CHAPTER 5

5. CONCLUSION

This study investigated the interpersonal communication factors in the supervisory relationship that play a role in enhancing occupational therapy students’ clinical reasoning during physical fieldwork education.

Sufficient evidence emerged from the study to indicate that the interpersonal communication factors identified in the supervisory relationship significantly influence the student’s learning of clinical reasoning.

The research findings do not concur with the findings of other studies in respect of the interpersonal communication between supervisor and student. The reason for this is believed to be that most of the available research approaches the issue from the student’s perspective which by its very nature tends to be subjective. This study on the other hand links the supervisor’s behaviour to a concrete outcome - the subsequent performance of the student in clinical reasoning as determined in an independent practical exam.

The mixed methods research design as employed was essential for the integration of qualitative analysis and exam grades.

5.1 Findings of the study

The transition to fieldwork education requires a shift of focus from classroom education to where it becomes practice. The transition is difficult and made more so by the fact that a hospital or a rehabilitation unit is not an isolated single entity but exists in a system with a multi-disciplinary team in which a collection of activities take place. In this environment the student must now adapt and develop her/his knowledge and skills to become a professional. The supervisor is expected to facilitate this process through a variety of means, all requiring effective interaction with the student, and to do this effectively the following specific supervisory traits were identified in the study.
Supervisors’ level of competency

The supervisor needs to possess a deep understanding of the subject matter since critical, creative and practical thinking is not possible without content knowledge (memory thinking). Supervisors should therefore be both technical experts in their field of specialisation as well as role models who set constructive norms.

If the supervisor is professionally competent and effectively incorporates clinical reasoning in her treatment regime, she will naturally expect the student to achieve the same high standards in this regard. The supervisor should have the ability to set a “just right” challenge to students on their stage of development, i.e. primitive, hyper-mobilised or mature.

The typical student on the other hand, expects to learn from her supervisor and will strive to meet her standards if she experiences the supervisor as being authoritative and worth imitating (complementary relationship). Should the supervisor not meet these expectations, chances are that the student will not take the fieldwork education seriously and might even try to employ manoeuvres to define the relationship as between equals.

A supervisor that is skilled in clinical reasoning and transferring that knowledge (teaching) is of fundamental importance in the successful fieldwork education of occupational therapy students. These competencies are not only necessary in terms of the supervisor’s ability to enhance students’ professional development but they also impact on the interpersonal relationship between supervisor and student.

Interpersonal communication factors in the supervisory relationship;

Supervisors should at all times be polite in their dealings with students and treat them with respect since respect is fundamental in any relationship.

Fieldwork supervisors should be open and approachable within reason. If the students experience them as too distant they will not have the freedom to ask questions or discuss problems, which just results in a lost learning opportunity. On the other hand, if the relationship is too close, it is doubtful if the students will get the benefit of unbiased feedback.
In contrast to popular belief, an authoritarian or commanding approach by the supervisor was actually found in this study to be effective in fieldwork education.

More successful supervisors exhibited a linear, rather than circular approach in communicating with students.

It is expected of all supervisors to exhibit appropriate flexibility in dealing with students which often necessitates wisdom from the supervisor. However, the more effective supervisor tended to be fairly rigid. It was found that successful supervisors tended to be more judgmental than empathetic in their dealings with the students.

Students, who performed well in their final practical exam, received only limited confirmation during fieldwork education in contrast to their less successful peers.

In line with the above, the students seem to benefit more from critical feedback. If the feedback is overly positive the students are not really extending themselves to improve.

**Supervisors’ impact on students’ clinical reasoning skills;**

Ultimately, the effectiveness of fieldwork education reveals itself through learning from and respect for the supervisor. The students’ clinical reasoning skills should show a marked improvement as a result of the supervisors’ intervention in the learning process and when students respect their supervisors the latter are perceived by the students as authoritative and worth imitating.

### 5.2 Reflection on the findings of the study

The findings are not in line with general beliefs indicated in the literature because in current thinking, a caring, flexible and understanding approach by the supervisor encourages professional development during fieldwork education.

