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The Routledge Doctoral Student's Companion: Getting to Grips with Research in Education and the Social Sciences

PART III (12 Chapters)

Coming to terms with research practice Riding the Emotional Roller coaster of Doctoral Research Studies

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Abstract

Emotions are an integral part of the doctoral process. A range of emotions are common and to be expected. How do emotions affect the doctoral process for doctoral both students and their supervisors? And how can they be made to work positively for all concerned? This chapter explores the role that emotions play in the doctoral process and how students can benefit from reflecting on this issue. The role of emotions at the beginning, middle and end of a doctoral programme are explored along with some of the emotions that arise from the supervisor/doctoral student relationship.

Introduction

The academic demands and rigours in carrying out doctorate research are clear, or they will become so as doctoral students grapple with the challenge of 'making an original contribution to knowledge'. But what about the emotional ups and downs and challenges that a doctorate programme of study also poses? It is exciting to embark upon research programmes that will result in one of the highest academic qualifications obtainable with the eventual prospect of being able to add the 'Dr' prefix to one's name (or the suffix 'PhD' as some customs have it). This is a typical emotional starting point for many, if not all, doctoral candidates. But candidates can also expect to experience many other emotions directly related to undertaking doctoral research.

This chapter discusses the emotional roller coaster ride that students are likely to experience during their doctoral research. The aim is to focus on the nature and role that emotions play in the doctoral process, and to develop strategies and approaches that can be used to help manage these emotions with the aim of helping students work more successfully towards their goals. Extensive guidance exists on strategies for conducting

doctoral study that are usually outcome oriented; in this study by focusing on 'emotions' we are most concerned with the personal response to doctoral undertakings rather than the research undertakings themselves.

This chapter has its origins in a workshop that the authors (and several others) initiated in 2002. The workshop was designed by three academic staff who had completed their PhDs within the previous six years, along with three doctoral candidates who they were supervising. The students were at various stages in their research, with one in the first year of study, one in the third year and the other within weeks of submitting a thesis for examination. The six participants had varied backgrounds with ages at PhD commencement ranging from 25 to 42, and three males and three females. The PhD topics covered a broad range of disciplines within the environmental science field (including soil science, environmental management of industry, policy analysis, tourism and surveys of visitors to national parks and analysis of their behaviour). All six, however, recognized similarities in their emotional experiences associated with their doctoral studies.

Preparation for this first workshop involved the six 'facilitators' collectively developing and then responding to three self-reflective questions. These were:

1. How would you graph your emotions over the duration of your PhD?
2. What emotions did you experience during your data collection and field work activities? How did you manage/not manage them? How could you have made your emotions work better for you in your data gathering/field work?
3. How did you manage your emotions? Could you have managed them better in hindsight? Who helped you in this management? Who/what could have helped you?

The responses were collated and used to consolidate similarities and discuss solutions and strategies for management of emotions. The workshop included activities, in which participants reflect on the role of emotions in their own doctoral studies, interspersed with presentations in which the facilitators shared their experiences.

This first workshop was well received, and a series of participative workshops with doctoral students and academics followed. At these workshops at least three of the facilitators shared accounts of their personal emotional journey through their doctorate studies and then invited participants to reflect on and share their experiences. It became very apparent from the workshops that doctorate students from all manner of disciplines shared or had similar emotional experiences. A common emotional trajectory with respect to various stages in research programmes began to emerge. These workshops have been run at the Australian Association for Social Research annual conference (Moore *et al.* 2002), the Murdoch University Doctoral Forum (2002, 2004 and 2005), the Murdoch University Environmental Science Doctoral Forum (2004), Teaching and Learning Forum¹ (2003 and 2005; Morrison-Saunders *et al.* 2005) and Council for Australian University Tourism and Hospitality Education conference (Hughes 2009).

¹ the Teaching and Learning Forum is a series of conferences initiated in 1992, held annually in Perth, Australia, by the five Western Australian universities making up the TL Forum partners (see: <http://otl.curtin.edu.au/tlf/tlf-pubs.html>).

