

The Experiences of Stress and Coping among Self-directed
Business Doctoral Students in an Irish University

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M.A. in Learning and Teaching

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ABSTRACT

Every level of education is crucial to ensure societies' development and growth. The unique feature of doctoral education is that doctoral candidates engage in creation of new knowledge which is important for further discovery, development or nourishment of future activities in all areas. Therefore, to continue producing and developing world-class research, institutions must ensure to provide appropriate, healthy and encouraging learning environments which will allow postgraduate researchers to reach their full potential.

The aim of this study is to provide a better understanding and awareness of the impact of challenges and PhD-related stressors on doctoral candidates' lives and their educational experience. This research is set to understand challenges and pressures impacting self-directed business doctoral students conducting their study on a full time basis. An important part of this project was to establish what coping strategies the study participants use in order to manage the pressures of the programme and enhance their well-being to ensure successful completion of their studies.

Qualitative methods formed the basis for this research study, with semi structured interviews as the chosen instrument for data collection. This method allowed for in-depth, complex data review that is not easily obtained via other data collection methods. Eight full-time business doctoral students represented the study sample and were recruited on a volunteer basis. Although the findings represent data from this

specific sample, it cannot represent the entire PhD students' population as the study was only restricted to students from one school in a higher education institution.

This research provides interesting insights and a deeper understanding of the challenges experienced by postgraduate researchers and their impact on the students' health and wellbeing, which is relevant to all stakeholders interested in students' welfare and educational outcomes in higher education settings. This study is building on the existing literature and enhances the existing research (especially as a qualitative piece of research, of which there aren't many on this particular topic) in the area of mental health of doctoral candidates and how the related issues impact on the students' educational experience. This area, according to literature is currently under researched.

Key words: PhD students, doctoral education, mental health and wellbeing, coping, challenges, support services, PhD experience.

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LIST OF ABBREVIATIONS

CBSM	Cognitive-behavioural Stress Management
HEA	The Higher Education Authority
HEFCE	Higher Education Funding Council for England (now Research England)
HEI	Higher Education Institutions
MBSR	Mindfulness-based Stress Reduction
MHI	Mental Health Ireland
NFQ	Irish National Framework of Qualifications
OECD	Organisation for Economic Cooperation and Development
PhD	Doctor of Philosophy
PGR	Postgraduate Research

CHAPTER ONE: INTRODUCTION

1.1 Background and Rationale

A number of Higher Education Institutions in Ireland provide doctoral education. There is a very noticeable increase in doctoral holders in the last few years. According to Central Statistics Office¹, in April 2016, 28,759 people had a doctorate (PhD) level qualification. This represented an increase of 30.9 per cent on the 2011 figure of 21,970 and an increase of 99.5 per cent on the 2006 figure of 14,412 (page 1). Although extremely rewarding and intellectually stimulating, reviewed literature suggests that the PhD journey is an onerous and potentially very stressful process (e.g. Toews et al., 1997; Cotterall, 2013; Metcalfe et al., 2018). Research also confirms that emotional exhaustion together with mental distress have an impact on educational outcomes and study completion rates (Wright, 2006; Hunter & Devine, 2016). Therefore, understanding the impact of stress on doctoral students and what is causing the stress could help in improving students' educational experience and result in better achievements and outcomes in PhD programmes (Barry et al., 2018). Mental health issues may affect schooling and its productivity according to Cornaglia et al. (2015). This can have a big impact on society and various outcomes (including income and employment). Levecque et al. (2017) argue that although students' health and wellbeing should be the educators' genuine concern, it is important to note that PhD students' work requires original contribution to knowledge, making their thesis an academic output contributor. Therefore, following the evidence of previous research

¹ <https://www.cso.ie/en/releasesandpublications/ep/p-cp10esil/p10esil/tl/>

indicating a link between mental health issues and student's research output, mental ill health may have an impact on the quantity and quality of those research outputs (p.869). This study aims to understand challenges affecting self-directed business doctoral students undertaking their PhD on a full-time basis and the coping strategies they use to manage their stress levels and well-being in order to successfully complete their studies. It is also set to provide readers with a deeper understanding of students' perceptions and attitudes that will help to consider best educational and academic practices in order to foster and enhance doctoral candidates' motivation, retention rates, study experience, physical and mental health. Davis et al. (2006) states that PhD students are the new ideas and knowledge creators. Jones (2013) supports this statement arguing that in order to gain better success in doctoral education, institutions and supervisors must get a better understanding of all related issues. Changing mental health needs of students raises big challenges for educational bodies so it is important for all stakeholders to understand the massive impact that mental ill health can have on many aspects of university's and other educational bodies' functioning. This issue therefore should become a priority and institutional responsibility as, according to previous research, the need for counselling services are increasing constantly. Lee (2008) raises an interesting point; that supervisors' memories and experiences from the time when they were doctoral candidates have a big impact on their current supervisory style. Therefore, it is important to deepen our understanding of the experiences and perceptions that doctoral students gather during their PhD programme, as those experiences will impact (positively or negatively) their learning identity, career development and their future.

The idea for this research project was influenced by researcher's genuine interest in doctoral candidates' wellbeing and the challenges they face on a daily basis, following four years of providing administrative support to this cohort of students. Although there is a number of support services available to doctoral students across the University (e.g. designated Administrative Officer for Research, Graduate Studies Office, Student Union, Student Support and Development, Counselling and Personal Development), PhD students often highlighted the individuality of their struggles and difficulties. Therefore, the main aims of this research are to investigate and develop knowledge in relation to individual (and therefore very personal) experiences of PhD students in relation to what they have found to be helpful or damaging to their well-being and academic progress during their studies. A further aim is to develop recommendations and contribute knowledge that might be useful for future research and activity or programme developments that could assist doctoral students with experiencing higher levels of well-being, better academic progress, and potentially higher completion rates.

The important aspect of this research is linked with researcher's ontological approach and supported by the ecological system theory (Bronfenbrenner, 1979) which highlights the individuality of every person, and each person's differences in attitudes, emotional intelligence, resilience, experiences, views etc. Therefore, the researcher's intention is to understand better the challenges that are particularly relevant to full time, self-directed business doctoral students as individuals. To understand how those challenges impact their lives and how they cope with those pressures. Kitzrow (2003) highlights the importance of everyone involved in higher education (including faculty

and administration staff) to take responsibility for students' mental health as students themselves are not always aware of services available to them or are reluctant to use them. The objective of this research study is to create a better understanding and awareness of the impact that PhD-related stressors and pressures have on students' lives and their educational experience.

1.2 Overview of Chapters

The first chapter outlines the background and rationale for the study, together with an overview of the layout for the project.

The second chapter aims to explore and discuss literature and previous research relevant to this study, taking into consideration features of doctoral education, theoretical frameworks, aspects of mental health and wellbeing among doctoral students, coping and support services. The 'Methodology' chapter introduces rationale for the author's methodological choices and argues the appropriateness of qualitative methods as the chosen route for this study's data collection process. This chapter covers aspects of credibility indicators and the importance of ethical considerations. Chapter four explores this study's findings and their significance in conjunction with the broader literature, which then is explored more in the discussion chapter. The fifth chapter, (discussion chapter) offers insights to theoretical implications and contributions, together with proposed recommendations based on this study's findings. The sixth chapter aims to provide conclusions and suggestions for future research.

CHAPTER TWO: LITERATURE REVIEW

2.1 Introduction

The aim of this literature review is to explore the research behind some of the challenges that doctoral students experience during their PhD studies and to provide theoretical context and framework as a foundation for the project. This chapter will first review background and context of the study and the following sections will explore stress and its impact on mental health in the context of higher education. The theory of coping mechanisms and support services will also be examined.

2.2 Background and Context of the Problem

Undertaking a PhD comes with a number of benefits. Leonard et al. (2005) report benefits of personal, intellectual and emotional development, growth of confidence, self-discipline, expanded views and knowledge, persistence, social benefits, joy and fulfilment. Students undergo personal and professional development and encounter many intellectual challenges. Although extremely rewarding in many ways, this experience also comes with high stress levels and high attrition rates (depending on the discipline). Even though prolonged stress may influence some students' wellbeing, Anderson et al. (2001) argues that small doses of stress can in some cases motivate students to work harder and achieve better results. When those small doses of stress turn into prolonged periods of stress is when students' mental and physical wellbeing may be impacted. Barry et al. (2018) argues that "doctoral study is challenging for

many reasons and psychological distress is higher than other categories of students and general population” (p. 480). Levecque et al. (2017) support this claim by providing data from their findings that PhD students’ prevalence of developing or having some sort of psychiatric disorder was 2.43 times higher compared to highly educated part of the general population, 2.84 times higher in comparison to highly educated employees and 1.85 times higher in comparison with higher education students (p. 877). Stallman (2008) highlights that psychological distress has a negative impact on student learning and is a concern to education providers. This statement is supported by Seligman et al. (2009) who argues that “increases in well-being are likely to produce increases in learning, the traditional goal of education” (p. 294). Deasy et al. (2014) suggest further that it should be recognised that being a student in higher education is stressful, rather than viewing it as a ‘normal part of student life’ (p. 19). It is also important to highlight at this point that the strong relationship between education and mental health has been explored in previous research from the psychological and economic angle (Cornaglia et al., 2015): “mental health problems may impact on human capital accumulation by reducing both the amount of schooling and its productivity, which may in turn have lifelong consequences for employment, income and other outcomes” (Eisenberg et al., 2009, cited in Cornaglia et al., 2015, p. 1), therefore the link between mental health and education cannot be underestimated or ignored.

Metcalfe et al. (2018) in their report (project undertaken for the Higher Education Funding Council for England) confirm that although there is an understanding of wellbeing and mental health needs and large increase in demand for support at

undergraduate level in higher education, mental health issues of postgraduate researchers and their need for support is under researched. The report lists a number of factors affecting postgraduate researchers' wellbeing, including lack of clarity of expectations and lack of feedback, imposter syndrome, supervisory relationship, career prospects, harassment and financial concerns.

Although there are many variables influencing doctoral students' development, this research will concentrate on stressors affecting postgraduate researchers and researchers' coping strategies that support their health and mental wellbeing.

Pyhältö et al.'s (2012) research investigated what possible difficulties or problems PhD students (669 participants) experience during their PhD studies, including the link between those difficulties and their well-being. The results indicated that "doctoral students' perceptions of problems varied" (p. 5). The aim for this research is to explore the individuals' approaches to stress and their need for support, therefore the following chapter sections provide synopsis of the relevant literature covering the broad areas relevant to this study.

2.3 Unique Features of Doctoral Education

Johnes (2013) highlights that doctoral degree is perceived as 'the pinnacle of education achievement' (p.13) with advanced doctoral degrees (Habilitation in Poland and the Privatdozent (Docent) degree in Germany and Switzerland) as exceptions.

In Ireland, the doctoral degree is the highest academic achievement and ranked at level ten by the Irish National Framework of Qualifications (NFQ). Doctoral programmes are on average four years in duration on a full time basis. Institutes of Technology, Quality and Qualifications Ireland, and Universities award those types of programmes. Davis et al. (2006) states that PhD students “[create] the new ideas and knowledge upon which future educational activities can be built, sustained and nourished” (p. 236). NFQ further develops the complexity of this achievement by listing the level ten learning outcomes, which “relate to the discovery and development of new knowledge and skills and delivering findings at the frontiers of knowledge and application. Further outcomes at this level relate to specialist skills and transferable skills required for managing such as the abilities to critique and develop organisational structures and initiate change” (2003, p.21). Many may assume that a student’s learning identity is formed by the time they exit undergraduate education as it could be seen as a continuation into the postgraduate level, rather than “re-situation of knowledge” (Tobbell et al., 2010, p. 262), so the assumption continues that those students are already equipped with the necessary skills to continue their studies. It is important to be aware that the postgraduate experience comes with additional strains in comparison to undergraduate level, where life becomes more complex, with stronger commitments from external environments and demands on students, resulting in significant changes in learning identity – and those “tend not to be acknowledged in pedagogic practice” (Tobbell et al., 2010, p. 276). This could cause or increase a feeling of incompetence and isolation adding stress to the experience. Jones (2013, p. 99) argues that the quality of doctoral education is very important because

continuance of all tertiary educational programmes in all countries will depend on the PhD students.

2.4 Theoretical Frameworks of the Study

Kerlinger (1986) defines theory as “a set of interrelated constructs, definitions, and propositions that presents a systematic view of phenomena by specifying relations among variables, with the purpose of explaining and predicting phenomena” (p. 9). With this in mind and with the intention of understanding relationships between variables linked to challenges of doctoral students, this part looks at the ecological framework and transactional model of stress.

2.4.1 Ecological Framework

In order to better understand students’ needs, the researcher decided to look deeper into students’ individual perspectives, views, experiences and knowledge to confirm whether those perspectives and views are indeed different and individualised. This is why gaining a deeper understanding of PhD students’ perceptions related to their challenges is the main focus of this project. Although each individual is equipped with abilities to deal with challenges of everyday life, prolonged exposure to life and work constraints can potentially affect our health and wellbeing. This also means that each individual will be impacted differently by a variety of different factors that will either enhance or negatively impact their development during their studies. According to Prilleltensky & Prilleltensky (2006) well-being is positioned within areas of individuals,

communities and organisations. Should well-being be negatively affected in one of those areas, the other areas will also be affected.

Therefore, it is important to look at those factors from the ecological perspective (Bronfenbrenner, 1979) and the influence that ecological variables have on well-being. Bronfenbrenner (1979) created the ecological system theory to explain the effect of interaction between a child's inherent qualities and a child's environment, and how this interaction affects the child's growth and development. According to Bronfenbrenner, it is vital to take into account the context of multiple environments in order to understand a child's development. He divided those eco-systems into four types: macrosystem (represents culture, belief systems, social forces, historical trends and events), exosystem (settings, events, policies that the individual is impacted by even though the individual does not actively participate in them), mesosystem (where the individual is involved in two or more microsystems, e.g. employment, social life, family), and microsystem (individual's immediate environment, e.g. family, school, friends). The fifth system, chronosystem, was added by the author in his later work as it became transparent that changes occur over time in environmental factors. Each of those systems has an impact on every human being's development. And when we take into consideration all four systems, they will form the individual's ecology, which changes overtime. Therefore, considering the amount of variables that influence our development over time, it is safe to say that every human being is different. Therefore, every PhD student, their experiences, upbringing, personality and values are different because of the variety of factors that impact their development over the years (see Figure 2.1). Although educational systems are designed to deal with students as

cohorts rather than students as individuals, doctoral education in many cases is a solitary journey for students that are often somewhere between their student status and staff member or researcher status (should they get involved in University activities e.g. teaching). Therefore, not only their needs as students may be different from other postgraduate students, but the development pace and exposure to variables are never the same for every doctoral candidate which poses a question whether their needs should be looked at from a different, more individualised perspective.