The perceived dichotomy between the literature and the findings of the study could possibly be explained by the fact that the research available, and referred to in Chapter 4, was largely based on the perceptions of the students rather than the
actual measurement of the educational outcome. A similar conclusion would have been reached in this study if the actual performance of the students in the final practical exam was not used as a touchstone in the determination of the most effective supervisor profile. Stated differently, if the profile of supervisors described by the students as friendly, supportive, emphatic, etc. were taken as signifying the ideal, a completely different picture would have emerged.

Students who obtained grades in the 50% range were not necessarily always supervised by less competent supervisors. Even with competent supervisors who displayed the less effective interpersonal communication profile expounded in 4.12 the students faired badly. Competent supervisors who were emphatic and flexible did not enhance the development of the students’ clinical reasoning skills. In the focus group and one-on-one interviews the impression was created that they sometimes regarded the overly confident student as competent and therefore trusted that student to work without supervision.

Although scientific knowledge of a patients’ physical dysfunction and possible intervention strategies are certainly essential in therapy, the therapist only becomes authoritative in the application of clinical reasoning through experience. This is evidently the purpose behind practical fieldwork education, but that is just a start. To be really competent at the level expected of a supervisor years of practical experience is required. The competent supervisors that are successful in terms of subsequent student performance know this, which might to some extent explain their behaviour. Competent supervisors would not necessarily see their communication with the student as an interactive or circular process, probably to some extent based on the belief that the student has nothing of value to add.

Inexperienced or novice supervisors on the other hand would probably welcome a circular discussion as they would not necessarily know what to do and also not feel comfortable in giving guidance. Since newly qualified supervisors have limited experience they often find it quite challenging to supervise students who might be the same age or even older than themselves. Problems are uncertainty and unease. Students question their knowledge and experience, sometimes with good reason, which can result in very uncomfortable situations, best avoided by either being friends with the students or leaving them to their own devices.
The supervisor treats real patients, often with financial implications in the private hospitals, where the result of a mishap or lapse of professional behaviour by the student could have serious consequences. There might thus be a good reason why supervisors tend to be authoritarian, that is commanding, rigid and linear, in their handling of students. However, by being more rigid than flexible, the supervisor creates boundaries or structures within which the student is expected to perform and which could also have a positive effect on the students as it lessens some of their anxiety. This is something which students readily admit they experience in the fieldwork setting since it stems from not knowing what is expected of them. Likewise, a linear approach is not necessarily experienced negatively by the student as several indicated discomfort in having to express their views in what is essentially a foreign environment for them, especially in the earlier stages of the practical fieldwork.

As for the lack of empathy displayed by the more successful supervisors (in terms of the students’ subsequent performances) a number of reasons have been put forward by these supervisors themselves: work pressure, a belief that students are bound to follow the path of least resistance and would want to avoid pressure, looking for an easy way out (even to the extent where they would not hesitate to try and manipulate the supervisor). The ultimate aim of a good supervisor is to mobilise the student to take on the challenges inherent in clinical reasoning. They tend therefore to exert pressure on students to perform and as a result are not inclined to be overly empathetic.

An effective supervisor gives realistic corrective feedback, even if it seems to be overly critical, as her aim is to get the student to improve. As long as feedback is perceived by the student as being task-oriented and not a personal attack, the student will react positively. Supervisors who give unrealistic positive feedback on the other hand are not experienced by students as credible or worthy of respect, and students would therefore tend not to learn from them. As one student put it “I also learned a lot from therapists if I can see their therapy works, then I think, wow, that is a good therapist, then I automatically have respect for that therapist and any feedback they are willing to give me I will take and really look at it…”
5.3 Reflection on the significance of the study

5.3.1 Development of students’ professional behaviour

The findings of the study clearly identify which interpersonal communication factors in the supervisory relationship are contributing to the development of the occupational therapy students’ clinical reasoning skills and therefore also their professional behaviour.

