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FORMAL MENTORING PROGRAMS IN EDUCATION AND OTHER PROFESSIONS: A REVIEW OF THE LITERATURE

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FORMAL MENTORING PROGRAMS IN EDUCATION AND OTHER PROFESSIONS: A REVIEW OF THE LITERATURE

Abstract

The sheer volume of literature on mentoring across a variety of disciplines is an indication of the high profile it has been afforded in recent years. This paper draws upon a structured analysis of over 300 research-based papers on mentoring across three discipline areas in an attempt to make more valid inferences about the nature and outcomes of mentoring. It begins by reporting on the findings compiled from a database of research papers from educational contexts. These research-based papers are examined to determine the positive and more problematic outcomes of mentoring for the mentor, mentee and the organization. A discussion of the findings from two other databases, namely, 151 research-based papers from business contexts and 82 papers from medical contexts, is provided and commonalities across the three databases are highlighted. The paper concludes with a discussion of key issues that administrators responsible for establishing mentoring programs should consider to maximise the experience of mentoring for all stakeholders.

Key Words

Mentoring, education, business, medicine, challenges

FORMAL MENTORING PROGRAMS IN EDUCATION AND OTHER PROFESSIONS: A REVIEW OF THE LITERATURE

Introduction

This paper represents an ongoing quest to synthesise our current understandings of the mentoring phenomenon. As researchers in the field, we were conscious that a great deal of writing in the area of mentoring in education and across other professional disciplines reported that mentoring was an overwhelmingly positive learning process for mentors and mentees alike (Hansford, Tennent & Ehrich, 2002). Our initial investigation of mentoring in educational contexts confirmed this since there did not appear to be a substantial body of work which reported on the "darker side" of mentoring (Duck, 1994; Long, 1997). Thus we became interested in examining more closely a sizeable body of the mentoring literature so that we could begin to make more valid inferences about its potential to be a beneficial force in educational contexts. To this end, we compiled a database of research papers from educational contexts and undertook a structured analysis of these papers. A structured analysis is a pre-determined set of criteria, namely a set of coding categories, that is used to analyse literature. In this study, we coded each of the studies according to descriptive data (i.e. positive and problematic outcomes of mentoring for the mentor, mentee and the organization) and then identified the frequency of occurrence of the predetermined coding categories. Findings from the analysis of the education-focused studies prompted us to investigate the nature, frequency and outcomes stemming from mentoring in other professional areas such as business and medicine. Following the study of educational contexts, we repeated the process and compiled a database of research papers on mentoring from business contexts and medical contexts. While the focus of this paper reports on the positive and more problematic outcomes of mentoring from our structured review of papers from education contexts, it will also illuminate the features of mentoring common to the three different contexts (i.e. education, business and medical contexts). This paper begins with a discussion of the meaning of mentoring, identifies some of the common strengths and weaknesses of mentoring and then proceeds to discuss the methodological process that guided the study.

The Meaning of Mentor and Mentoring

The original meaning of the word, mentor, refers to a "father figure" who sponsors, guides and develops a younger person. Throughout history, mentors have played a significant role in teaching, inducting and developing the skills and talents of others. Indeed, there are many examples of mentors in the biographies of famous artists, scientists and musicians (Byrne, 1991) who have played a key role in shaping their protégés or mentees' destiny.

Traditional or informal mentoring arrangements where the mentor and mentee somehow find each other (Kram, 1985) continue to operate in many contexts. It was only in the last two to three decades that formal mentoring programs were introduced in government departments and corporations. This movement occurred because organizations could see the advantage of implementing formal programs since they enabled potential learning and growth for employees on the job (Ehrich & Hansford, 1999). Our concern in this paper lies with formal mentoring programs.

Formal mentoring programs differ greatly in nature, focus and outcomes. For instance, in her extensive review, Jacobi (1991) noted that some programs train mentors, while others do not; mentors are assigned to mentees and in other programs the mentee selects the mentor; some programs designate the location and frequency of meetings, while others leave it to the participants to decide. In addition, some programs are evaluated while others are not or are "evaluated" by vague and imprecise techniques (Jacobi, 1991). In relation to evaluations of mentoring programs, Merriam (1983) concluded that many "consist of testimonials and

opinions" (pp.172-173). After reviewing over 300 research-based papers on formal mentoring programs, we would support Merriam's claim.

Strengths and Weaknesses of Mentoring

Our precursory investigation of the literature revealed that there tends to be a general acceptance that mentoring yields benefits for mentees and mentors. Career advancement and psycho-social support are often identified as two important outcomes of mentoring for the mentee (Kram 1985; Levinson, Darrow, Klein, Levinson & McKee, 1978). For instance, in terms of career outcomes, Roche (1979) found that 75% of the top executives in the United States had been mentored and compared with their counterparts, earned 28% more, were more likely to have a degree, were happier with work, and more likely to mentor others. Psychosocial support, such as encouragement, friendship, and advice and feedback on performance (Kram 1985), has also been identified as a positive outcome of mentoring for mentees.

