support, they seek support from personal sources. Women who perceive that their achievements are valued less than those of men, may internalise this and personally undervalue their own achievements. Self-undervaluation may prevent women showcasing their achievements, resulting in a lack of recognition, which may hinder career progression. While vicarious experiences were not the most influential learning source for any participant, participants' narratives indicate this is not because vicarious experiences are not important to women in accounting. Instead, they are less influential, due to a lack of female role models. This relate to RQ1: *What self-efficacy learning sources impact the self-efficacy beliefs of female accountants?* and helps us to better understand the relationship between the learning sources and self-efficacy in the career context of female accountants. While all four learning sources influence the self-efficacy of female accountants, the findings indicate that less learning source experiences are available to women in the workplace. This results in fewer opportunities to improve women's self-efficacy beliefs.

Participants in this study generally perceive their self-efficacy beliefs are high and feel that their self-efficacy evolved with time and experience. Interviewees also perceive that high self-efficacy is a requirement to achieve career progression. Despite women in this study perceiving their self-efficacy as high, they generally experience ongoing challenges to their self-efficacy in the form of self-doubt, as demonstrated in stage 2. Literature identifies that self-doubt could



negatively impact career development (e.g., Bandura, 1988; Wood and Bandura, 1989). Yet participants describe dealing with self-doubt, by drawing from the learning sources of social persuasion (support and encouragement) and physiological factors (feelings and beliefs), as represented in stages 3 and 4. Drawing on these learning sources restores their self-efficacy so that their career progression is not hindered. Work-based challenges can negatively impact self-efficacy beliefs (see stage 2). Such challenges could potentially impact career progression, but participants demonstrate agency in dealing with work-based challenges encountered, as presented in stage 3. Their agentic action creates learning source experiences, as demonstrated in stage 4, which restores self-efficacy beliefs, as demonstrated in stage 5. Their agentic action results in achievements (performance accomplishments) or positive feelings and beliefs (physiological factors) which improves and restores their self-efficacy. Participants also demonstrate agentic action in directing their careers (see arrow from agentic action to career development), demonstrating a direct relationship between agentic action and career progression.

RQ2 asks: *How do self-efficacy beliefs impact the attainment/non-attainment of senior positions for female accountants?* While high self-efficacy assists career development, as demonstrated in stage 5, participants encounter self-doubt and work-based challenges, which could negatively impact career progression. Narratives indicate these threats to self-efficacy, in the form of self-doubt and/or work-based challenges, may occur repeatedly throughout one's career. The circular arrows in Figure 1 attempt to demonstrate that the relationships portrayed in stages 1 to 4 are continuously occurring. Career development is not an end point but rather an integral part of an ongoing process. Participants draw on the learning sources to overcome self-doubt and take agentic action, resulting in learning source experiences, to deal with work-based challenges. In general, it appears that participants design approaches to overcome the challenges encountered in their careers, so that they can achieve career progression. Women in STEM similarly design coping mechanisms, to overcome career challenges faced (Pajares and Zeldin, 1999). Self-efficacy not only impacts career development directly, but it impacts indirectly through the self-efficacy learning sources. Consequently, the challenges (self-doubt and work-based challenges) encountered by participants, inform how self-efficacy impacts the attainment or not of senior positions.

### **Section 3 Implications and recommendations**

Harris (2022) calls for qualitative research to highlight subtle adjustments that when collectively made, can largely impact women's career experiences. Many such adjustments will be discussed in this section which derived from the data analysis and participants' suggestions. Participants were asked towards the end of each interview what they thought may be done to encourage more female accountants into senior positions. Since participants possess substantial lived career experiences spanning early, mid, and later-career stages, their suggestions are particularly valuable and welcome.

#### **3.1 Implications and recommendations for individuals**

It is important that women themselves better understand the power and impact of self-efficacy. While it is easy to provide support positively, it is also relatively easy to provide negative support. Such negative support can have far reaching consequences, as individuals can become demotivated by constant negative feedback (Bellemans and Devos, 2023). At times participants spoke about how difficult it was to come back from negative events or occurrences within their careers. Helena explains, "But it does take a while to you know, bring yourself back up". Megan clearly remembers almost 20 years later how a senior manager negatively impacted her confidence. "But yeah, that was 2004 so nearly 20 years ago but I vividly remember the feeling I had at the time. So that definitely would have knocked my confidence then". This is supported in literature as Bandura (1997) explains that it may be easier to reduce an individual's self-efficacy beliefs, than increase them through social persuasion.

It is also important to recognise that some participants spoke very highly of their supportive organisations which seem to possess a culture of equality. Such organisations are important to highlight as the type of organisations that others could aspire towards. Women at later career stage may have developed an understanding of what they value in their organisation and may be in a better position to find an organisation that meets their needs from a support perspective. Linda feels that a supportive work culture is very important for her and if her organisation was not supportive, she would possibly leave. "So, I know the support and help is there. I think that's important. If I wasn't working in an environment where there was support, I probably wouldn't stay". Individuals could request and seek feedback, mentoring and networking from

various sources within their organisation, from their professional accounting bodies and from personal sources. If organisations do not provide sufficient support, individuals could seek and obtain support from alternative sources, like many participants in this study. Understanding that the perceived undervaluation of women may result in the lesser prominence of performance accomplishments, individuals could make a conscious effort to celebrate their own successes and achievements and where possible, seek recognition for them. If female role models are not available in the workplace, individuals could collaborate with others to seek role models from alternative sources that they could aspire to. Understanding the significance of positive feelings and beliefs is also important for individuals, as improving such beliefs and feelings is something that can be targeted at an individual level. What this means is, women could also play a role in improving their exposure to the learning sources, to ultimately improve their own self-efficacy (Hackett and Betz, 1981). Simarasl et al. (2024) explain how individuals can act to improve their own self-efficacy, which can assist their career development.

