Building Bridges:
Higher Degree Student Retention and Counselling Support

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Abstract

This paper aims to contribute to the discussion on increasing retention rates in higher degree students. It gathers evidence from the literature on the value of increasing counselling and mentoring care for higher degree research students. The creation of, and rationale for, a designated higher degree student counsellor-mentor role is described. The role of a counselling-trained mentor is one that combines elements of counselling, mentoring, organisational and social support for both higher degree research students and supervisors. The creation of this role is proposed as a means to increase student satisfaction and retention.

Introduction

Reflection on my participation in a higher degree research supervisor training unit, through my lens as a counsellor, revealed a particular thread of interest: the significant number of times emotional care and psychological support issues were described as important for student academic perseverance, wellbeing and retention. Given the significant attrition rates for higher degree research (HDR) students, particularly in the Humanities (Evans, Evans, & Marsh, n.d.), a solid argument could be made for timely provision of more effective psychological care and emotional mentoring for HDR students.

This paper gathers data from the higher education literature that supports the value of creating a counsellor-mentor role for the support of HDR students, and their supervisors, in a university setting.

Supervision is a non-negotiable part of being a HDR student. Universities provide post-graduate co-ordinators and advisors. Student counsellors are part of the expected provision by a university. Psychological and emotional support of students is regarded by some universities as part of the shared responsibility for all staff. However, few tertiary institutions provide a delegated, trained, counsellor, with personal experience of the joys and hazards of the higher degree journey, whose role it is to support HDR student's psychological and emotional

wellbeing, and who would act as a catalyst for students forming collegial peer connections, and connections with staff.

Postgraduate students may find it a little strange at first to have a counsellor-mentor assigned to them. A perception that counselling is for those with mental health problems tends to persist despite the applicability of counselling skills in a very broad range of corporate, educational and human services settings. Counselling is currently defined as a "professional activity that utilises an interpersonal relationship to enable people to develop self understanding and to make changes in their lives" and aims at "fostering wellbeing through personal growth" (PACFA, 2011).

This paper makes a case for the creation of a dedicated HDR student support position: a counsellor-mentor. The duties and responsibilities of this role would be to focus on enhancement of both student and supervisor experience during higher degree research programs. It is suggested that this could lead to enhanced student ability to focus on research, more productive supervisory relationships, higher retention, and more satisfied students, whose attitudes and outputs contribute to an enhanced image for the institution, thus eventually increasing higher degree student enrolments.

Retention and attrition of HDR students

Key predictors of HDR completion have been recognised as: the quality of relationships between students and supervisor and faculty, student involvement in activities, communication with other students, concern for students as professionals, and the extent of interaction with academic peers (Govendir, Ginns, Symons, & Tammen, 2009).

Of the HDR students who started a degree in 1992 in Australia, only 53% had completed by 1999 (Martin, Maclachlan, & Karmel, 2001). Compared with the undergraduate rate of attrition, the rate at the post-graduate level of study is high. Since students taking higher degrees may eventually form much of universities' professional researcher and teaching staff (Pritchard, 1995), this may be bad news for the future staffing of universities, as well as budgeted for income from higher degree completions.

A doctoral student's relationship with their supervisor is the most important factor in the degree progress, and negative relationships have been cited as the main reason for student attrition (Ferreira, 2006). Reducing the impact of relational difficulties, and increasing both student and supervisors positive relational experiences may facilitate greater retention.

Creating an environment of warmth and care, and ensuring effective pastoral care is available to HDR students are described as two of the key strategies in evolving the appropriate

intellectual and emotional climate for higher degree candidates (Conrad, 2007). Conrad goes further and recommends that a member of staff undertakes formal counselling training, in order to provide this support.

Nurturing a culture of research

Many writers, from differing disciplines, have catalogued strategies that they have found to be instrumental in building an effective research culture. In Australia, Neville (2008) argued that an approach to establishing a research community must include, among other actions, attention to the relational and emotional needs of students, and collaborative sharing of information.

Among Neville's (2008) practical suggestions for encouraging research are the establishing of regular monthly meetings for students at all stages of the research program and building relationships with peer debriefers. Conrad (2007) also recommends the use of regular group supervision, involvement in research teams, having access to peer support, and the overall development of a collegial research environment.

In the field of nursing education, Jootun and McGhee (2003) identified ways to foster a positive research environment, including: development of a community of scholars where there is trust, open discussion and good networking; establishing a research group that meets regularly and is supported by faculty management; provision of good research supervision; establishment of a program to develop supervisors, and collaboration between inexperienced and more experienced researchers.

Components of successful research environments in the field of family medicine have been identified as including: faculty involvement in mentoring, regular group gatherings to discuss research methods, support from a research professional, and opportunities to present research (DeHaven, Wilson & O'Connor-Kettlestrings, 1998).

Individual student, supervisor and institutional responsibilities have been identified by Phillips and Pugh (2010) as contributing to an effective research culture. Students are encouraged to take responsibility for learning the necessary research skills, for dealing with the inevitable psychological challenges they will meet along the way, and for building relationship with supervisors. Supervisors are advised to prepare for the supervisory role, and to understand and respond to student expectations. Institutions are advised to provide the necessary tuition and mentoring, and support the evolution of peer support groups.

