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# STUDENTS' PERCEPTIONS OF SUPERVISORY QUALITIES: WHAT DO STUDENTS WANT? WHAT DO THEY BELIEVE THEY RECEIVE?

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## ABSTRACT


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| Aim/Purpose | This paper explores students' perceptions of qualities they believe their ideal supervisor should possess as well as those they see as characterizing their current and past supervisors. |
| Background | Over more than three decades, multiple cultural contexts and diverse methodologies, research studies have demonstrated that what person related human qualities in postgraduate research supervision have greater valence for students than does discipline/research expertise. This paper probes why this might be so. |
| Methodology | Across 15 Australian universities and all disciplines 698 students participated in an *opt-in* online survey which invited students to provide descriptors of their supervisors' qualities as well as those of their ideal supervisor. The survey was student centred in that it required them to nominate the qualities of their supervisor/s rather than asking them to respond to statements about supervisors/supervision on a Likert scale. |
| Contribution | This research which was designed to allow students to characterise their actual supervisors and their ideal supervisor in an unconstrained and anonymous way demonstrated their dominant valuing of, firstly, human traits consistent with emotional intelligence and, secondly, the professional aspects of supervision especially in relation to research process. In providing a snapshot of the janus face of supervision, these uniquely student generated perspectives on supervisory qualities provide data not only supportive of previous studies with very different methodologies but also with implications for supervisor development programs and supervisor benchmarking within universities. |
| Findings | The resultant student initiated perceptions of positive and negative qualities of supervisors support the findings of other studies which show that students value and seek cognitive and affective person related qualities in |


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supervisors over discipline/research expertise qualities. For 25 percent of the sample there were no qualities in common between their principal supervisor and their ideal; this increased to 50 percent with one quality in common.

Recommendations for Practitioners: In developing and honing individual philosophies of supervision, supervisors should reflect, for example, upon the ways in which they present to and interact with students as individuals, their availability to students, their interest in students' research and career development. Those delivering supervisor development programs should consider the balance in such programs between process- oriented material and human interaction strategies.

Recommendation for Researchers: Research in the doctoral space has tended to be summative as in post completion evaluations of the experience or cross-sectional sampling of experience or what is valued as in the current study. Longitudinal research which samples perspectives both within and beyond candidature is needed. This should thus encompass the experiences of those who complete and those who do not over a period of perhaps six years.

Impact on Society: Globally since the late 1990s, universities have initiated doctoral training programs and codes of conduct pertaining to the supervisory relationship yet evidence suggests that supervision issues remain vexatious. The sector thus needs to address the efficacy of such programs in ameliorating issues raised by students. The silent acknowledgement of late stage doctoral attrition – and the lack of follow up as to the complex interrelationship of factors prompting such a personally difficult and societally wasteful decision – remains a besetting problem for the sector.

Future Research: Two critical issues would usefully guide future research in the doctoral education space. Firstly, the ultimate efficacy of supervisor development programs requires evaluation and follow up. Secondly, the perspectives of those who exit the PhD process virtually without trace need to be investigated and evaluated for policy implications. Further some respondents in this study had supervisory roles themselves and the qualities they attributed to self as supervisor were closer to the ideal than those of real supervisors. This suggests that a more extensive investigation of how supervisors see themselves in the supervisory role would be useful as such research would potentially impact on the nature of supervisor development programs in the future.

Keywords: supervisory qualities, supervision, supervisory relationships, postgraduate attrition

## INTRODUCTION

To what extent is there synergy between the real and the ideal postgraduate supervisor? Potentially less, it seems, than might be desirable from either an institutional or candidate perspective (Times Higher Education (THE), 2017; Bloch, 2011); indeed a colleague recently reported having had conversations with newly graduated PhDs who clearly saw their supervisors as being more interested in students' work for the purpose of adding

> … publications to their own CVs than … in the student's progress - and were actually quite bitter about that, even though they had completed promptly, published *en-*

> *route*, passed just fine, and got into good postdocs/jobs (personal communication, March 15, 2018).

If students who tick all the PhD milestone success boxes remain "quite bitter" about their supervisory experience, what might be the sentiments of the broader cohort – those in the process and those who have opted out, for whatever reason? Young-Powell (2018) reported that

> Emma Baker [pseudonym] felt like a failure when she quit her PhD after 18 months and started again from scratch ... [feeling] she had no choice when the relationship with her supervisor became toxic (Young-Powell, 2018).

An anonymous academic (2019) reported that his "toxic supervisor ruined [his] health" while his university did not act upon his complaints, post experience concluding that he had

> … Yet to settle on what bothers me more: my supervisor's perverted behaviour and ethics, or the university's tacit support of them both problems extend far beyond me, my supervisor, and my university, and illustrate how toxic research culture can be (Anon, 2019).

An article entitled "Of monsters and mentors: PhD disasters, and how to avoid them" published in UK's *The Times Higher Education Supplement* (2017) lamented that, despite

> … all the efforts in recent years to improve the doctoral experience for students, Times Higher Education still receives a steady supply of horror stories from PhD candidates. (THE, 2017)

In acknowledging that "perhaps such tales are inevitable", the article also argued that "there is still more that could be done to ensure that this most intense and crucial of academic relationships doesn't end up on the rocks" (THE, 2017). Certainly in the past two decades or so universities have initiated a range of strategies to ameliorate what they perceive to be the inherent problems. Supervisor training programmes, accreditation via a register of supervisors, publication of an official code of supervisory conduct and agreed contracts between supervisor and student represent some of the initiatives which have characterized the terrain in the first decades of the 21st century. German universities such as the University of Munster have introduced what is referred to as a Structured PhD Programme. Of such strategies Bloch (2011) noted that

> Students in structured programmes do report a higher level of exchange between them and their (official) supervisor. Nonetheless, the intensity of supervision remains way behind expectations, and the difference between the new and old unstructured style is marginal (Bloch, 2011: 22).

Considering this continuing gap in expectations, despite a range of ameliorative actions by universities, what might be the factors underpinning a less than optimal experience for postgraduate research students in relation to supervision? How do students perceive their supervisors? What distinguishes *actual* supervisors from those perceived to be *ideal*? After multiple positive enhancement initiatives by universities over the last two decades, why might it be that to bespeak a supervisor apparently still offers no guarantee of a bespoke postgraduate research experience?

This paper aims firstly to scope what positive and/or negative qualities postgraduate research students perceive to characterize their supervisors. Secondly the qualities of students' actual supervisors are compared with students' perceptions of the qualities of an ideal supervisor. The literature reviewed in this paper identifies remarkably consistent results across a range of methodologies and socio-cultural contexts. This forms the backdrop for the methodology of this study which invites students to identify the qualities they perceive to characterize their supervisor/s rather than asking them to respond to qualitative statements about supervision as in many other studies. The student driven data are analysed into broad thematic categories which are presented and discussed in terms,

firstly, of actual supervisors and then against students' perception of ideal supervisor qualities. The final sections allude to the findings of this study in the context of broader sectoral issues.

## LITERATURE REVIEW

The literature on postgraduate research supervisors certainly seems to suggest that, across previous decades, universities and continents, there is considerable scope for improvement in the way that their students experience the research learning environment (Welsh, 1978). A significant lode of reported dissatisfaction relates directly to supervision and the supervisory relationship. Since the late 1970s studies focusing on postgraduate students tend to fall into two categories, broadly as from either a consumerist or an experiential perspective.

The broadly consumerist studies tend to be large scale questionnaire surveys funded by government quality assurance agencies and designed to address a broad spectrum of issues (of which supervision is but one) relating to the physical, financial and human resourcing of candidature. Typically these postdate submission by 6 – 12 months. For example, the recently revised Australian Postgraduate Research Experience Questionnaire (PREQ) comprises 28 items across the seven scales below. The 2017 satisfaction percentages for each scale are included in square brackets:

- Supervision (6 items) [81.5%]
- Intellectual Climate (5 items) [81.3%]
- Skills Development (5 items) [94.3%]
- Infrastructure (5 items) [77.0%]
- Thesis Examination Process (3 items) [79.4%]
- Clarity of Goals and Expectations (3 items) [91.6%]
- Overall Satisfaction (1 item) [84.4%]

(QILT Survey Program, 2018:66)

The UK Postgraduate Research Experience Survey (PRES) currently has seven core scales, each with four items. The 2017 Overall Satisfaction percentage was 82 percent and the percentages for individual scales are in square brackets: supervision [86%]; responsibilities [79%]; resources [81%]; research skills [86%]; research culture [66%]; professional development [79%]; progress and assessment [79%] (Slight, 2017:12). While the Overall Satisfaction percentage for the Australian PREQ was marginally higher than that for the UK PRES, the PRES Supervision satisfaction was higher than that for the PREQ. This may be a function of the supervision related statements to which students were responding. In the PRES students responded most positively to statements relating to supervisors' skills and subject knowledge (92%), contact meeting their needs (89%), feedback (88%) but less to meeting their training and development needs (76%). The six items contributing to the supervision scale in the PREQ included contact meeting students' needs, feedback, guidance re topic selection/refinement/literature search/discipline knowledge and also the extent to which supervisors made "a real effort to understand difficulties I faced", the last of which introduces a different and more affective dimension from those sampled in the PRES.

While supervision is only one of the dimensions sampled by such government initiated consumerist surveys, research studies conducted by individuals or small groups tend to be smaller in scale, use diverse methodologies and are often more focussed on particular experiential dimensions including aspects of supervision and acculturation to a research culture. Such studies began in the late seventies and continue to the present. Unlike the large scale surveys which are conducted post submission, these studies are more likely to have been completed within the period of candidature. Welsh's (1979) Scottish longitudinal study based on successive interviews with 64 supervisory dyads, for example, found that students expect supervisors to be organized in their supervisory duties and available to

discharge them, to have professional expertise, person related qualities such as interest in and enthusiasm for the student's research as well as concern for the student's all round welfare. By the end of the first year, however, 51.6 percent expressed reservations about the quality of their supervision (e.g., unhelpful, uninterested, unapproachable, lacking rapport). Welsh (1980) found that, by the end of year two, students evidenced increased resilience despite continuing unsatisfactory supervision. Yet she noted that, by the end of year three, 45 percent had not submitted. Subsequent work by Kiley (personal communication, August 13, 2018) suggests that "the rubber hits the road in second year and so they are less positive", an occurrence which may or may not be independent of the quality of supervision.