As mentoring is a two-way or reciprocal process, it provides benefits also for the mentor. For instance, the work of Levinson et al. (1978) found that mentoring rejuvenates mentors' careers since it enables them to assist and shape the professional and personal development of mentees. According to Douglas (1997), other benefits for the mentor include increased confidence, personal fulfilment and assistance on projects. In relation to the benefits for the organisation, Murray and Owen (1991) identify several benefits of formal mentoring programs including increased productivity, improved recruitment efforts, motivation of senior staff, and enhancement of services offered by the organization.

While there is a considerable body of literature that documents the merits of mentoring for all parties, Long (1997) is more cautious. According to Long (1997), "under various conditions, the mentoring relationship can actually be detrimental to the mentor, mentee or both" (p.115). She goes on to identify several concerns regarding mentoring including a lack of time for mentoring; poor planning of the mentoring process; unsuccessful

matching of mentors and mentees; a lack of understanding about the mentoring process; and lack of access to mentors from minority groups. Long (1997) also highlights the difficulties that mentoring poses for organizations if there is insufficient funding or termination of funding before the program is established. Other drawbacks of mentoring from the organization's point of view include problems when there is a lack of support; the difficulties in coordinating programs within organizational initiatives; and the costs and resources associated with mentoring (Douglas, 1997, p. 86).

It seems that as formal mentoring programs are planned, structured and coordinated interventions within an organisation's human resource policies, it makes sense for those charged with the responsibility of implementing such programs to endeavour to ensure that the goals of the program are clear and known to key parties; that mentors and mentees are well-matched; and that organizational support and commitment are evident. Since organizations including schools invest considerable resources into mentoring programs, it is incumbent on the planners, such as educational administrators, to minimise potential problems that could arise. The final part of our paper attempts to synthesise some of the recommendations that educational administrators should consider when planning and implementing a formal mentoring program. Before we discuss these recommendations, the next section of this paper turns to the methodological process that we used in analysing the body of mentoring research reviewed.

Methodology

We used a structured analysis of the literature from three discrete disciplines in order to arrive at our understanding of the mentoring phenomenon. For inclusion in the three reviews, studies had to meet two criteria. Firstly, they had to report original research findings and, secondly, they had to focus on the use of mentoring in an educational setting (such as schools or universities), business context (government or non-government organizations) and

medical context (hospitals, universities, and other medical contexts). Databases used for the literature search on education contexts included ERIC, AUSTROM (AEI), PsycLIT and ProQuest. Databases used for the search in business contexts used some of these plus EBSCO and Business Periodicals Index, Business Australia on Disk, Science Direct and Emerald. Databases used for the analysis of mentoring in medical contexts included some of aforementioned in addition to Health Reference Centre – Academic, Medical Library, Webspirs, Australasian Medical Index and Google.

Our search of the selected education databases identified above revealed 159 studies conducted between 1986 and 1999. From the search of business databases, 151 studies between 1986 and 2000 were identified and later analysed. While 82 articles between 1995 and 2002 were found from the medical databases, only eight studies reported on the outcomes of mentoring and were therefore eligible for use in our study. The overarching majority of the papers from the medical field were descriptive in nature and seemed to focus on the value of engaging in mentoring. This suggests to us that research in the area of mentoring in medical contexts is variable and relatively new in comparison with other fields such as education and business. It is important to appreciate that while mentoring in the medical field has been around for many years, "most ... is informal and by its nature, often invisible" (Bligh, 1999, p.2).

All of the studies were analysed according to a coding sheet which was developed from a preliminary reading of 14 articles in the area of educational mentoring. Two main categories of data were coded. These were factual data comprising the year of publication, source (eg journal, research report), country of study, sample size and data collection techniques employed; and descriptive data comprising the reporting of positive and problematic outcomes associated with mentoring for the mentor, mentee and organization

across the three databases. The descriptive data underwent content–analysis to identify underlying themes or categories (Weber, 1990).

The findings discussed in this paper refer to the descriptive outcomes that emerged from the three sets of analyses. In this article, the four most frequently identified positive and problematic outcomes for mentors, mentees and the organization will be highlighted. We have reported elsewhere precise details concerning both the factual and descriptive findings from the studies (see Hansford, Tennent & Ehrich, 2002, in press; Ehrich, Hansford & Tennent, 2003, September).

