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A structured programme to develop novice researchers at the University of South Africa

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The article reports the views of mentors forming part of a structured mentoring programme to develop novice researchers in one college at the University of South Africa. The study was conceptualised according to the constructivist learning theory and the self-efficacy theory. The survey determined the views of 36 mentors by means of a questionnaire. It was found that the majority of the mentors are dedicated to the project. A number of challenges were identified, including a lack of quality time for the project, inadequate institutional support and a lack of training in certain issues, including the influence of mentoring style, how to negotiate rules and give feedback, how to deal with gender and cultural differences, and how to address negative mentee emotions.

'n Gestruktureerde program om beginnernavorsers by die Universiteit van Suid-Afrika te ontwikkel

Die artikel rapporteer die sienings van mentors wat deel vorm van 'n gestruktureerde mentorprogram om beginnernavorsers te ontwikkel in een kollege aan die Universiteit van Suid-Afrika. Die studie is gekonseptualiseer volgens die konstruktiwistiese leertoerie en die selfdoeltreffendheidsteorie. Die menings van 36 mentors is met behulp van 'n vraelys bepaal. Daar is bevind dat die meeste mentors tot die program verbind is. 'n Aantal uitdagings is geïdentifiseer, insluitende 'n tekort aan kwaliteittyd vir die projek, 'n gebrek aan institusionele steun, en 'n gebrek aan opleiding in sekere kwessies. Laasgenoemde sluit kwessies in soos die invloed van mentorstyl, hoe om oor reëls te onderhandel en terugvoering te gee, hoe om geslags- en kultuurverskille te hanteer, en hoe om negatiewe protégé-emosies te hanteer.

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In 2008 one college at the University of South Africa (Unisa) identified an urgent need to address the skewed human resources profile in terms of race and gender in various sectors of the college including academics, management and productive researchers. The most prolific researchers were white, middle-aged and male. Thus, the dean of the college initiated a Scholars Development Plan which set out to replace the productive but ageing academics in the college with younger colleagues already employed by the university. The plan introduced tuition, research, mentorship, and leadership programmes as well as short fellowships to enhance specific academic areas.

This article focuses on the structured mentorship programme, which aimed to develop researchers in particular. A number of initiatives were launched during 2009, including identifying possible mentors, launching a mentoring initiative, organising workshops on mentoring (covering two full days), and monitoring mentoring groups. In addition, Integrated Performance Management Systems (IPMS) stipulated that professors were expected to mentor less experienced staff (particularly those who are black, young and female), and would be evaluated quarterly on this issue. A high IPMS achievement could lead to financial reward. Professors and associate professors who were prolific researchers were also allowed to work from home, on condition that they mentored at least one mentee. Thus a number of the mentorship relationships were sustained over a physical distance between participants. The dearth of publications on South African mentoring relationships in diverse contexts indicates the importance of this study. Garvey & Alfred (2000: 219) emphasise that without good research into mentoring, whatever form it takes, mentoring cannot develop.

Mentoring is defined as "a dynamic, shared personal relationship in which a more experienced person acts as an adviser, guide and role model for a less experienced person (the *protégé*)" (Steinmann 2006: 3). A number of authors highlight the functions of mentors.[1] Mentors fulfil instrumental/career functions that include providing

1 Cf Borisoff 1998: 85, Cunningham 1999: 443, Geber 2009: 674, Johnson 2007: 45-70, Perna *et al* 1995: 34, Wilson *et al* 2002: 319.

teaching/training and information; providing exposure; fostering networks; challenging mentees, and clarifying expectations from the outset. This entails pointing out unacceptable behaviour such as excessive dependency, poor working habits, the violation of personal boundaries, and chronic perfectionism. Psychosocial functions fulfilled by mentors include being physically and psychologically accessible to mentees, providing mentees with support and affirmation of their worth, being intentional role models, providing socialisation for the inculcation of professional attitudes and values, delivering constructive criticism, and allowing increasing collegiality.

However, not only the mentees may benefit from the relationship. Advantages for mentors include the pleasure derived from seeing mentees develop into capable colleagues. The creative synergy of the relationship often generates new ideas that spark rejuvenation in the lives of mentors. When mentors create new contacts for students, they develop their own. They may also be more motivated to remain up-to-date with the latest developments (Henry *et al* 1994:38, Johnson 2007: 12-3, Pierce 1998: 4).