Participants offer various suggestions for individuals with respect to career progression and the representation of women in senior positions. Many participants feel that women are afraid to take a risk and apply for a senior position. Una explains how this approach does not help individuals. “But if they’re [women] not going forward for it...Then they’re hindering themselves. But it’s more their own belief that they can do something because women very much don’t like to go for a job, until they know they can do it”. Participants encourage individuals to take this chance as expressed by Ellen. “...They [women] worry about things more, so they’re less inclined to take a risk. So, I think they need to get up that spectrum a little bit, to be a little bit more risk takers”. Kate emboldens women to “put themselves forward, and not be afraid of failure. Because that is actually what happens as well”. Chloe recognises the value of equality in the home, which is important for managing the workload that comes with a senior position. “And it’s kind of...it is tough, but they need to kind of share the workload or something, with their partner”.

Participants generally feel that women need to support other women in the workplace and seem to take personal responsibility for assisting other women’s career development. Brenda explains that “...women have a duty, that people like me, and I do that, I’ve a handful of women

out there, I'm hoping that when I'm gone, they'll be the ones running the place... it is about mentoring and sponsorship". Megan echoes the concept of women helping other women within organisations, "that's one area. I think to be a mentor for others as well and to be seen to be an advocate for women, I think is important". Olivia concurs that women need to be supportive of each other:

I think women supporting women. Again, that sounds like a soundbite, but I think as a woman, I think we should always try and seek out the women in our teams and make sure that even just to have one to ones, have a coffee with them and say, how are you getting on? And talk about your experiences. I think it's very important, particularly if you have kids and all that kind of thing, to talk to other women, to say listen, you know, you can do both, you know. There's plenty of supports there, talk, put your hand up if you're struggling. I think women are not the best, some of the women on my team they're slow about putting their hand up if they're under water, if they're struggling. Whereas a guy, he's probably quicker to say, I can't, I've got too much on my plate. Sometimes the women will be slower to say, I'm having issues maybe.

Some studies speak about the "queen bee" syndrome that women who have succeeded in their careers are reluctant to assist other women's career development (Drexler, 2013; Ellemers, 2014; Faniko et al., 2021). Participants in this study demonstrate an opposite view. Participants working in senior positions recognise a genuine personal responsibility to assist other women and their career development. Such suggestions discussed highlight where improvements can be made, which will enhance the working lives of female accountants and assist women at all career stages.

### **3.2 Implications and recommendations for organisations and professional bodies**

Implications and recommendations for both organisations and professional accounting bodies are presented, to enable organisations and professional accounting bodies to improve the working lives of female accountants.

Understanding the evolving nature of self-efficacy can facilitate organisations and professional accounting bodies to design supports and interventions to improve the self-efficacy of women in accounting at earlier stages of their career, when their self-efficacy is still developing and evolving. This is important for women, as research finds that these earlier career stages are particularly pertinent for career progression (Arnold and Clarke, 2016). As self-efficacy is a factor contributing to the underrepresentation of women in senior positions, it is important to take measures to improve the self-efficacy of women in accounting. Such measures can be targeted due to the learnings from this current study. Since physiological factors are particularly influential on the self-efficacy of participants, organisations and professional accounting bodies can provide training to specifically improve and develop the positive feelings and beliefs of individuals e.g., determination, confidence, and resilience. Support is not always provided from organisations. This provides an opportunity for organisations and the professional accounting bodies to better support women in their accounting careers. This could be done in various ways such as networking, regular meaningful feedback, mentorship, sponsorship and seeking out and encouraging women who may possess the ability, but not the self-belief, to put themselves forward for progression. While professional accounting bodies may not be able to engage in all these activities, mentoring and networking are areas that they could target. The accounting bodies have a very large network of members that could be utilised to better connect women for mentoring and networking purposes.

Organisations and the professional accounting bodies could assist women to fully appreciate and value their successes and achievements through training and professional development. Such training could assist women to better showcase their successes and seek recognition for their achievements. Research similarly suggests that organisations help to improve individuals' perceptions of their accomplishments (Spurk and Abele, 2014) and help women challenge their own undervaluation of their abilities (Betz, 2004). Organisations and accounting bodies could seek out and promote female role models (even if they work in different areas/jurisdictions) that women can aspire to, thereby improving the vicarious experience opportunities available to women in accounting. In general, improving women's exposure to the self-efficacy learning sources can improve women's self-efficacy (Hackett and Betz, 1981).

Literature demonstrates that high self-efficacy assists individuals within their career development (e.g., Betz and Hackett, 1981; Hackett and Betz, 1981; Dickerson and Taylor, 2000; Sullivan and Mahalik, 2000; Athanasopoulou et al., 2018). This study also demonstrates how self-efficacy interacts with self-doubt and work-based challenges through agency and the learning sources. Therefore, increasing women's self-efficacy directly and indirectly impacts career development. Self-doubt could also be targeted by organisations and professional bodies through training and/or professional development. Usher et al. (2023) suggests that organisations support individuals and convince them that self-doubt is normal, while reassuring individuals of their abilities and achievements. Barker and Monks (1998) studied men and women in accounting in Ireland and half the women studied suffered gender discrimination. The differing treatment of women emerges from participants' narratives in this current study. As women, participants perceive they are less valued, less supported, excluded from networking, have few female role models and most have witnessed or experienced gender-based injustices. While agentic action assists participants in managing perceptions of gender-based injustices, this is not addressing the problem, as gender-based injustices appear to persist in the accounting domain. Lehman (2019) believes that gender research in accounting has not progressed in recent years, as it tends to focus on gender pay gaps. Therefore, Lehman (2019) calls for qualitative research in gender in accounting to assist in challenging the structures within accounting and ultimately benefitting the profession. Risse (2020) speaks about organisations examining their systems and structures, instead of women feeling that they must adapt. Unlike some traditional male professions which are not yet obtaining equal numbers of women and men as members (e.g., senior counsel in the legal profession), accounting has been attracting equal numbers for over 30 years (Cohen et al., 2020). While this may indicate a problem in the accounting profession, it also presents an opportunity for organisations and professional accounting bodies to take meaningful action and lead the field for other professions.

The professional accounting bodies could incorporate the professional development, supports, role modelling and training of women within their continuous professional development (CPD), which every accountant undertakes each year. Incorporating into CPD provides the opportunity for women to invest in self-development which will ultimately assist with career

progression. Cassia and Magno (2021) find that accountants' self-efficacy improved through the knowledge they obtained from external sources, particularly from peers in accounting, indicating the potential influence that the professional accounting bodies could potentially harness to assist women's working lives.