Findings

Positive Outcomes of Mentoring from Education Studies

Of the education studies reviewed, 35.8% reported only positive outcomes as a result of mentoring and four studies (or 2.5%) reported exclusively problematic outcomes. In relation to the benefits for mentors, less than half (47.8%) of the education studies that reported some positive outcome associated with mentoring identified benefits for the mentor. In contrast, substantially more studies noted positive outcomes for mentees (82.4%) than for mentors. This can be attributed to the fewer studies that sought opinions from mentors. Insert Figure I here

Figure I presents the four most frequently cited positive outcomes (in percentages) of mentoring for mentors and mentees in the education studies. As illustrated, the most commonly cited mentor outcome was that of collegiality and networking. Almost 21% of the education studies reported benefits associated with collaborating, networking or sharing ideas with colleagues. For instance, school principals in Brady's (1993) Australian qualitative study noted "cross fertilisation of ideas" as being a beneficial outcome of mentoring. Similarly, a teacher in a mentoring program in the USA noted that mentoring provided "a unique"

opportunity for teachers to share and exchange ideas with other teachers" (Downey, 1986, p. 26).

Reflection was the second most frequently cited outcome for mentors with 19.5% of studies attributing reflection or reappraisal of beliefs, practices, ideas and/or values to their mentoring activities. For instance, a mentor teacher in a university pre-service teacher education program in Australia commented that "you reflect on your own teaching ... its some incentive to improve, work harder, try other things" (Spargo, 1994, p.6). Mentoring was also said to facilitate the professional development of mentors. Just over 17% of studies made reference to the important outcome of professional development. As an illustration, a mentor teacher in a study by Murray, Mitchell and Dobbins (1998) described her experience as "a worthwhile professional experience in its own right" (p.24), while Hanson (1996) quoted a mentor in her United Kingdom study as saying that mentoring "added another dimension to his experience" (p.55)

Personal satisfaction, reward or growth (16.4% of studies) was the fourth most frequently cited outcome for mentors. This sentiment was exemplified by a teacher mentor in Holmes' (1991) study who commented, "I love working with these students and learn so much from them as well as about myself" (p.7).

As indicated in Figure I also, the most frequently cited positive outcome for mentees, evident in 42.1% of studies, related to support, empathy, encouragement, counselling and friendship. Both mentee teachers and headteachers indicated that support was an important outcome of mentoring. For instance, a mentee headteacher in Bush and Coleman's (1995) United Kingdom study stated "knowing that there is somebody in the background I can turn to is a great source of comfort" (p.65). Similarly, a beginning teacher in an Australian study by Ballantyne, Packer and Hansford (1995) commented, "I feel very comfortable around her [mentor] and know she is there to help where she can" (p.300)

Assistance with classroom teaching was the second most frequently cited positive outcome for mentees. Just over 35% of the studies pinpointed help with teaching strategies, content, resources, classroom planning and or discipline. This high percentage is reflective of the large number of studies in the review that focused on mentoring for pre-service or beginning teachers. As an illustration, a pre-service teacher in Hardy's (1999) United Kingdom study noted, "I gained a lot of subject knowledge on areas I was not experienced in" (p.182).

The third most frequently cited positive outcome for mentees, noted in 32.1% of studies, related to contact with others and discussion. This category included discussing or sharing ideas, information, problems and gaining advice from peers. As an illustration, a mentoring program for black /ethnic minority school and university students in the United Kingdom "acted as a positive form of networking" that enabled students to "establish that their problems are not unique to them alone" (Showunni, 1996, p. 13).

Feedback via positive reinforcement or constructive criticism was the fourth most frequently cited outcome of mentoring for mentees. More than one in four of the studies (or 27.7%) reported that feedback was beneficial. For instance, in his investigation of educational administration in Singapore, Tin (1995) cites one mentee as saying, "everyday a session is provided for me to go through the completed tasks and my mentor would give me her evaluation and feedback. This is most useful" (p.22).

Common to both mentors and mentees are issues relating to sharing ideas and knowledge. Although not shown in Figure I, other common positive outcomes for mentors and mentees were reflection and professional development. Whereas these outcomes were rated more frequently by mentors, reflection was reported in 15.1% of studies and professional development was reported in 13.8% of studies for mentees.

Problems Associated with Mentoring from Education Studies

Almost half (48.4%) of the studies that reported problems identified problems for mentors, while slightly fewer studies (42.8%) identified problems for mentees. As Figure II reveals, the difficulties associated with mentoring were similar for both mentors and mentees and, for this reason, will be discussed together. The two most frequently cited outcomes were lack of time, and professional expertise and/or personality mismatch. Lack of time was noted in 27.7% of studies for mentors and 15.1% of studies for mentees. As an illustration, 14 of the 15 mentors in Ackley and Gall's (1992) study of preservice teacher mentoring in the United States claimed that lack of time was their "greatest impediment" (p.17) while a mentor headteacher in Bush and Coleman's United Kingdom study noted there is "such a shortage of time these days to do everything that you need to do" (p.67). In terms of a mentee's perspective, one trainee teacher in a study of teacher education partnerships in the United Kingdom reported, "my mentor never has time; he is always so busy that I feel acutely embarrassed if I need to bother him (Younger, 1995, p. 32).