Nevertheless Welsh's (1980) concept of **availability to discharge supervisory duties** is the first recurrent, dominant and enduring negative theme in the research literature about supervision from the late seventies onwards and across diverse continents. In the USA Hartnett and Katz (1977) found attention to students inadequate in time. In an Australian study Ibrahim, McEwen, and Pitblado (1980) students complained about lack of access to supervisors who were too busy and, when they did see them, had interrupted access. Cook (1980) in Ireland pointed to the need for regular discussion sessions in order to create and maintain psychological momentum for students.

Pole, Sprokkereef, Burgess, and Lakin (1997) noted that their UK students reported availability and access issues as well as interruptions to supervisory meetings. In Sweden Frischer and Larssson's student interviewees (2000: 143) revealed lack of regular meetings, no structured discussion and no follow up leading them to their characterization of supervisory interaction as a "ghost relationship". Newall (2003) in NZ found that 53 percent of Arts students did not have regular contact with their supervisors compared with 17 percent in Health Studies.

The Pearce, Hollman, and Maurtin-Cairncross (2006) study of throughput rates in one South African university reported that only one out of 15 students interviewed had easy supervisor access with 12 claiming inadequate contact. For Burgaz and Senturk's (2007) students in Turkey, items of greatest negativity included timeliness of meetings and clarity of focus during meetings. Krauss and Ismail (2010) and Ghani and Said (2014) cite time and accessibility constraints for students in Malaysia while Ngozi and Kayode (2013) note that supervisors do not keep to time schedules in Nigeria. In Zimbabwe Garwe and Mugari (2015) found that, while most students were happy with their supervisors in terms of knowledge, organization and attitudes, 85 percent perceived supervisors to be inaccessible. In assessing the quality of research supervision in mainland Chinese higher education, Peng (2015) noted that supervisors had too little time for students. Beaudin, Emami, Palumbo, and Tran's (2016) survey of postgraduate dental research trainees in Canada revealed that those dissatisfied with the quality of their supervision met supervisors less often than weekly. Pyhältö, Toom, Stubb, and Lonka's research (2012) in Finland and Wagener's (2017) in France identified lack of supervision/supervision frequency as key problem areas in the supervision category

Over these many decades, however, universities have progressively introduced measures to address this situation. Supervisor development programs have become almost universal as have canons of supervisory conduct and registers of approved supervisors. Yet, it seems that access to supervision remains a vexing problem transcending both time and cultural contexts. A compounding issue is that, even where contact does occur as reported by Morrison, Oladunjoye, and Onyefulu (2007), supervisors are often late for meetings, rushed and distracted *in situ* with both the meeting atmosphere and outcomes leaving students feeling directionless and despondent.

The second key and time enduring issue for many students relates to **the timeliness and quality of feedback** (e.g., Ballantyne (2001), Morrison-Saunders, Moore, Newsome, and Newsome (2005), Jacobsson and Gillström (2006)). The specifics of these issues vary but relate to access, quantity and quality and remain consistent across time and context as demonstrated by the following examples. Spear (1999) cited concerns with slow/superficial reading of work while Haksever and Manisali (2000) noted a deficit in critical analysis of work. Ridsdale's (2000) paper focussed on international

postgraduate students and reported that too much feedback was confusing and/or incomprehensible as well as being perceived as vague and/or demoralising. Calma's (2011) survey of 53 officials, directors, university executives and executive staff in the Philippines suggested an over focus on proofreading drafts as distinct from actually engaging with the content.

Ferreira's (2006) interviewed 32 doctoral students in the USA about their ideal supervisor and found complaints about the lack of quality feedback and the dominance of negative feedback in relation to their actual supervisors. Similarly forty percent of Wadesango and Machingambi's (2011) 40 student participants across two South African universities believed they received too little feedback, 25 percent regarded the feedback as contradictory and 20 percent perceived it to be too negative. Interviews with 19 doctoral students in Finland by Vekkaila, Pyhälto, Hakkarainen, Keskinen, and Lonka (2012: 165) demonstrated that "upsetting feedback" contributed to "students' sense of insecurity, frustration and loneliness". Communication difficulties relating to feedback had the highest frequency of five themes identified by Yarwood-Ross and Haigh (2014) in their study of what PhD students say about supervisors derived from material published on the Postgraduate Forum between September and December, 2012. A study of the quality of MBA supervision in Zimbabwean universities based on questionnaires completed by 100 current MBA students and 100 recent MBA graduates conducted by Garwe and Mugari (2015) found that only 20 percent reported timely feedback and only 25 percent found such feedback to be constructive.

The first and second areas of student dissatisfaction – demonstrably problems reported in the literature over more than a decade and a half - go hand in hand. Supervisors who find it difficult to accommodate their postgraduate research students within their overly busy schedules are likely also to experience problems in making time to provide timely and constructively relevant feedback.

The third major area of dissatisfaction with supervision is **person related** or what Żorga (2007) referred to as the "person bound" qualities (Żorga, 2007: 436) underpinning postgraduate supervision. In the mid-nineties, Neales (1967: 150) characterized supervision as "a more direct social and professional responsibility [than undergraduate teaching] because the relationship is a personal one". Heppner and Handley's (1981) study of 33 supervisor/supervisee dyads revealed that satisfaction with supervision was more strongly correlated with students' perceptions of supervisory relationships than with perceived expertise. Around the turn of the century the students in Fraser and Matthews's (1999) study expressed relative satisfaction with expertise related characteristics and relative dissatisfaction with the non-expertise characteristics of their supervisors. Similarly Burns, Lamm, and Lewis (1995) and also Barnacle (2002) found that satisfaction with supervision was most related to the nature of contact with the supervisor – interest in and level of enthusiasm for and commitment to the student and topic/research. Successful progress in Sayed, Kruss, and Badat's (1998) study was linked to supervisor empathy while human factors were what most assisted 77 percent of Stallone's (2004) respondents. The pre and post 2000 literature is consistent in this regard.

This is not surprising in the context of Gardner's (2007: 731) analogy of "riding the torpedo of graduate school" and what Batchelor and Di Napoli's (2006: 17) students characterized as a "voyage of vulnerability" and a "journey characterized by uncertainty". Reconciling the ambiguities encountered in what students often perceive as an environment of isolation is challenging since many experience what Doloriet, Sambrook, and Stewart (2012: 6) characterize negatively as a "distanced form of supervision". This impacts on the provision of technical and emotional support that is integral to the supervisory relationship. Given this, one wonders why fewer than four percent of Bégin and Gérard's (2013) students alluded to the provision of support by supervisors in the context of the 25 percent of McEvoy, Hunter, Matchett, Carey, McKinley, McCloskey, and Woodside's (2018) survey respondents who felt that supervisors did not provide support when required. Wisker and Robinson's (2013) study of doctoral 'orphans' concludes that supervisor neglect leads to disempowerment and confusion, a finding supported by Löfstrom and Pyhältö's (2014) interviews with 28 students in which there were 28 mentions of supervisor abandonment, inadequate supervision and disrespect.

Handal and Läuvas (1987) argued, in fact, that a supervisee must be able to sense the supervisor's person and not just their professional role mask in order to establish and maintain a relationship of mutual trust and respect. Following his presentation to the "Enabling mental health for research degree students" Mini Plenary at the Quality in Postgraduate Education held in Adelaide, Australia in April 2018, Kearns was interviewed by Smith (2018). He characterized two types of problematic postgraduate research supervisors. Top of his list is what he characterizes as the "toxic" supervisor who is not a good person to be around:

> They will criticise your work mercilessly, humiliate you in public, never provide any support, leave you completely on your own, and go out of the way to undermine your confidence and progress (Kearns interview by Smith, 2018: 14 - 15).

In his view it is "wrong" to allow students to be supervised by such individuals. His second *bête noir* is the quintessentially "busy" supervisor for whom students are but a minor aspect of his/her workload and whose *modus operandi* he describes as "just [to] get the data out and get more work done" rather than to "be worried about the 'person' side of the business". As "really clever researchers",

> … they will have high demands and be very critical when giving feedback. They're very busy, so they're not around much, and they leave the student alone, but they get upset when things don't happen (Kearns interview by Smith, 2018: 14 - 15).

The roots of these issues are person related rather than academic and run counter to what students want from their supervisors. For Harrow and Lowenthal's (1992) graduates the most helpful supervisory roles centred on the interpersonal and academic with "friendly helper" and "mentor" being chosen by over half the respondents. While the most important roles were mentor and motivator, students were averse to supervisors prescribing what they should do. Kam's (1997) analysis of 250 questionnaire responses by postgraduate students concluded that, while appropriate research supervision has no set prescription, the frequency and duration of contact does matter to students, the quality of research supervision being as much a function of the supervisor-supervisee interaction as the process of supervision. In essence, supervisors with sympathetic, caring attitudes towards students' problems are generally seen to provide quality supervision.

Pellarin, Lynch, and Speck (1998: 53) emphasize communicative qualities: "To ensure success in any working relationship of this length, effective, honest and regular communication is essential", together with strong commitment, regular meetings, the ability to motivate, flexibility, punctuality and a sense of humour and a creative approach by both parties. Lamm and Lewis's (1999) factor analysis following their investigation of the interpersonal relationship in doctoral supervision produced five factors; facilitation; strong guidance; challenge; personal support; and professional doctoral guidance – and found no significant differences across departments. Rose's (2000) 34 item Ideal Mentor Scale has three sub-scales: integrity, guidance, and relationship; her subsequent study (Rose, 2003) found that two universal qualities were central to students' definition of a mentor: communication skills and provision of feedback.

Janssen's New Zealand (2005) interviews derived the ten most important qualities of an ideal supervisor as support, availability, interest and enthusiasm, knowledge and expertise in the field surrounding the PhD, interest in students' careers, good communication, constructive feedback, provision of direction and structure, approachability and rapport, experience and interest in supervision. Such qualities have been identified across subsequent studies with different methodologies applied in a range of cultural contexts as exemplified in Table 1.

While the consistency of the findings is remarkable, perhaps so is the dominance of closed ended survey methodologies with somewhat ubiquitous scales of satisfaction. Studies which have used open ended questions have typically analysed the data thematically. This paper questions what might be the outcomes if student respondents are neither provided with open ended interview nor questionnaire prompts but, instead, given total agency in their responses?