Participants offer various suggestions for organisations to improve their recruitment processes, such as examining the language used in job advertisements. Mary highlights "how describing a role as being ambitious and fast-paced and demanding and so on...all these real aggressive words which were very male dominated, you know, very male-orientated words, which would put women off going for the role". Participants feel that if more women go forward for positions, they will have greater opportunities for attaining progression. To encourage more female candidates, Jill's organisation asks recruitment companies to source equal numbers of male and female applications. Una feels that "if a job is advertised and not enough female candidates go forward for it, they should be encouraged to go forward for it because they'd be surprised at how much they actually can do the job". Frances feels that the selection process would be less biased if all personal information was removed from CVs:

When they send CVs just remove everything that's in the bio information. The name, the address, the age, anything that could bias the person. Have the experience in front of you, and then the person can make the judge on the experience the person has, and that's from the first, you know, from the beginning of the process and then you will see way more women going up the ladder. Because sometimes you've got guys and they hire guys, and I saw it happening, maybe because they feel more comfortable. I don't know.

Jill previously worked in an organisation that actively sought to progress women. They approached and encouraged women to apply for promotions. Within this organisation they adopted a "complier explain" policy, so that recruitment managers had to seek gender equal numbers of interviewees. If they did not achieve gender equal numbers, the recruitment managers had to account for this. Jill explains, "It's much easier to comply than to explain. And what they found was, more women were applying for roles". The organisation did not stop there. They continued to apply the "complier explain" policy when interviewees were chosen

for the roles by asking challenging questions, “why are you not giving that role to that woman? Why is it that the...What is the reason? What are your reasons? Explain to me why, what the reasons are?”, as Jill explains. This approach really challenged recruiters as Jill describes, “And the more they pushed, the more uncomfortable people got”. She explains that this approach was very successful, as they achieved greater gender balance within the organisation:

And what they found I think was that they got quite a good balance into the senior leadership team. And they were very good, a lot of them were really very good because they wanted it. For a lot of them they’d been knocking at the door for years.

Catherine believes that organisations can really benefit by offering flexibility to their employees. In her experience as a senior manager, employees will work exceptionally hard in return. “... on my team that have come back to a four-day week. I can get as good work out of that person in four days, then I can get out of other people in five days”. Many participants speak about the requirement for networking and mentoring. Geraldine explains that mentoring may exist at an early career stage but is not available, yet it is required for those at middle management level who seek further progression.

#### **Section 4 Contribution to knowledge and practice**

Little research exists about self-efficacy in the domain of accounting (Burnett et al., 2010; Byrne et al., 2014; Beatson et al., 2020). This study provides a greater understanding about how self-efficacy develops and evolves, how self-efficacy may be challenged and how self-efficacy interacts with self-doubt and other work-based challenges incurred within participants’ careers. Little is known about female accountants’ career progression outside practice (Jeacle, 2011), so Siboni et al. (2016) call for qualitative research on women in accounting across various types of organisations. A framework which was derived from the discussion, illustrating the influence of self-efficacy on female accountants’ career development was presented in Figure 1. Components of this framework extends the available knowledge of self-efficacy theory in the context of female accountants working in industry in Ireland.



#### **4.1 Contribution to knowledge**

This study extends knowledge by highlighting the significance of physiological factors on female accountants' self-efficacy, which has not previously been discussed in the literature. Findings such as the significance of social persuasion and the lesser prevalence of performance accomplishments as learning sources, support existing literature. Greater exploration within this study surfaced more nuanced findings. What emerges is a contribution to knowledge as follows: the exclusion from networking appears to reduce the organisational support provided to women and the connection between women feeling undervalued and the lesser prominence of performance accomplishments. Buse et al. (2013) calls for research in male-dominated professions to explore how factors such as self-efficacy are developed by individuals, with the aim of improving the retention and representation of women (in engineering). While considerable research has been conducted on the self-efficacy learning sources in the career domains of STEM and teaching, to the best of the researcher's knowledge, this study is the first to explore the impact of the four learning sources on the self-efficacy of women in an accounting career context. Therefore, this study contributes to an understanding of the learning sources impacting female accountants' self-efficacy.

Evolving self-efficacy has not been researched in an accounting context. Findings contribute to knowledge by providing valuable learnings as to the career stages which possibly require more support when self-efficacy beliefs are still developing, i.e. early and mid-career stages. Theory does not make reference to individuals overcoming self-doubt, by drawing on the self-efficacy learning sources. Nor does theory explain how agentic action creates learning source experiences e.g., the success of such action (performance accomplishments) or the improved feelings and beliefs due to this action (physiological factors). While a recent study finds that agentic action increases self-efficacy beliefs (Simarasl et al., 2024), this study further extends knowledge by demonstrating that this occurs, through the self-efficacy learning source. The contributions to knowledge previously discussed are represented in Table 2, which categorises these contributions as follows: adds to knowledge; develops knowledge or supports knowledge.