Although international literature has highlighted the benefits that mentor-mentee relationships hold for participants, the context of this research is distinct in the sense that the relationships did not develop spontaneously but were initiated by management and facilitated by means of various rewards, as mentioned. Empirical evidence suggests that, to be successful, mentoring should be voluntary; and that mentors in formal relationships are less motivated, their mentees are less satisfied and the relationships are of shorter duration (Garvey & Alfred 2000: 219, Okurame 2008: 521).

This article focuses on what lessons can be learnt from structured mentoring programmes in higher education institutions that would benefit others who strive to initiate similar programmes. To this end, the aim of this particular study was to determine mentors' views of the above-mentioned structured mentoring programme to develop novice researchers at Unisa 10 months after its implementation. The research was grounded in a number of relevant theories, namely constructivist views of learning and self-efficacy theory (SET).

1. Conceptual framework

Constructivist theory is relevant with regard to how novices (mentees) acquire knowledge and skills. Considering that the emphasis falls on research, constructivist views indicate that mentoring should involve mentees in actual research projects in accordance with the following principles: learning is an active process of making sense of the world; knowledge is invented, not discovered; knowledge is both individually and socially constructed, rather than passively absorbed, and effective learning requires meaningful, challenging problems to solve (Fox 2001: 24).

SET is also relevant, since prolific researchers have "robust self-esteem" (Geber 2009: 675). Bandura (1990: 316) defines self-efficacy as people's "beliefs in their capabilities to mobilize the motivation, cognitive resources, and courses of action needed to exercise control over task demands". Thus, self-efficacy judgements are not concerned with one's actual abilities, but with one's judgements of what one can accomplish with these abilities. Lei (2008: 668) defines research self-efficacy as "the extent to which students are confident about carrying out different research tasks, from library research to designing and implementing practical research projects". SET is based on Social Cognitive Theory (SCT), which revolves around the notion that learning is correlated with observing what others (such as mentors) do (Maddux 1995: 5-6). The principle of triadic reciprocity is important. It states that environmental events, inner factors (cognition, emotion and biological events), and behaviour are mutually interacting influences.

Self-efficacy is developed through four major sources (Evans 1989: 60, Powell *et al* 2007: 105), presented in order of importance.

- Experience: personal evaluation of accomplishments is the most important factor influencing self-efficacy. Prospects are raised by successes and lowered by failures.
- Vicarious experience: observing others who are competent can generate the hope in observers that they too can do well by modelling their behaviour on the observed behaviour. This is particu-

larly true when people (mentees) view themselves as similar to the models (mentors).

- Social persuasion (encouragement): coaching and the unfailing acknowledgment of real accomplishment raise self-efficacy and lead people to believe that they can execute tasks. However, it is generally easier to decrease than to increase a person's self-efficacy.
- Physiological and emotional states: these states can influence self-efficacy evaluations, for example anxiety can decrease self-efficacy beliefs.

People are more inclined to take on tasks if they believe they can succeed. Learners give up trying when they believe that their attempts are ineffective – the phenomenon of learned helplessness (Paris & Byrnes 1989: 179). Hence, self-efficacy judgements influence choice of goals, goal-directed measures, effort and emotions (Evans 1989: 54, Schunk 1995: 282, Zimmerman *et al* 1992: 665).

2. Research design and data collection

The research design took the form of a survey (McMillan & Schumacher 2006: 233). A questionnaire was designed to determine mentors' views of mentoring after the programme had been running for approximately 10 months. The items in the questionnaire were significantly influenced by SET and constructivist views of learning. Thus, the questionnaire was structured as follows: after a first section that determined biographical information, the next section elicited information concerning the mentor-mentee relationship. In the third section, mentors had to respond on a four-point Likert scale to indicate whether the item was relevant, and if so, to what extent they agreed or disagreed. In accordance with SET, the items in this section focused on experiences, observation and modelling, encouragement and emotional support. The final section of the questionnaire contained four open-ended questions to determine mentors' perceptions of what worked well or did not work well in the programme, what improvements they recommended, and what the impact of the mentoring programme was on them.

To ensure content and face validity, the questionnaire was sent to two managers responsible for the mentoring programme. No items were added or removed. Only one small change was made to the wording of some items ("formal" mentoring programme was changed to "structured" mentoring programme). In a pilot study, two experienced mentors were asked to complete the questionnaire. This resulted in changes to the formulation of some items to enhance clarity. Thereafter the questionnaire was finalised.