**Table 1: Overview of Methodologies adopted in studies identifying the Qualities of an Ideal Supervisor**

| COUNTRY | METHODOLOGIES | | | | |
|---|---|---|---|---|---|
| | **INTERVIEWS** | **FOCUS GROUPS** | **SURVEY (CLOSED ENDED)** | **SURVEY (OPEN ENDED)** | **OTHER (SPECIFIED)** |
| **Australia** | Yeoh & Doan (2012)<br>Halbert (2015) | Halbert (2015) | | Davis & Kiley (2018) N=698 | |
| **China** | | | Gu, He, & Liu (2017) | | |
| **Ghana** | | | Azure (2016) | | |
| **Ireland** | | | Stephens (2014) | | Boyle (2014) - online sources |
| **Malaysia** | | | Tahir, Ghani, Atek, & Manf (2012) | | |
| **South Africa** | | | | Chiresche (2012) N=32 | |
| **Sweden** | | | Dimitrova (2016) | | Emilsson & Johnsson (2007) – testing of a pedagogical model |
| **The Netherlands** | | | Mainhard, van de Rijsy, van Tartwijk, & Wubbels (2009)<br>Woolderink, Putnik, van der Boom, & Klabbers (2015) | | |
| **UK** | | McEvoy, Hunter, Matchett, Carey, McKinley, McCloskey, & Woodside (2018) | Ali, Watson, & Dhingra (2016)<br>McEvoy, Hunter, Matchett, Carey, McKinley, McCloskey, & Woodside (2018) | | Lim (2007) - blogs |
| **USA** | De Welde & Laursen (2008) | | Anderson, Ingram, Buford, Rosli, Bledsoe, & Onwuegbuzie (2012). | Barnes, Williams, & Archer (2010) – 2391 responses to 2 open ended questions re experiences | Bloom, Propst Cuevas, Hall, & Evans (2007) - qualitative textual analysis |

# METHODOLOGY

Evaluative protocols of the student experience are routinely distributed post thesis submission in a number of countries. Given that these are designed to capture a snapshot of the total student experience in undertaking the research degree, supervision is typically but one facet of many sampled. Many of the studies discussed in the previous section have, to a greater or lesser extent, invited students' responses within the boundaries set by Likert scale response options to pre-set statements or interview/survey questions/probes. As indicated in the discussion following Table 1, the current study takes a deliberately unconstrained approach by inviting students to supply their own descriptors such as in the sample question below:

2. **What are the five qualities which characterize your current principal supervisor?**

(a)

(b)

(c)

(d)

(e)

Four questions sought students' perceptions of the qualities of their current supervisors - principal supervisor and co-supervisor (where applicable) and previous supervisors (Masters and/or Honours). A later question invited students to list the qualities of their ideal supervisor. To accommodate participants who were both students and supervisors a further optional question invited these respondents to list the five qualities which characterize themselves as supervisors. These six questions followed the format of question two above.

Fifteen Australian universities (including the Group of Eight, Australian Technology Network, Innovative Research Universities, as well as non-aligned universities, both urban and rural) were invited to participate in this study of postgraduate students' perceptions of supervisory qualities. With the exception of the university at which the researcher was then located (where the questions were delivered by anonymous survey to protect the identity of supervisor colleagues), the research was designed to gather responses to the questions in a one on one interview of a cross sectional sample of students at different stages of candidature across each university. However universities did not accept this sampling frame preferring instead a mode of participation which was both anonymous and voluntary. Universities also differed in the enthusiasm with which they communicated the opportunity to participate to students. Some posted a notice on a virtual noticeboard while others communicated the invitation directly to students, again varying in the degree of encouragement to support the research. This resulted in an online survey in which the only identifier was discipline area of study.

While this snowball approach to sampling (after Biernacki and Waldorf, 1981) was effective in attracting the online submission of 698 surveys, it is not possible to determine the response rate and, unfortunately, nor does the required anonymity allow a breakdown of responses by gender or stage of candidature. The universities' decision to reject the sampling frame must be acknowledged as resulting in potential bias as a function of a self-selected sample – might there have been an over emphasis on disgruntled students, for example? Or, conversely, a bias towards those who were satisfied and anxious to praise their supervisors? What representation might there have been of students contemplating withdrawal from candidature? The findings of the study must therefore be considered in the context of a necessarily voluntary and anonymous survey in which the only descriptor was the discipline of study. Access to the gender and stage of candidature of participants, for example, would potentially have been useful in considering the data and its implications.

Of the submitted surveys 27.4 percent were submitted by students in the Humanities and Social Sciences (Group 1), 9.7 percent by students in the Creative Arts (Group 2), 35.7 percent by students in the Sciences and Health Sciences (Group 3) and 27.2 percent by students in the Professional Studies areas including Business, Education, Engineering and Law (Group 4). These discipline clusters provided the groups for analysis across all universities in the further interest of anonymity for universities as well as students. This paper focuses on the results of the six questions from the opt in survey as described above, those seeking students' perceptions of the qualities of their supervisors – principal, co-supervisor, masters, honours (as appropriate) and their ideal supervisor.

The decision to give students total agency in their responses yielded data which both intersected with and went outside/beyond that reported by studies utilizing statements requiring students' responses on a Likert type scale. Janssen's (2005) interviews derived the ten most important qualities of an ideal

supervisor as support, availability, interest and enthusiasm, knowledge and expertise in the field surrounding the PhD, interest in students' careers, good communication, constructive feedback, provision of direction and structure, approachability and rapport, experience and interest in supervision. Simply to mine the data for evidence of these ten qualities would have resulted in the use of but a fraction of this rich data bank. Application of the WordNet-Based Categorization Dictionary (Miller, 1995) was deemed to be inappropriate given Feijoo, Muñoz, Amadó, and Serrat's (2017) observation that "semantic information alone might not be sufficient for successful word categorization" in certain contexts. Managing students' often extended qualitative responses thus necessitated the generation of data driven categories, a process which took place within a grounded theoretical frame deriving from the original work of Glaser, Strauss, and Strutzel (1968) but also cognizant of later divergences between the original authors and Glaser's (2002) argument that

> The researcher can use his or her own concepts generated from the data instead of using, and probably forcing, the received concepts of others … (Glaser, 2002).

As Willig (2008) points out, "categories in grounded theory *emerge from the data*, they are not mutually exclusive, and they evolve through the research process ... [because] grounded theory aims to develop *new, context-specific* theories" (Willig, 2008: 35-36). The process of moving through initial coding to concept and thence to category occurred through collaboration by the present author (expertise deriving from Groups 1, 2 and 4 above together with extensive research supervision experience and contributions to supervisor training programmes) and a co-researcher (expertise deriving from Groups 3 and 4 above and also an experienced supervisor). Our overriding principles were that all student cited qualities would be accommodated, their language would be left intact, and all decision making would be sensitive to apparent student intent.

Our first decision related to the fact that many respondents did not simply offer five discrete qualities (e.g., approachable, negligent, calm, despotic, busy) but rather groups of qualities (e.g., helpful and encouraging) or phrases encapsulating a quality (e.g., understands what is required, over-committed at work). The decision was that qualities should be distilled to the smallest meaningful unit. Hence *helpful* and *encouraging,* as in the first example above, were classified separately whereas the phrases *understands what is required* and *over-committed at work* each received a single classification – the first as a positive in the category Supervisory Expertise and the second as a negative in the Time Related category. Each quality was given a value of one so that each citation of, say, 'intelligent/very intelligent' is counted separately under Intellectual/Cerebral Qualities.

Initial reading of the data generated four agreed overarching thematic meta-categories. Within these meta-categories are 12 major categories with sub categories being introduced, following collaborative discussion between the researchers, to fine tune the analysis as appropriate and to respond to students' distinctions. In the case of the 12 categories, qualities were classified as either positive or negative. In some cases students made comments where the positive was undercut by the negative as exemplified by the following:

> He is not an idiot but not bright either
>
> Last but not good enough, [a] good hearted person;
>
> Enthusiastic when I do meet with him;
>
> Helpful – but at a price.
>
> A cheery figurehead but pretty useless to me apart from that.

These were categorized as Double-edged Sword comments (DeSc).

As data analysis proceeded, however, it became necessary to create a fifth meta-category to accommodate descriptors which related not to supervisors' qualities but to their personal issues and/or characteristics. The latter included factual statements about the supervisor which were not qualities *per se* (e.g., bald, short, bespectacled, curly haired, female); statements that implied a positive personal

judgement (e.g., handsome, good undergraduate teacher, pretty); statements that implied a neutral judgement (e.g., religious, has local knowledge, sporty, has many interests); as well as statements that implied a negative personal judgement (really really badly dressed, conservative, workaholic, I knew about the character flaws when I started with him -however they were worse than I had anticipated).

The category **Personal Issues** encompasses statements relating to a supervisor's mental and/or physical health (e.g., sickly, unhappy, bi-polar, personal problems intrude on work, fatigue) or work-related issues (e.g., computer phobic, overwhelmed by teaching, research and supervision requirements, takes out stress on easy targets – students).

Application of the principle of responsiveness to student distinctions was sometimes counter intuitive. For example, the terms accessibility and availability might linguistically be justified as referring to the same quality. However, students distinguished between the two with both often being cited in a student's list. For students, *accessibility* encompassed 'willingness to see me', 'focus on me as a student', 'fit supervision to my needs as well as generosity with time', 'reasonable unscheduled access', 'not appearing tired, overworked, busy all the time and stressed', 'not too busy to spend quality time'. Qualities relating to *availability* ranged from being available for the planned duration of candidature to timely response to emails/questions/phone calls, proactive availability, seeking out students for discussion, present *vis à vis* absent McEvoy, available when required, and not being 'frustratingly elusive'.

Table 2 presents an overview of the five meta-categories and 12 categories, together with their sub-categories.