This chapter presents the collective findings of the personal reflections of the authors, their learning from the workshops and a literature review. The literature review revealed that while little exists explicitly on the topic of emotions in doctoral research, related material suggests this is an important aspect for achieving success and developing a confident researcher identity. Following a review of literature, presented as 'lessons learned', this chapter explores the emotions associated with the beginning, middle and end of the doctoral studies. The chapter concludes with a suite of approaches for managing emotions that doctoral candidates might personally apply and benefit from during their studies.

Lessons from the literature

The importance of the role of the supervisor, and the student-supervisor relationship has been frequently identified as a key issue in the success of the doctoral process (Cullen *et al.* 1994; Cryer 1997; Graves 1997) and clearly this relationship may have an important emotional dimension to it. Acknowledging some of the psychological and emotional aspects that may be encountered in the doctoral process, such as enthusiasm, isolation, boredom, frustration, anxiety and euphoria, Phillips and Pugh (1994) proposed that part of the supervisor-student relationship should incorporate a helpful psychological 'contract'. Graves (1997) suggested that students should share any worries about their research or other factors that might affect it with their supervisor(s), while Cryer (1997) made a case for supervisors to have some involvement in their students' personal problems. However, he suggested setting limits to time and emotional energy spent, with an awareness of when students should be directed to further professional help.

Denicolo and Pope (1994) noted the solitary but challenging and rewarding nature of doctoral research work, its pressures and conflicts with simultaneous roles the student maintains with associated feelings such as guilt and anger that may arise. They suggested the need for supervisor involvement in addressing such personal issues and concerns throughout their students' candidature. Emotions experienced in the doctoral process may relate to student success with respect to completion rates. For example, West *et al.* (1988) noted maintenance of motivation and enthusiasm rated as one of the greatest problems encountered with the doctoral process in a survey of 26 PhD graduates from Monash University, Australia. In contrast to this Rudd (1985) reported issues such as boredom, disenchantment, laziness and 'work ethic' were considered factors in failure or delays in completion of the PhD in only a small minority of cases.

Some important consideration of the role of emotion in the doctoral process can be found in work on a number of sub-types of anxiety. This includes library and statistics anxiety; the feelings of intimidation, discomfort and/or fear students describe when starting an information search that require using an academic library or use of statistical methods to analyze data sets. Library anxiety has been recognized in undergraduate and postgraduate students (e.g. Onwuegbuzie and Jiao 1998; Jerabek *et al.* 2001). In some cases it may be debilitating to the extent it becomes difficult to write research proposals, a potential stumbling block for continuation of research study (Onwuegbuzie 1997). Some of the research suggests library anxiety may be related to the learning mode preferences of individual students (Onwuegbuzie and Jiao 1998; Jiao and Onwuegbuzie,

1999). It also seems to occur at higher levels for students who perceive that they have to keep up with particular standards or expectations of others (Jiao and Onwuegbuzie 1998). Students who perceive that they have lower levels of scholastic competence, intellectual ability and creativity also tend to have high levels of statistics anxiety (Onwuegbuzie 2000). Much of this work, however, is focused on the characteristics of the learner, rather than on ways of managing emotions.

For a better understanding of the potential role of emotions in the doctoral process, some idea of how the emotions will affect or impact on the student's ability to progress with their research would be useful. The small number of studies into the role of emotions and doctoral students is reflected in understandings of emotions in education more generally. Few studies of the role of emotions on learning, other than of test anxiety and attribution theory, were undertaken prior to the 1990's (Pekrun *et al.* 2002). While test anxiety has long been recognized as being inversely related to performance in certain conditions (Hembree 1988) it is of little relevance to the doctoral situation. Pekrun *et al.* (2002) demonstrated the important but complex roles of both positive (e.g. enjoyment, hope, pride, relief) and negative emotions (e.g. anger, anxiety, hopelessness, shame, and boredom) on motivation and learning in school and undergraduate university students. The emotions related in significant ways to motivation, effort, learning strategy use, self-regulation and academic achievement. The positive emotions, with the exception of relief, were correlated with higher achievement and the negative with lower achievement. Negative emotions were elevated in students who dropped out of their studies compared with those who completed, although the direction of causality could not be implied in the results (Pekrun *et al.* 2002).