Collaboration has been found to contribute to research outputs (and the award of grants). Incentives to collaborate vary widely across disciplines – "hard" science researchers are usually more dependent on one another, and "soft" research is often more individual (Ulhoi, 2005).

Researchers in the humanities may need more encouragement and provision of opportunities to collaborate.

Psychological and emotional support in HDR

Higher degree students have been reported as being challenged by their new identity as research students. They can benefit joining a research environment that supports a sense of belonging. They may struggle with low levels of self-efficacy, with procrastination, with the need for mentoring, and with the emotional challenges that arise in daily life and as a result of the academic challenges they are undertaking.

First-semester doctoral students have reported a need to feel integrated into the life of a faculty and to feel part of the wider university community (Austin et al., 2009). Doctoral students returning to higher education from a professional career may also struggle with a sense of identity and can benefit from welcoming support (Austin et al.). HDR students' needs for connection and exchange were found to be widespread, and establishing a HDR student network was recommended (Grebennikov & Shah, 2008).

As well as supervision focused on the world of thesis work, Grevholm, Persson, and Wall (2005) suggest these aspects of providing personal support for the student:

Supervisors should support and encourage the Ph.D. student, especially when needed; supervisors show respect for different conditions in the private life of the Ph.D. student, e.g., illness, pregnancy or family problems; at least some of the supervisors are especially responsible for ensuring that the Ph.D. student develops independency, work integrity and ethical behavior (p. 180 – 181).

In many institutions it is assumed that supervisors have the time and the skills to provide this personal support.

Parsloe (1993) found that students' moods (excitement, despair, boredom and confidence) had predictable stages as they moved through their studies. These moods would not be predictable to the students, however, and may cause alarm. A higher degree counsellor could provide guidance where mood indicators were problematic or prolonged. Appropriate referral information could also be provided in the case of escalation of negative self-evaluation or reaction.

One role of a higher degree counsellor would be to support self-efficacy. Self-efficacy is the belief in one's abilities to plan and carry out courses of action required to produce desired results (Bandura, 1997). A student's expectation of effectiveness can determine whether they will make an effort, how much effort they will make, and how long the effort will be sustained in the presence of obstacles. Bandura's research identified that people with greater self-efficacy will

persist longer with their tasks because of their belief that they are able to eventually succeed. A student's motivation to pursue research, and the way they make use of supports, is affected by their belief in success, and these beliefs may need guidance and support over the long haul of higher degree research.

Procrastination, which includes "self-denigration, fear of failure, difficulty in making decisions, a need for structure, and perfectionism, which includes perceptions that the dissertation should be significant and the best in the field", was significantly related to delayed completion (Latona & Browne, 2001, p. 6). The research suggests that these aspects of procrastination could be used to identify students at risk and develop interventions focused on dissertation completion. Among a higher degree counsellor's roles might be the tasks of identifying students troubled by psychological challenges, and develop interventions that guide them through the difficulties.

Students who have a mentoring relationship with their advisor feel professionally affirmed and are more productive after graduation (Ferreira, 2006). In addition to the functional support they receive, psychological counselling support has been identified in early studies as important to HDR students (Bergman & Gaitskill, 1990; Brown, 1981; Coleman & Thompson, 1987; Hanson & Smith, 1996; Hughes, 1992; Mogan & Knox, 1987; Myton, Allen, & Baldwin, 1992; Nehring, 1990; Schaefer & Schaefer, 1993; Sieh & Bell, 1994; Thurber, Hollingsworth, Brown, & Whitaker, 1989).

Studies show that students' satisfaction with their HDR program is directly related to satisfaction with relationships with supervisors and advisors (Bargar & Mayo-Chamberlain, 1983; Davis, 1999; Golde, 1996; Hollenshead, Younce, & Wenzel, 1994; Office of Scientific and Engineering Personnel, 1996). The quality of the interpersonal relationship between graduate students and their advisors has been found to be a better predictor of success in a doctoral program than a student's test scores and undergraduate grade point average (OSEP, 1996; Sorenson & Kagan, 1967). In many cases the supervision relationship is perceived as one of the most disappointing aspect of students' experiences within a HDR program (Curtin, Blake, & Cassagnau, 1997; Ferreira, 1997; Golde, 1998; OSEP, 1996).

Being able to identify students experiencing disappointing relationships, and who may be at risk of dropping out "helps target intervention programs to where they are needed most and offers ways to improve the graduation rate" (Herzog, 2006, p. 17). Students at risk of dropping out should be monitored. A higher degree counsellor-mentor could recommend, create or deliver intervention programs.

Among the significant influences on the rate at which HDR students complete are several psychological and emotional challenges: student psychological factors, positive relationships

between student and supervisor, and the need for a sense of belonging to a group or institution (Latona & Browne, 2001).

A sense of belonging and relating

A sense of belonging to a group or institution is regarded as critical for HDR success (Latona & Browne, 2001). In the case of science-based students this comes primarily through engagement as part of a research team or department. For Humanities students the sense of belonging is more often built on participation in institutional activities, collaboration on papers, presenting work at seminars, or being part of a cohort.