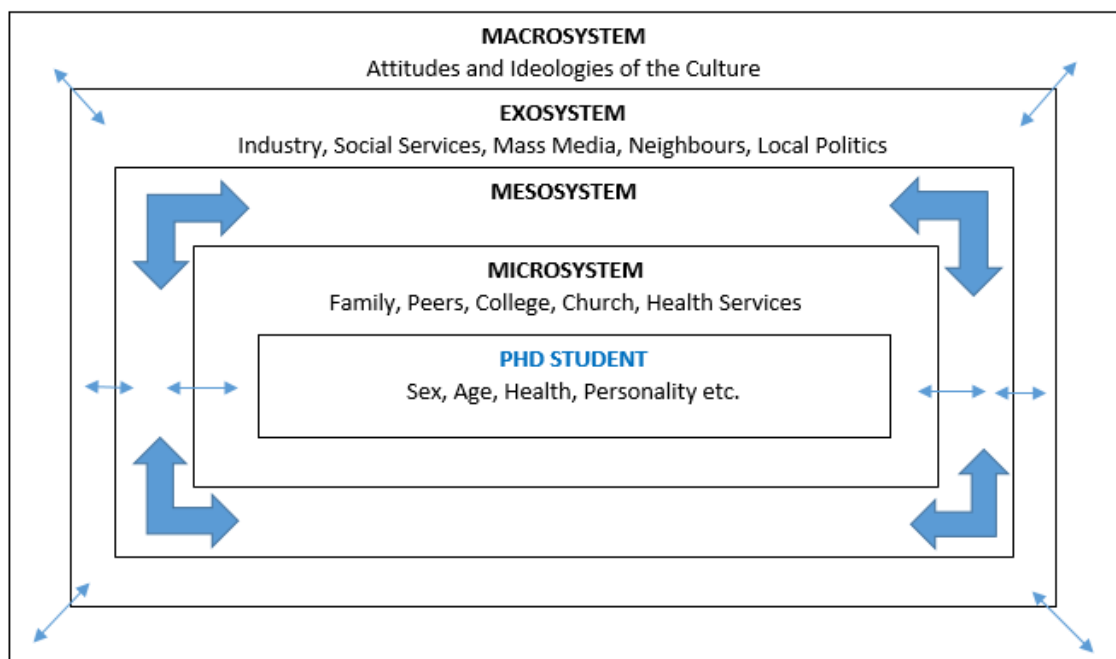


Figure 2.1: Visual Representation of the impact of ecosystems on a PhD Student.

2.4.2 Understanding Mental Health and Stress - Transactional Model of Stress

Lazarus' (1966) Transactional Model of Stress defines stressors as 'demands made by the internal or external environment that upset balance, thus influencing physical and psychological well-being and requiring actions to restore balance' (p.19). This model focuses on the differences in how individuals respond to their environment. The

extent to which an event is considered as challenging or threatening is what makes it stressful. Therefore, the transactional model of stress encloses a set of various responses (emotional, adaptive, cognitive and affective) that are the result of those of the individual-environment transactions. Lazarus (1966) states that the relationship between the person and the environment is constant and they are inseparable – they are affected by each other.

Lazarus et al. (1984) argues that stress does not indicate lack of resources to cope with a situation (which could be from the future, present or past), but rather results from an individual's perception of those situations. According to Ross et al. (1999) demands themselves do not cause harm, but the individual's perception and the way they see those demands may result in damaging outcomes. Omura (2007) supports this statement by claiming that because each individual is different, what some individuals may interpret as a stressful situation may not cause stress to others. Although prolonged stress can impact on some individuals' health and wellbeing, Anderson et al. (2001) states that not all stress experienced by students has a negative impact. In small amounts, it can act as a motivator. Nevertheless, it is important that we are able to distinguish between the type of stress that acts as a motivator and the negative impacts of prolonged stress. Robotham (2008) in his critical review quoted Misra et al.'s (2000, p. 238) categorisation of stress divided into four types of responses: emotional (e.g. anxiety, fear, depression), physiological (e.g. headaches, sweating, weight gain or loss), behavioural (e.g. irritability, substance abuse, mood swings) and cognitive (e.g. the assessment / appraisal of stressful events or situations and the ability to develop strategies to deal with them). Although each of us is different, and

not all types of responses will occur at the same time, it is important to be able to recognise the types of responses and our bodily reactions – this will enable us to apply coping mechanisms or prevent further symptoms developing.

Stress Management Society (SMS) (<http://www.stress.org.uk/>) explains that when our body is under stress, it thinks it is being attacked and immediately adapts ‘fight or flight’ response, releasing a mix of chemicals and hormones, which prepare the body for physical defence or some form of preventing action.

Although stress is not always bad as it allows us to react quickly to danger, when we stress in situations that do not relate to danger, our body still reacts in a similar way, by releasing a blood flow to muscles (taking it away from our brain) preventing us from performing at the highest level and slowing down our clear thinking processes which can affect many areas of our life. Prolonged stress can greatly affect our bodies in various ways. Although Robotham (2008) confirmed that our body can react to stress in four different ways, the Stress Management Society provides expanded list of examples of changes that could occur during periods of prolonged stress, and those are:

- Physical (e.g. chest pain, rapid heartbeat, aches and pains, frequent colds, skin complaints, indigestion, high blood pressure)

- Emotional (e.g. depression, moodiness, irritability, fatalistic thinking, panic, cynicism, anxiety, feeling overwhelmed, frustration)

- Behavioural (e.g. increased intake of alcohol, cigarettes and caffeine to relax, isolating yourself from others, sleeping too little or too much, demotivated, loss of sense of humour)
- Cognitive (e.g. memory problems, poor judgement, inability to concentrate, 'brain fog', indecision, starting many tasks but achieving little, self-doubt).

2.5 Mental Health and Stress in the Context of Higher Education

In November 2017 The Irish Times published an article about an increase in PhD holders in Ireland. The article quoted numbers from the Central Statistics Office showing "28,759 people had doctorates at the time of Census 2016, a rise of 31 percent since 2011 and of 99.5 percent on 2006". Although there are many other areas that are being discussed in relation to doctoral education that have priority over this topic (e.g. funding, escalating high-level research, career prospects, value of the qualification etc.), awareness of stressors and mental wellbeing of doctoral candidates is extremely important, especially in light of rapidly increasing numbers of doctoral candidates in Irish Institutions. At the same time, Sorcha Pollak in her Irish Times article titled: 'I don't think there's anything darker than doing a PhD' (published in December 2017)² touches on very sensitive issues of mental wellbeing during what is academically the most challenging journey a student can undertake, highlighting the challenges of such a journey and the importance of being surrounded by many supportive mechanisms during this time.

² <https://www.irishtimes.com/news/education/i-don-t-think-there-s-anything-darker-than-doing-a-phd-1.3309625>

Research by Bozeman & Gaughan (2011), Reevy & Deason (2014) confirms that work related stress among academics is rather widespread and increasing. Other studies, for example Kinman (2001) suggest that stress impacts even more the younger academics as (amongst other factors) they face a large amount of job insecurity – all those factors are a potential cause of anxiety, burnout, emotional exhaustion. As per 2015 UK higher education national figures, one in 125 students and one in 500 staff admitted to having ill mental health to their University (Shaw, 2015). Anxiety, fear and emotional exhaustion are in many ways interlinked with burnout. Maslach & Goldberg (1998) describe burnout as “a type of prolonged response to chronic emotional and interpersonal stressors on the job. It is an individual stress experience embedded in a context of complex social relationships, and it involves the persons’ conception of both self and others” (p. 64). Christie et al. (2008) describes PhD students’ experience as a “rollercoaster of confidence and emotions” (p. 225), although Hadjioannou et al. (2007) as cited in Cotterall (2013, p. 174) use stronger expression indicating that “paralyzing pressure... enormous stress and ... loneliness ... [are] the rule rather than the exception of doctoral student life”. This is quite interesting in light of a recent study conducted by Levecque et al. (2017) which indicates that 32% of PhD students are at risk of developing or having already some form of psychiatric disorder.

Although research records and data exists in relation to the wellbeing and mental health of students, especially at the undergraduate level, according to the Metcalfe et al.’s (2018) report, there is much less data related to mental health amongst postgraduate researchers and the proper services available to them. The report states that only 0.9% PGRs declared their ‘mental health condition’ (p. 6) to their educational

institution in 2013/14. Where the most recent Postgraduate Research Experience Survey (PRES 2017) indicated that 3.3% of participants reported having a mental health condition. Metcalfe et al. (2018) report confirms that mental health issues within higher education seem to be under-researched and that one in four adults will have mental health issues at some stage in their life. As completing doctoral degrees may be very stressful (Stubb et al., 2011), chances of developing a condition relating to ill mental health are relatively higher (than e.g. at undergraduate level).

One of the biggest factors of students not seeking help or delaying seeking help is stigma associated with mental health issues. Link & Phelan (2001) define stigma as a process involving separation, labelling, stereotype awareness / endorsement, prejudice and discrimination in a context in which economic, social or political power is exercised to the detriment of members of a social group. According to a number of research (Kessler et al., 2005; Thornicroft, 2007) 52-74% of people with mental disorders in Europe and USA do not receive treatment. The stigma associated with mental illness may have a big impact on reducing help-seeking. Social stigma not only impacts on help-seeking, and (as it is the case for every illness) early intervention is key to better and quicker recovery. It also may impact the recovery process. Mental Health Ireland (MHI) (<https://www.mentalhealthireland.ie/a-to-z/stigma/>) states that although most people experiencing mental disorders either recover fully or learn how to manage them and live with those disorders, the social stigma associated with mental health can worsen their current difficulties or make the recovery harder. MHI also states that the strong stigma associated with mental disorders can experience discrimination in all areas of their lives. It is important to note that

Employment Equality Acts (1998-2015) and the Equal Status Acts (2000-2015) protect against discrimination and victimisation of individuals with mental health issues.

Metcalf et al.'s (2018) report disclosed the perceptions of postgraduate researchers confirming their view on prevalent mental health issues in doctoral education but the stigma associated with mental health issues could be a preventing force from discussing their problems. The report also confirmed that "in common with the general population, some postgraduate researchers could be approaching crisis point before they sought help" (p. 18).

As previously mentioned, seeking help early can prevent further development of a mental disorder and can increase the speed of recovery. Although there is a number of local and national campaigns trying to change peoples' views and awareness on mental health, it seems that more needs to be done to change our perceptions and attitudes related to ill mental health.

2.6 General Triggers of Stress at Doctorate Level Indicated by Existing Research

Doctoral candidates, as previously mentioned, due to the nature of PhD studies (high workload, strict deadlines and a number of environmental pressures) are exposed to a number of triggers that can increase their stress levels, and therefore affect their well-being. Each PhD student is different and they will potentially identify a number of varied factors influencing their well-being and will interpret stressors differently. Nevertheless, there are general, most commonly researched areas that students are

affected by: supervision, finances, imposter syndrome, loneliness and isolation, career prospects. All those aspects are discussed below.

Supervision

Jones (2013) states that “to ensure greater success in the doctoral graduate process, supervisors and institutions must have an understanding of the issues which arise through this task” (p. 83). He highlights the importance of the role that all institutions play in developing and moulding doctoral candidates into future practitioners or academics. Vitality of this process cannot be understated as doctoral students are involved in developing and discovering new concepts and knowledge, adding to the body of educational activities (Davis et al., 2006). Although, as previously mentioned, the educational institution’s role is extremely important in shaping doctoral candidates into future academics; it is the doctoral supervisors’ role that is absolutely fundamental in the process of transitioning and clarifying the part that those researchers and practitioners in making will take in their future jobs and in society (Barnes, Williams & Archer, 2010; McAlpine & Amundsen, 2012). Halse (2011) argues that existing research clearly indicates that “supervisors play a critical role in the doctoral experience, in the success of a doctoral programme and in achieving faster progression and lower attrition rates among students” (p. 557). This is confirmed by Johansson’s (2017) statement supported by previous research that “effective supervision influences the quality of the PhD and its ultimate success or failure’ (p. 167). Metcalfe et al.’s (2018) report confirmed that although there were a number of positive relationships between PhD students and their academic supervisors, there

was also a number of issues that doctoral candidates experienced with their supervisory relationships. Those issues are complex and could heavily influence the student's PhD journey and study experience in either a positive or negative and stressful way. This highlights the importance of healthy and supportive relationships between PhD students and their supervisors. Styles & Radloff (2001) state that "the quality of the student-supervisor relationship is an important factor mediating outcomes of the postgraduate research experience" (p. 97).

It is interesting that supervisors' memories and experiences from the time when they were doctoral candidates have a big impact on their supervisory style (Lee, 2008). Henderson (2017) confirms this point highlighting that researchers (Halse 2011; Peelo 2011; Wisker and Kiley 2014 - cited in Henderson, 2017, p. 403) get their 'ideas on doctoral pedagogy' (p. 403) from relevant literature, their own experience of being supervised, from acting as examiners and observing their academic colleagues. Gatfield (2015) designed supervisory styles model framework which indicated four different supervisory styles: the laissez-faire style (low structure support), the pastoral style (low structure support, highly supportive supervisor but not that task-oriented), the directorial style (interactive relationship but not task-oriented) and the contractual style (high structure but low support). This calls for more PhD supervisors' awareness in relation to their supervisory styles and the impact that their style has on their current PhD students' development as they will eventually become the future PhD supervisors.

Financial Situation

Bair & Haworth (1999) suggest that if a doctoral student has financial support (regardless of type) that doesn't require the student to work (e.g. scholarships), he/she will be more likely to progress quickly and complete the programme. But not every PhD student has financial security during their studies. Metcalfe et al. (2018) confirm that postgraduate researchers and staff highlighted financial concerns as potential causes of stress (p. 21). Financial insecurity and increasing cost of living may reduce the amount of funds available to postgraduate researchers – when this happens, usually the quality of food, social or relaxing activities diminish first as expenditure is cut, contributing to “poorer wellbeing” (p.21). Students may experience difficulties even when they secure a scholarship. An average scholarship in Ireland amounts to €1300 per month (as per GradIreland: <https://gradireland.com/further-study/advice-and-funding/funding/costs-and-funding>) – although tax free, scholars often must engage in additional activities to increase their income (e.g. teaching), as living expenses in Ireland (especially cost of accommodation) have increased in recent years. Engagement in additional activities can potentially put pressure on students' timely completion of the programme or longer working hours in order to finish the programme within the set time-frame.

Imposter Syndrome

Two psychologists, Pauline Clance and Suzanne Imes, first identified ‘imposter syndrome’ in 1978. This phenomenon refers to a pattern of behaviour where individuals start to doubt that their academic success is achieved by their ability and

competence. They think it is rather due to being lucky or by being in the right place at the right time and they are not worthy of the success they have. They often feel like a fraud and worry about others finding out that they are not as competent or intelligent as they appear to be. Individuals impacted by this syndrome often experience low self-esteem and self-image. Those perceptions prevent them from taking pride and enjoying their success and therefore it may influence their ability to reach full potential (Clance & O’Toole, 1987). If individuals experience intense feelings of feeling like an imposter, this can lead to anxiety, fear of failure, guilt, inability to perform to the best of their ability, affecting their performance (Clarence & O’Toole, 1987).

A recent project undertaken by Vitae (Metcalf et al., 20118) for the Higher Education Funding Council for England (HEFCE – now Research England) lists imposter syndrome in postgraduate researchers as one of the factors affecting their wellbeing, resulting in large workloads and high expectations with completing the doctoral degree. One of the direct quotes from the Metcalfe et al.’s report (2018, p. 18) summarises the general struggles of students: “The implicit and underlying stresses involved in the publish or perish paradigm, as well as imposter syndrome more broadly, make it so that most graduate students who used to love learning now feel stressed and frantic about whether or not they are measuring up to the system’s qualifications. This has a huge bearing on well-being”.

Loneliness and Isolation

Conducting a doctoral research project and writing a thesis can be a lonely experience as it is based on sole contribution and not group work. This journey is “accomplished

through the socially (and often physically) isolated context of field research, experienced and celebrated as a personal rite of passage” (Delamont, Atkinson & Parry, 1997, p. 327). Janta et al. (2014) describe the doctoral journey as emotional and multi-faceted. Although PhD programmes differ, there are common elements that are present in many cases: uncertainty, anxiety, loneliness and social isolation, which are likely to have an impact on students’ psychological health and wellbeing (p. 553).