Insert Figure II here

Professional expertise or personality mismatch was the second most frequently cited problematic outcome for both mentors and mentees. Unsuccessful matches between mentors and mentees were reported in 17% of studies for mentors and 12.6% of studies for mentees. The mismatches were either the result of personality, ideological or expertise differences. As an illustration, Ganser (1995) noted that professional and personality mismatches were a major concern for mentor teachers in his United States study. These mentors expressed anxiety about not getting on with their mentee, having to assist mentees who were working at different levels or whose teaching philosophy differed from their own. Some of the studies revealed that personality differences were instrumental in the failure of some relationships.

For instance, two mentees in a study by Turner (1993) attributed their ineffective mentoring relationships to incompatibility with their mentors.

Equal numbers of studies (i.e. 15.1%), reported a lack of training or understanding of program goals and the extra burden or responsibility as problematic outcomes associated with mentoring. For instance, a mentor in Ganser's (1992) study admitted, "I have no idea what my responsibilities are and I suspect he [the mentee] probably doesn't either" (p.21). In relation to the added burden created by mentoring, a mentor in Hanson's (1996) study explained, "you are having to add the role of mentor to an already full workload" (p.55). For mentees, the third and fourth most frequently cited problematic outcome of mentoring related to mentors who were critical, out of touch, defensive or untrusting (10.7% of studies) and the difficulty of meeting, being observed or observing their mentor (9.4% of studies). Referring to the former, mentees in some studies indicated that their mentors had been overly harsh, critical and out-of date in their thinking. A lack of flexibility and trust were apparent not only for mentee teachers but also mentee principals. For instance, a potential school principal mentee in Tin's (1995) study noted, "the principal did not trust me to run the school as she did not want to be held accountable for any mistakes that I might make" (p.24). The other problematic outcome for mentees, difficulty in meeting, often stemmed from timetable clashes that resulted in limited opportunities to observe mentors (Scott, 1997).

As indicated above, comparison of mentor and mentee problematic outcome categories reveals some commonality across the groups. Both groups were reported to have experienced problems stemming from lack of mentor time and professional expertise or personality mismatch. The other categories for mentors were a lack of training and understanding about the program and the perception that mentoring was yet another responsibility or burden.

Positive and Problematic Outcomes of Mentoring for the Educational Organization

In addition to identifying positive and problematic outcomes of mentoring for the mentor and mentee, our review also considered the outcomes for the organization. Just over 16% of studies cited one or more positive outcome that impacted upon the organization within educational settings. The most frequently cited outcome that emerged from our review was improved education or grades or attendance or behaviour of students (evident in 6.3% of studies). For example, according to an Australian study of peer mentoring among law students, MacFarlane and Joughin (1994) noted that mentoring resulted in increased levels of attendance at lectures. The next three most frequently cited outcomes included "support or funds for the school" (3.1% of studies), "contributes to or is good for the profession" (2.5% of

Only 8.8% of studies revealed one or more problems that directly impacted on the organization. These problems were disparate and only two, costs and lack of partnership, were reported in more than one study. For instance, Robinson (1993) and Hanson (1996) reported that schools in the United Kingdom receive inadequate funding for the implementation of preservice or beginner mentor programs while lack of partnership or communication with and / or commitment from organizations was reported in a small number of studies. In the next section we provide a discussion of the positive and more problematic aspects of mentoring derived from the business and medical studies reviewed.

studies); and "less work for principals / staff" (2.5% of studies).

Outcomes from Business and Medical Studies

As anticipated, there were numerous outcomes for the mentor and mentee reported in the business studies. However, due to the nature and the small sample of the medical studies (N=8), it was not possible to distinguish between outcomes for mentors and mentees.

Positive Outcomes for Mentors and Mentees

The most frequently cited response from the business studies for mentors related to networking and collegiality with 7.9% of business studies nominating collegiality / networking as constructive outcomes from a mentoring experience. In the medical literature, networking and a sense of community was also deemed important for the profession. The prominence of this positive outcome was not surprising given that mentoring relationships involve the sharing of knowledge and expertise and, as such, the process has the potential to foster collegiality and collaboration. The other three most frequently cited positive outcomes for mentors included "career satisfaction / motivation / promotion" (7.3%); "improved skills/job performance" (6.6%) and "pride/personal satisfaction" (6.6%).

Similar frequently cited outcomes pertaining to career and skill development were apparent for mentees from the business studies. A review of these studies revealed that "career satisfaction / motivation / plans / promotion" was the most frequently cited response (50.3% of studies), "coaching / feedback/ strategies" was rated in second place (30.5%), while "challenging assignments / improved skills / performance" was the third most frequently cited positive outcome for mentees (23.2%). That career development and skill enhancement emerged prominently in the analysis was not unexpected since both outcomes are commonly cited for mentors and mentees alike in the business literature. Indeed Kram (1985, 1983), whose work was acknowledged in approximately 42% of the business papers, maintains that key functions of mentoring are career development and skill development.