Reactions to emotions are often complex and individual. Shame reactions to perceived failure in undergraduate students who did not achieve the result they wanted were found to result in increased motivation and effort in some students, but equal or reduced performance in others (Turner *et al.* 2002). Individual factors relating to esteem, self efficacy, and goal related processes seem to account for differences in individual responses. Individual responses to emotions were also noted by Pekrun *et al.* (2002). For example, some individuals were positively motivated by anxiety while others were negatively motivated. Goals seem to have an important role in emotional responses and emotional regulation as they provide direction, comparison points (e.g. 'Where am I in relation to my goal?') and the need to make judgements about goals within the context of other, perhaps conflicting goals, with the result that emotional responses develop (Schutz and Davis 2000).

Doctoral students, as a cohort, are likely to have different characteristics when compared to school or undergraduate students. They have a proven record of academic achievement and could be expected to have more positive views of self efficacy, be better motivated, and are perhaps also more likely to have self regulatory strategies, learning strategies and strong study skills, compared with cohorts of school or undergraduate students. The links between emotions, goals and motivation described in these recent studies, are likely to be of relevance to the doctoral cohort where motivation and its maintenance are recognized as an issue (West *et al.* 1988).

Emotions experienced during the doctoral process

A PhD is a very individual process; a finding that was repeatedly reiterated in the workshops and which evokes a variety of emotional responses. Since a doctoral candidate is required to make an original contribution to knowledge, this necessitates the candidate conducting a new or unique study of some kind. This virtually ensures that they work largely independently in an individual manner. However, the responses at these workshops, suggested that the emotional states experienced by any individual doctoral candidate are likely to have common themes with those of other doctoral students. During the various occasions that these workshops were presented to doctoral students, many of the participants empathized with the facilitators' experiences and shared similar accounts. The overwhelming feeling in the room was always one of great relief that other doctoral students have experienced similar emotional reactions to the doctoral process: that despite the individuality of a doctoral study, there are common shared experiences and feelings.

Emotions recorded during the doctoral process included: anxiety, boredom, excitement, fear, frustration, elation, satisfaction, loneliness and even what some described as 'slight insanity'. Over the period of candidature each student typically experiences a plethora of emotions with swings from negative to positive and back at varied time scales, described by one participant as an 'emotional roller coaster'. More than one emotion could be experienced simultaneously. It was clear that these highs and lows are a normal part of the doctoral process. The roller coaster can be usefully considered as having early, middle and end phases.

Early phase

Both positive and negative emotional states are evoked at the beginning of the PhD, however positive emotions (including elation and enthusiasm) seem to dominate initially. Initial elation was related to factors such as being accepted as a doctoral candidate, or being awarded a scholarship to undertake PhD studies. Enthusiasm was linked to the challenge and anticipation of undertaking the research in an area that the candidate was interested in and considered relevant and important. Older doctoral candidates, returning to studies following many years (sometimes decades) in the workforce, reported feelings of excitement but at the same time were daunted by fears of returning to study. These fears appeared to be exacerbated when surrounded by younger (and more confident) colleagues and by information and technology related issues (e.g. the sheer volume of literature and information technology skills necessary to access it). One particular 'mature' age student returning to study after a number of years in the workforce made the realization during one workshop that it would be helpful to find a mentor (not necessarily from their discipline area) to help them adapt to and progress through the doctoral process.

Most of the negative emotions recorded in the early phase related to the initial major challenges of the project. Bewilderment and confusion were associated with:

- deciding where to start, especially in tackling the body of literature that needed to be understood and reflected upon;
- focusing on a research area that would be manageable;
- focusing on a project that would make a valuable contribution to the field;

- ensuring that the research will be sufficiently original to fulfil the requirements of a doctorate; and
- determining an approach for the project.

Anxiety could also be recorded in relation to these issues, and the additional concern of establishing a positive working relationship with the supervisor(s).