Lower level integration may also contribute to a feeling of intellectual and social isolation, which as a result can be linked with doctoral students’ decreased satisfaction and in many cases attrition (Lovitts & Nelson, 2000). Ali & Kohun (2007) support the view that positive relationships with supervisors and socialisation can be strong factors in achieving success and student retention. They also claim that it is very important to encourage social contact across faculty and to provide social support as it can greatly help with effects of social isolation on students. Pyhältö et al. (2009) also suggest that the scholarly community is the main context for learning and working and yet, many students experience problematic relationships with their academic community or feel isolated from it.

Career Prospects Uncertainty

Article published in April 2018 by The University Times³ provides perspectives from both, PhD students and Academics about their experiences with career prospects in academia. From the PhD students’ perspective, the article describes the psychological distress of completing a PhD (one in three students is at risk of experiencing a

³ <http://www.universitytimes.ie/2018/04/re-plotting-the-route-to-an-academic-career/>

psychiatric disorder during their studies (Levecque et al., 2017), and confirms that there is a larger number of requirements PhD graduates must meet to get a job as an academic, and the new path that prospective academics must follow before they can secure an entry-level position (undergraduate degree, master's and then PhD). With the increasing number of PhD graduates, and very few job opportunities in Ireland, many graduates are forced to seek employment abroad, mainly in the UK. With a shortage of jobs in academia, PhD students have to work harder than ever before to have a chance of securing employment, as competition is extremely high. Speaking to The University Times, Dr Eoin Daly (NUI Galway) notes that PhD is now a “minimum requirement” rather than being considered as “sufficient in itself”. Today’s PhD candidates on the top of their studies and research must publish and demonstrate their ability to engage with the wider field of their study, have teaching experience and be connected with their sector.

2014 OECD (Organisation for Economic Cooperation and Development) report recorded a significant increase of doctoral holders across European countries confirming that the number of doctoral holders (or equivalent degree) “[...] across OECD countries has significantly increased over the past decade, growing from 158,000 new doctorates in 2000 to 247,000 in 2012, a rise of 56%” (p. 1). Due to the increasing number of doctoral students and easier access to higher education, career development and opportunities became a point of strategic importance for PhD education across European countries, according to the survey published in 2019 by European University Association (Council of Doctoral Education). Therefore, career

development support for doctoral candidates and early-stage researchers has become a focal point for academic leaders.

2.7 Factors Impacting Motivation and Student Retention

Many different factors motivate students to undertake a PhD. Although there is a number of motivational theories, some more relevant to PhD students than others, Leonard et al. (2005) grouped PhD students' motivators into broad areas of acquisition of research skills, personal development, professional development and strong interest in a selected research area. Muszynski (1988) completed a qualitative study of 120 doctoral students and found that stressful events in life, depression and sense of isolation affected motivation to complete the thesis. The author found that the doctoral students either did not associate the seriousness or severity of their situation with the PhD process or did not look for appropriate support or help. All those difficulties resulted in their motivation to complete their studies gradually decreasing. Despite strong intrinsic and extrinsic motivators to complete a doctorate degree, achieving a PhD degree is a very laborious and challenging process. Despite this, it is also seen by many as the highest level of academic qualification and educational achievement (Park, 2005). Completing a PhD is a complex and stressful process for a number of students and research finds that doctoral students' attrition rates (despite strong motivators) are high and can range between 33% to 70%, depending on a discipline and mode of study (Ivankova & Stick, 2007; Kim & Otts, 2010; Gardner & Gopaul, 2012). Pyhältö et al. (2009) confirm a relationship between the way students

perceive their learning environment, their study persistence and well-being. High workload, poor atmosphere, worrying and not enough feedback were among factors linked to students contemplating interrupting their PhD programme. On the other hand, feedback, positive atmosphere and satisfaction were prevalent among those not considering interrupting their studies.

2.8 Stress Coping Mechanisms and Support Services

It is difficult to talk about coping without mentioning stress. It may not be possible to try to apply a coping mechanism without having some exposure to a stressful situation as argued by Carver (2006) who states that coping is often seen as an attempt to manage a demanding situation in a way that can minimise a negative impact or detach the threat from the situation. Another way of describing coping was defined by O'Driscoll et al. (1996) who describe coping as individuals' efforts to reduce or eliminate stressors affecting them, change their perception of those stressors or try to reduce the extent of harm that those stressors can cause them. Individuals can apply many coping strategies in stressful situations. Lazarus & Folkman (1984) propose a problem-based coping strategy (avoiding the threat) or emotion-focused strategy (managing emotions). Because each individual's perception of stress is different and coping strategies may have a different outcome for each individual, they may not always be appropriate or successful in reducing stress. Therefore, some form of intervention must be considered in such cases. Faasse & Petrie (2015) claim that those interventions have been associated with positive outcomes and improved health, and

they list those interventions as relaxation training (p.552), emotional expression, mindfulness-based stress reduction (MBSR), cognitive-behavioural stress management (CBSM) (p. 553), benefit finding (p. 554).

Beyond coping strategies and other coping interventions, it is vital that doctoral candidates, considering how stressful completing a PhD can be, have access to a wide range of support services in their institution. Although a number of support services are available to doctoral candidates in most universities, the basic structures must be right, and those are often more challenging for universities to manage. Based on their research Hakanen et al. (2006) conclude that the PhD journey is a process of continuous meaning making, where students should feel an ongoing growth of their competence as researchers and should feel as a member of the academic community, valued and important. Those positive experiences may prevent burnout, stress and emotional exhaustion. The learning environment that would be ideal for developing researcher expertise should offer shared control (intentional facilitation and promotion of learning by supervisors and other (more senior) members of a scholarly community) by using student centered methods (which support students' autonomy and independence e.g. research project collaborations, research presentations and discussions, small group activities etc.), and activating methods to assist doctoral candidates in their skills development (Styles & Radloff, 2001) creating constructive friction (Vermunt & Verloop, 1999) - process of graduate development of more and more advanced academic knowledge and skills. If there is very little guidance or support, students may start to feel helplessness (destructive friction). Similar can happen in cases where the learning environment is very controlled by lecturers.

Therefore, maintaining supportive, well-balanced and thriving learning environment is very important from student development and reducing attrition perspective. Pyhältö et al. (2009) links well-being to the learning environment and benefits of scholarly communities arguing that the healthiest environment was felt by those who felt strong belonging to the scholarly community.

Changing mental health needs of students raise big challenges for educational bodies therefore, it is important for all stakeholders to understand the massive impact that ill mental health can have on many aspects of the university's life, therefore this issue should become a priority and institutional responsibility as the need for counselling services are increasing constantly (Kitzrow, 2003).

2.9 Conclusions

This literature review has examined existing and relevant research in the area of this study and relevant theoretical frameworks. The literature review confirms that the PhD studies are different from taught courses. This poses challenges for educators in ensuring the students' wellbeing and mental health, as PhD studies are particularly challenging and stressful. Prolonged periods of stress can impact students' mental and physical wellbeing. The Royal College of Psychiatrists in their report (2003) acknowledge that higher education institutions and universities often fail to meet students' mental health needs. They argue that it is essential to engage with student stress and promote positive mental health. It is also important to understand students'

coping behaviours because it will allow them to support students better when they experience difficulties (Connor-Smith et al., 2007).

If we consider the two frameworks (the ecological systems theory and the transactional model of stress) mentioned in this chapter, both, one way or another, indicate that every human being is different and reacts differently to the surrounding environment. Although review of the literature suggests various factors affecting doctoral candidates' health and wellbeing, those suggestions are often based on quantitative approaches. This has influenced the researcher's decision to adapt a qualitative approach for this study to get a deeper understanding of doctoral students' challenges and their needs in order to see whether the support services that are available for them in their institution are meeting their needs, supporting and nourishing their educational development.

CHAPTER THREE: METHODOLOGY

3.1 Introduction

This chapter will provide background of philosophy and paradigm, which directed this piece of research. Rationale and research objectives will be explored. This section will also discuss the methodology employed in this research, ethical considerations and study limitations. The main aim of this chapter is to provide sufficient details to justify and explain the adapted approach and procedures employed in this research.

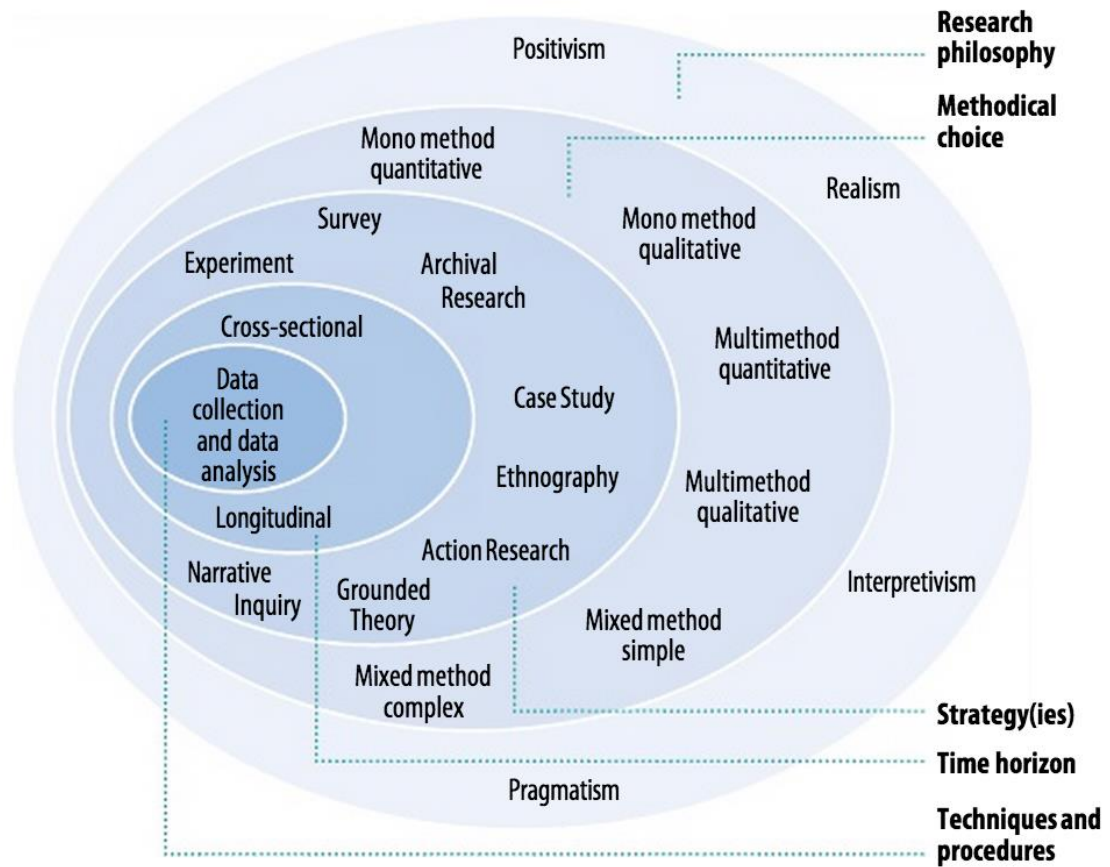
3.2 Research Paradigm, Philosophy

It is important to understand that philosophical underpinnings of research paradigms have high importance when conducting a research project, as the author's approach and methodology used becomes a spine for the entire project. As there are different ways of measuring reality, it is vital for researchers to acknowledge the differences, guide the readers on his/hers adapted approach and show the full picture (including rationale and limitations). Castellan (2010) notices that some researchers associate themselves with qualitative approaches or quantitative highlighting epistemological differences: objective truth and a single reality (quantitative approach), versus subjective truth and multiple realities (qualitative approach). Some researchers claim that their approach (either qualitative or quantitative) is the best for educational research. Gall et al. (1996) argues that at an epistemological level it is not obvious or indicative which approach has a better way of discovering truth, and it is vital to note

that both approaches were helpful in the researchers' discoveries. Some researchers like to combine both approaches. Although there are many enthusiasts of mixing both methods, Bogdan & Biklen (1998) claim that although it could be highly beneficial, combining those two approaches may be difficult, especially when it comes to maintaining the integrity when those studies are conducted at the same time. Although each of those approaches are different and neither of them can on its own provide a comprehensive outcome without any limitations, when combined together, they can complement each other. Although Castellan (2010) warns that each approach should be analysed by criteria associated with each separate approach and should only be conducted within its own context. O'Leary (2017) argues the qualitative and quantitative approaches should be seen as adjectives (p. 132) for the kinds of data and the way it is analysed (rather than descriptors or method or methodology, or even the researcher). O'Leary suggests that in the case of qualitative approach the data is presented in the form of a word, icon or a picture and analysed using 'thematic exploration' (p. 132), where with quantitative approach the data is presented numerically and analysed statistically. Therefore, the choice of methodology and methods should be influenced by the answers we would like to get to our research question. In case of this research study the choice of approach was indeed influenced by the researcher's curiosity in relation to understanding the meaning of human action (Schwandt, 2001) relating to challenges of self-directed business doctoral students therefore the research philosophy is supported by interpretivist approach. To visualise the complexity and importance of research design please see Fig. 3.1. Saunders (2012) recommends starting the research journey at the outer layers (research philosophy),

following further layers to the final one, which is data collection and analysis. The design choices made by the researcher were based on the research question and the types of answers the researcher wanted to obtain. The research question doesn't state a hypothesis; rather it states the researcher's intention of deepening an understanding of the challenges of self-directed business doctoral students, their coping methods and whether support services available to them meet their needs. There have been many studies done on various aspects of educational approaches and strategies, but not as many attempts to explore challenges, mental health and wellbeing of postgraduate researchers, especially using qualitative approaches. Although the researcher could see a lot of benefits with adapting a quantitative approach to this enquiry, the core intention was to explore deeper levels of participants' perspectives and get a better understanding of issues that impact their studies as a group and as individuals. The interpretive epistemology and methodology supports this study's approach in trying to understand individuals' perspectives, taking into consideration students' cultural and historical context that is part of them. The ontological approach for this piece of research is relativism, meaning that reality is subjective and different for everyone, and so the main aim is to take the individual differences into consideration. The ontological approach is supported by ecological system theory (Bronfenbrenner, 1979), which highlights the individuality of every human being, that each person's development is shaped by influences from different systems throughout the duration of our lives, which change overtime.

Fig. 3.1 - Saunders' "Research Onion" (2012, p.2)



3.3 Research Rationale and Objectives

The objective of this research study is to create a better understanding and awareness of the impact that PhD-related stressors and pressures have on students' lives and their educational experience. Pyhältö et al. (2009) state that doctoral programmes are influenced by social practices of scholarly community, which provides a certain learning environment. This learning environment may affect PhD students experience, their professional identity and development of their expertise (p. 222). Therefore, it is important to gather students' perceptions of their learning environment, as students'

perceptions can be helpful when assessing the quality of PhD education. This ties with the Bronfenbrenner's (1979) ecological framework which indicates that every individual is exposed to multiple ecosystems over the duration of their development which shape each of us differently, therefore our perceptions and experiences differ. This framework has informed the researcher's methodological approach. Reviewed literature suggests that the PhD journey is an onerous and potentially very stressful process. This study aims to understand challenges affecting self-directed business doctoral students undertaking their PhD on a full-time basis and the coping strategies they use to manage their stress levels and well-being in order to successfully complete their studies. It is also set to provide readers with a deeper understanding of students' perceptions and attitudes that will help to consider best educational and academic practices in order to foster and enhance doctoral candidates' motivation, retention rates, study experience, physical and mental health. Davis et al. (2006) highlights the importance of PhD students positive study experience as those students are new knowledge creators based on which future activities can be built or future knowledge developed even further. Jones (2013) supports this argument claiming that all involved in doctoral education must understand the issues that are surfacing during the PhD study period. It is important to deepen our understanding of the experiences and perceptions that doctoral students gather during their PhD programme, as those experiences will impact (positively or negatively) their learning identity, career development and their future.