The fourth most frequently cited positive outcome for mentees was "counselling / listening / encouragement" (21.9%). This type of outcome is akin to Kram's (1985, 1983) notion of the "pyscho-social" outcomes associated with mentoring. In all of the medical studies, personal growth appeared as a positive outcome of mentoring for mentors and mentees alike. In some instances, these were simply general comments indicating personal

growth, while other medical papers referred to enhanced confidence, interpersonal contact, and being more valued as a person.

Problematic Outcomes for Mentors and Mentees

Many of the problematic outcomes experienced by mentors and mentees were similar across the education, business and medical reviews. For example, frequently cited in the reviews was "lack of time". Lack of time was the most commonly noted problem by mentors in the business studies (6%). It was also identified as a problematic outcome of mentoring in the medical studies.

The second and third most frequently cited problematic outcomes for mentors in the business review, were "negative mentee attitude / lack of trust / cooperation" (5.3%) and "little training or little knowledge about the goals of the program" (4.6%). In the medical context, a lack of mentor training was viewed by mentors and mentees as detrimental to the well-being of the program. The fourth most frequently cited problematic outcome for mentors was "jealousy / negative attitudes of others". While jealousy was not an outcome that emerged in the medical studies, what did emerge as a problematic workload issue was the extra burden or responsibility that mentoring created for mentors.

In contrast to the mentor outcomes, the two most frequently cited problems for mentees in the business studies were issues relating to race and gender (7.9% of studies) and cloning or conforming or over-protection (7.3% of studies). The race or gender issues tended to arise as a consequence of matching female mentees with male mentors as well black mentees with white mentors. Similar to the problems experienced by mentors discussed earlier, mentees reported particular mentor characteristics and behaviours as being problematic. Problematic attitudes of others was noted as the fourth most frequently cited negative outcome of mentoring for mentees (6% of business studies) and ineffective and

untrained mentors were seen as the third most frequently cited outcome for mentees (6.6% of business studies.

An important problematic outcome of mentoring that was unique to the medical studies was the perception of mentees that seeking help signalled a type of weakness or inability to cope. Yet, mentoring by definition is a process that is based on support and development. Perhaps this outcome can be explained in terms of the predominance of informal mentoring arrangements in the medical field which can emerge if and when mentees approach mentors for help.

Positive and Problematic Outcomes for the Organization

In contrast to the education studies reviewed in this paper, almost twice as many business studies (30.5%) cited one or more positive outcome for the organization. The most frequently cited benefit reported in 13.9% of studies was improved productivity or contribution or profit by employees. Other outcomes from the business studies included retention of talented employees (11.9%), promotes loyalty (6.6%) and improves workplace or communications or relations (4%).

As was the trend in the education literature, the business literature featured fewer studies reporting problematic outcomes of mentoring for the organization. Of these problematic outcomes, two problems were cited in more than a single study. These were high staff turnover which was seen to hamper the development of long-term relationships between mentors and mentees, and gender or cultural bias in the organization which resulted in good staff being overlooked in the mentoring process. In the medical studies, on the other hand, organizational or attitudinal barriers was the most frequently cited problematic outcome of mentoring. It was reported in seven out of eight of the studies. Problematic organizational barriers included ambivalence to the project by management, minimal support from management, issues relating to the use of resources, problems arranging schedules and a

belief that mentoring should not be formalised. In contrast, the belief that mentoring should not be formalised was an issue that did not emerge from either the business or education databases.

Discussion

The results from our study revealed, not surprisingly, considerable commonalities in outcomes across the three reviews of the literature. For mentors, for instance, lack of time and training, personal or professional incompatibility, undesirable mentee behaviours and attributes such as lack of commitment and unrealistic expectations were issues that caused problems for mentoring relationships. In addition, for some mentors, mentoring was a burden or workload issue that often went unnoticed by others. Mentees, too, were concerned by a lack of mentor interest and training and a host of problematic mentor attributes and behaviours (e.g. critical or defensive behaviours). Professional or personal incompatibility or incompatibility based on other factors such as race or gender was also seen by both mentors and mentees as impediments to the success of the relationship. Organizations, too, were confronted with difficulties arising from mentoring programs. Lack of commitment from the organization, lack of partnership and funding problems were reported in some studies, while in others, cultural or gender biases meant that some mentees' experiences were not positive.

Despite the shortcomings of mentoring, our findings suggested that mentoring appears to offer far-reaching benefits for mentors and mentees. Many of the reviewed studies indicated that mentoring provided both personal and emotional support as well as career development and satisfaction. For mentees, mentoring provided opportunities to develop competencies and skills, knowledge and improve performance. For mentors, it promoted professional and personal development. Benefits of mentoring for both groups included improved skills, access to new ideas and personal growth.