One of the problems associated with HDR work is the isolation of the students and faculty (Brien, 1992, Fairfield, 1977; Hughes, 1993). Delamont, Atkinson and Parry (2000) have shown how the doctoral experience for all students is most beneficial when it involves a process of socialisation into discipline-specific areas of knowledge. Schoenfeld (2003) suggested that students are more likely to become effective researchers, and to develop useful habits and perspectives more rapidly, if they perceive themselves to be members of a research community.

Loneliness in the long distance dissertation race can affect the quality of students' work (Pritchard, 1995). One of the most broadly accepted definition of loneliness is "the distress that results from discrepancies between ideal and perceived social relationships" (Hawkley & Cacioppo, n.d., p. 1). Lonely people may behave in ways that are self-defeating, and may experience high levels of anxiety, pessimism and fear of negative evaluations by others (Hawkley & Cacioppo). Postgraduate researchers may enroll with high hopes of collegial exchanges, and – particularly in the Humanities – find themselves spending long hours alone in a library (Pritchard). A wide-ranging survey of post-graduate students (O'Neill, 1995) revealed that some students reported feeling lonely and their expectations of social interaction were not met, some also felt they would have gained from an induction period.

Integration determines whether individuals perceive the benefits of their efforts to be greater than the costs of persisting and remaining enrolled in an institution. Integration is the incorporation of individuals into a community and the feeling experienced by them that they fit into the community (Tinto, 1993). Tinto's theory of student retention proposed that student persistence is related to the degree of integration they experience within an institution. Having insufficient personal interaction with others within the institution results in a lack of integration.

Commitment to a group and commitment to the degree are highly interdependent aspects of membership in a doctoral cohort or group. Group support and peer encouragement were emphasized repeatedly in research responses from doctoral students as a mechanism that kept them on track toward achieving their degrees (Dorn, Papalewis & Brown, 1995). One of the main

reasons for students persisting in a doctoral program was the support and encouragement from cohort members (Brien, 1992). Dorn, Papalewis and Brown investigated persistence enhancers such as social interaction, peer mentoring, and group cohesiveness and found that those "who work together as a team earning doctorates benefit from the experience, share those benefits with their workplaces, and most importantly, tend to find the motivation to complete their doctorates" (p. 305).

Cesari (1990) also recommended peer relationships as an important source of support and encouragement and stated that doctoral group members rely on one another for guidance and knowledge, and that group members gain competence and a sense of self-worth by helping their peers.

To meet the needs of HDR students and increase their persistence Dorn, Papalewis and Brown, (1995) emphasized social interaction, incorporating a cohort structure, fostering collegiality, and encouraging collaboration. The creation of a sense of collective identity can emerge from being part of a group. This means that the success of the group reflects positively on all members and they become committed to the success of all (Dorn, Papalewis & Brown).

Mentoring and the HDR student

Mentoring has proved to be valuable in the field of higher degree research. Mentoring relationships can have an impact on student retention, on successful completion of the doctoral dissertation, and on future career opportunities for those mentored (Bell-Ellison & Dedrick, 2008).

Various dictionaries define a mentor as someone who is a trusted counsellor, guide, tutor, or coach. "Typically, a mentor motivates, supports, shapes, encourages, and guides a mentee to be all he or she can be" (Varney, 2009, p. 128). Mentoring has also been described as a nurturing process in which a more experienced person serves as a role model, and encourages, advises and befriends a less experienced person with the aim of promoting professional and/ or personal development (Anderson & Shannon, 1988).

A range of mentor roles have been identified: teacher, confidant, sponsor, opener of doors, role model, developer of talent, protector, and successful leader (Schein, 1978). Schmidt and Wolfe (1980) also identified roles such as consultant/advisor, role model, and sponsor; while Bey and Holmes (1990) cited being supportive, insightful, nurturing, and protective as attributes of an effective mentor. Many of these descriptors could equally relate to a counsellor's role.

One of the first definitions to focus on the interpersonal relationship between mentor and mentee defined mentoring as "a relationship in which a person of greater rank or expertise

teaches, guides and develops a novice" (Alleman, Cochran, Doverspike, & Newman, 1984, p. 329). Both Jacobi (1991), in his literature review, and Anderson and colleagues (1995) highlighted three components of helping relationships: emotional and psychosocial support, direct assistance with career and professional development, and role modelling.

A longitudinal study of mentoring of doctoral students (Paglis, Green, & Bauer, 2006), found that having a mentor resulted in positive benefits for subsequent productivity and self-efficacy. It was found that the degree of mentoring - which was measured at the end of the program - predicted the research productivity of graduates 4 years later.

Ideal mentors and counsellors attend to the interpersonal dimension of the relationship with students (Heinrich, 1991). Ferreira (2006) found that the characteristics of an ideal advisor / supervisor, according to HDR students, included: being personable, providing quality feedback, and being empathic. Experience and ability with interpersonal skills and empathy are the core tools of a counsellor (Buser, 2008).

After an extensive survey, Rose (2003) developed the 34 item *Ideal Mentor Scale* (IMS) for doctoral students seeking faculty mentors, to help them consider the qualities they most valued in a potential mentor. Two universal qualities were central to the students' definitions of a mentor: communication skills and provision of feedback. Graduate students also valued integrity, guidance, and the relationship. Rose (2003) explains:

> Because of the potential for the IMS to enhance communication and relationships between graduate students and faculty, its routine use may enhance the adoption of a "culture of mentoring" at doctoral-granting institutions, which ultimately may improve the satisfaction of students with their doctoral education (p. 491).