The population consisted of 46 mentors of whom 38 were white academics). Of these, 19 (41%) were from Education, nine (20%) from Theology, six (13%) from the different language departments and four (9%) from Communication. The remaining eight mentors (17%) were from six different departments in the college. The questionnaires were distributed, completed and collected at a mentors' forum where some mentors were present. Questionnaires were mailed to all remaining mentors and self-addressed envelopes were included. The mentors were requested to return the questionnaires within two weeks via the institution's internal mailing system. The questionnaires were completed and returned anonymously.

The data in the first three sections were analysed by means of frequencies and percentages. The data in the final section were analysed qualitatively (by identifying categories and sub-categories) as well as quantitatively.

3. Results

Of the 46 mentors, 36 completed the questionnaire, giving a response rate of 78%.

3.1 Biographical data

Table 1 illustrates the participating mentors' gender, age group and rank.

Table 1 indicates that there were marginally more female than male mentors involved (52.8% and 47.2%, respectively), in spite of a greater representation of white males in the research output category. This perhaps reflects females' greater willingness to mentor and serve others. The majority of the mentors were in their fifties

(55.6%) and either professors (41.7%) or associate professors (50%), as could be expected. The fact that a few more associate professors than full professors were involved may be related to the fact that participation could contribute towards future promotion.

Table 1: Biographical data of mentors

Variable	F	%
Mentor gender		
Male	17	47.2
Female	19	52.8
Mentor age (years)		
41-49	11	30.6
50-59	20	55.6
60+	5	13.9
Mentor position		
Full professor	15	41.7
Associate professor	18	50.0
Other (eg senior lecturer)	3	8.3

3.2 Mentoring relationships

Table 2 summarises information on the various mentoring relationships.

Table 2: Information on mentoring relationships

Statement/question	F	%
I have the following number of mentees:		
1	24	66.7
2	7	19.4
3	2	5.6
4	3	8.3
The focus of my mentoring is mainly on:		
research	18	50.0
teaching	1	2.8
all aspects of academe	16	44.4
My main reason for being involved in mentoring is:		
I believe it is my responsibility	26	72.2
it is part of the IPMS evaluation	2	5.6
I cannot work from home if I am not involved in mentoring	2	5.6
Other	6	16.7

Statement/question	F	%
I experience being a mentor as:		
a burden	2	5.6
just another task	19	52.8
satisfying	7	19.4
missing scores	8	22.2
My mentee and I interact:		
mainly in person	18	50.0
mainly electronically	0	0
about equally in person and electronically	8	22.2
personally, electronically and telephonically as needed	10	27.8
My mentee and I generally meet:		
once a week	5	13.9
once a fortnight	6	16.7
once a month	20	55.6
Other	5	13.9
The feedback I give to my mentee is:		
mainly in written format	4	11.1
mainly orally	18	50.0
about equally in written and oral format	14	38.9
I would describe my mentoring style as mainly:		
task-oriented	12	33.3
people-oriented	7	19.4
equally task and people-oriented	17	47.2
My mentee and I informally established ground rules for the programme.	23	63.9
We established written ground rules for the programme.	5	13.9
We did not establish ground rules for the programme.	8	22.2

In particular, Table 2 reveals that the majority of the mentors (66.7%) had one mentee only. The remaining mentors had two or more mentees, indicating a noteworthy willingness to mentor. For 94.4% of the mentoring relationships, the focus was exclusively on or including research.

Some items revealed the mentors' attitudes towards mentoring. The majority (72.2%) were involved in the mentoring programme because they believed it was their responsibility, while some (5.6%) said they participated because it formed part of IPMS evaluation or allowed them to work from home. For 52.8% of the mentors, mentoring was merely another task; 19.4% experienced mentoring as satisfying, and two (5.6%) thought mentoring was a burden.

The interaction between mentors and mentees was important for keeping the relationship alive. The majority of the mentors (55.6%) met their mentees once a month, 16.7% once every two weeks, and only 13.9% met once a week. Half the mentors interacted mainly in person with their mentees, while the rest interacted in person, electronically or telephonically as needed. Half (50%) of the mentors gave mainly oral feedback to their mentees, and 38.9% gave feedback equally in written and oral format.