**Table 2: Categorisation of contribution to knowledge**

<b>Adds to knowledge</b>	<b>Develops knowledge</b>	<b>Supports knowledge</b>
<p>Significance of physiological factors.</p> <p>The connection between women feeling undervalued and the lesser prominence of performance accomplishments.</p> <p>Evolving nature of women's self-efficacy in accounting over time.</p> <p>Self-doubt is overcome by drawing from the learning sources of social persuasion and performance accomplishments.</p> <p>Agentic action creates learning source experiences, specifically performance accomplishments and physiological factors.</p> <p>Understanding of the learning sources that impact female accountants' self-efficacy.</p> <p>Provides a framework which expands the available knowledge of self-efficacy to female accountants working in industry.</p>	<p>Participants progress with little organisational support, despite research finding that organisational support is required for women's career progression (e.g., Flippin 2017; Tinsley and Ely, 2018; Chauhan et al., 2022).</p> <p>While self-doubt could hinder career progression (e.g., Bandura, 1988; Wood and Bandura, 1989) participants overcome self-doubt and progress.</p> <p>When self-efficacy evolves, it remains high, unlike the self-efficacy of teachers, which declined after 23 years (Klassen and Chiu, 2010).</p> <p>While challenges can negatively impact women's career development (e.g., Hackett and Betz, 1981; Cohen et al., 2020; Padavic et al., 2020; Faniko et al., 2022), female accountants take agentic action to deal with work-based challenges and progress in their careers.</p> <p>Extends the finding from Simarasl (2024) that agentic action positively impacts self-efficacy in an accounting context.</p> <p>Exclusion from networks results in lesser organisational support for women.</p> <p>Develops the body of knowledge of self-efficacy in an accounting context, which is less researched (Burnett et al., 2010; Byrne et al., 2014; Beatson et al., 2020).</p> <p>Self-doubt and work-based challenges encountered by female accountants, inform how self-efficacy impacts the attainment / non-attainment of senior positions.</p>	<p>Social persuasion is a prominent learning source (e.g., Zeldin and Pajares, 2000; Usher, and Pajares, 2006; Bellemans and Devos, 2023).</p> <p>Performance accomplishments are less significant for women (e.g., Zeldin and Pajares, 2000; Bellemans and Devos, 2023),.</p> <p>Participants feel less supported by organisations (Ellemers, 2014; Faniko et al., 2021).</p> <p>When organisational support is lacking individuals seek support from personal sources (Bellemans and Devos, 2023).</p> <p>Perception that female accountants do not promote themselves (Athanasopoulou et al., 2018), yet self-promotion assists career progression (Cross, 2010).</p> <p>Participants require female role models (e.g., Nauta et al, 1998; BarNir et al, 2011; Jones and Iyer, 2020).</p> <p>Female accountants are prone to self-doubt like other women in traditionally male dominated careers (Wood and Bandura, 1989; Tellhed et al., 2017).</p> <p>Work-based challenges negatively impact self-efficacy (Hackett and Betz, 1981; Hancock and Hums, 2016).</p>

## **4.2 Contribution to practice**

Klassen et al. (2011) reviewed literature from 1998 to 2009 on self-efficacy in a teaching context. These authors explain that research is not practically focused. This current study contributes from a practical perspective by providing numerous recommendations for organisations, professional accounting bodies and individuals, as discussed in Section 3. In this section the study will focus on creating a better understanding to help improve the career experiences of female accountants.

Organisations, professional accounting bodies and other relevant bodies would benefit by understanding how self-efficacy influences women's career development in accounting. High self-efficacy is required for career progression. Self-doubt exists for female accountants which can be overcome by drawing from the learning sources. Taking agentic action interacts with the learning sources to restore self-efficacy beliefs. Understanding the evolving nature of self-efficacy for female accountants is important, as this assists those who seek to improve female accountants' self-efficacy and establish what assistance is required at the various career stages. These concepts demonstrate the benefits of focusing on self-efficacy as an important factor within women's career development.

Nonetheless, it is important to highlight where female accountants experience less opportunities for their self-efficacy to improve because as women, they feel undervalued, they perceive a lack of organisational support, they feel excluded from organisational networks and have less female role models available. Highlighting where female accountants experience fewer self-efficacy learning source opportunities, provides possibilities for enhancing the learning source experiences provided to women. Improving the learning source opportunities for women should improve their self-efficacy. Hackett and Betz (1981) suggest that women's self-efficacy in the workplace may be lower than that of men's because of different access to the self-efficacy learning sources. Lower self-efficacy disadvantages individuals, as they underestimate their capabilities to achieve (Zeldin and Pajares, 2000) which can result in the failure to reach career potential (Hackett and Betz, 1981; Bandura, 1988; Athanasopoulou et al., 2018). Understanding the importance of self-efficacy for female accountants' career progression is highly important. Taking action to improve female accountants' self-efficacy

and career experiences is crucial. Having focused on creating an understanding about female accountant’s career experiences and how self-efficacy influences their career development, Table 3 provides practical suggestions (potential actions), based on the learnings of this study. These suggestions were previously discussed in Section 3.2, but it is appropriate to revisit them again in the context of the contribution to practice.

**Table 3: Practical contribution**

<b>Learnings:</b>	<b>Potential actions:</b>
High self-efficacy required for career progression.	Women may possess lower self-efficacy than men. So, training required of recruitment managers/senior managers to develop and encourage women to put themselves forward for progression. Examine bias in all recruitment processes. Introduce measures to increase numbers of female candidates when recruiting.
Nature of evolving self-efficacy.	Targeted initiatives to increase self-efficacy, particularly at early and mid-career stages where self-efficacy may still be developing.
Women may possess self-doubt.	Training could be designed to assist women overcome self-doubt, so that it does not hinder career progression.
Women may encounter work-based challenges such as work/life conflict and gender-based injustices.	Action to scrutinise where and why this is occurring. Risse (2020) speaks about organisations examining their systems and structures, instead of women feeling that they must adapt. Unconscious bias training provided regularly for all individuals.
Significance of feelings and beliefs.	Targeted training undertaken to further strengthen the feelings and beliefs of individuals e.g., to develop resilience, ambition, confidence, and determination.
Organisational support less frequent and women excluded from networks.	More support provided by organisations and professional accounting bodies to individuals. Conscious effort to include all employees in organisational networks.
Women feel undervalued and may then undervalue their own success and achievements.	Training required to eliminate bias in the workplace. Introduce processes to ensure that all employees and their achievements are equally recognised. Training designed for women to assist them in valuing their achievements and success.
Lack of female role models.	Conscious effort to source female role models – even if external to the organisation and to make these very visible to women and men.

The underrepresentation of female accountants at senior levels is a problem for the accounting profession. While some traditionally male dominated professions are not yet obtaining equal numbers of women and men as members, accounting has had equal numbers for over three decades (Cohen et al., 2020). It could be expected that after this lengthy period that women would be better represented at senior levels. Lehman (2019) calls for qualitative gender research in accounting which can help challenge the status quo and enact change within the accounting profession. Haynes (2006) suggests that the stories of “ordinary” women in

accounting are not generally heard. This study gives a voice to women working in industry in accounting. By portraying participants' stories, this study helps to challenge the existing position and encourage change for the better, in the accounting domain. This study commenced by exploring the self-efficacy learning sources and influence of self-efficacy on the career development of female accountants. Yet, what has come out of the study is not relevant only within accounting but has significance within society in general.