The important aspect of this research is linked with researcher's ontological approach and supported by the ecological system theory (Bronfenbrenner, 1979) which, as

previously mentioned, highlights the individuality of every person, and each person's differences in attitudes, emotional intelligence, resilience, experiences, views etc. Therefore, the researcher's intention is to understand better the challenges that are particularly relevant to full time, self-directed business doctoral students as individuals. To understand how those challenges impact their lives and how they cope with those pressures. Kitzrow (2003) highlights the importance of everyone involved in higher education (including faculty and administration staff) to take responsibility for students' mental health as students themselves are not always aware of services available to them or are reluctant to use them. The main aims of this research are to investigate and develop knowledge in relation to individual (and therefore very personal) experiences of PhD students in relation to what they have found to be helpful or damaging to their well-being and academic progress during their studies. A further aim is to develop recommendations and contribute knowledge that might be useful for future research and activity or programme developments that could assist doctoral students with experiencing higher levels of well-being, better academic progress, and potentially higher completion rates.

3.4 Sample

Sampling Methodology

According to Lewis (2003) sample selection should represent a purpose. In addition, the purpose should be able to represent a phenomenon linked to characteristics that are rather specific (e.g. knowledge, experience, sociodemographic – all to be of

interest to the mentioned research phenomena). Therefore, there was a set of criteria that all volunteers had to meet in order to participate in this study. Participants had to be currently undergoing a full-time PhD studies in the area of business.

The age range of all potential participants varied between 25 and 60 years old and volunteers did not belong to medical or clinical groups.

Sampling Size and Characteristics

Due to time constraints, the researcher decided to use the sample size of eight volunteers, which was a relatively easy number to manage and large enough to provide a range of perspectives. This was also the total number of all students that volunteered for the study. In order to recruit study participants, the Gatekeeper (Administrative Officer for Research) sent an email on researcher's behalf to full time PhD candidates seeking volunteer participation. Explanation of each step of the study, aims, objectives, risks associated with participation, full disclosure and right to withdrawal at any stage were included with the email (see Appendix One to Three). Information sheet and consent form were attached, together with researcher's contact details, should any of the potential participants require further information. Participants were also provided with contact details for counselling service in case the interview questions caused distress or upset to participants. The participants consisted of four males and four females, all in the age of 20 to 39 years old. All participants are full time doctoral candidates in the area of business. Table 3.1 provides a visual representation of participants' profiles. The names used for the purpose of this table are pseudonyms. The order in which the participants are listed is random.

Table 3.1 – Participants’ Profile

Pseudonym of Participant	Gender	Age Bracket	Stage of Study	Residency Status of Students	Receiving a Scholarship
Sam	Male	30-39	5 th Year, Final Stage	Non-Irish	Yes
Owen	Male	20-29	3 rd Year	Irish	Yes
John	Male	30-39	3 rd Year	Non-Irish	Yes
Stephen	Male	30-39	3 rd Year	Irish	Yes
Monica	Female	30-39	2 nd Year	Non-Irish	Yes
Wendy	Female	30-39	4 th Year	Non-Irish	Yes
Anna	Female	30-39	5 th Year, Final Stage	Non-Irish	Yes
Barbara	Female	30-39	4 th Year, Final Stage	Non-Irish	Yes

3.5 Procedure

One-to-one interviews were the primary method of collecting data for this research project. Interviews were conducted in March 2019. The qualitative approach selected by the researcher (face-to-face, semi-structured interviews) allowed for in-depth and complex data that is not easily obtained via other data collection methods. Face-to-face interviews, rather than telephone or Skype interviews were selected as a preferred way of conducting them in order to build rapport between the interviewer and each participant. Semi-structured interview questions allowed preparation in advance of interviews, introduced a structure where all participants are asked the same questions, but at the same time allowing interviewees to share their views and experiences in their own way. This method also allowed for probing questions during

the interview, and to clarify responses immediately during the interview, allowing full understanding and ensuring clarity. This approach ensured in-depth, reliable and comparable qualitative data.

Encouraging trust between the researcher and participants was aimed at increasing the feeling of being more comfortable with the process, which then encourages interviewees to share their experiences more openly. Conducting interviews in person also allows the researcher to observe bodily and facial expressions. This can greatly assist with a better understanding of the intended meaning (Kvale & Brinkman, 2009). Participants had an option to select a date, time and a preferred place for the interview, as convenience and suitability in some cases may positively influence participation. All interviews were re-confirmed couple of days before each scheduled date. As all participants chose to attend the interviews on the campus, the researcher was able to secure private meeting rooms for each interview. This was aimed at putting all volunteers at ease and re-assuring privacy and confidentiality. Each participant agreed on their consent forms for the interview to be recorded. The recordings are stored on a mobile device protected by a pin number, securely locked at researcher's place of residence. The interviews were initiated and guided by a set of semi-structured questions (see Appendix Four). Each interview lasted between 45 and 60 minutes. At the end of each interview, participants were thanked for their time and participation. The recorded interviews were then transcribed by the researcher. Although time consuming, this process allowed the researcher to become more familiar with the data which assisted with data analysis.

3.6 Measures / Data Analysis

Qualitative research comes with challenges when it comes to analysing the collected data due to the fact that there is “no widely accepted rules about how qualitative data should be analysed” (Gray, 2017, p. 686). Researcher therefore turned to literature for guidance. O’Leary (2017) lists five important steps of reflective qualitative analysis: ‘(1) organise the raw data; (2) enter and code that data; (3) search for meaning through thematic analysis; (4) interpret meaning; (5) draw conclusions’ (p. 325). O’Leary continues that it is important to keep in mind during the analysis process all aspects of the project (e.g. aims and objectives, constraints, theory etc.).

Brown and Clark (2006) argue that thematic analysis is a very useful tool for extracting rich data with clearly highlighted themes and patterns. Although flexible, it allows systematic data analysis. Authors list phases of thematic analysis and those are presented in table 3.2.

Table 3.2 - Phases of Thematic Analysis (Source: Brown and Clarke, 2006, p. 87)

	Phase	Description of the Process
1	Familiarizing yourself with your data	Transcribing data (if necessary), reading and re-reading the data, noting down initial ideas
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
3	Searching for themes	Collating codes into potential themes, gathering all data relevant to each potential theme
4	Reviewing themes	Checking if the themes work in relation to the coded

		extracts (Level 1) and the entire data set (Level 2), generating a thematic 'map' of the analysis
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
6	Producing the report	The final opportunity for analysis. Selection of 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

It became quite clear to the researcher from the outset, that transcribing interview recordings herself, although extremely time consuming process, will benefit the data analysis as the transcribing process will greatly increase researcher's familiarity with the data. Once the data was transcribed and ready for analysis, reading and re-reading all transcripts, including manual analysis by highlighting or underlying text with different colours formed an important part of the analysis process. Those steps assisted in open (and line by line) coding process (see Appendix Five for visual representation) which involved organising segments of data into categories (Creswell, 2012) which then allowed to look for emerging themes. This was a time consuming process as the researcher needed to manage subjectivities, which involved repeating the process of revising themes a couple of times. The line by line coding method was chosen in order to ensure that all important aspects are captured. The researcher also decided to compare her coding approach of one of the interviews to this of a colleague (not linked with the study) in order to ensure consistency in approach for the rest of

the data. Because some open codes were very similar, it was important to group them together into categories (as previously mentioned), which assisted with deciding on the themes. The structure of the interview questions inspired by the literature review resulted in early emergence of some strong themes (e.g. Motivators or Coping and Wellbeing). At the same time, some sub-themes (e.g. Community, Work-Life Balance and Self-Awareness) were generated by the data from interviews. The themes' selection was influenced by their significance (Braun & Clarke, 2006) bearing in mind the research question throughout the process. Although the author indicated few more initial themes, it became clear that some main themes overlapped. Therefore, it became necessary to merge some of them and also to create subthemes in order to highlight some important aspects of the data (e.g. Support Services as a main theme, with Academic and Non-Academic support services as sub-themes due to the high importance of both categories to the study participants).

The next stage is to report the findings of this study (Chapter Four) bearing in mind ethical considerations and responsibility in providing a valid data report and respecting participants' confidentiality at the same time.

3.7 The Importance of Credibility Indicators

The quality and credibility of research depends on consistency in method implementation process (O'Leary, 2017). Lincoln and Guba as cited by Yilmaz (2013, p.320) argue that quantitative and qualitative research differ in their approach, therefore the concepts of those approaches in terms of the level to which they are

reliable and valid must be described differently. Lincoln and Guba (cited in Yilmaz, 2013, p. 320) list and explain the main qualitative approach indicators that present the level of rigour of qualitative research and those are: credibility (study participants find the outcome of the research credible or true), transferability (findings are transferable to another similar settings), dependability (clearly explained and identified audit trail) and confirmability (analysis done based on the findings of the collected data and exposed to an auditing process). Corbin and Strauss (2008) summarise that in order to ensure research quality, researchers must have a good methodological and research processes knowledge and their methodology must be consistent. The purpose of the research project should be clearly explained. Researchers should be hardworking, open to new ideas and creative. Authors should be above all aware of the impact that assumptions and bias can have on their study. They should also maintain sensitivity for the data and for the participants.

Every effort was made to ensure dependability in this study, by using systematic and well documented methods. Although this study cannot be applied to the general population due to the size of the sample, it is transferable into similar settings (e.g. another institution delivering PhD programmes for full time, self-directed doctoral students). Researcher was very conscious of the importance of the dependability indicator therefore, each step of the process is explained and documented. Data analysis was done using only findings from the data collected and put through some auditing processes (e.g. managing subjectivities, engaging independent person to assist with assessing of the coding process). Full attention was also given to ethicality by strictly following code of practice and avoiding any unethical processes.

Managing subjectivities was on researcher's mind in particular during the entire data collection and analysis process. Author decided to transcribe the interview data herself in order to become very familiar with the data which helped during the analysis stage, as it allowed to recall more important details from the interviews, it allowed to reconnect with the data, highly increased data familiarity and allowed for more careful and detailed analysis of this rich data. It was important to take breaks during analysis, to come back to the data with clear mind in order to ensure objective approach. One of the interviews was double coded by the author and a colleague who was unfamiliar with the study in order to check researcher's approach. Although there were minor differences in the way both parties phrased or named their codes, it was interesting to see that the majority of codes had the same core meaning. Both parties discussed the minor differences in coding, agreeing that they did not have a significant impact on further data analysis. The researcher was very aware of probable influences of researcher's subjectivity as a potential limitation of qualitative research (Gray, 2017), therefore the author aimed to remain objective at every stage of the process.

3.8 Ethical Considerations

The importance of ethical considerations in qualitative approach cannot be underestimated. Orb et al. (2000) highlight the importance of the research design, relationships between the researcher and participants, and researcher interpretations of data, which could potentially be subjective. Awareness of potential ethical issues is vital for data collection, as it is easy to lose participants' trust. Researchers must

ensure confidentiality, anonymity, ensure protection from harm, gain consent prior to data collection and reassurance of a right to withdraw from the process at any stage. Orb et al. (2000) confirm the main ethical principles, which are: autonomy, beneficence and justice. The main ethical consideration and a major concern for this research project was the anonymity of participants and ensuring that their privacy was kept. There was a high possibility that the information provided by the volunteers might potentially include their family members, colleagues, supervisors, university staff, some policies or even entire departments. It became apparent therefore that protecting their identities was extremely important for two reasons: to encourage and support openness and disclosure, and to protect the participants from any possible adverse effects. Every effort was made to ensure anonymity, e.g. participation was on volunteer basis only; interviews took place at a date, time and place convenient to each participant; consent forms and recordings (only indicators of students' identity) were locked at researcher's place of residence; during the process of transcribing and data analysis any content that could identify participants was initialled or removed. The entire study was designed taking into consideration research ethics policies, and only commenced once the Research Ethics Approval was granted by the National College of Ireland's Research Ethics Committee. Before the process started, the researcher secured approval from the school's Associate Dean of Research to conduct this study. Appointment of a Gatekeeper was quite important due to the fact that the researcher provided administrative support to PhD students in the past, therefore it was vital that the Gatekeeper was responsible for the recruitment of participants on behalf of the researcher to avoid any risk of the sample group feeling 'pressurised' to

participate. Full disclosure of all details related to this study was provided to participants in advance in a form of invitation email, consent form, Invitation of Participation and Study Participation Information Sheet (Appendices 1 to 3). All those documents explained the background and purpose for the study, confirmed the participants' profile, stated that the research is on volunteer basis only and ensured right to withdrawal at any stage. Opportunity to seek clarification and ask questions was provided at each stage. The structure of the data collection was explained (face-to-face, semi structured interviews with a duration between 40-60 minutes) and each participant was reassured of their anonymity. Volunteers were asked in advance for permission to record their interview and to use any of their anonymised data for the purpose of this thesis and any associated publications. Appointment of the Gatekeeper was part of the researcher's efforts to maintain high level of professionalism during the process. Researcher's awareness of being an employee for the same company meant additional efforts for maintaining very professional and not overly friendly atmosphere during the entire process. The researcher was very aware of the need for additional layers of reassurance that the process is fully confidential, and it has not been taken for granted at any stage that all participants, being researchers themselves, were very aware of ethical considerations involved in research projects. It was made very clear to all participants that the only reason for this research project is to fulfil the thesis requirement for this Master's programme. The researcher felt that maintaining professional and trustworthy atmosphere while managing subjectivities at the same time will allow for rapport building and will encourage participants to openly share their perspectives during the interview.

3.9 Limitations

Researchers using qualitative approach are seeking to understand the phenomenon from the participants' perspective. This forces them to become an integral part of the process. With researcher involved in the process, managing subjectivities could sometimes be challenging although full awareness of the issue played a vital part in efforts to reduce them to a minimum. The author was also aware that it is often difficult not to have certain expectations or even some pre-conceptions during data collection and data analysis. The author also acknowledges limitations with the study sample as there was a limited mix across different levels – most volunteering participants are close towards the finishing line. This did not allow getting the perspective of students that are in year one of their studies.

It is also worth mentioning that all participants receive scholarships so the study does not include feedback from self-funding full time PhD students, although this aspect was out of researcher's control as all participants volunteered to part take in this study. It is a coincidence that all volunteering participants receive some form of a scholarship.

The author also highlights that the small sample size (although not unusual in qualitative approach) comes from a single institution, which can prevent generalisability (O'Leary, 2017).

As interviews are time consuming, this form of data collection may have discouraged some stressed and busy students from participating (especially those at early stages of their study) therefore mixed methods approach may have potentially provided a

better range of participants. For example, an initial questionnaire may have provided a better insight to the levels of stress and associated triggers at each stage of the programme or whether there is a link between stress levels and gender or nationality. Such initial quantitative approach could form a base for more in-depth enquiry with qualitative methods.