**Table 2: Overview of Meta Categories, Categories and Sub Categories**

| META CATEGORIES | CATEGORIES | SUB CATEGORIES |
|---|---|---|
| **Person Related** | **Affective** | **Interactive Style**<br>**Personal *Modus Operandi***<br>**Nurturing Orientation**<br>**Personal Judgement** |
| | **Cognitive** | **Intellectual Disposition**<br>**Intellectual/Cerebral Thought Processes** |
| **Fundamental Aspects of Supervision** | **Time Related** | **Availability**<br>**Accessibility**<br>**Timeliness**<br>**Meetings** |
| | **Feedback** | **Nature**<br>**Timeliness**<br>**Quality**<br>**Editing**<br>**Specifics**<br>**Amenability** |
| | **Supervisory Expertise** | **Research Process**<br>**Experience**<br>**Personal**<br>**Guidance**<br>**Administration**<br>**Responsiveness**<br>**Style** |
| | **Student Orientation** | **Support**<br>**Facilitation**<br>**Trust**<br>**Professional**<br>**Social** |

| META CATEGORIES | CATEGORIES | SUB CATEGORIES |
|---|---|---|
| **Candidate Oriented** | **Communication Skills** | **Language Skills**<br>**Listening**<br>**Communication**<br>**Guidance** |
| | **Engagement in Research** | **Interest in Research Area/Topic**<br>**Engagement** |
| | **Educator/Mentor** | **Mentor**<br>**Strategies** |
| | **Personal Relationships** | **Relationship**<br>**Interpersonal Skills**<br>**Compatibility** |
| **Discipline and Research** | **Discipline Expertise** | **Knowledge**<br>**Specific Knowledge**<br>**Reputation**<br>**Practitioner Networks**<br>**Academic Flexibility**<br>**Passion** |
| | **Research Expertise** | **Experience**<br>**Passion**<br>**Reputation**<br>**Specifics** |
| **Descriptors of the Person** | **Personal Descriptors** | **Positive**<br>**Neutral**<br>**Negative** |
| | **Personal Issues** | |

These categories, derived from qualitative data, represent individual (mutually exclusive as a result of decisions taken by the collaborating researchers) classifications or groupings. While this is fundamentally a qualitative study, as Gürtler and Huber (2006: 327) acknowledge, 'we cannot completely avoid referring either to quantities in QUAL studies or to qualities in QUAN studies'. In this study the four discipline clusters were unequal in student numbers. Secondly students sometimes cited more and sometimes fewer qualities than the five requested. The decision was made that the number of times particular types of qualities were cited by students would be the focus of analysis. Hence, in the analyses which follow, both frequencies and percentages of qualities within the data generated categories are presented. This communicates the number of times a particular type of quality (e.g., feedback) is cited by students and also facilitates comparison across discipline clusters.

## RESULTS

Qualities were initially analysed for each category of supervisor separately – Principal, Co-Supervisor, Masters and Honours for each of the four discipline clusters. There were only minor differences between the discipline clusters (see the Appendix) so Table 3 presents frequencies and percentages of qualities for each of the supervisor groups – principal, co-supervisor, masters, honours – aggregated across the four discipline clusters.

Overall *Cognitive and Affective Person Related Qualities* (positive and negative) accounted for over 40 percent of all supervisory qualities cited by students. These qualities were more dominant than the Fundamental Aspects of Supervision, those areas most commonly focussed on in Likert type surveys of supervisor satisfaction. These areas were also those of greatest dissatisfaction with the fundamental aspects of supervision the highest. While only 15 percent of the positive qualities cited were candi-

date oriented, those that were negative in this regard were negligible. The smallest meta-category overall was *Discipline and Research Expertise* with only 10 percent of positive qualities and less than one percent negative.

**Table 3: An Overview of Students' Perceptions of the Qualities of their Supervisors by Level of Supervisor**

| META CATEGORY | CATEGORY | PRINCIPAL | | CO-SUPERVISOR | | MASTERS | | HONOURS | | ALL SUPERVISORS | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | N | % | N | % | N | % | N | % | N | % |
| **Person Related Qualities +** | Cognitive | 296 | 6.8 | 169 | 8.5 | 74 | 6.0 | 176 | 8.6 | 715 | 7.4 |
| | Affective | 1215 | 27.8 | 595 | 29.8 | 329 | 26.6 | 618 | 30.1 | 2757 | 28.5 |
| **Fundamental Aspects of Supervision +** | Time Related | 235 | 5.4 | 95 | 4.8 | 71 | 5.7 | 83 | 4.0 | 484 | 5.0 |
| | Feedback | 152 | 3.5 | 45 | 2.3 | 42 | 3.4 | 54 | 2.6 | 293 | 3.0 |
| | Supervisory Expertise | 568 | 13.0 | 220 | 11.0 | 128 | 10.3 | 169 | 8.2 | 1085 | 11.2 |
| **Academic Expertise +** | Discipline | 348 | 8.0 | 166 | 8.3 | 113 | 9.1 | 153 | 7.5 | 780 | 8.1 |
| | Research | 88 | 2.0 | 18 | 0.9 | 13 | 1.1 | 63 | 3.1 | 182 | 1.9 |
| **Candidate Oriented +** | Educator/Mentor | 70 | 1.6 | 10 | 0.5 | 5 | 0.4 | 18 | 0.9 | 103 | 1.1 |
| | Student Orientation | 463 | 10.6 | 175 | 8.8 | 122 | 9.9 | 200 | 9.7 | 960 | 9.9 |
| | Engagement in Research | 109 | 2.5 | 31 | 1.6 | 26 | 2.1 | 47 | 2.3 | 213 | 2.2 |
| | Communication Skills | 84 | 1.9 | 40 | 2.0 | 20 | 1.6 | 42 | 2.0 | 186 | 1.9 |
| | Personal Relationships | 23 | 0.5 | 9 | 0.5 | 3 | 0.2 | 10 | 0.5 | 45 | 0.5 |
| **Descriptors of the Person** | Personal Descriptors + | 14 | 0.3 | 1 | 0.1 | 7 | 0.6 | 13 | 0.6 | 35 | 0.4 |
| | Personal Descriptors Neutral | 19 | 0.4 | 2 | 0.1 | 2 | 0.2 | 2 | 0.1 | 25 | 0.3 |
| | Personal Issues | 12 | 0.3 | 1 | 0.1 | 4 | 0.3 | 2 | 0.1 | 19 | 0.2 |
| **OVERALL** | | | | | | | | | | | |
| **Positive** | | 3696 | 84.7 | 1577 | 78.9 | 959 | 76.7 | 1650 | 80.4 | 7882 | 81.6 |
| **Negative** | | 613 | 14.0 | 401 | 20.1 | 262 | 21.2 | 368 | 17.9 | 1644 | 17.0 |
| **DeSc** | | 53 | 1.2 | 22 | 1.1 | 27 | 2.2 | 35 | 1.7 | 137 | 1.4 |
| **TOTALS** | | 4367 | 45.2 | 2000 | 20.7 | 1248 | 12.8 | 2053 | 21.3 | 9663 | 100.0 |

Of the total number of qualities cited by students almost half are attributed to Principal supervisors and the least to Masters Supervisors. Those attributed to Co-supervisors are less than half those attributed to Principal supervisors, a somewhat surprising finding given the expectation in Australian universities that every student will be assigned at least one co-supervisor. In terms of the proportion of qualities in each category, however, there is remarkable consistency across the supervisor groups apart from a slightly higher percentage of positive qualities attributed to Principal supervisors in the meta-categories *Fundamental Aspects of Supervision* and *Candidate Oriented*. Hence subsequent discussion will focus on all supervisors and discipline clusters aggregated. Table 4 thus presents and overview of the meta-categories in terms of the frequencies and percentages of positive and negative qualities for all supervisors across all four discipline clusters.

**Table 4: Students' Perceptions of the Positive and Negative Qualities of All Supervisors**

| META CATEGORY | SUB CATEGORIES | ALL SUPERVISORS Positive | | ALL SUPERVISORS Negative | | TOTAL |
|---|---|---|---|---|---|---|
| | | N | % | N | % | % |
| **Person Related Qualities** | **Cognitive**<br>Intellectual/Cerebral<br>Intellectual Disposition<br>Thought Processes<br>**Affective**<br>Nurturing Orientation<br>Interactive Style<br>Personal *Modus Operandi*<br>Personal Judgement | 3472 | 35.9 | 582 | 6.0 | 41.9 |
| **Fundamental Aspects of Supervision** | Supervisory Expertise<br>Time Related Qualities<br>Feedback | 1862 | 19.2 | 937 | 9.7 | 28.9 |
| **Candidate Oriented** | Educator/Mentor<br>Student Orientation<br>Engagement in Research<br>Communication Skills<br>Personal Relationships | 1507 | 15.6 | 178 | 1.8 | 17.4 |
| **Discipline and Research Expertise** | Discipline Expertise<br>Research Expertise | 962 | 10.0 | 66 | 0.7 | 10.7 |
| **Descriptive of the Person** | Personal Issues<br>Personal Descriptors | 79 | 0.8 | 15 | 0.2 | 1.0 |
| **TOTALS** | | | 81.5 | | 18.4 | |

Clearly the first two meta-categories account for over 70 percent of all supervisory qualities cited by students. These are also the meta-categories which account for the majority of negative qualities cited by students. Hence subsequent tables probe the sub categories of these two meta-categories in greater detail in order to explore positive and negative qualities in greater detail.

Table 5 presents the cognitive and affective dimensions of positive and negative person related categories together with exemplar qualities, frequencies and percentages for each sub-category. For the

purposes of comparison in Tables 5 to 8 positive and negative qualities are treated discretely so that each adds to 100 percent.