5.3.2 Supervision

From the findings interpersonal communication strategies can be identified which during physical fieldwork education will enhance the occupational therapy students’ ability to apply clinical reasoning skills. The intention is to incorporate this information in the supervision workshop which is presented once a year at the University of Pretoria’s Department of Occupational Therapy School of Health Care Sciences, Faculty of Health Sciences.

5.3.3 Health care

Everyone has the right to health care services according to Section 27 (1) (a) in the Bill of Rights in the Constitution of the Republic of South Africa (1996).

Every patient and client therefore has the right to receive quality occupational therapy where applicable. In order to ensure that the best care is provided, it is the obligation of the Occupational Therapy Department of the University of Pretoria to equip the occupational therapy student with sound clinical reasoning skills and the findings of this study are therefore expected to enhance the training of such students in clinical reasoning.
5.3.4 Contribution to the scientific body of knowledge

No evidence could be found that the interpersonal communication factors in the training of occupational therapy students had previously been investigated to this extent or in this specific manner. Although a lot of work has generally been done in this field, the study is unique in that the influence of interpersonal factors on the education of students in clinical reasoning was measured by means of a hard outcome, the final practical exam. This lends credibility to the findings which are expected to have an impact on the fieldwork education of occupational therapy students at this University. It could also be of value on a national as well as international level for other occupational therapy training institutions.

5.4 Reflection on the execution of the study

5.4.1 Participants

i. Inclusion of student participants

The decision to exclude from the study three students (pp, bb and p) in order to eliminate cultural influences that could skew the results, is elucidated in Figure 5-1: Comparison of End of Term and Practical Exam grades of the 33 students that consented to participate in the study. In all three cases their End of Term rating in the WHR was noticeably lower than that of other students at their level of performance. This pointed to a bias that could impact on the study as they constitute 10% of the sample. However, three people are not enough to reliably quantify the effect of this bias. Other exceptions, such as nn, rr and gg are due to defined circumstances as explained in Chapter 4.
Figure 5-1: Comparison of End of Term and Practical Exam grades of the 33 students that consented to participate in the study

ii. Supervisors

Assessing clinical reasoning ability in students.

Some of the supervisors are novice therapists and lack the depth of experience to be truly competent in clinical reasoning themselves. Even if competent and effective in using the underlying principles of clinical reasoning, they might not necessarily be conversant with the relevant terminology having studied at institutions where this concept is not taught or used. Either of the above might render them unable to assess the students’ level of creative clinical reasoning as defined and used in the study.

Work Habit Reports

In learning complex skills the parts making up the whole are in themselves complex so that it is not possible to see whether the student is doing well or not. It follows that feedback about how successful one is at any given time can have a powerful effect on the ease with which one learns.

It is not always clear on which grounds supervisors decided on the grades given to students in the WHR for clinical reasoning. As mentioned in Chapter 4, the grades were sometimes skewed by other considerations; at M-T some supervisors felt
students had to be made aware of their shortcomings while at the EoT there was a temptation to give higher grades as that would reflect well on their input as fieldwork educators.

The tendency of supervisors at some hospitals to do the WHR of individual students as a group rather than individual supervisors giving grades could also lead to the stronger supervisors’ evaluation of a specific student prevailing in the end. However, individual ratings could also be perceived as putting certain supervisors in an exposed position should they have it totally wrong or very different from other, possibly stronger, supervisors.

**Work load**

Supervisors, especially those working in private hospitals, are often under severe time pressure and find it difficult to spend enough time with students. Simply allowing time for a student to express his/her thoughts and feelings requires a sacrifice from the supervisors according to Yalom, (2005). Modelling/demonstrating, observation of and feedback to the student suffer as a result.

**iii. Students**

Students, who had to invest all their mental and physical energy into “survival” with the demands on them, were less likely to be innovative in their ability to do creative clinical reasoning. This seems to be especially true of the first fieldwork block in which they were exposed to a clinical environment for the first time.