Although the author is satisfied that the findings are accurate and fully represent the views expressed by the study participants, the researcher acknowledges the absence of participants' validation of the findings as a strong limitation of this research - the timeline for the project completion did not make it possible. Participants' validation of findings would have involved them reading their own transcribed interviews in order to confirm whether the text represents a true value, whether conclusions are correct (O'Leary, 2017) and, where necessary, refine researcher's understanding.

3.10 Conclusions

This chapter outlined the methodology chosen by the researcher and various stages in this research process. The author's aim was to explore challenges of self-directed business doctoral students. In order to get a deeper understanding of the data, the researcher trusted that a qualitative approach is the best method in this case as it facilitates deep exploration into social complexities, belief systems and experiences. The next chapter will present discussion of the findings.

CHAPTER FOUR: FINDINGS

4.1 Introduction

This chapter contains the findings based on data from eight interviews collected for the purpose of this research. The interviews were conducted with volunteering full time business doctoral students. Direct quotes are used throughout this chapter. Those quotes are selected to represent an example of a common issue. Where a quote relates to stand alone or individualised view, this is highlighted in the narrative. In order to preserve participants' identities, their names were replaced by pseudonyms. This study's purpose is to explore challenges of doctoral students, their coping strategies and whether the support services available to them are sufficient. The findings have been grouped under themes that emerged from an analysis of the data and some influence of the literature review. In order to capture the richness of the data, sub themes were allocated to each theme and both groups are visually presented in table 4.1.

Table 4.1: Visual presentation of themes and subthemes (total participants n=10)

THEMES	SUBTHEMES
1. Motivators	Intrinsic and Extrinsic
2. Challenges / Pressures	Common Challenges Individual Challenges
3. Coping and Wellbeing	Mental & Physical Health Work-Life Balance and Self-Awareness
4. Support Services	Academic Support Services

	Non-academic Support Services (Different for PhDs)
5. PhD Experience	Bittersweet Community

4.2 Theme One: Motivators

This theme emerged from the literature review as motivation plays an important part in retention of students. Literature review indicates that there are many potential factors that can negatively impact students' motivation (Muszynski, 1988). This study's findings indicate that students are initially mainly motivated by intrinsic factors (only one student was initially mainly motivated by extrinsic factor). Intrinsic motivation indicates that the individual's interest and desire are the main causes for their actions. Extrinsically motivated individuals on the other hand act as a result of factors or reasons outside of their internal drives, for example, to receive a reward or out of fear of failure or punishment (Ryan and Deci, 2000). The reasons for highlighting both types of factors when discussing PhD students' motivators is the transition from initial intrinsic factors into extrinsic factors as indicated by the findings. Although it is not easy to establish without deeper enquiry (or a research study designed to uncover this particular phenomena) whether students' motivation to start their PhD study was entirely influenced by only intrinsic or only extrinsic factors (or both), the researcher based her assessment of the types of the initial motivators on students' response to a related interview question in conjunction with a literature around this topic (Ryan and Deci, 2000). Further analysis of the data allowed to note emerging trends of changes to the types of motivators after a year or two of the programme.

Examples of intrinsic motivators highlighted by the data are aligned with the literature review and included love for research, discovering new knowledge, fascination with research and its flexibility. One of the students indicated that he had *“no kind of desire to get the title of ‘Doctor’”* (Owen). That his main motivation for starting the PhD was the actual process and his love for research. Another student confirmed that he has multiple degrees. He always liked to study: *“It is like I’m curious and I need my mind to be stimulated”* (John). It is worth mentioning that the main intrinsic motivators were also closely linked with the enjoyment factor. Students indicated that freedom, flexibility, learning, autonomy and the excitement of discovery of new knowledge were the main enjoyment factors of the PhD process.

Extrinsic motivators also surfaced as the initial motivators for one student: *“It was not an entirely planned decision”* as it was influenced by her Master’s supervisor. Wendy explained:

“He was still grading my Master’s thesis so I should not say ‘No’ at this point” (to his suggestions to explore the PhD option more). *“But if the seed came from myself, then, I think, it would be a little bit easier to power through and have the persistence”*

Extrinsic motivators, although not main or an initial influencer to start a PhD for most students, started surfacing eventually throughout the process:

“I’m not a quitter... you know what I mean. So once I started it there was no other way than also finishing it.” (Wendy)

“You can’t just quit half way, like... If you don’t have to, if you are capable, you have to keep going. You know?” (Stephen)

“Where did you go?’ ‘Oh, I started a PhD and I failed’... [laugh]... No – that will not be my legacy!” (Monica)

The importance of highlighting this phenomenon in the context of this research question, especially as 88% of participants are affected by it, is confirmed by Schafer (1996) who claims that fear of failure is “...perfectly natural and can help motivate you to prepare and perform well. Sometimes, however, fear of failure becomes so extreme that it creates unnecessary emotional and physical distress” (p. 555). The fear of failure is a strong extrinsic motivator (according to Ryan and Deci, 2000), which affected a significant number of participants.

4.3 Theme Two: Challenges / Pressures

Research indicates that conducting a PhD is a very stressful process (e.g. Deasy et al., 2014; Pyhältö et al., 2012). Exploring challenges of self-directed business doctoral students was the main focus for this study therefore the ‘challenges / pressures’ theme emerged quite strongly throughout the data. The findings indicate that some challenges were common for most PhD students but there were also challenges that were very different to every individual (depending on their personal circumstances or background), which links with both, the ecological framework and transactional model of stress, discussed in chapter two. Additionally, students also quite strongly indicated managing expectations and relationships, together with some aspects of communication about the pressures they feel under as strong challenges.

4.3.1 Common Challenges

Literature review (chapter two) has indicated that there are common challenges that may apply to the majority of students. The main challenges were grouped as: financial pressures, challenges with supervisor, imposter syndrome, loneliness and isolation, career uncertainty. The researcher decided to explore further whether the study findings will confirm the applicability of those groups of challenges to this particular sample. Two additional aspects that emerged from the data are managing expectations and relationships, and communication about challenges. Let's take a look at each of those factors:

Financial Pressures

All volunteers are recipients of different scholarships and are full time students. The value of a scholarship that each participant receives cannot be indicated due to additional information that can possibly reveal participants' identities. Three out of eight students have indicated that they don't have financial pressures as they are able to manage with what they have, but the other five students highlighted financial pressure as a serious challenge.

"Oh, God. Yeah! Financial pressures – yeah, that's difficult. That's very hard. (...) Now, I'm very lucky. I have a full funding but it is still, you know... pittance. (...) I find it difficult not having money" (Stephen)

Four out of eight students mentioned challenges related to securing accommodation in Dublin. Sam highlighted the fact that students studying in Dublin do not get any

extra allowances considering that the government scholarship is the same across the country but it is cheaper to study and live outside of Dublin.

“Financial pressures are real and the most dominant ones... (...) How can you live on this salary in Dublin? Tell me... How can I rent an apartment...? I was denied the accommodation here on campus. (...) If I would be offered it now [scholarship], I wouldn't do it... Back in the day I was just naïve I suppose but now I wouldn't do it for a scholarship...” (Sam)

Four mature students also felt a pressure of being at a certain stage of their life where they should be saving but they cannot do that from their scholarships.

“It is not enough because I'm at a point in my life... there are things that I need to do that I can't afford to do, like even travelling back home... I have to start saving in January to afford ticket in December (...)” (Monica)

Two students indicated that finances are not their biggest pressure (although personal circumstances of those students cannot be highlighted at this point to preserve participants' identities).

“The money is crap but it's enough to get by... Or for me it is enough to get by... The lifestyle I lead is not very extravagant” (Owen)

The findings in relation to financial pressures are in line with previous research (e.g. Schafer, 1996; Robotham, 2008) indicating that stress related to finances can have a negative impact on students and can cause additional strains associated with studying.

Challenges with Supervisors

Seven out of eight students indicated challenges associated with their relationship with their supervisor(s). Significant amount of previous research that relates to PhD students (e.g. Barnes, Williams & Archer, 2010; McAlpine & Amundsen, 2012) indicates this factor as one of the most challenging aspects of the PhD journey. Managing relationships in general may be quite challenging in some cases, but managing relationships with a supervisor involves a particular approach, as indicated by this study's findings. In most cases, even when the overall relationship is manageable, there are aspects that are very stressful when it comes to student – supervisor relationships.

“Of course it is relationship with different hierarchy that needs to be managed carefully. (...) Just need to be careful how you phrase it so it is a constant challenge that needs to be monitored because obviously you don't want to damage the relationship with your supervisor – it is the most important relationship you have in the PhD” (Wendy)

Most of the volunteers are mature students (aged 30-39), although aware that the relationship with their supervisor(s) must be managed carefully, they struggle with the balance between being mature researchers and subordinates.

“The supervisor thing can be quite tricky... It's very collegial but then it is also a power distance. And it is hard to find that balance. Especially as an older student. It would be a lot easier if were 22 or 23 [years old] and you were used to being subservient. (...) They want to help you, and they might forget that there is the power distance but like, nobody forgets it for too long. And that can be quite frustrating. And the student has to shut up and suck it up at that point. You can't tell them 'Here, hang on a minute, like. You are behaving like this, and now you are behaving like that...' No. That's just how it is.” (Stephen)

“But... actually sometimes I’ve been offered some work or something like that but I said ‘No’ which is quite uncommon as a PhD. People tend to think, because it is a supervisor, you have to agree, and you have to do it. But I always say ‘No’ because internally I’m like ‘I’m a grownup, they are also. I’m not like a child, I’m not at their command or anything” (John)

This part also ties with managing expectations and relationships. Following structured Master’s programmes with clearly defined guidelines, programme structure and deadlines, PhD students are facing lack of regimental structure, some guidelines but often indicated by each individual supervisor and their individualised approaches.

Barbara explains her situation:

“I think it is a grey area in terms of how much is the standard [guidelines in terms of the level of supervisor’s assistance or help], that I don’t think there is a black and white... or line of what is enough... (...) From a bright side, I am an independent researcher after this process”

PhD students often have to figure things out by themselves. This is a challenge for many students as they have to re-evaluate their expectations and manage their relationships in light of this.

“(...) you never learned research etc., or you have done like little research going in to the PhD and you expect to have, like, very strong supervision, but actually this is not what is happening. And this is the case for most people I’ve been talking to in terms of doing a PhD in law, or marketing, or other fields... (...) In the first year we all expect kind of... ammm... clear guidelines (...), we expect our supervisors to be expert in the topic that we want to investigate, neglecting the fact, that at the end of the day we will be more expert than them on a specific question so it is kind of... this is what is tricky when you do a PhD and what is not when you are an undergrad...” (John)

All participants often had a vision about how things are going to be during their PhD.

They had to manage their expectations or disappointment if things did not turn out as expected.

“But I will also learn not to take things at face value. There is always something behind it... always a story that I don’t know. So I will take away the lesson that I need to ask more” (Monica)

“I was very spoilt with the university where I came from and I realise more and more that this is not the case at every university. (...) I was used to very high quality in universities in terms of having the newest of the newest things (...)” (Wendy)

Communication about Challenges

Students felt that although everyone experiences certain challenges at different stages of their PhD, they usually do not share them with colleagues or fellow students “because it keeps up appearances” (Wendy). The researcher did not come across this particular factor during the literature review process highlighted as explicitly as it was done by participants throughout the data. Some of it can be linked to stigma associated with communicating issues in fear of judgement. Most students feel the same way, but few have the courage to communicate this to others.

“People don’t talk about challenges really, so this is great piece of research” (Stephen)

*“Yeah, some of this s*** is hard, so why is everybody pretending that they are great?... and everybody pretends... Just admitting where its hard and what went wrong... How you struggled... It can be really helpful for incoming students to know that stuff... Because nobody told me any of that stuff that I struggled badly with... and you are sitting there, thinking ‘Am I the only one struggling with this?’” (Stephen)*

Wendy always thought she was a good and honest communicator until she was told not to express her doubts so openly.

"I've received this feedback from my supervisor and my partner: 'Don't always tell everybody that you are afraid, just fake through it'. (...) And nobody is being honest about what they struggle with... (Wendy)

Imposter Syndrome

Findings indicate that imposter syndrome is quite common amongst doctorate students, although two out of eight students responded that they do not struggle with this syndrome.

*"No – I could do with a bit of that. (...) imposter syndrome doesn't surface."
(Stephen)*

Third student admitted that although she often has 'doubts' during various stages of the process, she would not necessarily call it an imposter syndrome.

Literature confirms that this syndrome can have a strong and negative impact on students' performance, leading to guilt, anxiety, fear of failure or affecting their academic performance (e.g. Clance & Imes, 1978; Clarence & O'Toole, 1987).

Examples of how the imposter syndrome affects students are as follows:

*"(...) even Professors feel the same... And you just... like... accept that this is natural. And actually, sometimes I started to be worried if I didn't feel like that"
(Anna)*

"Yes, it is quite strong" (Wendy)

“It is very difficult to say ‘I deserve it; I am good enough’ when you look at all the other things that you are failing at. You have too few successes compared to challenges and failures. So imposter syndrome is real. Oh my God, it is so real.” (Monica)

Loneliness and Isolation

Loneliness and isolation does factor as a strong challenge in the findings which is a confirmation of related findings from previous research in this area (e.g. Lovitts & Nelson, 2000; Ali & Kohun, 2007). Students feel that due to the fact that every research they undertake is different, everyone is on different schedules, at different stages so they are on their own with their projects.

“Yes, for sure, because every research is quite unique. (...) It is quite different from other work environments that you work with other people in a team, so... yes, PhD project can be lonely” (Barbara)

“Everyone has a different struggle. That’s what makes it very lonely. Because ‘I can understand what you are going through, but I cannot really understand what you are going through’...” (Monica)

Students often feel that they have no one to talk to about their research or struggles, no one to bounce ideas off or just to think out loud or having a sounding board. They don’t see their supervisor(s) as someone they can do that with.

“Sometimes PhDs are very lonely... so they need somebody to hear them out (...). (...) ‘Because my supervisor always sends me back my work and... I don’t know what is wrong here’ – this is... I hear always the same thing [from new PhDs]” (Anna)

“(...) having a person who can understand or you can share something with them is quite important I would say for this process. (...) I’m a person who thinks while I’m talking so if I talk to someone in terms of my worries or what I have

achieved today, it helps me to form a more constructive thinking, to maybe find a solution or to plan for the next step.” (Barbara)

“Is there something that would help me? Yes. If I had someone to talk to... that I could openly and honestly talk to... (...) like a sounding board (...)” (Monica)

Career Prospects Uncertainty

This factor features as a worry for all PhD students. Increasing pressure to have a teaching experience and publications by the time they graduate is a big challenge (often directly linked to the timelines for finishing the PhD and funding, which is usually only granted for three and a half or four years). Although this issue features in the literature review, it’s profound impact comes from students and established academics watching the current job market and political scene. Increasing minimum requirements of skills and experience (e.g. amount of publications, teaching experience) is not the only factor causing those uncertainties. Due to low academic jobs opportunities in Ireland, the UK was a popular choice for job seeking destination. Although PhD students always worried whether they will be able to secure academic position after completing their PhD, the current Brexit (withdrawal of the United Kingdom from the European Union) scene adds enormous pressure as it is difficult to predict how much will the academic job market be impacted by the changes following Brexit.

“(…) if you don’t publish, you are sure that you won’t have any position and you can’t make your place in academia...You can be a teacher perhaps, or a lecturer, it is ok. But if you want to do research, then you will not get any position if you are not... like... published a little bit. So I think this is common for all PhD students – the pressure of publication”. (John)

“(...) but in terms of publications I Seriously don’t have time (...) and I can’t even apply for post doc without a publication so... I am worried about my tomorrow. No idea what to do... Oh – and I don’t teach. So I have no teaching experience (...).” (Monica)

4.3.2 Individual Challenges

Students confirmed through the findings that even though, from the PhD perspective challenges are very similar to most students as they struggle with topic in year one, methodology in year two, data collection in year three and write up in year four, they believe that each of them have their own additional and individual struggles.