Although negative emotions were evident in this early phase of the PhD, they are not necessarily problematic at this stage. Emotions can interact in quite complex ways with motivation, goals and performance. According to a cognitive-motivational model (Pekrun *et al.* 2002) positive and negative emotions may additionally be viewed as activating or deactivating based on their effects on motivation and performance. Based on the authors' self-reflections and the views presented at the workshops, these negative emotions described in this early phase are more likely to be activating than deactivating, being viewed as part of the challenge. At this stage most doctoral students describe a high level of motivation for the task ahead, and are looking forward to 'getting their teeth into the project'.

Middle phase

Negative emotions were more prominent in the middle phase of doctoral programmes than in the early phase. Emotions include frustration, boredom, guilt and loneliness/isolation. A large part of the work in this middle stage revolved around data collection including fieldwork activities. These are discussed in more detail later in this section. The negative emotions in this stage were often associated with the realization of the size of the project and the amount of time and effort required (e.g. by comparison, earlier undergraduate experiences are of much shorter time scale). By this stage a doctoral student may have experienced a number of issues such as:

- encountering a research dead end, or the need to change direction with some aspect of the project;
- things not always working out as planned;
- things taking longer than planned; or
- administrative requirements, such as budgets, progress reports or ethics approvals, causing slowing or stalling.

These issues were associated with feelings of frustration.

The repetitive nature of ongoing literature searches, or writing and re-writing drafts (for some participants) also gave rise to frustration, and even boredom. By this time a doctoral student has been working for some time, as an individual, on a large and challenging project. Feelings of isolation and loneliness were more likely to be recorded now than in the initial stages. The most common result described for this stage then seemed to occur, this was a slump in enthusiasm and associated motivation. Feelings of boredom, often about half way through the doctoral programme, along with isolation, associated with dampened enthusiasm and output have been noted elsewhere (Phillips and Pugh 1994).

Another cause of negative emotions related to employment. Many doctoral students undertake some casual teaching, or engage in some other employment for all or part of their candidature. These activities can be very distracting and time consuming,

especially as work engagements have strict deadlines whereas doctoral activities could be viewed as having no real deadline. A result is that doctoral activities frequently get relegated to second place (albeit temporarily), leading to feelings of guilt and frustration.

Because of the intensity and diversity of emotions associated with data collection, more detailed comments are provided here. Gathering data is a core activity in many doctoral programmes, whether it is via laboratory, field or archival research. This is a major activity in terms of time and effort, and is associated with both positive and negative emotions. The main positive emotion is excitement, and this seems to relate to a number of underlying factors:

- the initial thrill of being able to apply the theoretical ideas in a practical situation;
- a sense of progress in actually getting real data after the time spent planning and designing the project;
- as the data collection progressed there was satisfaction that a body of data was accumulating, or if patterns began to show in the data that supported the initial ideas; and
- the excitement and joy of simply being 'in the field', as enjoyment of a particular environment or activity may have been one of the initial reasons for choosing the topic for doctoral study.

The excitement noted in relation to data collection is typically tempered by a number of negative emotions: notably fear, frustration, and to some extent loneliness. Fear appears to have been related to two underlying factors - fear of the unknown, and beliefs regarding one's own self-efficacy. All of the facilitators of the initial workshop (and this includes the authors of this chapter) experienced some degree of fear prior to and during initial trips. This fear of the unknown could relate to the remoteness of the field area, being in a strange new place, concerns about a lack of success, or an inability to gain access to experts or information. Belief in one's self-efficacy became critical if data collection relied on interviewing experts or members of the public. Interviewing experts was associated with fears that they might not approve of the research, whereas for members of the public there were concerns related to cultural differences (e.g. how to communicate effectively with Japanese tourists visiting a national park). Participants in the workshops engaged in other types of research reported similar fears, although the research settings and particulars were different.

Frustrations with data collection fall into two areas. The first concerns the need to collect large amounts of data within a tight time schedule. Students in workshops reported feeling rushed, things not going as planned, and forgetting important equipment. One of the workshop participants experienced significant frustration and self-directed anger after setting off on a major field expedition only to discover when they got there (a whole day's driving later) that they had left vital equipment back at the university and had to return and start all over again. Frustration was also associated with the fatigue of the demanding (emotionally or physically) and repetitive business of data collection. The second area of frustration concerns participants who were involved in large-scale surveys and had enlisted the help of volunteers for data collection. If some volunteers were not collecting data according to the instructions then the data would potentially be flawed, giving rise to frustrations.