The mentors' mentoring style influenced the mentoring relationship. In this regard nearly half of the mentors identified their mentoring style as equally task- and people-oriented, and a third as mainly task-oriented. Nearly two-thirds of the respondents (63.9%) indicated that they and their mentee(s) informally established ground rules for the programme; 22.2% did not establish any ground rules, and only 13.9% had written ground rules for the programme.

3.3 Mentors' views of the mentoring process

SET suggests that the most important way to develop research self-efficacy is by doing well at research. This implies that novices need to complete actual research projects successfully. To this end Table 3 reveals important information of how the mentor pairs functioned.

Table 3: Mentors' views of mentoring (percentages)

Statement	N/a	Disagree	Neutral	Agree
I have enough time available to be a dedicated mentor		52.8	36.1	11.1
My mentee(s) have enough time available for participation		41.7	27.8	30.6
My mentee has a positive attitude towards being mentored		2.8	8.3	88.9
My mentee and I selected a specific training programme to develop required skills	5.6	5.6	8.3	80.6
My mentee is actively engaged in the mentoring programme	2.8	11.1	19.4	66.7
I experienced the training programme for mentors as useful	16.7	11.1	16.7	55.6

Statement	N/a	Disagree	Neutral	Agree
The literature on mentoring that was given to me was useful	11.1	5.6	33.3	50.0
The formal launching of the mentoring programme was motivational	5.6	8.3	41.7	44.4
Regular reports on the mentoring programme are necessary		11.1	22.2	66.7
Regular meetings with other mentors are useful		8.3	52.8	38.9
My mentee(s) and I are well matched		2.8	22.2	75.0
The relationship between my mentee and me is influenced by culture	19.4	25.0	22.2	33.3
The relationship between my mentee and me is influenced by gender	30.6	30.6	19.4	19.4
Setting clear goals for the mentoring programme is necessary		5.6	8.3	86.1
Stipulating clear time frames to reach goals is necessary		5.6	16.7	77.8
In general, the Unisa infrastructure supports my mentoring		38.9	16.7	44.4
I refer my mentee to other experts		16.7	25.0	58.3
I motivate my mentee to participate in conferences/workshops		5.6	5.6	88.9
I regularly provide my mentee/s with literature sources	2.8	13.9	16.7	66.7
I regularly proofread my mentee's written work	2.8	8.3	8.3	80.6
I consciously try to ensure that my mentee has positive learning experiences		2.8	11.1	86.1
I consciously try to be a role model for my mentee			16.7	80.6
I consciously give constructive criticism and encouragement	2.8		2.8	94.4
I consciously give positive affirmation before recommending changes			5.6	94.4
I consciously address negative mentee emotions (eg anxiety) when these arise	13.9	8.3	25.0	52.8

Table 3 shows how groups operated to develop mentees' research knowledge and skills: 80.6% of the pairs selected a specific training programme to develop the required skills, 86.1% set goals for the programme, and 77.8% stipulated time frames within which to reach the goals. More than half of the mentors referred their mentees to other experts when needed, 88.9% motivated them to participate in conferences or workshops, and 66.7% provided them regularly with literature.

Because of the pressure that novices experience to develop as researchers and to publish, the individual dispositions of mentors and mentees will influence how hard they work at being successful: 88.9% of the mentors believed their mentees had a positive attitude towards being mentored, although only approximately two-thirds (66.7%) of the mentees were believed to be actively involved in the programme. This may be due to time pressures.

Because sufficient uninterrupted time to conduct research projects is necessary to ensure that the mentee experiences success, it is significant that more than half of the mentors believed they did not have sufficient time to be dedicated mentors, while only 30.6% thought their mentees had enough available time for participation in the programme.

Managers who initiate mentoring programmes also influence the success of their programmes by the training and the support they provide or the requirements they set. For this project, 66.7% of the mentors indicated that regular reports on the mentoring programme were necessary, 55.6% that the training programme for mentors was useful, and 50% that the literature on mentoring given to them was helpful. Mentors and mentees need to believe that supporting departments at institutions are able to create helpful environments in which research can flourish. Only 44.4% of the mentors believed that the Unisa infrastructure supported mentoring. Moreover, only 44.4% indicated that the formal launching of the mentoring programme was motivational, and 38.9% that regular meetings with other mentors were useful.