## **Section 5 Limitations of the study and recommendations for future research**

While efforts were made to address possible limitations in the study, as with all research, this study is subject to limitations which will be discussed in Section 5.1. Following the discussion of these limitations, recommendations for future research will be presented.

### **5.1 Limitations of the study**

The researcher is a later career stage female accountant who, until commencing her doctoral studies, largely worked in industry. Consequently, the researcher brings her experiences to the research and becomes a part of the study (Adcroft and Willis, 2008; Haynes, 2008). How the researcher interprets data and subsequent findings is subjective, which is recognised in qualitative research. Instead of believing such subjectivity is a negative factor, the researcher views this positively, as it assisted her to understand and portray the lived experiences of participants in this study. This subjectivity helped the researcher to better understand the contexts from which participants presented their narratives and to demonstrate these to the reader (Haynes, 2006). Measures were taken within this study to help address potential researcher bias, which was discussed in Paper 2, Section 7. Such measures include recording reflections post interview, which were subsequently compared to the interview transcripts and differences investigated (McGrath and O'Toole, 2012). Regular discussions with supervisors were conducted, while being aware of and discussing the researcher's own interpretations (Haynes, 2006) regarding the findings emerging from the data, to ensure sufficient regard was given to alternative interpretations and perspectives. Peer reviews were sought (e.g., presenting findings at IAFA Doctoral Colloquiums 2022 and 2023, IAM conference 2023, EAA congress 2024 and being mentored as part of the EAA PhD Forum 2023). Participant checking of transcripts was undertaken to ensure their experiences were correctly represented. A reflexive

journal was maintained from the inception of the study to ensure findings were interpreted in a trustworthy manner.

As this is a cross-sectional study (explores a sample at a particular point in time), it is not clear if the relevance of learning sources may adapt as individuals' careers develop (Shipherd, 2019). Gale et al. (2021) state that few researchers have explored differences in teaching self-efficacy at different career stages. No study has explored differences in the self-efficacy of female accountants at different career stages, so it is recognised that focusing on only one career stage is a possible limitation. Yet, including women from different career stages would reduce the potential depth of the study. Participants self-selected into this study. Nearly all participants in this study have progressed into senior positions and it is important to learn from women who have progressed, despite difficulties and challenges encountered (Jogulu and Franken, 2022). Nonetheless, women who have felt unable to progress are not represented and their differing experiences may influence their perceptions of the learning sources that influenced their self-efficacy. This is recognised as a possible limitation.

While the learning sources that participants draw from to overcome self-doubt are social persuasion and physiological factors, this does not suggest that these are the only, or most important, learning sources for overcoming self-doubt. They are simply the most important learning sources for overcoming self-doubt for this particular sample. Similarly, this study finds that the results of agentic action create learning source experiences, specifically performance accomplishments and physiological factors. This study does not suggest that these are the only learning source experiences generated from the results of agentic action. Again, they are the learning source experiences resulting from the agentic action taken by these participants.

## **5.2 Recommendations for future research**

This study exploring the influence of self-efficacy on female accountants' career development, is a rich ground from which to harvest future research ideas. Prior studies focus largely on female accountants working in practice and less so on female accountants who work in industry. Therefore, less is known about women's career progression outside practice (Jeacle,

2011), which justifies further research. This study has identified future avenues of research to be explored, with accountants working in industry.

Future studies could further explore the significance of physiological factors and whether this learning source is particularly important for women who specifically seek to progress within their careers. Future studies could incorporate early and mid-career stages to explore whether the impact of learning sources differ over the various career stages e.g., exploring whether performance accomplishments are more prominent at earlier career stages, as they were for female accounting students (Beatson, 2024). Incorporating early and mid-career stages could also explore whether the influence of vicarious experiences adapt as individuals develop their career experience, as it appears to do for early career stage teachers (Marschall, 2023; Yim, 2023). Alternatively, a longitudinal study could be undertaken to explore whether the influence of self-efficacy and the learning sources adapt over the career lifetime of individuals e.g., exploring whether the availability of female role models improves over time and if so, how this impacts individual's self-efficacy.

Future studies could incorporate female accountants who may have chosen not to progress further or feel that they were prevented from progressing within their careers. This would facilitate capturing their lived experiences and their perceptions of the self-efficacy learning sources and influence of self-efficacy on their career development. Most participants in this study perceive that their self-efficacy is high. Further studies could comprise of women who perceive that their self-efficacy is low/lower. This would provide the opportunity to explore the influence of the learning sources on their self-efficacy beliefs and explore the impact of lower self-efficacy on their career development (e.g., ability to overcome self-doubt and ability to take agentic action to deal with challenges encountered).

The framework presented in Figure 1 could be tested using male accountants working in industry. This could explore if the perception that participants have of their self-belief being lower than that of their male counterparts is justified. Using male participants to test this framework would also provide learnings as to whether the self-efficacy learning sources differ according to gender in accounting, as demonstrated in other career domains (e.g., Lent and

Hackett, 1987; Lopez and Lent, 1992; Zeldin et al., 2008; Bellemans and Devos, 2023). Exploring the potential gender differences with respect to the learning sources has not been undertaken in an accounting career context. Using this framework with male participants could explore whether men working in accounting also experience self-doubt and if they do, how they overcome it, as well as exploring the interaction of agentic action and the self-efficacy learning sources. This framework could be explored in other accounting settings such as academia, public sector, and practice, as well as in non-accounting settings.

### **Section 6 Concluding remarks**

This study set out to explore the influence of self-efficacy on the career development of female accountants. Findings contribute to knowledge with respect to evolving self-efficacy, how individuals draw from the learning sources to overcome self-doubt and how the results of agentic action create learning source experiences that improve self-efficacy. Findings also contribute to knowledge as participants find physiological factors particularly significant, which has not previously been found in literature. The link between participants feeling undervalued and subsequently undervaluing their own achievements has not previously been identified in the literature.