A number of the participants noted loneliness during the data collection stage of their PhD. This was a particular issue for those working in remote settings, or at least away from home. In these circumstances the issue was most serious 'after hours' when there was no one to socialize with. A science student on fieldwork in remote locations working very long hours alone (having had the frustration of not being able to attract volunteers to accompany him) reported that he found himself feeling slightly 'crazy' and deprived of human company.

Negative emotions seem to be common and prominent during the middle phase of the doctoral process. Whereas the negative motions in the early phase are not necessarily problematic, they may pose more significant dangers in this middle phase. The feelings of frustration and boredom, and the underlying issues such as the repetitive nature of the work and realization of the size of the project, have the potential to become deactivating in their effects on motivation and performance. During this phase, a slump in productivity and procrastination over doctoral tasks is a real possibility. Managing negative emotions during this phase, including data collection, appears essential for maintaining motivation, avoiding a slump in productivity, and ensuring progress towards long term goals. It may even be important for more fundamental reasons concerning health and well-being. For example, a psychology student workshop participant, who was preparing to collect data which would involve observations of and interviews with victims of domestic violence, realized that she would need to take care to 'look after herself' emotionally during this demanding process. Up until that point, she had only given consideration to the practical design and academic content aspects of her research.

It is also vitally important to acknowledge the positive emotions associated with this data collection phase. These can potentially counter the deactivating effects of some of the negative emotions. A key example here is the excitement of building a body of data as a progress marker towards the ultimate goal of achieving the doctorate, and is one factor that is likely to have an activating effect on performance and motivation.

End phase

The end stage of doctoral studies is also characterized by a mix of strongly felt negative and positive emotions. Negative emotions include fear, frustration, anxiety, boredom, and panic; while positive emotions include elation and satisfaction. This stage for most doctoral candidates comprises mainly of data analysis and writing up (although due to the nature of individual projects, some candidates have advanced drafts of parts of their thesis by this stage).

During the writing up phase most candidates seem to experience satisfaction and elation when final drafts of thesis chapters and eventually, the entire thesis, are completed. But on the way to achieving this some also experience strong negative emotions (frustration and boredom) associated with the need to think and write about the project constantly. Fear of failure is common. Often this is based on concerns the research will not contribute anything new to the candidate's particular field or specialty. This emphasizes

the need for supervisors to ensure their students clearly understand the different ways in which it is possible to make an original contribution (Phillips 1994).

Anxiety arose in relation to a number of issues, for example, whether the work really justifies the conclusions made. Anxiety can also emerge if students feel their work contradicts expert opinion in their field. Making such assertions requires considerable confidence. This was particularly an issue if candidates were questioning the established views of experts likely to examine their thesis. Although not common practice in Australian universities, the requirement to mount a thesis defence is an obvious source of anxiety for doctoral students in the final stages of their programmes.

Frustrations were often reported with respect to the relationship and tensions between the student and the supervisor. Usually these related to the usefulness of guidance provided by the supervisor, and aspects of feedback on thesis drafts. Problems were noted where the supervisor was not able to discuss issues in the thesis at the depth required by the candidate because they were not sufficiently close to the research area themselves, or where they requested the inclusion of additional material (e.g. data analysis or literature reviews) or changed their mind about how to approach a particular problem. Frustrations also arose when students had to wait, for what they considered unreasonable periods, for supervisors to provide feedback and guidance on thesis drafts.

For those candidates who have been the recipient of a scholarship, the end of funding could be associated with feelings of panic. While this might be expected to have a negative and debilitating effect on motivation, the opposite, a strong motivation to finish, was apparent. Although some of the negative emotions (e.g. boredom) characterising this phase are potentially deactivating in their effects on motivation to complete the doctorate, they may to a large part be countered by the mix of other positive, and negative but motivationally activating, emotions. At this stage the long term goal of the PhD is closer, which in itself can be highly motivating. Some students do, however, falter at this stage and it is not unknown for students to withdraw their candidature even in this final phase of their research programme. The support of an understanding and helpful supervisor can be critical.