According to SET, the second most important source of research self-efficacy is modelling. Mentees need to identify with and emulate mentors as role models. Table 3 shows that 80.6% of the mentors consciously tried to be role models for their mentees. This was influenced by how well the mentors and mentees were matched – 75% of the mentors believed they were well matched. One-third considered their relationship to be influenced by cultural differences, and less than 20% saw gender as having an effect.

Social persuasion and encouragement is the third most important dimension of the development of self-efficacy. Table 3 reveals that more than 80% of the mentors indicated that they regularly proofread their mentees' written work; consciously tried to ensure that their mentees had positive learning experiences, and intentionally gave constructive criticism, encouragement and positive affirmation before recommending changes.

Finally, SET shows that emotional states can influence self-efficacy judgements. According to Table 3, only approximately half of the mentors (52.8%) consciously addressed negative mentee emotions when these arose.

3.4 Mentors' views on what worked well in Unisa's structured mentoring programme

In response to the question on what worked well, a number of aspects were mentioned including some general advantages, how the programme was managed and the resources that were provided.

3.4.1 Advantages of formalisation

A respondent welcomed the fact that the mentoring s/he had been doing unofficially had been acknowledged by being formalised. Another appreciated the fact that this now allowed him/her to work from home. However, most respondents commented on the advantages of formalisation for the *mentees,* namely that pairs were required to set goals and submit reports; mentoring improved teaching material and teaching in general, and mentoring contributed towards "growing one's own potential timber" at the institution and increasing departmental research outputs, which would facilitate

the development of mentees' career paths. One stated: "It ensures directed action at developing competing and career paths which are essential in the complex environment of Unisa."

3.4.2 A well-managed programme

A number of respondents commented favourably on the management of the programme. Reference was made to the careful matching of mentors and mentees; the fact that mentors only needed to have one or two mentees; the regular communication from the director, which was viewed as motivational, and the efficient monitoring of the programme by means of the submission of three reports during the year. The number of reports was felt to be adequate, and respondents indicated that the project was well balanced between formality and informality.

3.4.3 Helpful resources provided

Approximately half of the respondents referred to the resources provided by management, which included mentorship training (via quality workshops and the provision of relevant literature) and a mentorship forum. Although one respondent noted that upfront training was lacking ("workshops have come rather late in the programme"), the workshops were experienced as "very helpful", provided mentors with guidelines, and ensured that mentors and mentees "knew exactly what to do". This was experienced as motivational, and led to "full and committed participation", "regular meetings with the mentee" and "attendance of conferences and research projects with mentees".

3.5 Mentors' views on what did not work well in Unisa's structured mentoring programme

Respondents identified problem areas including time constraints, problematic mentoring goals and some management and mentee problems.

3.5.1 Time constraints

Time was reported as the greatest constraint to good-quality mentoring by 16 respondents, who expressed the view that the lack of

time was related to the fact that mentoring was not part of their work allocation (an "add-on"). One wrote:

> When I agreed to participate in the programme at the beginning of 2009, I was not fully aware of the impact of various tasks and responsibilities on my time available for mentoring. The fact that there is very little formal recognition for mentors can be regarded as problematic.

Others referred to unnecessary demands on their time for administrative purposes. For example:

> Planning is problematic in view of a myriad of unexpected workshops, discussions, repeated calls for information that has already been submitted to someone else or is by now available on the university system. Consequently, mentoring is placed on the backburner as other more pressing issues are given priority – the semester system also makes it difficult to perform effectively as a mentor.

Not only the mentor's time, but also that of the mentee was a problem. For example:

> The Young Academic's Programme takes mentees away from their offices for long periods of time so they are not available via telephone or e-mail to their mentors. The culture at Unisa is to allow interruptions, and to permit sudden deadlines to take priority over academic tasks, so scheduling and keeping meetings is difficult.

3.5.2 Problematic mentoring goals

One respondent observed that the mentoring programme placed too much emphasis on preparing the mentees to publish as many articles as possible. Another said that there was "no support for mentors' own development when required".

3.5.3 Management problems

Seven respondents referred to an "over-regulated" mentoring programme. One observed: "The structured programme does not work for me – too many [*sic*] compulsory paperwork, workshops, etc."

Other criticisms included the fact that mentees did not receive any training on mentoring or mentoring relationships. Finally, one respondent noted that there was too much emphasis on the IPMS. This respondent experienced it as "unfair discrimination if you do not have a mentee".