“But my story is different from everyone else’s. Everyone is going through a different struggle, right?” (Monica)

Anna agrees:

“I think all PhDs have their own stress. Some people have more, some people may have less, depends on their personalities and the other things, like... related to their families, other things that are out of your control.”

Those challenges included family or relationships responsibilities, different financial situations, battling health issues, managing a number of stakeholders (especially those students that secured government scholarships), going through family bereavements or trying to move on with their lives outside of the PhD journey (e.g. engagements, marriages, house moves, securing employments). This confirms Bronfenbrenner’s (1979) ecological perspective, and the influence that ecological variables have on each individual’s well-being, mental state and ability to perform at the highest level.

Although most students quite openly discussed their individual challenges, they also appreciate many positive things about their situation. Owen, for example, is very aware, that his situation is quite different from other students and he is very aware of all his advantages:

“Like I said, I get on extremely well with my supervisors. I sometimes do wonder if I’m quite exceptional in that regard (...). And I sometimes wonder if my circumstances were different, if I came from a different country or... I wasn’t so similar in interest and stuff like that to my supervisor, would these things be as easy?”

Monica, even when facing a number of very difficult challenges out of her control, is still able to appreciate what the experience has to offer:

“It has been an awesome experience even with the challenges, even with the frustrations. (...) That experience, that embodiment of the process is exhilarating, it is awesome, Margaret! It is awesome! I have challenges! You know, the only way you grow is if you have challenges.”

4.4 Theme Three: Coping and Wellbeing

The researcher decided that exploring how PhD students cope with the challenges associated with their study and how they maintain their wellbeing was a crucial aspect of this enquiry. Therefore, the topic of coping featured as one of the interview questions which then influenced significant part of the data. Students further indicated strong links between mental and physical health, and work-life balance and self-awareness which became subthemes. Findings indicate that students are doing their best to adapt coping strategies to increase their wellbeing. Although it is

impossible to apply 'one size fits all' approach, findings show that students reach for some common positive coping strategies (e.g. form of exercise or getting outdoors, talking to and spending time with family and friends, engaging with a hobby etc.). Coping strategies can hugely benefit students under long term pressures (as mentioned by e.g. Lazarus & Folkman, 1984; Faasse & Petrie, 2015). Participants did not indicate their current involvement with any negative coping strategies (e.g. smoking, misusing prescription medicine, taking drugs or abusing alcohol intake, overeating etc.).

4.4.1 Mental & Physical Health

Exercise can be seen as a health benefit, but research suggests that it "might also be used as a coping mechanism by some individuals to manage stress and promote psychological health (Ingledeu & McDonagh, 1998 as cited in Thome et al., 2004). Thome et al. (2004) continues that physical exercise not only improves physical health but might also improve psychological wellbeing (p. 339).

Data shows that students often linked their physical health and wellbeing to their mental and emotional state.

"I think it is probably one of the key lessons that I have had from a PhD is that it can take like a hidden physical toll which can also lead to an emotional toll if you are not taking care of your body first and foremost, then the emotional stuff will really rack up (...). So for me, the biggest bit of advice would be 'Look after your body'." (Owen)

Those students who let the stress take over discovered that long hours in the office,

lack of proper diet, physical exercise and lack good sleep often lead to poor mental wellbeing.

“I think you’d get a bit depressed if you wouldn’t get out. I think your mental health would nearly suffer more than your physical health if you weren’t getting out regularly and getting some exercise.” (Stephen)

Students often due to increased pressure had no time to eat well or exercise. Due to poor diet and lack of exercise they often noticed putting on weight – this made them feel even more tired and upset. Lack of sleep caused headaches, decreased concentration and productivity what lead to poor mental wellbeing considering the already strong pressure to deliver parts of projects on time.

“It is like a chain reaction. I’m uncertain, I cannot sleep, then I have insomnia, then I have a headache the next day, which means that I have to work longer to get the same work done. Which means that I cannot go to the gym, so... which means that I have gained weight (...). I had so much satisfaction from it, and this is a huge part that is just missing from my life all together now. Also, the insomnia is a very big issue. It may sound stupid but I am actually through the stress and uncertainty, I’m actually getting a physical heart pain...” (Wendy)

“I didn’t have time to go to the gym, so health went down as well... I got a little bit overweight.” (Sam)

Anna, due to her previous experiences with her Master’s programme learned to maintain her work-life balance, but she noticed her new PhD colleagues falling ill due to stress:

“Because when I watch other people that I work with, they just started their PhD... I find that it is affecting their lives. Their health... especially their health. They start to have different things... and start getting... they go to GP every time and then complain from different pains, in different parts of their body... And I knew this is all from stress.” (Anna)

4.4.2 Work-Life Balance and Self-Awareness

The importance of work-life balance was highlighted by Castelló et al. (2017) who indicated that if students get into difficulties in achieving balance between personal life and academic and professional demands of a doctoral degree (p. 1056), they are likely to consider dropping out from the programme. As majority of the volunteers for this project are towards the end of the programme, they were able to share their perspective on their work-life balance and its importance. Two students went through very difficult Master's journey that taught them to start their PhD with the right work-life balance approach. Both linked their decisions to previous experiences and self-awareness.

"I'm very happy to say that I think... one of my achievements in PhD is to have a balance between my family life and my PhD. (...) I had a terrible experience with Master's. So I learned a lot from that experience" (Anna)

"I don't really sleep much. I need four hours a night so I was going 24/7 basically... I put on 35-40 pounds. Like, I was big, you know? My partner was doing everything in the house at home, I was literally just doing the Master's for 11 months. It went through in July. And... amm... I came out on the other side of it and I was nearly traumatised. I said 'What the hell was that, like. Never, ever do that again'." (Stephen)

Students do not realise at early stages how easy it is to let the PhD take over their lives. They want to perform to the best of their ability and put pressure on themselves to deliver.

"So I would find myself, even though you have more flexibility in your life as a PhD student, you dictate your own hours... I would work more hours, probably because of that. Because I know that this is in my own hands from start to finish" (Owen)

“The whole system is set up to inspire you to work like a dog, 24/7. And it is very difficult to resist that urge, especially when people are getting frustrated with your progress (...). (Stephen)

Most of the other participants learned to keep their work-life balance half way through the PhD, learning on the experiences of the early stages of their programme.

“Maybe others are different, but from my personal experience, I didn’t have time for anything. I had to stay [studying] long hours...I had no free time. (...) If I could leave a note for my past self, I’d say I would certainly do less work – be less busy but more productive. So what I’m doing now what I wasn’t doing before is that I have a cut off time at 5 pm (...) I have my eight hours a day. No matter what stage of work I’m in... That’s it.” (Sam)

“It is just so easy for PhDs to go from 8 hours a day to 9, 10, 14 hours a day and for that to become norm.” (Owen)

“But when you have a relationship or social commitments or stuff like that, then you have to balance things, because you don’t want to neglect the social aspects of your life and... so the pressure is also there – working hard to hit the deadlines but at the same time not so hard that it affects negatively your family life or work life balance” (John)

The findings are in line with Brill et al.’s (2014) reports that time management is very important to students’ success and that balancing life commitments and time management are very challenging for PhD students.

4.5 Theme Four: Support Services

Although the student–supervisor relationship is very important to ensure successful completion of the programme, Monsour & Corman (1991) argue that doctoral candidates require support beyond what the supervisor(s) can offer. Social networks

and supportive programmes play a significant part in students' transition from structured study into self-directed study (Ali & Kohun, 2007). Influenced by the literature review to incorporate it as an interview question for data collection, the researcher realised that the aspect of support services kept emerging throughout the entire data therefore it became an important theme. Findings show that most interviewed students were not aware of the full range of support services available to them on the campus. They either did not look for those support services or found that those that are currently available do not meet their needs. All eight students admitted that support services should be different to PhD students from other postgraduate or undergraduate students' services because PhD students have different challenges; they have a fundamentally different university experience; most doctoral students are at different stages of their lives (than other university students). It was difficult to highlight all the support services mentioned by the students under one theme because it became apparent that students put a lot of emphasis on the academic side of support services which had a more profound impact on their studies. But participants also highlighted the importance of non-academic support services that they also highly value.

4.5.1 Academic Support Services

Students felt that there should be some form of personal academic support available to them (especially at the early stages of their research project). Even though they are attending modules, workshops, writing support classes in this university and other

universities, they argued that often there is not enough guidance provided and it takes a lot of time to figure things out by themselves.

“(...) I think maybe academic support, because I find a lot of PhDs, especially the new ones are always asking ‘If there is somebody I can sit with (...) because my supervisor always just sends me back work and ... I don’t know what is wrong here’ – I hear always the same thing. And I wish when I started there was somebody that could help.” (Anna)

“And... ammm... again... lucky me – I had one very good friend whom I... maybe even somehow consider my early stage PhD mentor who was a student himself at the time, who supported me a lot with this, but it was luck, pure luck that he knew where to look, that he knew... (...) [without his help] I probably would have made very different methodological decisions which would have impacted my studies negatively.” (Wendy)

4.5.2 Non-academic Support Services

As previously mentioned, students believe that support services (including non-academic support) should be different for them. PhD students cannot avail of most social events organised by the University:

“We don’t live a party life at the university. (...) You, kind of, have to keep a little bit of distance on campus to younger students, because they could always end up being your students.” (Wendy)

“PhD students (...) are in a bit of a twilight zone between being a student and a member of staff, and the students’ union I think operates at... sort of closer to student end of that spectrum. (...) I guess given the challenges that we face – absolutely, yeah. The support structure needs to be a little bit different for PhD students.” (Owen)

Some students indicated that even if there are support services across the university, students often don’t know where to look for such services. Sam suggested that there should be a way to communicate those services to PhD students:

“What I would like to see is maybe like a portal for PhD students with a more streamline version of those things... maybe some sort of: ‘Those are the services that you can avail of as a PhD student’... ‘Those are the services that you can avail of on the campus...’” (Sam)

“So when you know where to look, the systems are there (...). And if you’ve a nervous disposition you may never find that out... You could’ve a very hard time. You wouldn’t be looking for help” (Stephen)

PhD students on low scholarships would appreciate additional support that would allow them to look after their physical activity. Sam explains:

“I would rather see as an optional maybe a package that I can get cheaper access to the gym... maybe tax free or something like that... that would actually be great.”

4.6 Theme Five: PhD Experience

This fifth theme was created to highlight the importance of participants’ perception of their experience during their studies which resulted from the data coding process. Which is linked with previous research, in particular with Pyhältö et al. (2009) who argued that it is vital to gather students’ perceptions of their learning environment, as students’ perceptions can be helpful when assessing the PhD education quality. PhD participants admitted that their PhD experience was a mixture of positive and negative experiences. Some students admitted that the PhD has changed them, their views and perspectives on many things. Two strong themes emerged from questions about their experience: fact that it was or still is a bittersweet experience, and the fact that the work community or the networking community is underdeveloped in this particular school in their opinion. Those two subthemes are described below.

4.6.1 Bittersweet

For most students, the overall experience was a bittersweet process, challenging and very hard at times, but filled with positive events and sense of achievement. Even though some may think that this is quite normal, that there are mixed emotions about some experiences due to the fact that every individual is different and perceives things differently, it is important to add, that factors impacting students' physical and mental wellbeing (as highlighted by previous research) should be a priority issue for educational institutions due to increasing requirements for counselling services among students (Kitzrow, 2003). Although it may not be possible to exclude all negative factors from a student's experience, educational institutions should increase their efforts in reducing them as much as possible.

Another point worth noting is that students motivated by intrinsic factors (as indicated by their responses) were more likely to express positive sides of their experience ("*I would start another PhD next year.*" (Owen)) but those students that have started their programme motivated by extrinsic motivators were likely to see it as a negative experience ("*Probably not so good to be honest.*" (Wendy)).

For most students, although rewarding, it was extremely challenging process:

"I think the PhD was the hardest thing I've done." (Sam)

"It is a difficult thing to do! (...) I mean, it is hard, but you know... there are things out there that will make you realise what real stress is..." (Stephen)

4.6.2 Community

This subtheme kept emerging from the data as of particular importance to participants. Stubb et al. (2011) confirms the vitality of “dynamic interplay between the individual and their environment” (p. 47) that scholarly community can foster, as an important part of “socio-psychological well-being”. Authors indicate that PhD students should be accepted as part of the community and recognised as new knowledge creators. A number of factors affected students’ perception in relation to the way the research community operates within the school. Students felt isolated from the school’s community as the biggest office with majority of PhD students is in another building due to space shortage in the school.

“Well, they put us over in the call centre, that is what they call that office over there (...) [laugh]. And we all feel very excluded over there. We are not part of the business school family at all.” (Stephen)

Although a number of students very positively spoke about the ‘Buddy’ system for incoming students, which allowed for better integration with the PhD student community in their year one (*“As a new student it is really difficult if you don’t have something to hold on to, that’s why thank God for the ‘Buddy’ programme” (Monica)*), students did not feel integrated with the school’s academic community. They felt that there were no opportunities (except for annual doctoral colloquium) to discuss their research with academic colleagues (other than their supervisory panel) and get some feedback.

“Although one thing that is, I think, lacking is... the lack of community. So I wouldn't say lack of community in terms of making friends (...). But I would say community in terms of work community.” (John)

“I think this is a problem that whole academia, many universities share... Is the non-integration of PhD students with staff (...)” (Wendy)

Due to a low number of such activities and small number of networking opportunities, students felt that there were limited opportunities for research collaborations within the school. Students argued that they have no idea what other researchers are working on due to lack of communication about each other's research engagements.

4.7 Conclusions

The findings evidently reveal that doctoral candidates face many challenges during their PhD journey. Some of them have a profound impact on their physical and mental wellbeing, and those affect students' study performance and learning experience. The importance of this outcome is supported by previous research (e.g. Cornaglia et al., 2015) which indicates that 'mental distress is strongly associated with poor educational outcomes and early drop-outs' (p. 9), hence the highlighted importance of this issue. The next chapter will discuss the theoretical implications of these findings and their relevance in relation to previous research and literature and provide recommendations aimed at enhancing positive study experience and supporting high completion rates.

CHAPTER FIVE: DISCUSSION AND RECOMMENDATIONS

5.1 Introduction

Juniper et al. (2012) highlight that “universities are increasingly viewed as important drivers of economic growth” (p. 573). Therefore, improving PhD researchers’ experience and optimising the research environment should be an important aspect to Higher Education Institutions. The main objective of this study was to explore challenges of self-directed business doctoral students and to create a better understanding and awareness of the impact that PhD-related stressors and pressures have on students’ lives and their educational experience. In order to achieve this aim, volunteering full time doctoral candidates participated in face-to-face interviews sharing their experiences for the purpose of this research. An overview of the findings from chapter four is evaluated and assessed taking into consideration leading theory in this area. This chapter also covers theoretical contributions of this study.

5.2 Summary of Main Findings

The findings from this research study reveal that majority of volunteers (seven out of eight) were motivated to commence their PhD programme by intrinsic motivators (e.g. love for research and discovering new knowledge, intellectual stimulation), which resulted in higher enjoyment of the process. One of the interview questions specifically concentrated on the aspect of motivation, as motivation strongly features

in a number of research studies involving PhD students. Although extrinsic factors motivated only one of the students to commence the PhD studies, those extrinsic factors started to surface for majority of the students into year two or three of their PhD journey. The main extrinsic motivator was the fear of failure. As this type of extrinsic motivator affects nearly all participants at this stage of their studies, it is important to note that extreme fear of failure can cause physical and emotional distress (Schafer, 1996).