It should be recognised that there could also be other general barriers to creative thinking that could impact on a student’s learning experience, such as the following:

- **False assumptions** – “I am not creative”.
- **Habits** – There is only one right answer.
- **Attitudes/emotions** – Fear of failure and risk avoidance worsened by perceived high expectations and pressure to perform.
5.4.2 Methodology applied

i. Research design

To be able to compare the interpersonal communication factors as identified through qualitative analysis with the exam results as a learning outcome a mixed methods research design proved to be invaluable. The complexity of many students and supervisors working in a matrix environment required substantial, though fairly simple, quantitative analysis.

ii. Focus groups and one-on-one interviews

In general the focus groups provided rich data from the participating therapist supervisors. Over and above the information gleaned from individuals on their approach in educating students, these sessions also tended to put the demands on the students and their general behaviour in context.

However, as could be expected it was noticeable that a few supervising participants tended to dominate the discussions in the focus groups which resulted in the views of other supervisors not being heard. This, and other group dynamics, made the follow-up through one-on-one interviews with those that did not participate fully in the group sessions essential.

iii. Capturing, transcribing, coding and analysing material

The sheer volume of work involved and the time required tended to limit the depth and scope of the study. In this case it was not possible for instance to evaluate the IPA of the students as well in order to punctuate the relationship from both perspectives.

iv. Analytical tools used

The practical exam grade as a common measure of all the inputs from the various sources enabled direct quantification and comparison of results rather than to rely on subjective interpretation.

IPA proved to be invaluable as an independent analytical tool in determining the relevant factors in the interpersonal communication in the supervisory relationship.
Statistical analysis was limited to simple averages and weighted averages as the basis for graphic presentation of the results for better understanding.

5.5 Limitations of the study

i. Emphasis on supervisor

The study was punctuated from a supervisor perspective only. From a GST point of view the behaviour of the supervisor impacts on the student who then reacts to it in a way that in its turn impacts on the behaviour of the supervisor. Thus the role students play in the interaction was not investigated in detail. This would have entailed more work than was possible in the time allowed for the study, especially as most students were exposed to more than one supervisor and vice versa. It was assumed that the summative result of the total interaction between supervisor and student in the fieldwork setting is reflected in the behaviour of the supervisor as defined for the purpose of the study.

ii. Demographic constraints

Students from only one university were included in the study. In addition they were all female and Caucasian. Again time constraints prohibited widening the study to incorporate all possibilities in terms of different educational institutions, gender and culture. As a matter of fact, the additional complexity posed by different cultures was avoided on purpose in the study.

5.6 Recommendation for further research

i. Supervision in fieldwork education

Supervisors are generally not fully equipped in all respects for their role in the fieldwork education of students. It is strongly recommended that all supervisors receive sufficient supervisory training before being expected to supervise students. The development of a condensed goal-orientated fieldwork training regime which
integrates the relevant concepts with the roles and responsibilities of the supervisor, student and faculty should be researched.

Wagner et al (Wagner, Keane, McLeod, & Bishop, 2008, p. 19) identified the general requirements for effective clinical supervision that, although referring to the clinical supervision of practicing health care professionals in NSW, could also be pursued to good effect in the fieldwork supervision of students in SA.

- “Training in the processes and purposes of clinical supervision.
- Greater flexibility in designing individual plans for clinical supervision.
- Clarification and overseeing the implementation of policies around clinical supervision.
- Systems of data collection to assess the efficacy of clinical supervision.
- An enhanced regard for the practice of clinical supervision in workplace culture”.

ii. Fieldwork education in the South African context

The effect of cultural differences on the supervisory relationship in South Africa’s multi-cultural society deserves to be investigated in depth.

iii. The supervisory relationship

It is recommended that future studies focus on the IPA of students as well in order to punctuate the relationship from both perspectives.

5.7 Closing remarks

Finally in respect of the interpersonal approach to human behaviour, there is no one role or pattern of interaction that is more effective in all contexts. A style or a pattern that may be highly effective in one kind of relationship may be ineffective in another. What is emerging here is that a style which is characterised by flexibility and empathy is not necessarily an effective teaching style whereas one which is characterised by a linear approach and limited empathy may prove to be significantly more effective.