This scale may be a valuable addition to the support materials a higher degree counsellor could offer to prospective students during pre-enrolment interviews, to help students with supervisor selection.

When professional life becomes highly demanding, the boundaries between personal and professional life become less distinct (Freeman, 2000). The professional self and the personal self may become mixed. In mentoring, the quality of support offered by the mentor has to be broad enough to support both the professional and the personal self of the student.

To promote retention of students, faculty need to provide the caring atmosphere of a mentoring relationship and direct assistance to facilitate student learning (Shelton, 2003). Students who reported greater perceived faculty support were more likely to persist throughout a nursing program than students who withdrew either voluntarily or because of academic failure

(Shelton). As faculty members are often busy and physically distant from HDR students, it may be that a more intentional plan for creating this caring atmosphere could be overseen by a higher degree counsellor.

Counselling skills relevant to a higher degree counsellor's role

A range of interpersonal counselling skills and therapist attitudes are identifiable as relevant for providing effective psychological and emotional support. Core counselling skills include a capacity for empathic understanding, ability to recognise recurrent themes, recognition of resistance, fostering a client's initiative (Teyber, 2006). The value of relationship skills has been reinforced by neuroscience findings that highlight increases in the effectiveness of therapy and higher neuro-plasticity (leading to the possibility of change) when positive relationships are present (e.g., Barletta & Fuller, 2002; Schore, 2002; Siegel, 1999; Wright, 2000).

Central in rapid development of a stable, secure connection and productive outcomes in the therapeutic encounter included:
- warmth, calmness and responsiveness
- attentive active listening where the person feels heard, accepted and understood
- openness and confidence
- the ability to convey care (Littauer, Sexton, & Wynn, 2005).

The link between these counselling skills and attributes and the key qualities identified by HDR students as making up the ideal mentor (Rose, 2003) is in the human warmth, the depth of positive relating and the non-critical acceptance of the student as a person. An effective mentor, according to students, is someone who values the student, believes in the student, tries to be thoughtful and considerate, can remain calm and collected in times of stress, is generous with time and other resources, and is cheerful and high-spirited (Rose). This wish-list of positive attributes may seem unrealistic in a busy academic institution, however, recognition of these may be useful for building positive working relationships. HDR students seem to thrive when they experience good interpersonal connections, both with a supervisor and / or within a research or learning community (Dorn, Papalewis & Brown, 1995; Schoenfeld, 2003).

As well as supervision focused on thesis work, Grevholm, Persson and Wall (2005) suggested supervisors provide personal support for the students, such as general support and encouragement. The authors also highlighted the need to demonstrate respect for different conditions in the private life of the student. The presumption that supervisors would have developed these skills, or that time would permit them to engage in personal support, may be challenged by the data on attrition and the responses in student surveys (O'Neill, 1995).

Counselling skills in HDR student support

Hindering experiences reported by counselling clients (Paulson, Everall, & Stuart, 2001) were described in thematic clusters. These included: concerns about vulnerability, barriers to feeling understood, lack of connection with counsellor, lack of counsellor responsiveness, and negative counsellor behaviours. It has been shown that similar experiences contribute to HDR student attrition (Austin, 2009; Curtin, Blake & Cassagnau, 1997; Parsloe, 1993). A higher degree counsellor, with their advanced level of interpersonal skills skills may be able to support students to process their negative experiences of supervision and the HDR life, so they can move on with renewed enthusiasm.

Counselling clients are generally reluctant to share negative experiences of therapy (Henkelman & Paulson, 2006), and it seems that HDR students may also be reluctant to share their negative experiences of supervision, of academic life, of personal struggles related to their project, with their supervisors (Ahern & Manathunga, 2004). HDR students will often reduce or cease communication with supervisors when their work becomes stuck (Ahern & Manathunga). The availability of a higher degree counsellor, who, while collaborating with a supervisory team, remains independent from the supervisory process, may assist in the unblocking experience and initiate the repair of any relational strains between student and supervisors.

Contributions of a counsellor-mentor to building an active research culture

Values and perceptions of quality within universities are shaped by strong evolutionary social forces, not by policy initiatives (Ulhoi, 2005). Therefore, the creation and on-going nurturance of a community or culture for research will always remain an interactional process.

Part of the role of a higher-degree counsellor-mentor would be to provide some organisation support such as linking students with facilities, relevant personnel and resources, and proving information and orientation for new students. This would be support that builds bridges among students, between students and supervisors, and between students and the wider research community.

This role may include support to match students and supervisors, assist new HDR students develop good working relationships with supervisors; collaborating to form peer-support groups and develop peer debriefing relationships; and provide on-going support that enables students' self-efficacy and self-care.

A counsellor-mentor role would include collegial support and mentoring for supervisory staff. Involvement in the preparation of staff to supervise would be seen as part of this role.