In most Australian universities, the doctoral thesis is submitted for examination by independent and external reviewers; a process which typically takes months (it is akin to the peer-review process utilized by academic journals). Submission of the thesis was generally described by workshop participants as anticlimactic rather than celebratory, since it is surrounded by the completion of many mundane and administrative tasks. The situation is surely much different when a thesis defence takes place. Feelings of relief, pride and elation at completing the task were also reported.

In some respects it is completion of the thesis that stands as the single most significant outcome accomplishment. Thereafter comes a period of restlessness, and for some a deep anxiety while awaiting the outcome of the examination process. It is as though the candidate is trapped in limbo. All doctoral research activity has ceased abruptly after three or more years of continuous focus and life is meant to somehow return to 'normal' but meanwhile the outcome is unknown. There is little candidates can do to manage this situation other than to be aware of it in advance.

An ongoing issue throughout the doctoral process emphasized by both the workshop facilitators and participants concerns the difficulty of trying to explain to friends, family and colleagues what the chosen doctoral studies were about. Also in some cultures, such as Australia, the value of academic pursuits may be under-appreciated so the societal benefits of doctoral research may not be acknowledged or supported by friends and families. The important challenge for all doctoral students (and indeed all researchers) is to learn how to talk about their research in ways that engage all that they come into contact with.

Strategies for managing emotions

The doctoral process is clearly associated with varied and changing emotional states. The positive emotions described previously are not likely to cause problems on the way to achieving a PhD as the main goal. Negative emotions are potentially a danger, but are not always a problem. In some circumstances they can result in an increase in motivation. However, students need to be aware of those negative emotions that deactivate from the task and long term goal of the PhD.

Many of the following strategies are suggested for doctoral students. Some, however, require inputs from peers, the supervisor or other individuals. The supervisor has an undeniably important role in the management of the student's emotional responses (particularly as some of the emotional responses will be related to aspects of the working relationship that is developed). And it is essential that supervisors as well as students are able to recognize and deal with the emotional aspects of the doctoral process.

The following strategies are suggested for doctoral students:

- Participate in forums and discussion groups with peers. These may also involve the supervisor(s). Sharing experiences and ideas is beneficial both emotionally and intellectually. It helps to break down feelings of isolation as shared experiences allow a student to realize that their experiences are a normal part of the doctoral process. The value of self-reflection and discussion groups/forums has been noted elsewhere. Burnett (1999) described the advantages of a meeting as a collaborative cohort for students who were at the 'all but dissertation' status in the coursework/research doctoral studies. These included reduced isolation for some students, a greater likelihood of completion, and skill and knowledge acquisition especially for writing and editing. The benefits to doctoral students of self help and peer support groups (Phillips and Pugh 1994) and supervisory groups (Elphinstone and Schweitzer 1998) have also been recognized.
- Talk to experts from the research area and, if it is appropriate within the structure of the project, publish journal papers during candidature (this may not always be possible or desirable). Both will help to reaffirm that what a student is doing is important and interesting, which should help with motivation. They are also a good source of feedback on the direction and progress of the research.
- Avoid working (exclusively) at home. Feelings of isolation may be reinforced if a student works at home most of the time. On the other hand, having to share offices with other doctoral students at a university seems to be the norm, and

these environments can be noisy and distracting, reducing students' capacities to be productive. Working at home then becomes more attractive. If this is the case, be aware of isolation issues; if they emerge take measures to counter them.