3.5.4 Mentee problems

One mentor mentioned an "unwilling mentee which is a burden". Two mentors referred to the pairing of the mentors and their mentees. For example, one (female) mentor wondered whether she would be penalised for not being willing to mentor a male. Her reasons included the fact that her husband would object. Another pointed out that everybody flocked to the more popular people in the department, leaving others without mentees.

3.6 Mentors' views on how to improve Unisa's structured mentoring programme

Mentors made recommendations relating to the Unisa environment, incentives for mentors, and the selection and training of mentees.

3.6.1 A supportive environment

Several mentors recommended a more supportive environment, which would include more training on the mentor-mentee relationship. For example, training could focus on questions such as: How can they work well together? What influence does the mentor's mentoring style, or differences between the mentor and mentee with regard to gender and culture, have on the relationship? Other suggestions included that training should incorporate feedback from other academic institutions, and that electronic templates should be made available on the Unisa staff website to facilitate reporting back. By contrast, another mentor desired mentoring to be more informal, with more freedom allowed.

Mentors needed more practical support: "Perhaps someone should develop an example of ground rules that would work well. How does one handle one unwilling mentee without spoiling the relationship?" Regarding the issue of time, 10 respondents indicated that they wanted mentoring "to be built into the work allocation". They also wanted Unisa to invest more resources in mentoring and to increase the mentoring programme to one or two years and give more opportunity for progress.

3.6.2 Incentives for mentors

Respondents recommended some "incentive" or "reward". One wrote: "Give credit to mentors and mentees that work successfully. Be more people-centred rather than task-oriented. Let good things happen without too much interference or checking up." Although some would appreciate rewards via IPMS assessment, others objected to this since "some people will not get mentees, even though they may be the best mentors", and if chairs of department were mentors, this could be interpreted as an unfair advantage for the mentee in his/her IPMS assessment.

3.6.3 Selection and training of mentees

Some mentors suggested that the programme be expanded, and indicated resistance to the fact that mentees needed to be selected from certain categories "for example, black female". Some mentors also suggested that mentees needed to participate in mentee workshops to clarify roles and responsibilities. For example, one mentor wanted the mentee to take the initiative in their relationship.

3.7 Mentors' perceptions of the impact of the mentoring programme on them

3.7.1 Mentor's own development and relationships

Some mentors indicated that the mentoring programme led to increased self-knowledge. This related to a greater awareness of strengths and weaknesses regarding leadership and mentorship qualities.

Others mentioned that the mentoring programme led to gains in their own research skills. Examples included:

> I feel empowered … A sense of achievement. It really inspires me to work even in a more focused way!
>
> This mentorship programme is really valuable for my own personal development as an academic at Unisa. It is an exciting challenge (wonderful opportunity to try to empower a fellow colleague).
>
> It helps me to share and pass on skills – usually I am a loner and prefer to work on my own; personally the more structured approach works well for me.

One also mentioned the fact that the mentee provided him/her with sources which were very helpful. As participants got to know one another better, relationships developed and improved. Examples included:

> We developed an outstanding relationship which we would not have had.

> I enjoy this relationship and also learned a lot about my mentee, about the whole Unisa structure and about MYSELF.

3.7.2 Learning to manage the process

Two mentors indicated that their mentoring did not begin with the Unisa programme; this programme only added additional administrative duties. Most of the mentors attested to the impact mentoring had on their time and workload: "more paper work as far as formal programme goes, which makes me more burdened, whereas if I was allowed to mentor informally, I would have loved it". In learning to manage the process, mentors needed to manage their time better and carefully plan sessions with their mentees. They thus addressed their anxieties concerning their own academic programmes. Mentors also had to work in a more goal-oriented fashion. One mentor noted the need to adapt his/her mentoring style: "I am too task driven and now consciously try to be more people oriented."

3.7.3 The satisfaction of contributing to the mentees' growth

Six mentors indicated that participation in the programme had had a positive impact on them, in that it was "affirming", "mostly satisfying", "enjoyable" and "enriching" to share knowledge and skills until the mentee could work independently. One mentor wrote: "I saw the desperate outcry for help from a mentee and has [*sic*] helped her to swim. It is wonderful to experience the growth (academically and in confidence) of a mentee". Another wrote:

> I have had the pleasure of watching young colleagues develop and grow into more competent academics. My present mentee is a fine young man, but he and I have only had minimal contact over the past two months due to my research and development leave and his commitment to the Young Academic Programme. Hence I feel both anxiety and guilt about our relationship.