From an institutional perspective a counsellor-mentor may contribute to the provision of relational skills training for supervisors, may actively support the establishment of regular wellbeing support meetings for students and staff, may actively monitor students' satisfaction, support or conduct research on student retention initiatives, and contribute observations that may help improve student support policies.

Mentoring has been shown to increase satisfaction, self-confidence and reduce attrition in early-career education professionals (Lee et al., 2006). The advice on becoming an effective mentor – from Lee et al. – includes taking care to develop a relationship that balances academic and personal concerns. This relational advice is congruent with that given to trainee counsellors.

Developing a model of enhanced higher degree student support, would include the provision of a skilled professional counsellor, who has traversed the higher degree bridges, and is available to both students and supervisors. This would be someone whose role is clearly as a support for resolving the psychological and emotional challenges faced by students, and who works in harmony with a supervisory team. Additionally this role would support student early orientation to a HDR program, and facilitating communal connections. Creation of this position would provide support beyond the traditional supervisor role, and even beyond the level that students typically expect of supervisors (Phillips & Pugh, 2010).

Specific duties of a counsellor-mentor might include: informal counselling of students and referral of students to campus counsellors if personal problems persist; negotiating and advocating for students if supervisory relationships break down, monitoring student satisfaction, initiating pro-active pre-emptive action for problems, contributing to the building of a research culture through promotion of professional connections and making organisational recommendations, providing pastoral care for supervisory staff, and provision of training in relational skills for supervisory staff.

Counsellor-mentor roles

Diagram 1 illustrates the five main supports that could ideally be provided for HDR students: a peer group, the supervisors, the provision by the faculty and the university, the research community and the counsellor-mentor. The counsellor-mentor would not only support students, but also provide advice, information, support and relational links - building bridges - between all stakeholders. The counsellor-mentor would also make some organisational contributions to evolving the research community and the student peer group.

Diagram 1: *Supports for Higher Degree Research Students*
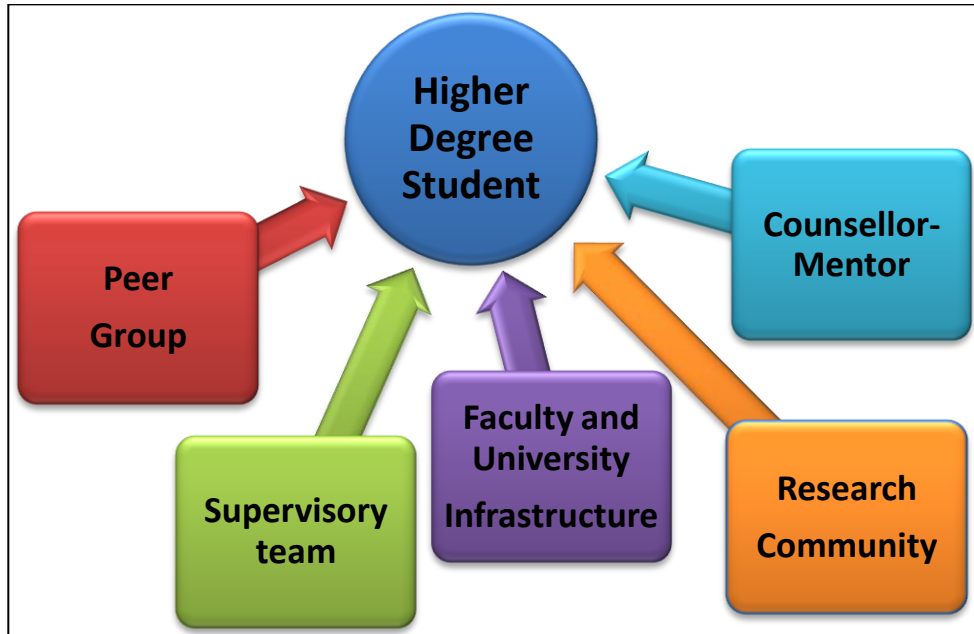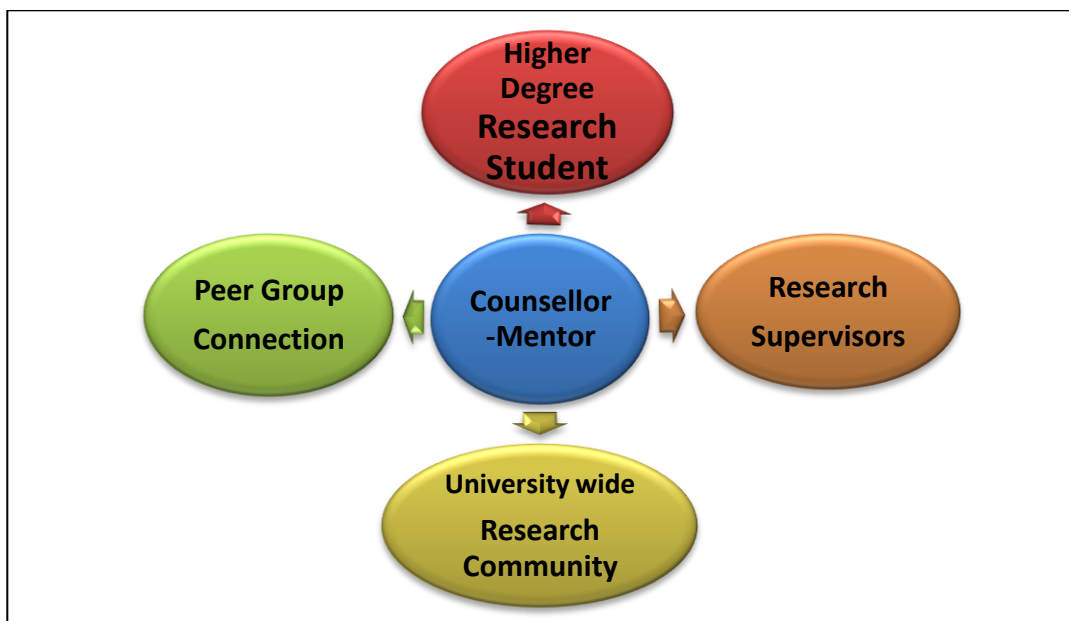