- Construct a timetable for major activities and milestones, including both academic tasks and administrative requirements such as progress reports. A timetable helps to provide motivation and a sense of direction. It also allows progress towards the long term goal of the doctoral programme to be measured. The timetable should be realistic, and a student should be encouraged to keep to it, perhaps rewarding themselves if they do.
- Carefully plan and organize data collection and field work trips well in advance. This way at least some of the potential frustrations can be avoided. (For example, plan budgets, arrange vehicles, food and clothing, make equipment lists and check each item off as it is packed, and ensure that all equipment is working properly).
- Be prepared for possible frustrations when methods are trialled. Initial methods or techniques may need to be modified to make them more effective or efficient.
- Take breaks and holidays. It is important to make time for breaks from the PhD, so include them in the timetable. Holidays allow for relaxation and rejuvenation. A break from 'the grind' and standing back a little from the project may have the additional benefit of producing new ideas or inspirations. If the routine has led to feelings of boredom, or there is a tendency to procrastinate over the PhD (as one of our participants noted 'cleaning the fridge, garden, office etc is much more appealing than writing') then set aside a specific time to do something different or rejuvenating, before returning to the more 'mundane'. Rudd (1985) commented that some students work too hard and 'might have been more successful if they had eased up a little'.
- Socialize while in the field or on data collection trips. This may be achieved by living in shared accommodation, through contacts with local staff or organizations associated with your research, or even visiting a local pub occasionally. Having a friend or relative along can really help, especially if they are able to assist with the research as well. Avoid taking along anyone who is likely to be a distraction from your work e.g. if they are likely to become bored waiting around whilst you engage in data collection activities and put pressure on you to hurry up or stop work altogether.
- If the field trips are lengthy, timetable some time off to do something not related to the research. As with taking holidays during a PhD, it is important to relax and rejuvenate.
- Choose examiners² that the student judges may be supportive or accepting of their thesis findings and approaches.
- Be ready to adjust the explanation of what the doctoral project is about according to the audience. It is useful to have a simple explanation as well as a more detailed answer. The simplification of concepts and emphasising practical benefits of the project can be helpful; e.g. describing it as a regular job avoids embarrassing or uncomfortable situations and can overcome the tendency to be

² in Australia, the doctoral candidate is often asked to nominate a list of potential examiners from which the supervisor or a university committee makes the final selection.

labelled as being in an 'ivory tower' or a 'boffin' or other similar derisory comment.

A critical precursor to the implementation of any coping strategy is an awareness that emotional highs and lows are a normal aspect of the doctoral process. Thus it is critical that both doctoral students and supervisors are aware of the issues surrounding these emotions. Overall there is a need for open communication about emotions. A student needs to be honest with their supervisor about their feelings and their progress. The supervisor needs to be able to provide guidance, encouragement, and strategies. Emotions also need to be seen as a way of acknowledging the many different challenges of the doctoral process (O'Leary 2001).

Supervisors also need to be aware of how their own actions and interactions can in fact be a part of the 'problem' or solution – students may wish to explicitly address such matters in discussions with their supervisors. Issues surrounding communication, academic pressures, and supervisor availability may translate into emotional responses in students. Grant and Graham (1999) stressed the important role of supervision and its quality, and considered it vital that students have an active role in the supervision process, despite the marked power differences. Furthermore, the supervisor needs to fulfil their academic responsibilities appropriately, e.g. by providing feedback and guidance on thesis drafts within an acceptable time. Maintaining clear communication is also vital, a point stressed by Phillips (1994) with the caution that misunderstandings are very common.

Negative emotions may remain, despite the use of many management strategies. Self reflection on the causes of these emotions may help the individual to deal with them. As Parsons (2001) comments, finding one's own strategies to deal with feelings is positive, and a good training for the professional life that would follow a doctorate.

Conclusions

This chapter has drawn on a novel approach to understanding the emotions associated with the PhD process by using self-reflection by a group of six academics combined with learning from a subsequent series of workshops run over almost half a decade. Collectively these activities have documented the emotional roller coaster of doctoral research studies. Emotional swings are experienced by all candidates. Even those for whom the doctoral process is overall a very positive experience, some negative emotions are encountered. This chapter addresses the three phases of research and associated emotions and what form these emotions are likely to take. Negative emotions are most likely in the middle phase and are often associated with data collection. Recommendations for managing these emotions include encouraging students in their self-management as well as 'managing' those around them. There appear to be great benefits to doctoral students in becoming aware of their own emotions and the particular role of these in their own doctoral research programmes. Self-reflection is critical.

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