**Table 5: Analysis of the Cognitive and Affective Dimensions of the Person Related Categories for All Supervisors**

| PERSON-RELATED QUALITIES | EXEMPLAR TERMS USED BY STUDENTS | PERSON RELATED POSITIVE | | PERSON RELATED NEGATIVE | | PERSON RELATED DeSc | | TOTAL | |
|---|---|---|---|---|---|---|---|---|---|
| | | N | % | N | % | N | % | + | - |
| **Intellectual/ Cerebral** | intelligent, very intelligent, brilliant, informed | 239 | 6.8 | | | | | | |
| | ill informed, ignorant | | | 3 | 0.5 | | | | |
| **Intellectual Disposition** | critical, focussed, open minded, organized | 396 | 11.4 | | | | | | |
| | scatter brained, disorganized, tunnel vision, imperceptive, | | | 63 | 10.8 | | | 20.6 | 17.3 |
| **Thought Processes** | analytical mind, thoughtful | 80 | 2.3 | | | | | | |
| | Absent-minded, confused/confusing. distracted, vague, careless | | | 35 | 6.0 | | | | |
| **Nurturing Orientation** | caring, commitment to students, empathetic, encouraging | 536 | 15.4 | | | | | | |
| | uncaring, discouraging, uncompassionate, unconcerned | | | 10 | 1.7 | | | | |
| **Interactive Style** | approachable, friendly, flexible, helpful, kind | 935 | 26.9 | | | | | | |
| | abrupt, dismissive, remote, invisible, unhelpful, inflexible | | | 111 | 19.1 | | | 62.6 | 47.8 |
| **Personal *Modus Operandi*** | conscientious, enthusiastic, hardworking, patient, reliable | 703 | 20.2 | | | | | | |
| | arrogant, aloof, cut throat, distrustful, domineering, inconsistent, moody, hands off, impatient, irascible | | | 157 | 27.0 | | | | |
| **Personal Judgement** | dedicated, efficient, generous, inspirational, professional, sense of humour, nice person | 583 | 16.8 | | | | | | |
| | always right, chaotic, difficult, emotionally punitive, erratic, inefficient, manipulative, rude, selfish, unethical | | | 168 | 28.9 | | | 16.8 | 28.9 |

| PERSON-RELATED QUALITIES | EXEMPLAR TERMS USED BY STUDENTS | PERSON RELATED POSITIVE | | PERSON RELATED NEGATIVE | | PERSON RELATED DeSc | | TOTAL | |
|---|---|---|---|---|---|---|---|---|---|
| | | N | % | N | % | N | % | + | - |
| **Double-edged Sword comments (DeSc)** | inclusive (sometimes), detached (but not unpleasant), friendly but sometimes intimidating, somewhat organized | | | | | 35 | 6.0 | | 6.0 |

Person-related qualities of supervisors encompass both cognitive and affective dimensions. Students cited cognitive qualities (the first three sub categories in Table 4) less often, either positively or negatively, than affective/interpersonal qualities. Qualities relating to Intellectual Disposition were cited in about the same proportion positively and negatively. Nurturing Orientation and Interactive Style qualities were cited twice as positively (42.3%) as negatively (20.8%). However, there were proportionally more citations of negative and DeSc Personal Judgement and Personal *Modus Operandi* qualities than positive - 62% cf. 37%.

The *Fundamental Aspects of Supervision* is the second highest meta-category for both positive and negative qualities. However, as noted, over 50 percent of all negative student citations fall in this category compared with less than 25 percent of positive citations. Of the three categories comprising the fundamental aspects of supervision as cited by students, the dominant category is supervisory expertise, followed by time related qualities and qualities related to feedback. Table 6 explores the positive and negative dimensions of supervisory expertise.

**Table 6: Analysis of the Supervisory Expertise Category across all Supervisors**

| SUB-CATEGORIES | EXEMPLAR DESCRIPTORS | SUPERVISORY EXPERTISE POSITIVE | | SUPERVISORY EXPERTISE NEGATIVE | | SUPERVISORY EXPERTISE DeSc | |
|---|---|---|---|---|---|---|---|
| | | N | % | N | % | N | % |
| **Administration +** | Knowledge of university protocols<br>Ensures admin up to date | 32 | 2.9 | | | | |
| **-** | No knowledge of school/university policies<br>Rigid focus on admin details | | | 7 | 2.0 | | |
| **Experience +** | Excellence of supervision skills<br>Very experienced as supervisor | 219 | 20.2 | | | | |
| **-** | Inexperienced; Out of depth<br>Undergraduate focussed | | | 59 | 16.9 | | |
| **Guidance +** | Constructive/reliable in advice<br>Guiding the research without being too prescriptive | 180 | 16.6 | | | | |
| **-** | Unwilling to give guidance until thesis is complete<br>Inconsistent advice | | | 78 | 22.3 | | |
| **Personal +** | Adaptive to different students' needs<br>Remembers where students are up to | 119 | 11.0 | | | | |

| SUB-CATEGORIES | EXEMPLAR DE-SCRIPTORS | SUPERVISORY EXPERTISE POSITIVE | | SUPERVISORY EXPERTISE NEGATIVE | | SUPERVISORY EXPERTISE DeSc | |
|---|---|---|---|---|---|---|---|
| | | N | % | N | % | N | % |
| - | Only interested when my work intersects with his<br>Dismissive of my direction | | | 30 | 8.6 | | |
| **DeSc** | Sometimes there when needed<br>Approachable when it suits | | | | | 20 | 5.7 |
| **Research Process**<br>**+** | Understands and is able to articulate the research process<br>Keeps me/project on track | 416 | 38.3 | | | | |
| - | No advice on structure<br>Jokes about his distance from the process | | | 87 | 24.9 | | |
| **Responsiveness**<br>**+** | Responsive to questions I have<br>Follows through | 72 | 6.6 | | | | |
| - | Doesn't answer specific questions<br>Doesn't take problems seriously | | | 21 | 6.0 | | |
| **Style**<br>**+** | Flexible approach<br>Open to new ideas<br>Not too directive/controlling | 47 | 4.3 | | | | |
| - | Deep-ender<br>Messy | | | 28 | 8.0 | | |
| **DeSc** | Only interested when things going well<br>A bit left of field but can inspire new trains of thought | | | | | 20 | 5.7 |

The dominant sub categories of both positive and negative supervisory expertise are Research Process, Guidance and Experience. Almost 40 percent of positive and 25 percent of negative qualities cited by students relate to Research Process. A similar percentage of both positive and negative qualities are in the Experience and Guidance sub-categories taken together. A further 28 percent of negative qualities refer to the Personal Aspects of Supervision and Supervisory Style compared with 15 percent of positive qualities.

On the positive side of Research Process, students appreciate the setting of goals and deadlines in the context of realistic expectations and a clear sense of intellectual engagement and support. A willingness to impart/share knowledge/experience of research design and process is valued by students as is the ability to present options to students faced with uncertainty. Negative descriptors in relation to Research Process included lack of intellectual input, inability to support ideas not his/her own, unclear expectations, dishonest with my data, more words than action, tried to persuade me not to worry about getting field data right.

Table 7 presents the Time Related qualities across all supervisors accounting for six percent of positive qualities overall and almost 30 percent of negative qualities.

**Table 7: Time Related Qualities Analysed across all Supervisors**

| TIME RELATED | EXEMPLAR DESCRIPTORS | TIME RELATED POSITIVE | | TIME RELATED NEGATIVE | | TIME RELATED DeSc | |
|---|---|---|---|---|---|---|---|
| | | N | % | N | % | N | % |
| **Accessibility** | | | | | | | |
| + | Easy to access<br>Willingness to spend time with me as a student | 127 | 26.3 | | | | |
| - | Busy all the time and stressed<br>Difficult to access | | | 338 | 67.6 | | |
| **DeSc** | Extremely busy but somewhat accessible nevertheless | | | | | 3 | 0.6 |
| **Availability** | | | | | | | |
| + | Proactive availability<br>Available for planned duration of candidature | 269 | 55.6 | | | | |
| - | Frustratingly elusive<br>Uncontactable | | | 54 | 10.8 | | |
| **DeSc** | Available when he's in town | | | | | 22 | 4.4 |
| **Meetings** | | | | | | | |
| + | Regular scheduled ongoing structured formal contact<br>Purposeful meetings | 39 | 8.1 | | | | |
| - | Forgets to turn up to scheduled meetings<br>Ignores my emails asking him to set meeting time | | | 29 | 5.8 | | |
| **DeSc** | Appreciated short meetings | | | | | 4 | 0.8 |
| **Timeliness** | | | | | | | |
| + | Reliable in keeping meeting time<br>Doesn't make me feel rushed | 49 | 10.1 | | | | |
| - | No respect for deadlines<br>Cannot balance competing time demands | | | 48 | 9.6 | | |
| **DeSc** | Worked within their time frame | | | | | 2 | 0.4 |

Overwhelmingly, student dissatisfaction relating to time is mostly related to supervisor lack of accessibility and availability, together accounting for over 80 percent of the negative qualities cited in this category. Indeed negative qualities relating to accessibility are cited more than two and a half times more frequently than are related positive qualities. Students had seemingly infinitely variable ways of presenting a busy, inaccessible supervisor: overcommitted, time poor, too busy to spend quality time, preoccupied with their own workload, never in his/her office, non-existent except as name, not proactive in seeking you out, after initial introduction has not been seen since, invisible.

The third dimension of the professional aspects of supervision, Feedback, accounted for 3.7 percent of actual, differentiable positive and 4.8 percent of negative qualities with students dominantly citing qualities in relation to Timeliness and the Nature of Feedback as is evident from Table 8.

**Table 8: Analysis of Feedback Qualities across all Supervisors**

| FEEDBACK QUALITIES | TYPE | EXEMPLAR DESCRIPTORS | FEEDBACK POSITIVE | | FEEDBACK NEGATIVE | | FEEDBACK DeSc | |
|---|---|---|---|---|---|---|---|---|
| | | | N | % | N | % | N | % |
| **Timeliness** | + | Prompt return of draft material<br>Makes time to read thesis drafts | 93 | 31.7 | | | | |
| | - | Slack beyond belief – often months<br>Doesn't read work requested | | | 34 | 39.1 | 7 | 8.0 |
| **Quality** | + | Good quality feedback – verbal and written<br>Effective Feedback | 19 | 6.5 | | | | |
| | - | Doesn't read closely enough<br>Illegible responses | | | 1 | 1.1 | 3 | 3.4 |
| **Nature** | + | Knowing what to critique & what to let go, especially early on<br>Critical and constructive | 138 | 47.1 | | | | |
| | - | Comments very general<br>Discouraging | | | 26 | 29.9 | 1 | 1.1 |
| **Specifics** | + | Rigorous critique of interpretation of theoretical material<br>Incredible memory for your work | 17 | 5.8 | | | | |
| | - | Work returned with only infinites-imal typo corrections<br>Micro-edits grammar/tenses | | | 2 | 2.3 | 0 | |
| **Editing** | + | Excellent proof reader<br>Meticulous attention to detail | 26 | 8.9 | | | | |
| | - | Did not focus on production and editing where I lost marks<br>Editing skills still need work | | | 2 | 2.3 | 1 | 1.1 |
| **Accessibility** | + | Happy to give FB<br>Reads everything I send her | | 0 | | | | |
| | - | Reluctant to give responses to drafts<br>Does never read anything | | | 9 | 10.3 | 1 | 1.1 |

The relatively low number of citations of qualities related either positively or negatively to Feedback is somewhat intriguing given that other studies (e.g., Wadesango and Machinggambi (2011)) report feedback as a major issue. This may, of course, be an artefact of the design of this study which gave students agency and did not ask them specifically to respond to a statement in relation to feedback as have many other studies. Nevertheless there were proportionally more negative comments about the Timeliness of Feedback than there were positive with students expressing evident frustration: hasn't had time to read my work, lacks time to closely critique my work, not a word of FB to my drafts after eight months waiting. No student made a positive comment about the Accessibility of Feedback but 11 percent commented negatively in that regard, for example: never monitors the work to make sure not going off track, would not read thesis drafts, afraid to give FB. On the other hand students proffered almost twice as many positive than negative comments about the Nature of the Feedback received and more than three times as many positive than negative qualitative statements in relation to Editing and the Specifics of Feedback.