Diagram 2 illustrates the four main areas of support a counsellor-mentor could provide. This graphic defines the role as one in which students, student support groups, supervisors and the research community within a university could benefit.

Diagram 2: *Possible Support Roles for a Counsellor-Mentor*

Overall a counsellor-mentor would have a wide responsibility to encourage generation of positive and productive interpersonal connections. These would be with HDR students, among

students (especially those at the initial phase of their projects), between students and their supervisory team, between students and the wider research community of the university.

Conclusion

The image and reputation of a university is a powerful contributor to both attracting and retaining HDR students (Nguyen & LeBlanc, 2001). The literature stresses that mentoring and peer group interaction should ideally be incorporated into HDR programs. This would encourage increased levels of nurturance, cognitive and emotional support and encouragement for students to complete higher degrees. Positive contacts with faculty members, provision of appropriate facilities, availability of effective counselling and mentoring, as well as creation of a sense of belonging within a research community, are crucial. These elements become integral to a university's reputation and image and ultimately attract and retain HDR students.

Word count: 4,437

References

Ahern, K., & Manathunga, C. (2004). Clutch-starting stalled research students. *Innovative Higher Education, 28*(4), 237 – 254.

Alleman, E., Cochran, J., Doverspike, J., & Newman, I. (1984). Enriching mentoring relationships. *Personnel and Guidance Journal, 62*(6), 329 - 32.

Anderson, E. M., & Shannon, A. L. (1988). Toward a conceptualization of mentoring. *Journal of Teacher Education, 39*(1), 38 - 42. DOI: 10.1177/002248718803900109

Anderson, G. N., Dey, E. L., Gray, M., & Thomas, G. (1995). Mentors and protégés: The influence of faculty mentoring on undergraduate academic achievement. Paper presented at the meeting of the Association for the Study of Higher Education, Orlando, FL.

Austin, J., Cameron, T., Glass, M., Kosko, K., Marsh, F., Abdelmagid, R., & Bürge, P. (2009). First semester experiences of professionals transitioning to full-time doctoral study. *The College Student Affairs Journal, 27*(2), 194 – 214.

Bandura, A. (1997). *Self-efficacy: The exercise of control.* New York: Freeman.

Bargar, R. R., & Mayo-Chamberlain, J. (1983). Advisor and advisee issues in doctoral education. *Journal of Higher Education, 54*(4), 407 - 432.

Barletta, J., & Fuller, S. (2002). Counselling outcomes attributable to the working alliance. *The Australian Journal of Guidance & Counselling, 12*(1), 41 – 49.

Bell-Ellison, B. A., & Dedrick, R. F. (2008). What do doctoral students value in their ideal

mentor? *Research in Higher Education, 49,* 555–567. DOI 10.1007/s11162-008-9085-8

Bergman, K., & Gaitskill, T. (1990). Faculty and student perceptions of effective clinical teachers: An extension study. *Journal of Professional Nursing, 6,* 33-44.

Bey, T. M., & Holmes, C. T. (Eds.) (1990). *Mentoring: Developing successful new teachers.* Reston, VA: Association of Teacher Educators.

Brien, S. J. (1992). The real purpose of higher education: Developing self-actualizing personalities. *Education, 105,* 151 – 154.

Brown, S. (1981). Faculty and student perceptions of effective clinical teachers. *Journal of Nursing Education, 20,* 4-15.

Buser, T. J. (2008). Counselor training: Empirical findings and current approaches. *Counselor Education and Supervision, 48*(2), 86 – 100.

Cesari, J. P. (1990). Thesis and dissertation support groups: A unique service for graduate students. *Journal of College Student Development, 31,* 375 – 378.

Coleman, E.A., & Thompson, P. (1987). Faculty evaluation: The process and the tool. *Nurse Educator, 12*(4), 27-32.

Conrad, L. (2007). Developing the intellectual and emotional climate for candidates. In C. Denholm, C., and T. Evans, *Supervising doctorates downunder. Keys to effective supervision in Australia and New Zealand* (pp. 36 – 44). Camberwell, Vic: ACER Press.

Curtin, J. M., Blake, G., & Cassagnau, C. (1997). The climate for women graduate students in physics. *Journal of Women and Minorities in Science and Engineering, 3*(2), 95 - 117.