McKeen and Richardson (1998) explored the entry of women into accounting in Canada between 1930 and 1985 and find that while women may have “established a presence” within their accounting careers, they did not achieve integration. It is disappointing to find that when interviewed in 2022-23, some participants still believe they have not achieved integration as female accountants working in industry. Ben-Amar et al. (2021) find that women still incur inequality with respect to career progression in the workplace. As participants’ stories emerge, various instances of the perceived differing treatment of women arise. Participants speak about feeling less valued, being less supported, being excluded from organisational networks, feeling less respected and being paid less than their male colleagues. Faniko et al (2022) suggest that less gender inequality in the workplace could help everyone in organisations, regardless of their gender. Section 3 provided recommendations to improve the working lives of women in accounting. Improving the working lives of female accountants could assist in improving female representation in senior positions. It is hoped that these learnings can help not only



women at early, mid, and later-career stages in accounting careers but all individuals within their respective career domains.

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## **SECTION FOUR**

### **Reflective Log Extracts**

## **Introduction**

On the first day of our first DBA workshop in March 2020, Covid restrictions were announced, and schools and colleges closed that evening. We were so lucky to have had that in-person day in Waterford Institute of Technology (WIT), now South East Technological University (SETU), to meet lecturers, programme directors and most importantly the other students in our class. Keeping a reflective log was advised from the very beginning of the DBA programme. Adopting a reflexive approach in research requires learning from experiences and acting upon such learnings (Boud and Walker, 1998).

## **Reflections on learning experiences**

I will present the pertinent learning experiences I encountered over the course of my DBA journey, which have been captured, discussed, and developed throughout my reflective log. While these learning experiences do not generally occur in isolation, I have attempted to demonstrate and discuss them individually and supported them with relevant excerpts from my reflective log.

### **Learning experience 1: Learning to trust the process**

We had been told many times by lecturers to trust the process throughout our DBA journey, which did not really resonate with me initially. The spring/summer of 2021 was a significant milestone on the DBA programme for me. I was struggling after workshop 3 (March 2021), which challenged us to develop a conceptual framework for our study, which I found extremely difficult. Feedback received from the workshop assignment highlighted the lack of clarity and cohesion within my research at that time. I was hugely disappointed and disillusioned because I felt I was not getting the results from the very hard work I was putting in. At the same time, I was getting used to working with my supervisors (which we had been assigned in May 2021) and the way in which they challenged me on my journey. I spoke to my supervisors about this utter frustration and disappointment. They advised me to trust the process. I explained how I had heard this previously but that it did not really resonate with me. They elaborated further and suggested that I conduct my literature review and follow where this led me and ultimately the conceptual framework would develop. This was difficult for me, as this is not how I am used to working. As an accountant, I am conditioned to expect results from my work inputs. I

felt that I had nothing to lose, as my current work method was most certainly not working for me during this stage of my studies. I shelved the frustrated feelings and got stuck into the literature review and parked worrying about the conceptual framework. Over the next few months (and many iterations) the conceptual framework did in fact develop naturally (albeit slowly). I was finally beginning to understand how to “trust the process”, which is demonstrated in Extract 1.

**Extract 1: Trusting the process**

**Sep-21**

They [supervisors] have provided so much challenge to the point where I feel I doubt what I am doing. They also provided so much support during this process. They encourage the positive aspects and have a very positive approach in general. I think it took until now to get used to the supervisory aspect of the DBA and how the process works. I feel I am finally learning how to “trust the process”, as I have been advised so many times. I can see how over the weeks, the study is developing hugely, after what felt like many, many months of preparation. It is so different to how I am used to working, so have learnt to adopt a totally different approach which will hopefully help me in other aspects of my life.

Boud and Walker (1998) speak about acting on our learnings, as part of the reflexive process. How I have acted on my learning to “trusting the process”, is that I think less about what may/may not arise down the line. Instead, I believe that whatever happens can be dealt with. I feel that this is reflection in action (Schon, 1983). By learning to trust the process, I became aware of my thought process and responses, such as worrying about possible outcomes and how to deal with them. So, I had to adapt and now I worry less about potential outcomes personally and professionally and focus more on getting the here and now right.

**Learning experience 2: Learning to accept critique**

In preparation for workshop 4 in November 2021, we had various readings and work to complete on reflexivity. This happened at such a critical time for me, having gone through my most difficult period of the DBA journey over the previous few months. This experience and the feedback from workshop 3, provided a great opportunity to reflect upon, as demonstrated in Extract 2.



## **Extract 2: Reflecting on how I handled recent feedback**

**Oct-21**

I used Gibb's (1988) reflective model to reflect on the feedback that I received from workshop 3 and how I handled that feedback. I found that I was too emotionally involved in my research, so needed to adopt the approach of analysing commentary received, with less emotion. I realised that being disappointed regarding the mark obtained was due to setting very high personal standards, which are not necessarily helpful. Reflecting made me realise that setting standards for myself may sometimes focus on the wrong aspect e.g., did the mark really matter? I now think it didn't, that the commentary provided by the lecturers, who are expert in their area, is actually far more valuable as a learning tool. I analysed the commentary received again. It was largely positive and supportive, yet my first reaction had been to focus on the negative aspects. Using Gibb's (1988) reflective model my action plan is to change my focus, be less hard on myself and remove any emotion from discussions and feedback/critique.

Reflection on action occurs after incurring an experience (Schon, 1983). It requires re-living the experience and while doing this, reflecting on what was happening and critically analysing this. Finally, it requires looking at the experience differently. Having re-lived my experience of how I handled and perceived the feedback from workshop 3 enabled me to learn from my past mistakes. Having committed to changing my focus, being less hard on myself and removing emotion from feedback, I had the perfect opportunity to put this into practice when presenting Paper 1 to examiners. In the DBA process the student presents their paper to examiners, who then pose challenges and questions and provide feedback to the student. I realised that while I felt nervous presenting my paper, that I was looking forward to the examiners' questions and feedback. I adopted the attitude that I have two additional experienced examiners providing valuable feedback, which can further improve my research study. This stood to me on the day of my presentation, and I really enjoyed the interaction and challenge with the external and internal examiners and remained completely open minded to what they had to say. Any critique they offered was taken by me very positively and objectively. The below is an excerpt from my reflective log that evening (5 November 2021).