## *COMPARING ACTUAL SUPERVISORS WITH THE IDEAL*

How do actual supervisors measure up again students' perception of the ideal supervisor? Table 9 examines attributed positive qualities of all *actual* supervisors compared with those of the *ideal* supervisor.

**TABLE 9: Students' Perceptions of the Positive Qualities of All Actual Supervisors Compared with the Ideal Supervisor**

| META CATEGORY | CATEGORY | SUPERVISORS | | | | TOTAL | |
|---|---|---|---|---|---|---|---|
| | | ALL ACTUAL | | IDEAL | | ALL ACTUAL % | IDEAL % |
| | | N | % | N | % | | |
| **Person Related Qualities** | Cognitive | 715 | 7.4 | 328 | 6.7 | 35.9 | 33.6 |
| | Affective | 2757 | 28.5 | 1315 | 26.9 | | |
| **Fundamental Aspects of Supervision** | Time Related | 484 | 5.0 | 463 | 9.5 | 19.2 | 30.8 |
| | Feedback | 293 | 3.0 | 180 | 3.6 | | |
| | Supervisory Expertise | 1085 | 11.2 | 864 | 17.7 | | |
| **Candidate Oriented** | Educator/Mentor | 103 | 1.1 | 94 | 1.9 | 15.6 | 21.7 |
| | Student Orientation | 960 | 9.9 | 627 | 12.8 | | |
| | Engagement in Research | 213 | 2.2 | 116 | 2.4 | | |
| | Communication Skills | 186 | 1.9 | 162 | 3.3 | | |
| | Personal Relationships | 45 | 0.5 | 64 | 1.3 | | |
| **Discipline and Research** | Discipline Expertise | 780 | 8.1 | 570 | 11.7 | 10.0 | 13.9 |
| | Research Expertise | 182 | 1.9 | 108 | 2.2 | | |
| **Descriptive of the Person** | Personal Descriptors | | | | | 0.9 | |
| | Factual and Positive | 35 | 0.4 | | | | |
| | Neutral | 25 | 0.3 | | | | |
| | Personal Issues | 19 | 0.2 | | | | |
| **TOTALS** | | | 81.6 | | 100.0 | 81.6 | 100.0 |

The major areas of difference between actual and ideal supervisors are that actual supervisors are perceived to have fewer qualities relating to the Professional Aspects of Supervision, fewer Candidate Oriented qualities and more Cognitive and Affective Person Related qualities than their perceived ideal supervisor. For example, in terms of Intellectual/Cerebral qualities, those relating to the intellect – very intelligent, sharp intelligence, intellectual – accounted for 67 percent of qualities attributed to actual supervisors in this category compared with 57 percent perceived to characterize an ideal supervisor. The ideal supervisor, on the other hand, is perceived to have commitment to the student which translates into respect for their endeavours, time for them, offers guidance re the research process and knows what is required for success. The time poor actual supervisor who communicates mega busyness to students, who places them in a queue for attention when their turn eventuates is seen as signalling that students' concerns and work have low priority and low valence for the supervisor. The power relationship dictates that it is good manners for the student to retreat and suck up the relegation.

Table 4 showed that one third of the negative qualities cited by students across all *actual* supervisors (Principal, Co, Masters and Honours) were Person Related – a similar proportion to that for positive Person Related Qualities. Table 4 showed that, in negative person related qualities, personal judgements (29%) and ways of operating (Personal Modus Operandi) that students do not admire (27%) dominate, along with negative Interactive Style (19%). The fundamental aspects of supervision, how-

ever, accounted for more than 50 percent of the negative qualities cited. Of these, the majority were Time Related (particularly Accessibility) followed by qualities relating to Supervisory Expertise (dominantly Research Process and Guidance). As suggested earlier, qualities which students perceive to impact negatively on their candidature such as inaccessibility to supervision, lack of access to sound research processes and guidance and/or personal disrespectful behaviours from supervisors which undermine confidence and increase the loneliness of the long distance researcher may well loom larger and be perceived as more threatening than somewhat benign but not necessarily facilitative positive qualities.

As noted in the Methodology some respondents were supervisors and, in their case as shown in Table 10, a somewhat different profile emerges.

**TABLE 10: A Comparison of *Ideal* Supervisor Qualities with those attributed (a) to self as Supervisor and (b) to their Principal Supervisor**

| CATEGORY | SELF AS SUPERVISOR | | | | | IDEAL | | PRINCIPAL | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | + | | - | | TOTAL % | N | % | + | | - | | TOTAL % |
| | N | % | N | % | | | | N | % | N | % | |
| **Cognitive and Affective Person Related Qualities** | 455 | 35.5 | 38 | 2.9 | 38.4 | 1643 | 33.6 | 1511 | 34.6 | 221 | 5.1 | 39.7 |
| **Fundamental Aspects of Supervision** | 384 | 30.0 | 32 | 2.5 | 32.5 | 1507 | 30.8 | 955 | 21.9 | 340 | 7.8 | 29.7 |
| **Candidate Oriented** | 271 | 21.2 | 5 | 0.4 | 21.5 | 1063 | 21.7 | 749 | 17.2 | 67 | 1.5 | 18.7 |
| **Discipline & Research Expertise** | 94 | 7.3 | 2 | 0.2 | 7.5 | 678 | 13.9 | 436 | 10.0 | 33 | 0.7 | 10.7 |
| **Descriptive of the Person** | | 0 | | 0 | 0 | | 0 | 45 | 1.0 | 3 | 0.1 | 1.1 |
| **TOTALS** | | 93.9 | | 6.0 | | | | | 84.7 | | 15.2 | |

Respondents' perceptions of their own qualities as a supervisor were closer to the ideal in respect of the fundamental aspects of supervision (time related qualities, feedback, supervisory expertise) and higher than the positive qualities attributed to principal supervisors by all respondents (30% compared with 22%). Their perceptions of self-ascribed negative qualities relating to this aspect were also lower than those seen to characterize principal supervisors (2.5% *vis-ã-vis* 7.2%). Overall 15 percent of qualities perceived by all respondents to characterize principal supervisors were negative while only six percent relating to self as supervisor were negative. Respondents citing their own qualities as a supervisor cited none that related to personal relationships in either a negative or positive way. The fact that respondents who were supervisors perceived themselves as closer to the ideal on many dimensions may be intuitively expected but nevertheless offers an intriguing avenue for further research potentially demonstrating Robert Burns's (1786) exhortation in his poem *To a Louse*:

> O wad some Pow'r the giftie gie us
> To see oursels as others see us!
> (Burns, 1786 in Robertson (Ed.), 1950: 139).

## *Degree of Fit between Actual and Ideal Supervisor Qualities*

The fact that, overall, 81.5 percent of actual supervisor qualities were positive is pleasing but what is the degree of *fit* for individual students? Table 11 provides two examples.

**Table 11: Examples of *Fit* between Students' Principal and Ideal Supervisor**

| STUDENT | PRINCIPAL SUPERVISOR | IDEAL SUPERVISOR | QUALITIES IN COMMON N |
|---|---|---|---|
| A | Acknowledged expert in field | Has the ability to provide critical, timely, constructive, discipline-specific advice | 0 |
| | High profile in field | Takes the time to think about and discuss the PhD candidate's work | 0 |
| | Busy | Knows the administrative side of doing a PhD | 0 |
| | Elusive | Is willing to help the student learn the craft as well as produce the thesis | 0 |
| | Self-focused - only interested where my work intersects with his | Can identify the skill gaps and advise ways and means of closing them | 0 |
| B | Busy | Approachable/available | 0 |
| | Open to new ideas/interested | Encouraging/enthusiastic | 0.5 |
| | Knowledgeable | Constructively critical | 0 |
| | Enthusiastic | Respectful | 0 |
| | Optimistic | Knowledgeable/helpful (generous with time and with guidance) | 0.5 |

In Student A's case there were no qualities in the Ideal supervisor list that were also on the Principal Supervisor list so this was categorized as zero qualities in common. Student B lists six qualities for the Principal supervisor and multiple qualities for the Ideal supervisor. In each of lines two and five, one of the multiple qualities listed also appears on the Principal supervisor list. While this was not a perfect match, our principle that apparent student intent would be accommodated resulted in such instances being counted as 0.5 so that, overall, Student B was regarded as having one quality in common. Table 10 presents the number of qualities in common between all students' *actual principal* supervisor and their *ideal* supervisor. As shown for Student B above, where students bracketed qualities 0.5 was recorded where there was commonality with one of the cited qualities resulting in 11 categories of agreement from none to five as reflected in Table 12.

For 15 percent of all students there was almost complete commonality of qualities between their current principal supervisor and their ideal supervisor, albeit somewhat lower for those in Humanities and Social Sciences (Group 1) and somewhat higher for those in the Professional Studies cluster (Group 4). On the other hand, for approximately a quarter of all students across the four discipline group clusters, there was no commonality of qualities between their current principal supervisor and their ideal supervisor. For almost 60 percent of all students, at best, there was either no commonality of qualities or only up to 1.5 qualities in common. This means that, for many students, the positive opqualities they perceived in their principal supervisors (e.g., cheerful, cordial, good, gregarious, laid back, likable, polite, powerful, street smart, quick thinker, uncomplicated) were not attributed by any student to their *ideal* supervisor and lacked compelling positive valence for them.