Davis, K. S. (1999). Why science? Women scientists and their pathways along the road less travelled. *Journal of Women and Minorities in Science and Engineering, 5*(2), 129 - 153.

DeHaven, M. J., Wilson, G. R., & O'Connor-Kettlestrings, P. (1998). Creating a research culture: What we can learn from residencies that are successful in research. *Educational Research and Methods, 30*(7), 501 – 507.

Delamont, S., Atkinson, P., & Parry, O. (2000). *The doctoral experience: success and failure in graduate school*. London: Farmer Press.

Dorn, S. M., Papalewis, R., & Brown, R. (1995). Educators earning their doctorates: Doctoral student perceptions regarding cohesiveness and persistence. *Education, 116*(2), 305 – 314.

Evans, T., Evans, B., & Marsh, H. (n.d.). International Doctoral Conference Commissioned Paper: Australia. Downloaded from: http://depts.washington.edu/eirgecon/papers/australia.doc   20/8/2011

Fairfield, R. P. (1977). *Person-centered graduate education*. Buffalo, NY: Prometheus Books.

Ferreira, M. M. (1997). *Gender issues related to graduate science success*. Unpublished doctoral dissertation, Indiana University, Bloomington, (Dissertation Abstracts International, 9810781).

Ferreira, M. M. (2006). Graduate students' description of the ideal science advisor: Implications for graduate women's success. *Advancing Women in Leadership Online Journal, 20,* Downloaded 27 August, 2011, from:
http://www.advancingwomen.com/awl/spring2006/Ferreira.html

Freeman, R. (2000). Faculty mentoring programmes. *Medical Education, 34,* 507 – 508.

Golde, C. M. (1996). *How departmental contextual factors shape doctoral student attrition.* Doctoral Dissertation, Stanford University.

Govendir, M., Ginns, P., Symons, R., & Tammen, I. (2009). Improving the research higher degree experience at the Faculty of Veterinary Science, The University of Sydney, in *The student experience, Proceedings of the 32nd HERDSA Annual Conference, Darwin,* 163 – 172.

Grebennikov, L., & Shah, M. (2008). Enhancing the research student experience at university. *Australasian Association for Institutional Research 2008 Forum*. Downloaded 27 August, 2011, from:
http://www.aair.org.au/app/webroot/media/pdf/AAIR%20Fora/Forum2008/Mahsood.pdf

Grevholm, B., Persson, L. E., & Wall, P. (2005). A dynamic model for education of doctoral students and guidance of supervisors in research groups. *Educational Studies in Mathematics, 60,* 173–197. DOI: 10.1007/s10649-005-4497-2

Hanson, L., & Smith, M. (1996). Nursing students' perspectives: Experiences of caring and not-so-caring interactions with faculty. *Journal of Nursing Education, 35,* 105-112.

Hawkley, L. C., & Cacioppo, J. T. (n.d.). *Loneliness.* Center for Cognitive & Social Neuroscience & the Department of Psychology University of Chicago. Downloaded 30 August, 2011 from: http://psychology.uchicago.edu/people/faculty/cacioppo/jtcreprints/hc09.pdf

Heinrich, K. T. (1991). Loving partnerships: Dealing with sexual attraction and power in doctoral advisement relationships. *Journal of Higher Education, 62*(5), 515 - 538.

Henkelman, J., & Paulson, B. (2006). The client as expert: Researching hindering experiences in counselling. *Counselling Psychology Quarterly, 19*(2), 139 – 150.

Herzog, S. (2006). Estimating student retention and degree-completion time: Decision trees and neural networks vis-à-vis regression. *New Directions for Institutional Research, 131,* 17 – 33. DOI: 10.1002/ir.185.

Hollenshead, C., Younce, P. S., & Wenzel, S. A. (1994). Women graduate students in

mathematics and physics: Reflections on success. *Journal of Women and Minorities in Science and Engineering, 1*(1), 63 - 88.

Hughes, H. W. (1993). Using cooperative/collaborative learning in graduate education. *The Journal of CAPEA, 5*(1), 69 – 77.

Hughes, L. (1992). Faculty-student interactions and the student perceived climate for caring. *Advances in Nursing Science, 14,* 60-71.

Jacobi, M. (1991). Mentoring and academic undergraduate success: A literature review. *Review of Educational Research, 61*(4), 505 - 32.

Jootun, D., & McGhee, G. (2003). Creating a research culture in a nursing school. *Nursing Standard, 18*(3), 33 – 37.

Latona, K., & Browne, M. (2001). Factors associated with completion of research higher degrees. *Higher Education Series*, Report No. 37, Department of Education, Training and Youth Affairs.

Lee, S. H., Theoharis, R., Fitzpatrick, M., Kim, K. H., Liss, J. M., Nix-Williams, T., Griuswold, D. E., & Walther-Thomas, C. (2006). Create effective mentoring relationships: Strategies for mentor and mentee success. *Intervention in School and Clinic, 41*(4), 233 - 240. DOI: 10.1177/10534512060410040601

Littauer, H., Sexton, H., & Wynn, R. (2005). Qualities clients wish for in their therapists. *Scandinavian Journal of Caring Sciences, 19,* 28 – 31.

Martin, Y. M., Maclachlan, M., & Karmel, T. (2001). *Postgraduate completion rates*. Canberra: Commonwealth of Australia.