The aforementioned discussion has highlighted the major themes and common outcomes that emerged from our three reviews. While word limitations prevent us from identifying all of the points of divergence that we found, some attention will be afforded in the following discussion to two important points. These are the issue of "reflection", which emerged as a positive outcome unique to the education studies, and "gender and race" that emerged as a significant focus and source of incompatibility between mentors and mentees in business settings.

Reflection

The first issue, reflection, was a significant outcome of mentoring in the education studies only. This is unsurprising given that reflection is a term that has been used in the education field for the last two decades or more and described as the "sine qua non of the "teacher-researcher", "action research" and "reflective practitioner" movements" (Day 1993, p. 1). Schon (1987), a proponent of the "reflective practitioner" movement, suggests that the key to development for teachers lies in their ability to reflect on their own learning. This process is also called, "reflection in action". Schon (1983, 1987) maintains that the process or act of reflecting has considerable power in enabling a person to change his or her work practices and / or personal beliefs. Thus, the mentoring process has been identified as a vehicle in facilitating reflection since it provides opportunities for mentors and mentees together and alone to reflect upon their practice, reconsider what they are doing and why and work towards improving their professional practice. Our review confirmed in educational contexts that mentors, in particular, and mentees to a lesser extent, consider reflection to be fundamental to the overall development of an educator.

Gender and Race Issues

The second issue emerging from the comparative analysis relates to the prominence, in the business studies, of gender and race issues. Our review of these studies revealed that

30.5% examined gender, 6% examined race, and a further 6% examined both race and gender issues. In contrast, gender and equity were the focus in only a very small sample (2.5% and 1.9%) of the education studies that we reviewed. As identified earlier in the paper, the most widely investigated mentoring focus in the education studies, accounting for nearly two-thirds of all studies reviewed, was mentoring for practice or beginning teachers. This is not to say that issues of gender and equity are unimportant within the field of education. On the contrary, there is a growing body of research that has specifically investigated the outcomes of mentoring processes and programs for women and people of colour across a range of educational contexts (refer to, for example, Brennan & Crawford, 1996; Bruce, 1995; Eliasson, Berggren and Bondestam, 2000). What is more likely is that the interest in gender and race so apparent in the business literature has coincided with the introduction of formalised mentoring programs within organisations.

Indeed, one of the reasons that formal mentoring programs were introduced into organizations in the United States and to a lesser extent in Australia, was to address affirmative action legislation (Edwards, 1995). It was thought that such programs would help make mentoring more accessible to women and members of minority groups (Beam, 2000; Carr, 1997; Noe, 1988; Ragins, 1989). It appears, however, that even when members of minority groups participate in mentoring programs, problems can and do occur. As our review of business studies findings revealed, gender and race misunderstandings were frequently the source of incompatibility between mentors and mentees (Thomas, 1989; White, 1990). These problems highlight the need for planners of mentoring programs to be vigilant in the matching process so that cultural, racial and gender factors are taken into account. As was discussed previously, the dimensions of personality and professional ideology are also critical in the matching process of mentors and mentee within all three professions - medicine, education and business. The issue of matching is also highlighted in the latter part of the paper as one of

the key challenges facing administrators charged with the responsibility of implementing formal programs.

In summary, then, our study of mentoring from three diverse areas indicated not only many common themes and points of convergence, but also that mentoring seems to offer considerably more benefits than drawbacks. We state this on the strength of the numbers of studies reporting exclusively problematic outcomes compared with those reporting exclusively positive outcomes. Our analysis suggests, too, that mentoring is a highly complex, dynamic and interpersonal relationship that requires, at the very least, time, interest and commitment of mentors and mentees and strong support from educational or organisational leaders responsible for overseeing the program. Our analysis confirmed a conclusion that we reached elsewhere that suggests "the negative [or more problematic] outcomes associated with mentoring can be minimised by time and effort being directed toward the design and implementation of theoretically sound programs" (Ehrich & Hansford, 1999, p.105). With this thought in mind, the final part of the paper highlights five important issues educational administrators or planners of mentoring programs should consider in order to minimise a range of potential problems from arising.

Issues and Challenges for Educational Administrators

The decision by a school, an educational district or a state department to engage in a mentoring program should not be the consequence of some chance event. In our examination of the educational literature, it appeared that some programs resulted from a hasty decision that mentoring had much to offer. The resultant programs often lacked intellectual rigour, were poorly planned and inadequately resourced. In addition, mentors were untrained and participants were unaware of program objectives. If such programs were evaluated, there was a tendency for this to be simplistic and based on anecdotal evidence. Unfortunately, the reports of such programs do little for education as a professional discipline. It seems,

therefore, that there are several major challenges facing educational administrators contemplating a mentoring program. These challenges are discussed next.