**Table 12: Commonality of Qualities between Students' Principal and Ideal Supervisors**

| NO QUALITIES IN COMMON | GROUP 1 HUMANITIES & SOCIAL SCIENCES | | GROUP 2 CREATIVE ARTS | | GROUP 3 SCIENCES & HEALTH SCIENCES | | GROUP 4 PROFESSIONAL STUDIES | | TOTAL | |
|---|---|---|---|---|---|---|---|---|---|---|
| | N | % | N | % | N | % | N | % | N | % |
| **5** | 17 | 8.9 | 8 | 11.8 | 22 | 8.8 | 28 | 14.7 | 75 | 10.7 |
| **4.5** | 1 | 0.5 | 0 | | 2 | 0.8 | 2 | 1.1 | 5 | 0.7 |
| **4** | 5 | 2.6 | 4 | 5.9 | 13 | 5.2 | 6 | 4.7 | 28 | 4.0 |
| **Sub-total** | 23 | 12.0 | 12 | 17.7 | 37 | 14.8 | 36 | 20.5 | 108 | 15.4 |
| **3.5** | 4 | 2.1 | 1 | 1.5 | 5 | 2.0 | 3 | 1.6 | 13 | 1.9 |
| **3** | 17 | 8.9 | 2 | 2.9 | 19 | 7.6 | 13 | 6.8 | 51 | 7.3 |
| **2.5** | 10 | 5.2 | 1 | 1.5 | 9 | 3.6 | 2 | 1.1 | 22 | 3.2 |
| **2** | 26 | 13.6 | 11 | 16.2 | 30 | 12.0 | 27 | 14.2 | 94 | 13.5 |
| **Sub-total** | 57 | 29.8 | 15 | 22.1 | 63 | 25.2 | 45 | 23.7 | 180 | 25.9 |
| **1.5** | 14 | 7.3 | 5 | 7.4 | 23 | 9.2 | 20 | 10.5 | 62 | 8.9 |
| **1** | 35 | 18.3 | 9 | 13.2 | 46 | 18.5 | 29 | 15.3 | 119 | 17.0 |
| **0.5** | 17 | 8.9 | 4 | 5.9 | 21 | 8.4 | 16 | 8.4 | 58 | 8.3 |
| **None** | 45 | 23.6 | 23 | 33.8 | 59 | 23.7 | 44 | 23.2 | 171 | 24.5 |
| **Sub-total** | 70 | 58.1 | 41 | 60.3 | 149 | 59.8 | 109 | 57.4 | 410 | 58.7 |
| **TOTALS** | 191 | 27.4 | 68 | 9.7 | 249 | 35.7 | 190 | 27.2 | 698 | |

## DISCUSSION

At face value the fact that there was a complete or almost complete match of qualities between *actual* and *ideal* supervisors for only 11 percent of the current sample compared with one or no common qualities for 33 percent sits at variance with the finding that 82 percent of all *actual* supervisor qualities were positive. Why might this be so? The data suggest that some sub-categories were valued more highly for the *ideal* than for *actual* supervisors. While overall there was a lower percentage of Person Related qualities for *ideal* supervisors, there were sub-categories where the percentages for *ideal* supervisors were higher, notably Intellectual Disposition, Nurturing Orientation, Interactive Style, and Personal *Modus Operandi*. Exemplar terms used in respect of *ideal* supervisors were:

> Intellectual Disposition – constructively critical. Highly developed critical ability, focussed, highly motivated, well organized;
>
> Nurturing Orientation – caring, commitment to students, empathetic, encouraging, understanding;
>
> Interactive Style – approachable, friendly, flexible, helpful;
>
> Personal *Modus Operandi* – conscientious, enthusiastic, honest, reliable, passionate, patient.

For the *ideal* supervisor over 30 percent of positive qualities related to the Fundamental Aspects of Supervision compared to just above 20 percent for *actual* supervisors. Again the sub-categories received different weightings for *actual* and *ideal* supervisors particularly in Supervisory Expertise (research process, personal, and experience sub categories), Time Related positive qualities where the sub categories of Accessibility, Availability and Timeliness for the *ideal* were double those for *actual* supervisors, and Feedback where nature, quality and timeliness were higher for the *ideal* than *actual*. While the Candidate Oriented qualities were higher overall for the ideal supervisor, major differences were noted in the sub categories of Communication Skills and Personal Relationships. Compared with *actual* supervisors, qualities indicative of Language Skills, Interpersonal Skills and Relationship were cited twice as often for the ideal supervisor.

There was negligible difference between the ideal and real supervisors in relation to discipline/research expertise although, in both cases, it was under 14 percent. The qualities which distinguish the ideal and real supervisors appear to be more person related in terms of respect, empathy and support for the learning opportunities and environment in which students are encouraged to explore, take risks, ask questions and pursue answers of interest and import to them. James and Baldwin (2006) elucidate the underpinning principles of good supervision as requiring good teaching (including interest in and concern for students, thoughtful & timely feedback); recognition of an intensive process which requires sustained time & energy; a relationship which has a particularity of personal dimension; the valuing of and responsiveness to student diversity; realistic extension of students; and judicious mentoring.

The James and Baldwin (2006) second principle goes to the heart of this issue; the intensive nature of supervision absolutely requires and deserves sustained time and energy which will never be delivered if that area of activity is subsumed and relegated to the back burner of academic responsibilities. While there were some supervisors in the current study whose descriptors by students would place them in Kearns's (2018) *toxic* category, there were very many more who would fit into his dominantly *busy* category.

It is clear that the James and Baldwin (2006) particularity of personal dimension is unlikely to flourish in an environment of hastiness and squeezed time where students are made to feel that they are nothing but a further source of stress for supervisors. Many feel the need for self-effacement which only intensifies the third precipitant of mental health issues mentioned by Kearns (2018) – isolation and the sense that nobody cares and there is no recourse. In discussing the Levecque, Anseel, De Beuckelaer, Van der Heyden, and Gisle (2017: 868) Belgian study which showed that a third of all PhD students are at risk of "… having or developing a common psychiatric disorder, especially depression", Kearns (2018) reminded his conference audience of the need to be sensitive when communicating with students, to "bear in mind that there's a person at the other end."(Kearns, 2018: 15). Sensitivity to the fact that students are also people too should underpin academic interaction as it should in all professional interactions. However supervisory busyness may blunt this sensitivity leading, unfortunately, to supervisory behaviour which impacts on students negatively leading to discomfort, loss of self-esteem and finally, all too often, peril. Some survive this; others do not.

The reality is that postgraduate students, as humans with vulnerabilities, idiosyncrasies, complex lives and often multiple responsibilities, are less amenable as a predictable metric than are publications, conference presentations, committee memberships, grants etc. Lovitts's (2008) study of "high-PhD-productive faculty" identified the advisor as "the most important micro-environmental factor in success or failure":

> I think advisor negligence is a large part [of failure] because there are no professional incentives to be nice to your dissertation students. Its hard work and you're not rewarded for it. (Lovitts, 2008: 299, 316-7)

Further Stephens (2014: 537) had the temerity to suggest that 'Not all individuals have the traits necessary to become a good supervisor/mentor' yet many, if not most, academics would regard the opportunity to supervise postgraduates as an unalienable right, albeit one that, in action, is often perceived to be more chore than delight. Further Stephens (2014) argues that:

> The role of supervisor … requires particular communication skills; personal qualities; and the building of a working and personal relationship with the doctoral student (Stephens, 2014: 537-8)

Supervisors in the Stephens's (2014) study were asked to indicate their level of agreement with a series of statements about supervision. Statements which might be regarded as indicative of supervision commitment received somewhat lukewarm endorsement from the supervisors in his sample:

> "I do not have the interest in students to be a good supervisor" (28% Agree & 28% Not Sure);
>
> "Supervisors are accountable for the performance of their students" (19% Agree & 44% Not Sure);
>
> "The success of my students provides the most job satisfaction" (12% Agree & 63% Not Sure);
>
> "Being a supervisor is my greatest academic responsibility" (44% Agree & 44% Not Sure).

Fifty-seven percent of Stephens's (2014) respondents felt that their colleagues did not perceive them to be a good supervisor. Since his responses were gained by survey, there was no interview follow up to explore what might lie behind these supervisors' attitudes. However, it is reasonable to hypothesize that those who are dubious about the job satisfaction to be derived from supervision may well provide less than optimal supervisory support to students.

The ultimate peril for postgraduate students is non-completion/withdrawal/opting out which, it seems, is a largely hidden/supressed statistic referred to by Lovitts (1996: 15) as the "silent exit". While some universities refer positively to a process of weeding out those unlikely to complete, Lovitts's (1996) research found that entry level academic ability does not account for attrition and nor is it discipline specific. Lovitts and Nelson's (2000) data "suggest that the single most important factor in student decisions to continue or withdraw is the relationship with a faculty adviser". They point out that "faculty members typically attribute departure to student failure" seeing themselves as "active agents when students complete their degrees and as passive onlookers when students depart" making it "especially easy" for them to "sustain the illusion that they have no role in student attrition" (Lovitts & Nelson, 2000: 46). Maddox's (2017) study of students who *did not finish* found that they "left … feeling that their interests and skillset were not being valued" and that they "required strong relationships with advisors … committed to seeing them complete the degree and [who] cared about their success" (Maddox, 2017: 189 &166). Castello, Pardo, Sala-Buberé, and Suñe-Soler (2017: 1053) refer to this as "a culture of institutional neglect" in the Spanish context.