Students openly talked about their challenges and although they were able to indicate common challenges that affected majority of them, they also highlighted that a lot of pressures or challenges they are experiencing are very individual to them, depending on their background, family situation or even personality which ties with Bronfenbrenner's (1979) ecological framework. This framework indicates that each individual is exposed to a range of interacting systems varying in their strength and how they directly impact each individual's development. Although this model was originally intended to understand human development, it has been used in a variety of contexts, especially change and transition context, because of its ability to position experience and individual identity – “the understanding of which requires attention to multiple levels of influence” (Tobbell & O'Donnell, 2013, p.126). This is particularly applicable to early stages of doctoral studies where the transition from previous structured education into independent learning requires interaction with many systems of the ecological model, transitioning and adjusting to new circumstances, policies, relationships. Findings indicate that although students were trying to apply coping strategies to maintain their mental and physical balance, physical activity and

support networks (friends and family) was the most commonly mentioned stress relief and it was often linked with their mental wellbeing. Students also talked about the importance of work-life balance and self-awareness as important strategies for maintaining wellbeing. This data suggests that PhD candidates struggle, especially at early stages of their programme and would appreciate additional academic support (independent to their supervisory panel) which could include for example one to one sessions with an advisor or a mentor (e.g. nominated academic staff member providing additional guidance in a mentoring capacity rather than offering subject expertise advice, as this is the role reserved for the supervisory panel), short workshops designed to provide initial assistance to new doctoral students at early stages of their studies or regular presentations of their PhD progress to other students and academic staff in order to get reassurance or constructive feedback. They also believe that their support strategies should be different from other students' in the university and should be more adjusted to their needs. The overall PhD experience comes across as a mixture of positive and negative experiences and some students named it a bittersweet journey. Some aspects of the programme and their learning experience were great, but students felt quite strongly about not being properly integrated with the rest of the colleagues by being in a separate office and their perception of there being a lack of vibrant and supportive working community in the school.

5.3 Theoretical Implications

5.3.1 Motivators

The findings confirm a clear connection between the initial, intrinsic motivators and enjoyment. The findings indicate a link with the principles of self-determination theory (Deci & Ryan, 1985, 2012). This theory indicates two broader categories of motivation: autonomous (including intrinsic, integrated and identified regulations and associated with positive outcomes) and controlled (including external and introjected regulations and associated with negative outcomes). Findings also confirm outcomes from other existing literature which indicate that increased levels of negative or stressful factors negatively impact on students' motivation (Muszynski, 1988), where positive factors increase students' motivation and levels of enjoyment (Pyhältö et al., 2009).

5.3.2 Challenges / Pressures

In general, participants associated themselves with the triggers of stress as indicated in the literature review. They mentioned financial pressures, challenges related to relationships with their supervisor(s), imposter syndrome, loneliness and isolation and career prospects uncertainty as quite strong pressure points. Interesting findings that emerged from the data indicated that doctoral candidates often had to manage their relationships and re-evaluate their expectations, which usually involves re-establishing perceptions and adjusting to new realities - this links to the ecological framework. It was also surprising to discover that communicating or discussing challenges or struggles with colleagues or fellow students was not something commonly done (this theme did not feature in the literature reviewed by the author although some may

interpret this as a form of stigma associated with feelings of being judged or feeling incompetent).

Although most challenges and pressures are similar in the majority of the PhD students, data has shown that there are challenges that are often very particular to each individual student. Students have highlighted that every person is subject to different circumstances, backgrounds, personality traits (tying to Bronfenbrenner's (1979) ecological framework) – and all this has an impact on their relationship with their environment (indicated by Lazarus, 1966 in his transactional model of stress), and whether they perceive their environment as stressful (highlighted by Ross et al., 1999, Omura, 2007). This research has also confirmed Pyhältö et al.'s (2012) findings that students' perception of difficulties or problems varies.

5.3.3 Coping and Wellbeing

Although scholarly research confirms benefits of coping strategies (Lazarus & Folkman, 1984) or interventions (Faasse & Petrie, 2015), majority of participants involved in this study reached out to physical exercise and networks of friends and families for needed support as the most commonly mentioned coping strategies. Although Kitzrow (2003) argues that the need for counselling services are increasing constantly, only one student mentioned seeking counselling or psychological services as a means of coping with stressors. The findings do not indicate reasons for the low need of counselling support services and do not indicate whether stigma associated with mental stress may be a potential reason for this. Work-life balance and self-awareness on the other hand surfaced as significant factors supporting students in maintaining their mental

and physical wellbeing. Unfortunately, students learned those strategies from their own experience, by going through prolonged periods of stress of being overworked and encountering prolonged stress related side effects (physical, emotional, behavioural and cognitive (Robotham, 2008)). This confirms the importance indicated by previous research of engaging with student stress and understanding students' coping strategies and behaviours in order to support them better (Connor-Smith et al., 2007).

5.3.4 Support Services

We learn from the findings of this research that doctoral students valued more academic support services (but felt their lack) more than non-academic support services (which they did not particularly look for as they believed that the support services available to them on the campus did not necessarily meet their needs). This ties with Vermunt & Verloop's (1999) theory of constructive and destructive frictions. Very little guidance or support can cause a feeling of helplessness (destructive friction). Students also argued that PhD students' support services should be more tailored to their needs. Which again indicates the need for better understanding doctoral candidates' requirements in order to provide the right support.

5.3.5 PhD Experience

This data confirms that students' experience with the programme is a mixture of positive and negative experiences. Previous literature emphasizes that psychological distress impacts learning negatively (Stallman, 2009) and that "increases in well-being are likely to produce increases in learning" (Seligman et al., 2009) therefore it should

be important to educational providers to introduce strategies that will increase students' well-being and as a result, increases in learning and enjoyment factors associated with the programme and learning experience. Lack of working community and integration with staff came across as a strong factor affecting students' learning and PhD experience. Students felt isolated, with very low opportunities for networking or research collaboration with the academic community. Previous literature confirms that the main context of PhD students learning is indeed scholarly community. Hakanen et al. (2006) confirm that students should feel that they are important and valued members of the academic community as this is vital for their ongoing growth as researchers in their journey of continuous meaning making. Other research (e.g. Pyhältö et al., 2009) confirm a link between well-being and the learning environment. Those who felt valued as members of the scholarly community experienced the healthiest environment.

5.4 Theoretical Contribution

This relativist study provides empirical evidence that a number of factors may potentially negatively impact PhD students study experience. It also enriches our understanding of challenges that PhD students face, what is important to them and what they see as problematic. It also contributes to the existing literature by increasing awareness of individuality and uniqueness of each PhD student's journey. It provides evidence that existing systems or strategies need to be adjusted in order to provide a better support for doctoral candidates, and ensure better learning

experience and better physical and mental well-being. It is also hoped that this study will spark discussions and activity in educational bodies around mental health and wellbeing of postgraduate researchers and how to increase levels of enjoyment and benefits from their learning.

5.5 Recommendations

The outcomes of this study clearly indicate that doctoral candidates struggle with a number of factors that either do or potentially can impact on their mental and physical health and well-being. Therefore, the importance of support services, designed and implemented with PhD students in mind in order to provide them with a safe and supportive environment in which they can experience growth and positive learning experience, cannot be underestimated. Although there are well developed support services available at this particular university for all cohorts of students, this study indicates that PhD students do not see those services as relevant to them or availability of those supports are not effectively communicated to them. Taking into consideration this study's findings, the author includes recommendations for Higher Education Institutions issued by Metcalfe et al. (2018), and proposes recommendations for the participants' institution. When considering recommendations for educational institutions, it is important to take a look at a broader framework, hence the reference to the Metcalfe et al.'s report. This report was published in 2018 in the UK and presents the findings of a project which was intended to improve readers' knowledge and understanding about postgraduate

researchers' wellbeing and mental health. As there is no Irish equivalent for this report or its recommendations, the researcher decided to use this reference to highlight the complexity of the issue. This report confirms increases in demand for mental health services in higher education, highlighting at the same time that there is less knowledge or awareness of postgraduate researchers' wellbeing and mental health issues. This report is directed at Research England and Higher Education Institutions (HEIs) and states a number of recommendations / interventions that should be undertaken to ensure supportive and healthy environment for postgraduate researchers.

Although the report also includes recommendations for UK Research and Innovation (and other stakeholders)⁴, it provides recommendations for Higher Education Institutions which are particularly relevant and potentially transferrable into the Irish context. The report refers to the Universities UK for Mental Health framework which can be found in Appendix Six.

Metcalfe et al.'s (2018, p. 4) Report Recommendations for Higher Education Institutions:

- Higher Education Institutions (HEIs) should develop institutional strategies to support the wellbeing and mental health of Postgraduate Researchers (PGRs) based on the UK Mental Health framework (see Appendix Six).
- HEIs should develop robust procedures for monitoring supervisory relationships and providing timely, transparent and fair mechanisms for dealing with supervisory issues.

⁴ <https://re.ukri.org/documents/2018/mental-health-report/>

- Supervisors, and postgraduate tutors should be trained, supported and recognised for their role in the identification and early intervention in wellbeing and mental health issues of their PGRs.
- As part of their strategic plan for PGR wellbeing, HEIs should develop communication strategies to promote points of entry into student support services specifically to PGRs.
- As part of their strategic plan for PGR wellbeing, HEIs should monitor the extent of mental health issues for PGRs and demand for associated services.
- HEIs need to consider how they resource their student support services and other relevant departments to support the wellbeing and mental health of PGRs, particularly activities aimed at prevention and early intervention.

Although most of those recommendations are more or less transferable to the Irish context, they highlight a need for similar mental health frameworks based on Irish institutions. The Higher Education Authority (HEA) is responsible for ensuring the quality of doctoral education. Higher Education Institutions are implementing the National Framework for Doctoral Education⁵ and the National policy statement on Ensuring Research Integrity in Ireland⁶ but there seem to be a lack of a current focus among their publications on mental health of doctoral candidates or early stage researchers, which, according to previous research, is vital in ensuring low attrition rates, which ‘come with significant social, institutional and personal costs’ (Cantwell et al., 2012, p. 68). Ali & Kohun (2006) and Hadijoannou et al. (2007) argue that the

⁵ https://hea.ie/assets/uploads/2017/04/national_framework_for_doctoral_education_0.pdf

⁶ <https://hea.ie/assets/uploads/2017/04/National-Policy-Statement-on-Ensuring-Research-Integrity-in-Ireland-2014.pdf>

doctoral programme is very different to the experience of any other programmes students have undertaken, due to much higher intellectual challenges, conducting individual research that requires original contribution to knowledge and much higher psychological demands. Therefore, looking after doctoral candidates' and early stage researchers' mental health and wellbeing should increasingly become a focus for policy makers in Ireland. Although there are many mental health campaigns across Ireland⁷, there seems to be very little focus on mental health in education in the HEA Strategic Plan 2018-2022⁸.

Recommendation for the Faculty:

Recommendation One: development and delivery of workshops specifically designed for PhD students in the area of mental health and wellbeing.

This study's findings indicate the importance of work-life balance and self-awareness as important strategies for maintaining wellbeing. The findings also suggest that PhD candidates struggle, especially at early stages of their programme and would appreciate additional academic support and short workshops designed to provide initial assistance to new doctoral students at early stages of their studies. They also believe that their support strategies should be different from other students' in the university and should be more adjusted to their needs. Although there is a number of different workshops available to all students across the university, PhD candidates

⁷ <https://seechange.ie/> https://www.mentalhealthireland.ie/mhi_campaigns/

⁸ <https://hea.ie/about-us/strategic-plan/>

experience higher workloads than other cohorts therefore relevance is an important factor for them when it comes to selecting time consuming training courses. Even though there is a number of initiatives already in place and a well-developed induction programme for doctorate candidates in year one, the induction takes place over one afternoon and cannot in detail cover relevant aspects of mental and physical wellbeing, although it is suggested that representatives from varied student services departments are present at the induction event to introduce their services to students and encourage engagement. It is therefore recommended that the Graduate Studies Office in conjunction with the Counselling and Student Support Services develop a range of workshops specifically designed with PhD students in mind (challenges awareness workshops; mental and physical wellbeing awareness workshops, including self-awareness and work-life balance; stress and time management workshops). It is also recommended that this project includes conduction of further research into students' support needs, what support services they see as relevant to them and what are the best channels of communicating the availability of those services to PhD candidates. This project would involve resources and financial commitment at University level.

Recommendation Two: designing and implementing a strategy to further develop scholarly community in the faculty.

Findings indicate that PhD students in this particular faculty did not feel as they were part of the scholarly community. The literature review confirms the importance of active integration of PhD students with the academic community in order to promote

students' intellectual stimulation and professional development, and to avoid intellectual and social isolation (e.g. Lovitts & Nelson, 2000; Ali & Kohun, 2007; Pyhältö et al., 2009). Development and changes related to scholarly / working community in academia will need to involve buy-in from senior management and the entire academic community in the faculty, as this change involves strong cultural adjustments, dedication and commitment from all stakeholders. It is proposed that some initiatives may involve quarterly faculty research days where academic staff and doctoral candidates present their current research work or collaborations – such an initiative would increase communication about research activities across the school, enhance learning and feedback opportunity for the students, provide networking opportunities across all academic fields in the school. Other initiatives may involve an invitation of doctoral students to academic group meetings to encourage networking and collaboration.

Recommendation Three: development of holistic communication channel in relation to support services that are available to PhD students.

The findings highlight that there is a need for a purposely designed communication channel that will highlight all health and wellbeing activities and services available to PhD students across all campuses. Participants mentioned that the only way they learn about health and wellbeing workshops or related activities is via email, but due to the volume of emails they receive on a daily basis, often those messages get overlooked or ignored. Having an active and regularly updated communication platform designed for doctoral candidates, covering various aspects of support options, social activities and

discussion forums about mental health stigma could encourage students' engagement and awareness of those aspects.

5.6 Reflection

The entire journey was a tremendous and rewarding learning experience for the author. It allowed a novice researcher to gain a great appreciation for research itself, its role across all dimensions of knowledge and the importance of researchers following the correct procedures and ethical considerations in order to produce credible research.

Although it was very clear to the researcher from the start of this project that qualitative approach will best meet the needs of this enquiry, exploring the data further and considering some limitations of this study sparked a thought of how mixed methodology approach could enhance and enrich this work by introducing another dimension to the data. The main focus was to gather a deep understanding of participants' perspectives and attitudes, and the researcher is pleased that the chosen methods met this expectation. The researcher believes that this study may be of great value to interested stakeholders – although it did not discover ground breaking findings, it definitely highlighted issues that may spark action in the direction of improvements of doctoral candidates' study experience and wellbeing. One of the study participants mentioned that an issue ignored, or not acted on for a long time, becomes a norm, a form of 'that is just the way it is'. It is hoped that this research project will increase awareness of PhD students' challenges, their needs for better

learning experiences and healthy environments which will support their mental and physical well-being.

5.7 Conclusions

The five significant themes emerging from this study's findings were explored in this chapter, in light of the existing theories and research. The findings confirm and contribute to the literature on doctoral candidates' challenges during their PhD studies as well as providing evidence of the relevance of the ecological framework and transactional model of stress. The findings' contribution is also important in terms of future strategies and development required for support services that are available to PhD students and in terms of highlighting the importance of inclusion and importance of working community for the development of doctoral students.