Awareness

In the light of the vast literature on mentoring, it seems inexcusable for those educational administrators considering the implementation of a mentoring program not to consult this resource. If asked to recommend starting points for the development of such awareness high on any list would be the work of Douglas (1997), Long (1997) and Hansford, Tennent and Ehrich (in press). Douglas (1997) provides a summation of past studies and makes several recommendations about possible programs. Awareness of the dangers of negativity in the early stages of planning, Long (1997) balances the rosy picture that mentoring equates to satisfaction and positive outcomes. As Long warns, there can be a dark side to mentoring, but we believe that this can be minimised by awareness of potential problems.

Support for the Program

Although the responsibility for coordinating an educational mentoring program may be vested in human resources personnel, the initial starting point is the strategic plans of the organization. Establishing the need for mentoring and making sure the financial resources and personnel are available commences with the overall strategic plan. Depending on the size of the educational structure involved, the objectives of the mentoring program may also be determined at this stage. This would likely be the case with a statewide project but not necessarily the manner in which an individual school would proceed. In a number of studies we reviewed there was mention that the program did not seem to have the complete support of senior administrators. For a mentoring program to be effective staff need to know the senior executive officers of the district or region are actively supporting the development. It is difficult for a mid-level administrator to drive a program if the staff members are aware that

he/she is not supported at the most senior levels. In fact, feedback loops to senior levels during the implementation of the program seem to be beneficial. During the early planning stages, it is important that administrators make it known that there will be transparency concerning the nature of the program, how personnel will be selected, expectations of participants and the evaluative requirements.

Mentor Training

Educational administrators must make numerous decisions about the mentoring program but perhaps the most difficult decisions relate to who the mentors will be and how they will be trained. Irrespective of the nature of an organization, not all personnel are suited to be mentors. For instance, in a single school program, how does the principal tell some Heads of Department or key teachers they are not required in the program? While some educational programs call for volunteers to act as mentors, there is the possibility that the volunteers may be those least suited to the role of mentor. This challenge is allied to the knowledge that mentoring is an additional load for already busy staff. Having selected the mentors, the administrators must determine how, or perhaps whether, mentors are to be rewarded in some manner. Administrators must also consider the issue of training, commonly cited in the literature as a key to the success of mentor programs. Decisions may need to be made, for example, about whether training should be provided in-house or conducted by external consultants.

Selection of Participants

Decisions surrounding who will be mentored must be made. Will educational administrators call for volunteers or select staff on the basis of a set of predetermined criteria? To a certain extent, this decision is probably determined by the objectives of the program. Based on the literature, the two other issues that warrant scrutiny relate to the gender of participants and the representation of minority groups. There is much literature that suggests it

has been women who have missed out on mentoring opportunities (Noe, 1988; Ragins, 1989) and some studies report the potential for sexual discrimination against women in mentoring settings (Byrne, 1989; Clawson & Kram, 1984). Similar problems are reported with respect to minority groups (Carr, 1997; White, 1990). In educational settings where administrators have ensured that equity policies have been fully implemented, it would be anticipated that gender and minority group issues would not create serious issues. However, the question as to whether mentors and mentees should be matched is clearly a question that must be resolved by administrators.

Evaluation of the Program

Rigorous evaluation is essential and educational administrators will need to decide on the model of evaluation to implement. Good practice suggests that there should be ongoing evaluative tasks during the life of a mentoring program and a follow-up assessment some time after the completion of the program. Much has been written about the relative strengths of qualitative versus quantitative evaluation models. However, equally, if not more importantly, is ensuring the validity and reliability of the procedures used.

Conclusion

An important finding to emerge from our structured analysis of over 300 research-based papers on mentoring across the areas of education, business and medicine, was that mentoring has enormous potential to bring about learning, personal growth and development for professionals. While the majority of reviewed studies revealed that mentoring does provide a range of positive outcomes for mentors, mentees and the organization, it is not, however, without its dark side. In some cases, poor mentoring can be worse than no mentoring at all. Our belief is that the potential problems of mentoring are not insurmountable. With careful and sensitive planning and skilful leadership, most problems can be minimised. In the paper we identified several critical issues that educational

administrators should consider during the planning and implementation stages of formal programs. Amongst these were the necessity for planners to be aware of the growing body of research literature on mentoring; the need for program support at various levels; the importance of mentor training; the careful selection of participants; and the need for ongoing evaluations. If resources (both human and financial) are to be invested in mentoring programs, those responsible for planning and implementing programs must be willing to commit time, resources and energy to such programs. Indeed, all parties have a responsibility to make mentoring work so that it can be a positive force for the individuals and their organizations.