In citing several studies as evidence for her statement that "40 to 60 percent of students who begin doctoral studies in selective colleges and universities do not persist to graduation" Bair and Haworth (1999) speculates that

> … An attrition rate of ostensibly 50 percent overall would be of tremendous concern to college and university administrators, faculty, and policy makers [but points out that] this has not been the case (Bair & Haworth, 1999: 1)

A somewhat normative attrition statistic of between one third and one half reported across the decades and multiple countries suggests that "graduate programs have been astonishingly wasteful of their human capital" (Lovitts & Nelson, 2000: 44). Early on Australia referenced the problem as an "unacceptable wastage of private and public resources associated with long completion times and low completion rates for research degree students" (Kemp, 1999: 2) but coyness prevailed re the metrics, reputedly around 30 percent but anecdotally often 50 percent. According to Bitusikova (2009) around 50 percent of candidates in European universities do not complete their doctorate. What has characterized institutional responses in terms of supervision? Over the last two decades, as acknowledged earlier in this paper, universities worldwide have initiated extensive supervisor development programs. For example, the cross institutionally scoped Irish National Academy for Integration of Research, Teaching and Learning (NAIRTL) Supervisor Support and Development Working Group (2012) guide "*Developing an institutional framework for supporting supervisors of research students*" encompasses the supervisor and the institution and the various phases of the supervision lifecycle. Universities have also introduced registers of supervisors within which neophyte supervisors are guided to-

wards principal supervisor responsibilities. While improvements have undoubtedly occurred, student dissatisfactions persist – and they cluster in the areas identified in this study.

What might be done that has not already been done? Academics are smart people who know how to respond appropriately in the context of institutionally sponsored peer programs but in the field they may not always deliver consistently on the desired behaviours in their interactions with students. Incremental strategies to acculturate early career supervisors towards full registration as a supervisor do not necessarily ensure that desirable behaviours persist beyond the achievement of the licence to become a primary supervisor – and the planned checks and balances of supervisory panels can be subject to the vagaries and time commitments of the individuals concerned. Perhaps actual or threatened de-selection of supervisors might be ultimately effective in delivering more rewarding postgraduate learning experiences for students? Alternatively broadening the selection criteria beyond demonstrated academic excellence might militate against students perceiving a supervisor to demonstrate what students perceive to be negative behaviours:

> Very supportive (occasionally, when Dr Jekyll is there instead of Mr Hyde)
>
> Lack of people skills/paranoid – he does not allow my co-supervisor and myself to discuss my research directly – we must 'speak' to each other through him
>
> Quite biased towards or against certain people, depending on how well she relates to them and whether she views them as the fastest little conveyor belts in her factory
>
> Unprofessional – tells me about his personal problems and his need for counselling as an excuse for why he is disorganised and unable to perform his duties as a supervisor
>
> When the blunt, direct, condescending remarks come out about me being 'only a student' I do get ticked off and de-motivated.

If the primary goal is to secure more rewarding pathways for students to complete successfully, what might be done to achieve this? Problems with supervision have been regularly identified over many decades yet the elephant remains in the room despite universities' multi-facetted attempts at amelioration and training of supervisors. This leads one to question the extent to which that apparently critical interest in the student might actually be amenable to teaching, however thorough/innovative/compulsory the supervisor training program? As one student observed of his supervisor, 'he's just not wired for supervision'. Might indeed there be some who are not suited to this kind of teaching/research training? What strategies might universities implement to countermand this problem - more rigorous evaluation following training or maybe selection? These issues offer scope for further research.

## CONCLUSION

This paper set out to scope positive and/or negative qualities postgraduate research students perceive to characterize their supervisors – principal, co-supervisor, masters and honours. The voluntarily participating students were invited to nominate five qualities for each category of actual supervisor and for their ideal supervisor. The resultant qualities were analysed into four major data driven meta-categories, each of which had categories and sub categories. While 82 percent of the qualities cited by students in relation to actual supervisors were positive, they were not necessarily those that they valued in their ideal supervisor.

### *LIMITATIONS AND STRENGTHS*

On the negative side it is again acknowledged that the participating universities' decision to allow only an opt-in mode of sampling imposes inevitable limitations on the sample in terms of its representativeness. The student generated data from this survey on their perceptions of positive and nega-

tive supervisory qualities thus provides but a single snapshot. Data analysis was subject to the potentially inherent bias of the researchers' identification of thematic categories. It was also restricted to comparison on the basis of discipline cluster as neither gender nor stage of candidature were identified on the survey.

On the positive side, the opt-in invitation provided a data yield far greater than originally envisaged. The methodological decision to allow students unconstrained agency in their descriptors provided both a complementary and a more complex snapshot of supervisors (both actual and ideal) than many previous studies which provided supervision process oriented statements for students to rate on a Likert type scale. The fact that over one third of all qualities were person related (cognitive and/or affective) provides an evidential base for observations about the centrality of the supervisor to successful outcomes across a range of previous research contexts. In the open response section "*What are PhD students unhappy with?"* the highest percentage of negative comments concerned supervision – its quality and their treatment by supervisors (Amnéus, 2013: 13).

### *Synergies with the Literature*

O'Donovan, Halford, and Walters (2011: 106) pointed out that the quality of the supervisory alliance is associated with supervisee satisfaction with supervision. The finding that students attached great importance to interpersonal affiliation or feeling supported by their supervisors (De Kleijn, Meijer, Pilot, & Brekelmans, 2014: 343) means that a distanced form of supervision has a negative impact on the relationship (Doloriet, Sambrook, & Stewart, 2012: 737), highlights the importance of personal supervisory interaction for students (Pyhältö, Vekkaila, & Keskinen, 2015: 15) and suggests that the more supervisory encounters there are, the calmer and more serene students feel (Wagener, 2017: 235). Indeed, Devine and Hunter (2016: 52) argue that the more students a supervisor has completed and the more frequently they meet, the lower the student's emotional exhaustion (Devine & Hunter, 2016: 52).

The theoretical literature on supervision spans a range of helping professions with a genesis in psychotherapy, psychology and social work. In the context of psychotherapy Rogers (1958) explored the characteristics of a helping relationship which he described as designed to "facilitate growth" and one characterised by trust, the feeling of independence to make choices and an active "person-to-person relationship" (Rogers, 1958: 6&8). Blocher (1983) takes a cognitive developmental approach to counselling supervision and enunciates the "dynamics or characteristics of person-environment interaction" as seven fold: challenge, involvement, support, structure, feedback, innovation and integration and suggesting the model's applicability "in a rather wide range of supervisory situations" (Blocher, 1983: 32&33). Kadushin's (1976) model of supervision in social work is an adaptation of Dawson's (1926) three pillars model in which he perceives the one on one meeting as the crucible in which the interdependent administrative, educative and supportive functions are appropriately fulfilled (Kardushin, 1992: 149). This research could provide a platform for theorizing a model of academic supervision which takes into account not only the "uneasy bridge" between teaching and research identified by Lee and McKenzie (2011) but also the mentoring aspect explicitly identified in the literature (e.g., Zhao and Han, (2007), Boyle (2014) and Mullens, Stapleton, Clarke, and Strodl (2019).

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## APPENDIX: STUDENTS' PERCEPTIONS OF THE QUALITIES OF THEIR SUPERVISORS BY DISCIPLINE CLUSTER (GROUPS 1 – 4)

| META CATEGORY | CATEGORY | GROUP 1 | | GROUP 2 | | GROUP 3 | | GROUP 4 | | TOTAL | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | N | % | N | % | N | % | N | % | N | % |
| **Person Related Qualities +** | Cognitive | 247 | 9.1 | 65 | 7.5 | 233 | 6.8 | 170 | 6.5 | 715 | 7.4 |
| | Affective | 803 | 29.4 | 248 | 28.7 | 995 | 28.9 | 711 | 27.0 | 2757 | 28.5 |
| **Fundamental Aspects of Supervision +** | Time Related | 124 | 4.5 | 54 | 6.3 | 156 | 4.5 | 150 | 5.7 | 484 | 5.0 |
| | Feedback | 111 | 4.1 | 23 | 2.7 | 80 | 2.3 | 79 | 3.0 | 293 | 3.0 |
| | Supervisory Expertise | 262 | 9.6 | 109 | 12.6 | 371 | 10.8 | 343 | 13.0 | 1085 | 11.2 |
| **Academic Expertise +** | Discipline | 234 | 8.6 | 54 | 6.3 | 269 | 7.8 | 223 | 8.5 | 780 | 8.1 |
| | Research | 39 | 1.4 | 2 | 0.2 | 107 | 3.1 | 34 | 1.3 | 182 | 1.9 |
| **Candidate Oriented +** | Educator/Mentor | 33 | 1.2 | 10 | 1.2 | 41 | 1.2 | 19 | 0.7 | 103 | 1.1 |
| | Student Orientation | 257 | 9.4 | 65 | 7.5 | 337 | 9.8 | 301 | 11.4 | 960 | 9.9 |
| | Engagement in Research | 59 | 2.2 | 36 | 4.2 | 71 | 2.1 | 47 | 1.8 | 213 | 2.2 |
| | Communication Skills | 58 | 2.1 | 22 | 2.5 | 57 | 1.7 | 49 | 1.9 | 186 | 1.9 |
| | Personal Relationships | 18 | 0.7 | 2 | 0.2 | 12 | 0.3 | 13 | 0.5 | 45 | 0.5 |
| **Descriptors of the Person** | Personal Descriptors + | 11 | 0.4 | 3 | 0.3 | 21 | 0.6 | 0 | 0.0 | 35 | 0.4 |
| | Personal Descriptors Neutral | 15 | 0.5 | 0 | 0.0 | 7 | 0.2 | 3 | 0.1 | 25 | 0.3 |
| | Personal Issues | 6 | 0.2 | 1 | 0.1 | 6 | 0.2 | 6 | 0.2 | 19 | 0.2 |
| **OVERALL** | | | | | | | | | | | |
| **Positive** | | 2277 | 83.5 | 694 | 80.4 | 2763 | 80.3 | 2148 | 81.6 | 7882 | 81.6 |
| **Negative** | | 405 | 14.8 | 161 | 18.7 | 634 | 18.4 | 444 | 16.9 | 1644 | 17.0 |
| **DeSe** | | 46 | 1.7 | 8 | 0.9 | 44 | 1.3 | 39 | 1.5 | 137 | 1.4 |
| **Total N** | | 2728 | | 863 | | 3441 | | 2631 | | 9663 | |

## BIOGRAPHY

**Professor Diana Davis** has been an Adjunct Research Fellow in the ANU Centre for European Studies since 2010. She has extensive experience not only in research supervision (over 130 successful completions across language, literature and the creative arts) but also in policy development surrounding doctoral education and the doctoral experience. The winner of the VC Award for Excellence in Supervision at two universities, she has most recently been a member of the VC's Committee of Inquiry tasked with re-imagining the ANU PhD and a contributor to supervisor development programmes.