4. Discussion

The principle of triadic reciprocity indicates that environmental events, inner factors and behaviour are mutually interacting influences. For the mentees, the mentor (with his/her attitude, behaviour and style) and the Unisa context are important environmental influences which deserve careful consideration. Although only 19.4% of the mentors indicated that they experienced mentoring as satisfying, and 52.8% indicated that it was just another task (cf Table 2), the responses to the open-ended questions were more positive. Many reported that mentoring was satisfying, enriching and inspiring, contributing towards their own growth in many ways and towards improved relationships in their department. This confirms that a profitable mentorship relationship is rewarding for both parties (David & Roger 2002, Okurame 2008: 521, Steinmann 2006: 4).

The results presented in Table 2 also show that 72.2% of mentors were involved in the mentoring programme out of a sense of responsibility. This conscientiousness influenced how they operated – most mentors had regular (monthly) meetings with their mentees. Such regular communication between parties is important to keep the relationship alive, facilitate successful experiences for mentees, and develop their self-efficacy (Verwey 2008: 174).

Mentors may have a task-driven style. However, SET shows that mentoring style should also be people-oriented to build self-efficacy. Steinmann (2006: 35) emphasises that mentors should exude warmth and show that they welcome the relationship. Friendship is often an outcome of a good mentoring relationship (Johnson 2007: 12). This issue warrants attention during mentor training.

Half of the mentors gave feedback orally, but to build mentee confidence, written comment is essential. However, mentoring is not a one-way process of conveying information, but a cooperative and critical, reflective meaning-making process (Greyling & Du Toit 2008: 959, Hugo 2009: 705). This issue also needs discussion during mentoring workshops.

In this project, only five of the 36 mentors established written ground rules at the beginning of research projects. According to

Steinmann (2006: 38), participants need to be clear on what they expect from each other. The issue of democratically negotiating ground rules at the start of the relationship could also be addressed in mentor training.

In line with SET, more than 80% of the mentors consciously tried to be role models, although this was often influenced by mentoring relationships crossing cultural and gender boundaries. One-third of the mentoring relationships in this study were influenced by culture, while nearly 20% mentioned that gender played a role. Mentorship theory indicates that cross-gender compositions may reduce the quality of mentoring. According to Okurame (2008: 523), some African cultures view males as superior to females; pairing of male mentees with female mentors may therefore cause discomfort for participants, as mentioned by a respondent. This may be particularly true if cultural boundaries are also crossed. Mentees and mentors therefore often prefer partners of the same gender (Okurame 2008: 530). Thomas (Johnson 2007: 176) also recommends that mentors handle racial differences with respect and protect mentees from negative criticism with racial overtones (Steinmann 2006: 92, 94). This issue needs mentor training and consideration when matching mentoring partners.

The necessity for careful matching of partners was also indicated by the fact that relationships were often affected by mentors believing that mentees were lacking in dedication. Mentors who are dedicated need to be matched with mentees committed to learning (Verwey 2008: 174). For example, not all mentees aspire to be researchers, but view themselves as teachers instead (Schulze 2009:14).

SCT and SET indicate how important the mentee's behaviour is in ensuring that success is achieved. According to the results in Table 3 and the open-ended questions, the mentors and mentees selected suitable projects with sufficient scope for learning, in line with constructivist learning principles. Other researchers have also pointed out the importance of following a constructivist approach to mentoring (Greyling & Du Toit 2008: 957, Verwey 2008: 174). The fact that mentors facilitated projects in a structured way, by setting clear goals and timeframes to reach these goals, indicated that it was

done thoughtfully. Geber (2009: 681) emphasises the importance of explicit goal-setting. Such deliberate mentoring may be related to mentors' dedication and training, and enhances the possibility of success and research self-efficacy.

Although mentors may generally not be knowledgeable about SET, the majority tried to be encouraging by giving constructive criticism and positive affirmation. However, only approximately half of the mentors consciously tried to address negative emotions when these arose. SCT shows that mentees' inner feelings interact with and influence their environment and behaviour. This issue could also be addressed in training.