Mogan, J., & Knox, J. (1987). Characteristics of "best" and "worst" clinical teachers as perceived by university nursing faculty and students. *Journal of Advanced Nursing, 12,* 331 - 337.

Myton, C., Allen, J., & Baldwin, J.A. (1992). Students in transition: Services for retention and outplacement. *Nursing Outlook, 40,* 227-230.

Nehring, V. (1990). Nursing Clinical Teacher Effectiveness Inventory: A replication study of the characteristics of "best" and "worst" clinical teachers as perceived by nursing faculty and students. *Journal of Advanced Nursing, 15,* 934-940.

Neville, B. (2008). Creating a research community. *Qualitative Research Journal, 8*(1), 37 – 46.

Nguyen, N., & LeBlanc, G. (2001). Image and reputation of higher education institutions in students' retention decisions. *The International Journal of Educational management, 15*(6). 303 – 311.

Office of Scientific and Engineering Personnel. (1996). *The path to the Ph.D.: Measuring graduate attrition in the sciences and humanities.* Washington, DC.: National Academy

Press.

O'Neill, I. (1995). *Taught postgraduate education: The student experience*. London: Heist
    Publications.

Psychotherapy and Counselling Federation of Australia (PACFA) (2011). *Aims, Approaches and
    Training Requirements for Counselling.* Downloaded from website 21 December, 2011:
    http://www.pacfa.org.au/resources/cid/41/parent/0/t/resources/l/layout

Paglis, L. L., Green, S. G., & Bauer, T. N. (2006). Does advisor mentoring add value? A
    longitudinal study of mentoring and doctoral student outcomes. *Research in Higher
    Education, 47*(4), 451 - 476. DOI: 10.1007/s11162-005-9003-2

Parsloe P. (1993). Supervising students for higher degrees by research in a social work
    department. *Journal of Further and Higher Education, 17*(3), 49 - 60.

Paulson, B. L., Everall, R. D., & Stuart, J. (2001). Client perceptions of hindering experiences in
    counselling. *Counselling and Psychotherapy Research, 1,* 53 – 61.

Phillips, E. M., & Pugh, D. S. (2010). *How to get a PhD. A handbook for students and their
    supervisors.* (5th ed.). Berkshire, UK: McGraw Hill / Open University Press.

Pritchard, S. (1995). A higher degree of loneliness. *The Independent Education News,*
    Downloaded 30 August, 2011 from:
    www.independent.co.uk/news/education/educationnews/a-higher-degree-of-loneliness-
1584514.html

Rose, G. L. (2003). Enhancement of mentor selection using the ideal mentor scale. *Research in
    Higher Education, 44*(4), 473 - 494. DOI: 10.1023/A:1024289000849

Schaefer, C., & Schaefer, K. (1993). Clinical psychology students' perceptions of an academic
    climate for caring. *Psychological Reports, 72,* 1223-1227.

Schein, E. H. (1978). *Career dynamics: Matching individual and organizational needs.* Reading,
    MA: Addison-Wesley.

Schoenfeld, A. H. (2003). The core, the canon, and the development of research skills: Issues in
    the preparation of education researchers, in L. Shulman and E. Langemann (Eds.), *Issues
    in education research*: *Problems and possibilities*, New York: Jossey-Bass.

Schore, A. N. (2002). Advances in neuropsychoanalysis, attachment theory, and trauma
    research: Implications for Self Psychology. *Psychoanalytic Inquiry*, *22*(3), 433 - 484.

Schmidt, J. A., & Wolfe, J. S. (1980). The mentor partnership: Discovery of professionalism.
    NASPA Journal, 17(3), 45 - 51.

Shelton, E. N. (2003). Faculty support and student retention. *Journal of Nursing Education,
    42*(2), 68 – 76.

Siegel, D. (1999). *The developing mind. How relationships and the brain interact to shape who we are.* New York: The Guilford Press.

Sieh, S., & Bell, S. (1994). Perceptions of effective clinical teachers in associate degree programs. *Journal of Nursing Education, 33,* 389-394.

Sorenson, G., & Kagan, D. (1967). Conflicts between doctoral candidates and their sponsors: A contrast in expectations. *Journal of Higher Education, 38,*17 - 24.

Teyber, E. (2006). *Interpersonal process in therapy: An integrative model.* Belmont, CA: Brooks Cole.

Thurber, F., Hollingsworth, A., Brown, L., & Whitaker, S. (1989). The faculty advisor role: An imperative for student retention. *Nurse Educator, 13*(3), 27-29.

Tinto, V. (1993). *Leaving college: Rethinking the causes and cures of student attrition* (2nd ed.). Chicago, IL: University of Chicago Press.

Ulhoi, J. P. (2005). Postgraduate education in Europe. An intersection of conflicting paradigms and goals. *International Journal of Educational Management, 19*(4), 347 – 358.

Varney, J. (2009). Humanistic mentoring: Nurturing the person within. *Kappa Delta Pi Record, Spring, 2009,* 127 – 131.

Wright, F. (2000). The use of self in group leadership: A relational perspective. *International Journal of Group Psychotherapy, 50*(2), 181 - 198.