CHAPTER SIX: CONCLUSIONS

6.1 Introduction

The main purpose of this study was to explore and deepen an understanding of the challenges and pressures that doctoral candidates experience during their studies, what coping strategies they adapt and whether they see the available support services as relevant and helpful. This chapter will draw some broad conclusions and identify areas for potential future research.

6.2 Conclusions

This research is a good addition to the other empirical studies in this area, which is the main strength of this study, as there aren't many qualitative enquiries in the area of PhD students' challenges and their impact on students mental and physical health and well-being. Levecque et al. (2017) states that the number of published studies that focus on doctoral students' mental health is limited as most of the research focuses on undergraduate students. They continue that considering the high importance that the mental health issues have on the research policy, "there is an urgent need for systematic empirical data rather than anecdotal information on their prevalence and the organizational policies that are linked to them" (p. 869). The findings contribute to the literature on students' stressors, their coping strategies and their perception on what appropriate support strategies may support them during their studies. The data provides empirical evidence of a need to review support strategies available to PhD students in higher education institutions in order to support their needs and elevate

their learning experience so they can reach their full academic potential. This study also suggests some immediate actions that can improve students' experience in their home institution and suggests future research opportunities in the next part of this chapter. Following the analysis of findings and the discussion of this research, it is evident that the findings support existing literature and research, adding the qualitative dimension to the enquiry of stressors and challenges of PhD candidates.

6.3 Future Research Opportunities

Although the stakeholders' interest in the increasing levels of mental health issues among undergraduate and postgraduate students is rising, there is still a need for further enquiry into levels of stress and their effects on the PhD candidates' learning. Should doctoral candidates not receive help and assistance during their studies, there are high chances that their research careers will be affected due to added pressure after their graduation (e.g. securing employment, workloads, work-life balance etc.). The issue of academic researchers not developing or quitting their research careers due to mental health issues should be a concern for research policy makers, as countries' economic development is dependent on the "nation's scientific advancement and cognitive ability" (Rindermann and Thompson, 2011 as cited in Levecque, 2017, p. 869). This study only took into account full-time doctoral students in the area of business. It may be important to conduct similar studies involving part-time PhD candidates due to large differences in the way they approach their studies. Part-time students are exposed to stronger impact from their ecosystems

(Bronfenbrenner, 1979): mesosystem (where the individual is involved in two or more microsystems, e.g. employment, social life, family), and microsystem (individual's immediate environment, e.g. family, college, friends). Part-time students are usually in a full time employment, trying to balance their studies, full-time job, family life, social life, health and wellbeing and other aspects of their life. Their time management abilities and access to support system in the university vary drastically when compared to full-time doctoral students.

The researcher also believes that undertaking further studies in this area using mixed methods could provide the depth and perspectives that qualitative methods can grant and the level and scale of this problem that the quantitative methods can provide. For example, the quantitative approach could help to distinguish whether different types of services are needed at different stages of the PhD programme in order to support students' varied coping strategies. Larger sample size needed for the quantitative approach could increase generalizability and make more mainstream recommendations.

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APPENDIX 1

Consent Form

Title of Research: 'Understanding stressors of self-directed business doctoral students'

Contact Details of the Researcher: Margaret Galuszynska; email address:
x18158170@student.ncirl.ie

Consent:



I agree to take part in the above study



I confirm that I have read and understood the provided information sheet for this research project and have had the opportunity to ask questions / seek clarification



I understand that my participation is voluntary and that I have a right to withdraw at any time.

Additionally, please select one of the following options:

YES NO

I agree to the interview being audio recorded

YES NO

I agree to the use of my anonymised quotes in a dissertation and publications

Name of Participant:

Date:

Signature:

Preferred contact email address:

Please return your signed form via email to x18158170@student.ncirl.ie or in a hard copy to:
Margaret Galuszynska, DCU Business School, Room Q159, Glasnevin Campus, Dublin 9

APPENDIX 2

Invitation to Participate in Study

Dear PhD Student,

As part of my Master of Arts in Learning and Teaching with National College of Ireland, I am conducting research (for the purpose of my thesis) on stressors of self-directed business doctoral students. This research is being conducted by me in a personal capacity.

I am inviting you to be a part of my study. This study is based on volunteered participation only.

If you accept, you will be asked to attend a face-to-face interview conducted by me (which will last between 45 minutes and 1 hour). The interview will take place at a time and location convenient for you.

With your permission, I would like to audio record the interview and take notes. All collected data will be securely stored (with password protected access on a device used) and destroyed after my Master's degree is completed. Your participation will be fully anonymous and your name will not be documented in any part of the dissertation.

Should you not feel comfortable with some of the questions asked during the interview, and would rather not provide an answer, we will move to the next question. Sample interview question can be provided in advance if required. You are also free to withdraw from the interview at any stage.

If you wish to participate, please read the attached Study Participation Information Leaflet and sign the attached consent form and return it to me at your earliest convenience. Once the consent form is returned to me, I will contact you to arrange the time and date for the interview.

Should you require more details or clarification in relation to any aspects of this process, please do not hesitate to contact me.

Many thanks in advance for your help with this project.

Best Regards,

Margaret Galuszynska
x18158170@student.ncirl.ie

APPENDIX 3

Study Participation Information Leaflet

Provisional Title of Research: 'Understanding stressors of self-directed business doctoral students'

Thank you for considering your participation in this research. Before you decide whether you would like to take part and before you sign the consent form, please take time to read the following information:

What is the purpose of this study?

This research project partially fulfils the thesis requirement for Master of Arts in Learning and Teaching and it aims to explore challenges and factors impacting on doctoral students' performance and their health & wellbeing during their studies. The purpose of this study is to gain insight into the experiences of PhD students in order to better support doctoral study in their institution.

Who is being invited to take part?

Full time self-directed business doctoral students are invited to take part.

Participation in this study is on a voluntary basis and participants have full right to withdraw at any stage without any consequences.

What will the process involve?

A semi-structured face-to-face interview will be arranged with the participant and conducted by the researcher. The interview will last between 45 and 60 minutes at a time and location convenient for the participant.

No one else except the participant and the researcher will be present at this interview, unless the participant would like someone to accompany him/her.

With the participant's permission, the researcher would like to audio record the interview and take hand written notes.

What are the potential risks associated with this study?

Although there are no anticipated risks involved in taking part in this study, should the participant not feel comfortable with some of the questions asked during the interview, and would rather not provide an answer, the interviewer will move to the next question. In case where the interview questions cause distress or upset to the participant, he/she

has a full right to withdraw from the study at any stage and is advised to contact the [Counselling & Personal Development Service \(counselling@dcu.ie\)](mailto:counselling@dcu.ie).

Will this research participation be confidential?

The participant's identity and all information discussed during the interview will remain confidential. Collected data will be coded with a number ID and disclosed only to researcher's supervisor (or examiners (on request only)). All collected data in soft and hard copy will be securely stored (with password-protected access on a device used / locked cabinet in my residence) and destroyed after the completion of the study. Each participation will be fully anonymous and no names will be documented in any part of the dissertation.

Further information

Results of this study's findings will be made available on request following the completion of this project.

Should you require any further details, please do not hesitate to contact:

Margaret Galuszynska
DCU Business School, Room Q159, Glasnevin Campus, Dublin 9
Email address: x18158170@student.ncirl.ie

Thank you for taking time to read this information leaflet.

Best Regards,

Margaret

APPENDIX 4

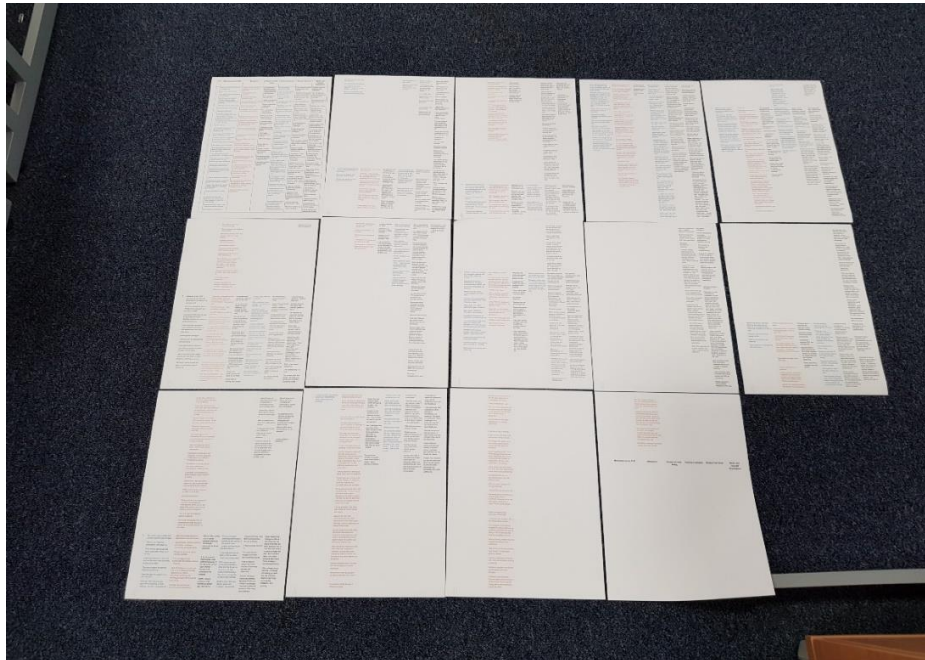
Semi-structured interview questions:

- What is your age bracket: 20-29; 30-39; 40-49; 50-59; 60 & over
- At what stage of your PhD are you? What is your perception of your progress? When do you anticipate completing your studies?
- How are you funding your studies – through employment (FT / PT) or through a scholarship?
- What influenced your decision to start a PhD?
- What do you most enjoy about the PhD journey?
- Are your reasons for starting your PhD the same as those for staying / continuing?
- What are your main pressures or challenges related to your PhD journey? Were they changing at different stages of your studies?
- Would you associate any of the following general factors impacting on your PhD studies:
 - o Financial pressures
 - o Potential challenges associated with relationship with your supervisor
 - o Aggravation caused by imposter syndrome
 - o Loneliness and isolation
 - o Career prospects uncertainty
 - o Other (if any)...
- How the pressures / challenges associated with your PhD studies affected your life?
- Do you think that your challenges / struggles are the same as everyone else's' or are they very particular to you as an individual?
- How do you cope with any potential difficulties or stress related to your studies? What do you think could help you to cope better?
- What do you do to relax from the demands of doing a PhD?
- Are you aware of support services available to PhD students? Have you availed or would you avail of those support options or other supports outside of the university?

- Do you think support strategies should be different for PhD students (comparing to other postgraduate or undergraduate students)? Why?
- At postgraduate level students may experience increased level of challenges in their efforts to manage life demands outside of their studies. What advice would you give your earlier PhD self, considering your experience to date?
- How will you remember your personal study experience during your PhD?
- How will you remember your overall experience with the university and community, during your PhD?

APPENDIX 5

Grouping codes into categories:



Sample of coding (due to data protection regulations and efforts to maintain participant's anonymity, only a sample is suitable for visual representation):

<p>Q: So you liked the process? You liked the research part of it? A: Process.. I mean.. doing things probably.. the way I can do things.. that I have the flexibility and those kind of .. amm.. maybe more the.. how do you say that?.. sorry, I start losing words [laugh]. Probably more the kind of.. achievement that I feel.. that make me feel fulfilling.</p>	<p>Flexibility and achievement, feeling fulfilled.</p>
<p>Q: What do you most enjoy about the PhD journey? A: Amm.. The freedom and the flexibility I think. Just want to do the things I want to do.. Of course within certain conditions [laugh]..</p>	<p>Most enjoys freedom and flexibility</p>
<p>Q: Are your reasons for starting your PhD the same as those for staying / continuing? A: Umm... No, not much.. I don't think so. I think they stayed pretty much the same.</p>	<p>Same reasons for starting PhD and continuing</p>
<p>Q: What are your main pressures or challenges related to your PhD journey? Were they changing at different stages of your studies? A: Well.. I think at different stage I had different challenges for sure. So in the 1st year the challenge was probably something related to amm.. Actually in the 1st year I feel like it was ok. But probably more the challenge would be in the 2nd year when I started collecting data or how do I decide which method I'm going to use, even though I had a method in mind, that I thought it could bring in value to my research, but considering all the constraints and resources that I had I had to give up that one and go with something more feasible and probably less risky as well.. so that was a bit of dilemma to make that decision at that time. I think that was a bit of a challenge to make that decision. And later on.. the challenge</p>	<p>Different challenges for each stage</p> <p>Challenges related to decision making processes - have to take risks</p> <p>Constraints with resources influence decision making process</p>



APPENDIX 6

Appendix 1 Universities UK Framework for Mental Health

A whole university approach to mental health

'Mental health in higher education has multiple determinants and consequences. It constitutes an increasingly complex challenge for leadership, a matrix of risk, regulation, emergent policy and opportunity, arguably no longer susceptible to conventional planning and delegation.

Adoption of a whole university approach requires strong and strategic leadership, engagement of multiple constituencies and partners and sustained prioritisation. It asks universities to reconfigure themselves as health-promoting and supportive environments in support of their core missions of learning, research and social and economic value creation and to embed this across all activities³⁷.



Framework elements

- Leadership
- Data
- Staff
- Prevention
- Early intervention
- Support
- Transitions
- Partnership

1. Leadership

- 1.1. Make mental health a strategic priority
- 1.2. Lead a whole university approach to mental health
- 1.3. Galvanise student and staff support
- 1.4. Allocate resource
- 1.5. Review and share progress

2. Data

- 2.1. Measure baseline need
- 2.3. Deploy evidenced interventions and adopt successful practice
- 2.4. Conduct rigorous and transparent audit of progress
- 2.5. Align learning analytics to student wellbeing
- 2.6. Useful information

3. Staff

- 3.1. Provide training in mental health literacy and health promotion
- 3.2. Allocate time and resource to staff support for student mental health
- 3.3. Align student and staff mental health
- 3.4. Build mental health – and health – into staff performance

³⁷ www.universitiesuk.ac.uk/policy-and-analysis/stepchange/Pages/whole-university-approach.aspx

4. Prevention

- 4.1. Audit and enhance learning, social, physical and digital environments to promote mental health
- 4.2. Promote healthy behaviours
- 4.3. Promote diverse, inclusive and compassionate culture
- 4.4. Provide learning and tools for self-care and positive mental health
- 4.5. Useful links

5. Early intervention

- 5.1. Run campaigns against stigma
- 5.2. Provide mental health literacy training to staff and students
- 5.3. Create intrusive communities of learning and peer support
- 5.5. Useful links

6. Support

- 6.1. Configure range of effective services and evidenced interventions
- 6.2. Ensure effective signposting of support
- 6.3. Ensure that academic policies – adjustments – align with support
- 6.4. Develop a crisis plan
- 6.5. Useful information

7. Transitions

- 7.1. Foreground mental health in discussions with parents, schools and colleges
- 7.2. Enhance intrusive support for students during transition periods
- 7.3. Focus on susceptible or at risk groups during transitions
- 7.4. Discuss mental health with employers
- 7.5. Useful links

8. Partnership

- 8.1. Develop regular high level links with NHS commissioners and services
- 8.2. Third-sector & charities and local communities
- 8.3. Develop local strategies and action plans on student mental health, student suicide
- 8.4. Encourage integration of university support services with local primary care and mental health services
- 8.5. Ensure signposting