### **Extract 3: Accepting critique**

**Nov-21**

I was second up for my presentation. While nervous, I handled it very well and really did a great job. Once it was over, I was happy to take questions and feel that I handled them very calmly (in the main). Some interesting points that arose here were... The feedback was so constructive and useful, and I felt so empowered and positive as I was able to answer questions posed by the examiners and discuss concepts. I really could not have asked for a better outcome from this process. Due to my reflective readings and observations, I was very positive in advance, that I and all the DBA students would pass but that we would have to do revisions. I feel that is par for the course – that research will never be perfect and could never be so. This is a huge benefit, following my reflexive work, which highlighted that in the past I was too emotionally/personally involved in research critique.

This outcome was exactly what I needed at this time, after what had been a tough 6 months or so. I finished 2021 on a high, full of confidence and the belief – for the first time – that my research may be on the right track. I can honestly say that I have continued to enjoy receiving critique and feedback since this reflective learning and no matter how harsh the feedback is, it has never once caused me to doubt myself or my research study. Instead, I accept the critique and look to see how I can utilise it to further improve my work.

### **Learning experience 3: Improved time management skills**

Having worked as a senior manager in industry for many years, I was used to working in very busy environments. However, studying for a DBA brings a whole new definition to what constitutes “busy”. At times it feels like you are being pulled from every angle. Since time is the restricted resource, it must be managed exceptionally well, for myself and all the important people in my life. Boud and Walker (1998) explain that the environments in which our experiences occur, influence our reflexivity. I cannot identify where the change in my approach to time management occurred but believe that March 2022 is when I particularly recognised it. The below extract portrays my feelings recorded in my reflective log in March 2022:

#### **Extract 4: Recognition of improved time management skills**

**Mar-22**

I firmly believe that the reflexive work carried out for workshop 4 has been of immense benefit to me – largely in coping with the massive workload. I am managing pressure very well and feel extremely capable that I can do this DBA and do it really well. Despite some absolutely hectic periods (such as mid-late February) I am really enjoying everything – work, study, and my personal life. I have finally struck a balance that works for me. I am saying no when it is required. To give an example of this. Mid to late February was exceptionally busy in work and we had readings and pre workshop 5 assignments to complete. I also had work to do for Paper 2. I planned this fortnight and prioritised the different aspects of work and study and decided to take a week away from Paper 2 (so advised my supervisors of this and asked to cancel our fortnightly meeting). The old me would have refused to admit defeat and tried to do everything and probably ended up stressed and very stretched. Now I recognise that I am a high achiever and am very highly self-motivated. Yet, I also acknowledge that I am only human and cannot always do everything I would like to do. I prefer to do 8 things very well than attempt to do 12 less well. This change in my attitude and approach is impacting positively not only my studies but also my work and personal life. I am amazed at how the DBA affects me as a person and takes me on a personal learning curve. I was not expecting this at all but am delighted with this unexpected outcome of my doctoral studies.

#### **Learning experience 4: Realising that I was on the right track**

In early June 2022 I presented at the IAFA Doctoral Colloquium in Maynooth University. I had previously attended IAFA events which as a lecturer, I found to be a hugely supportive environment. This was my first doctoral colloquium and IAFA also proved to be a very supportive environment for early career researchers (I find it funny using the term “early career researcher” having worked in industry for many years). Another lecturer from Maynooth and I jointly won two prizes at this event which were a research grant from IAFA and Chartered Accountants Ireland Educational Trust towards transcription costs and an EAA scholarship which provided mentoring for our research and to represent IAFA at the EAA Doctoral event in 2023. I was thrilled, as this really hit home that I was on the right track with my research. Previously I had not been completely sure if my study was quite good enough. The below excerpt was taken from my reflective log the day after the colloquium.

#### **Extract 5: Receiving validation for research study**

**9 Jun 22**

The colloquium was excellent. It was incredibly busy and fast paced and fantastic to hear the speakers (Professor Ingrid Jeacle and Professor Beatriz Garcia Osma) as well as experienced academics speaking and providing feedback to students. It is so interesting to hear most of their suggestions and opinions. I was nervous at the start of my presentation but got into it then and feel like I overcame the nerves (at least visibly). Celine said that I think I am more nervous than I come across as being. Celine and I took notes for each other on everything that was said by facilitators and others. I had Ingrid, Joan and Margaret as my facilitators and got excellent and challenging feedback and ideas from them. I won the EAA competition (myself and Aodhdin were joint winners) to represent IAFA at the EAA Doctoral event in 2023 (In Helsinki) and also a funding award towards my transcription services. I was completely overwhelmed on the day and only really appreciated this the following day. I am absolutely thrilled as this really drives home the value of my research study. At times I have been unsure if it was up to the mark for a doctoral study. I was delighted last November with the feedback from the examiners, but it is really beneficial to me to obtain validation outside of the DBA environment.

#### **Learning experience 5: Facing the fear of presenting**

In my past roles and in my lecturing, I feel extremely comfortable presenting. Yet, presenting outside of these areas is something that I feared and avoided. This avoidance of presenting held me back at times throughout my career and personal life. I felt that I needed to do something about this once I commenced my DBA. The Irish Accounting and Finance Association (IAFA) called for short presentations to be submitted in late 2020 for their teaching and learning day in January 2021 about what worked for lecturers when adapting to online teaching. I prepared and submitted a presentation as I was determined to avail of opportunities to present to “deal with” my fear of presenting. The below excerpt demonstrates how this led to another opportunity and how this impacted on me.

#### **Extract 6: First step in facing my fear of presenting**

**Jan-21**

I submitted a presentation on Mentimeter, which was used as one of the 12 presentations in this teaching and learning section. Due to the success of this presentation, I was asked to present in a teaching and learning capacity in UCC on this topic in March 2021. This is huge for me as it's something I would not have done prior to my DBA studies. I feel empowered by this and know that a few presentations will not change how I feel but have decided that I will keep pushing myself outside my comfort zone and hopefully learn how to enjoy presenting eventually.

This demonstrates progress in facing this fear. However, there have been times since, where I have been unhappy with my presentations too, as demonstrated in the below extract from October 2022, after presenting Paper 2 to examiners:

**Extract 7: Disappointment about Paper 2 presentation to examiners**

**Oct-22**

I feel that my slides were very good. I feel that after maybe 2/3 minutes I got better but am bitterly disappointed that I am still so nervous at this stage of the DBA and having got coaching for overcoming my nerves when presenting... but still personally disappointed in myself.