As pointed out by SCT, the Unisa context is important as an environment in which mentees learn and develop self-efficacy. Although approximately two-thirds of the mentors agreed that submitting progress reports to management was necessary, mentors did not want to be over-regulated and wanted paperwork to be kept to a minimum. Garvey and Alfred (2000: 221) also stressed that mentoring should not be over-managed. The establishment of an electronic forum, where mentors would be able to communicate with one another in their own time about the problems they experience, may be an option to consider.

Unisa provided mentorship training, which is critical for mentoring effectiveness (Mukeredzi *et al* 2009: 342). Table 3 shows that 55.6% of the mentors experienced the training programmes as useful and indicated that they believed mentees also needed training to clarify roles. The mentor-training programmes generally followed an "experiential" rather than a lecture approach, as is recommended (Garvey & Alfred 2000: 219). They also point out that "the main source of material for educating mentors is the 'participants themselves'". However, only approximately one-third of the mentors desired regular meetings with other mentors. This lack of enthusiasm for meeting with others may be related to a serious lack of time for all academic responsibilities. Since Geber & Nyanjom (2009: 894) emphasise that mentors do not automatically have mentoring skills (for example, listening, questioning and providing feedback), mentors need to reflect on their practices. Reflective practice is facilitated

if mentors record their learning and reflections after each mentoring session, and review this before the next session. This issue also needs to be considered during training.

Factors in the Unisa context impact on time available for mentoring projects. Setting adequate time aside for mentees to reach goals and experience success has been identified as important (Verwey 2008: 174) and is in line with SET. In this research, it appeared that the lack of sufficient uninterrupted time for both mentors and mentees to pursue projects is the biggest obstacle, as has also been found at other institutions (Mukeredzi *et al* 2009: 348). Although nearly 89% of the mentees had a positive attitude towards mentoring, only 67% were actively engaged in the project and only one-third of the mentors believed that their mentees had sufficient time for their assignments. It has been shown, therefore, that formal mentoring relationships in South Africa generally need between 18 months and three years before goals are reached (Steinmann 2006: 14-7). This has implications for management. Mentors are frustrated by the time spent on excessive reporting on their activities. A culture of auditing and control does not stimulate research and leaves academics with even less time for quality work (Schulze 2009: 12).

Mentors want to be compensated for mentoring, for instance by having mentoring built into their work allocation. This will allow them more time to be effective coaches and role models, as prescribed by SET. Garvey & Alfred (2000: 221) point out that mentoring is "legitimate work activity", "serious business" and "hard work".

According to this study, the majority of the mentors believed that the Unisa infrastructure did not support mentoring. Mentors and mentees need to believe that supporting departments are able to help them reach their goals. Individual research projects often require institutional support in the form of financial support, information exchange, or modelled behaviour by elements of the embedding social context (Garvey & Alfred 2000: 221, Zaccaro *et al* 1995: 306).

5. Conclusion

One way in which organisations such as Unisa can ensure their own survival is by developing individuals with the necessary potential to keep the institution competitive. This article highlighted lessons learnt from a structured mentoring programme that could benefit others who strive to initiate similar programmes. This was done by determining mentors' views of the structured mentoring programme to develop novice researchers. The views of mentors who had been involved in the programme for a few months indicated that, overall, the project was working relatively well and that most mentors were dedicated to the plan.

However, the programme needed to be improved by addressing the various challenges identified by this research. These included lack of time for quality mentoring. Mentors were frustrated by unnecessary demands on their time because of management styles entailing, for example, excessive reporting, which is indicative of a culture of control. Over-managing a mentoring programme causes resistance. A supportive environment needs to be created in which mentoring can flourish. Mentors need to be rewarded and nurtured, and mentoring needs to be built into work allocations. Mentors need to reflect on their practices. To facilitate this, they need training in good mentoring practices, including the influence of mentoring style, how to negotiate rules and give feedback, how to deal with gender and cultural differences, and how to address negative mentee emotions when these arise. Mentees also need training in their roles and responsibilities. An electronic forum where issues can be debated may stimulate reflection and provide support.

For optimal enhancement of the mentoring initiative, further research is needed. Mentees' views on the impact of the programme and on how it could be enriched need probing. An analysis of the mentors' progress reports may also be valuable. Ultimately, an effective mentoring programme may facilitate the development of a new group of researchers who will be able to replace the current productive group when they retire.

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