At this juncture, it is important to acknowledge several limitations associated with our review. Firstly, the studies selected for review were limited in terms of their origin and scope. Our review did not incorporate a true cross-section of studies from around the world; with most emanating from the USA and other English-speaking countries. Although we searched from a selected number of databases, by not searching others, such as "dissertation abstracts" and favouring those from English speaking countries, we have limited the findings.

Consequently, it is possible that we may overlooked some key research studies from other databases. Secondly, most studies we reviewed were dated from the mid 1980s to 2000. By focusing on this time-frame, and not on more current research papers, we may have also inadvertently neglected more contemporary mentoring issues and key outcomes for mentors, mentees and organisations. For instance, it is possible that more recent studies, i.e. those conducted from 2000 to the present time, may have reported on the "darker side of mentoring" to a greater extent than those featured in our review. Thus, our findings need to be considered in the light of the scope and time-frame of our study and therefore approached with some reservations. Despite these limitations, we believe that our study contributes to the

growing knowledge base on this highly interpersonal, complex and dynamic learning relationship.

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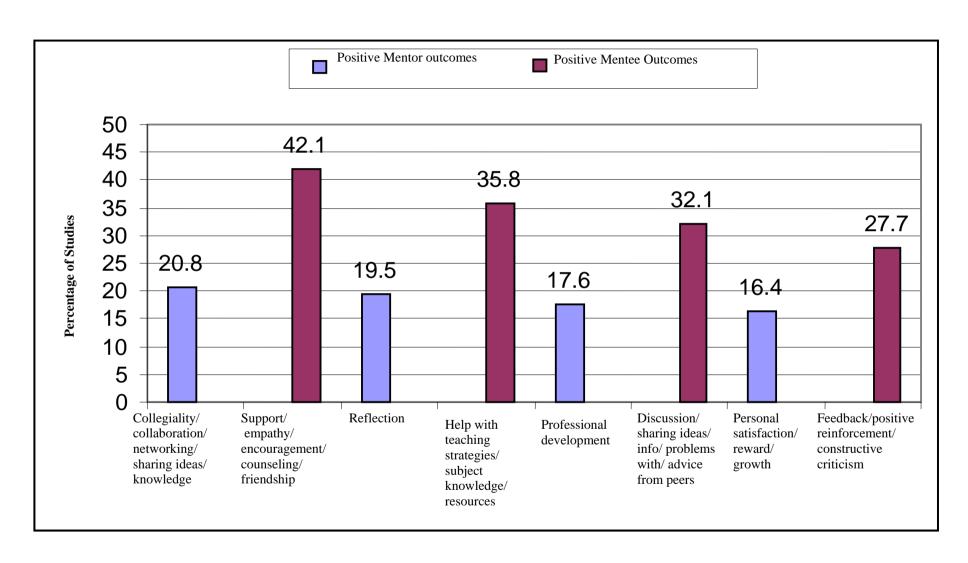


Figure I. Four most frequently cited positive mentor and mentee outcomes from the Education studies.

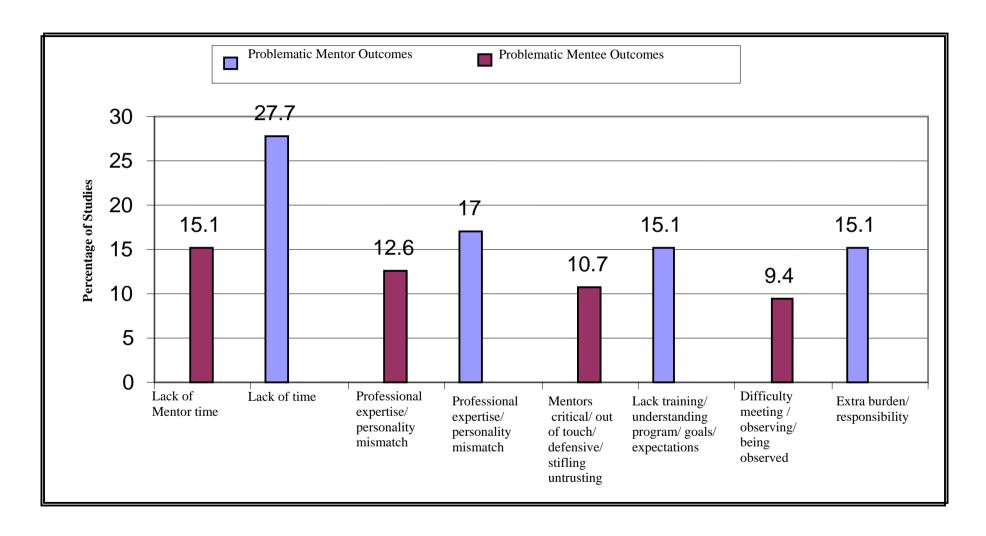


Figure II. Four most frequently cited problematic mentor and mentee outcomes from the Education studies.