Upon reflection I felt this was probably me being too hard on myself. Instead of concentrating on what went great, I was disappointed by the one part that had not gone so well. With the help of my supervisors, who provided me with more opportunities to present to them, I decided that I would avail of any opportunity to present in any environment, to start changing my mindset. Through my reflective log, over time I can see where the progress occurs. In IAFA in June 2023, my co-winner (from 2022) and I had to present to doctoral students about how we benefitted from the prizes we won the previous year. We put together a few slides and decided on a relaxed and fairly spontaneous presentation, which worked very well. It was the first time that I ever really enjoyed presenting. In November 2023 I presented my Paper 4 to examiners and this extract incorporates how I felt about this:

**Extract 8: Enjoyment of presenting P4 to examiners**

**Nov-23**

I submitted the presentation for P4 and for the first time am particularly happy with the standard of my presentation in my DBA programme. I usually feel that mine is very basic but think this is totally up to standard now. We were in SETU on 2 and 3 November... while I was nervous at the start, I really got into it and feel I did a super job and enjoyed it so much. I had no bother with the Q&A from examiners (I always really enjoy this part). I passed P4 subject to amendments, which again only have to go to the internal examiner.

As I reach the end of my DBA journey, I believe I have certainly faced the fear of presenting and acknowledge how the DBA has presented amazing challenge and opportunities in this respect. While this may appear a professional development, it forms a huge part of my personal development also within my DBA journey.

### **Learning experience 6: Improving self-efficacy as a researcher**

At the start of the DBA programme, I was apprehensive about numerous matters: that I would not be a good researcher; that I would struggle in writing papers (being a numbers person) and that I would not enjoy conducting research. Could I even write a doctoral thesis, as I am really a numbers person? As an early-stage researcher, I would have assumed that others always knew better and depended on their guidance and suggestions. However, due to the support and coaching I have received from my supervisors, I have become empowered to trust my knowledge and developing expertise and to come up with resolutions myself. When I received examiner feedback from Paper 2, I felt it was suggesting that I re-consider and potentially adapt studying later career stage female accountants. I panicked initially but adapted my new reflexive approach and decided to sit and think about this over the weekend in question. I challenged my previous decisions and questioned if I should also have included mid-career stage participants but kept coming back to later career stage as being most appropriate for my study. I tried to be objective reading this part of Paper 2 and could see that I was trying too hard to justify the choice of later career stage. Taking this time to reflect provided a great learning opportunity and it was very important that I clarified this decision within the study, prior to speaking to my supervisors. I feel that unless I am clear, how can they be sure that the study is going in the right direction. Below is an excerpt from this thought process, prior to discussing it with my supervisors:

#### **Extract 9: Becoming empowered as a researcher**

**Nov-22**

Therefore, I cannot open up the study to mid-career stage, as many females within this cohort, are not yet of the appropriate age (in other words possess sufficient career experience) to have potentially attained a senior position. Having given considerable thought to this over the weekend, I am perfectly happy to justify my decision to study later career stage female accountants. Looking at this part of my Paper 2 – I feel I am over-justifying this decision and possibly confusing the reader, by including too many points in here. This over-justification comes from being challenged on this, so many times already. I need to simplify this argument/justification piece. I feel so much happier, having calmly considered this point raised by the examiners and re-challenged myself and ultimately and logically came to a solution.

On 10 November 2022 I met with my supervisors to discuss this examiner feedback. The supervisors were happy with my proposals to deal with the examiner queries that I disagreed

with. As well as developing professionally as a researcher this was also an important personal development for me. This was a point where I felt that my self-belief (self-efficacy) as a researcher was really starting to improve. This extract explains my feelings at this time and how I appreciated the personal and professional development:

**Extract 10: Developing self-efficacy as a researcher**

**Nov-22**

In some points I disagree with the examiners and do not wish to incorporate their suggestion, so we discussed this also and they [supervisors] agree with everything I am proposing. I am delighted as I feel that I am developing so much as a researcher. The old me would have adopted the suggestions of others, possibly feeling that they automatically know more/are more experienced than I. This demonstrates the confidence I am obtaining and developing both as a researcher and as a person.

**Learning experience 7: Importance of support networks**

It goes without saying that the unwavering support of my family, was of huge importance to me from day one. Despite missing so many occasions and events, they were behind me and encouraged me, every single step of the way. The support network of my fellow DBA students while new, was really valuable as we all experienced tough periods during the programme. When we met in March 2020, we quickly made friends with each other, even though we only spent one day together. I already mentioned how previous support networks seemed to adjust as a result of Covid. People who used to be there, were no longer available, as they were dealing with their own issues. Friends struggled to understand why I would choose to take on a challenge, as significant as the DBA in my late 40s. Speaking to the other students in my DBA class, it appeared that we were all somewhat in the same boat. I have previously discussed how 2021 presented a particularly difficult time for me on my DBA journey. My end of year reflection speaks about the importance of my fellow students in getting through this time:

**Extract 11: Importance of support from fellow students**

**Dec-21**

The support of the other DBA students was of exceptional importance. It felt like we all struggled significantly over the same period, and we supported and encouraged each other when times were low. Chatting to the others, they also seem to feel that they can't talk to their friends about difficulties with their studies. So, we talk to each other.

## **Summary**

Maintaining a reflective log is a process I endorse, particularly during periods of intense learning, so I was very open to using a reflective log throughout my DBA journey. Cunliffe (2004) explains that reflexivity can benefit our work and relationships with others. I believe that constant reflection throughout my DBA enhanced my work in various ways e.g., learning how to better manage time, learning to trust the process, and reducing my fear of presenting. I also believe that reflection and subsequent action has improved my interactions with others e.g., learning how to better accept critique has made me more aware and accepting of the views and ideas of others both professionally and personally. During the last few years, I have certainly adopted a more reflexive approach, but believe this is something that can always be improved upon. Nadin and Cassell (2006) state that reflexivity does not stop and requires commitment as well as being open to improvements. While I am particularly pleased at the beneficial results in recent years of applying reflective learnings, I know that I need to continue this process of reflexivity both in my research and all aspects of my life, so that I continue to develop and maintain a reflexive perspective and benefit my research, work, and personal life.



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