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STUDENTS' EXPERIENCE OF THE HONOURS' SUPERVISORY RELATIONSHIP: A PRELIMINARY INVESTIGATION

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Abstract

This study considers the role and intervention strategies adopted by supervisors at the Honours level from the student perspective, and their implications for student learning. Using an adaptation of the presage-process-product model for the supervisory setting and interview data from eight students enrolled in a Bachelor of Business Honours programme, we report two key findings. First, the largest gaps observed related predominantly to academic and validation roles. More specifically, students reported the need for supervisors to take on a greater mentoring, innovative and judgemental roles. Second, students preferred more facilitative interventions (e.g. more supportive and catalytic strategies) rather than authoritative interventions (such as prescriptive or confronting) as they promote confidence building and independence. The study concludes with a discussion of implications of the research for stakeholders in the supervisory process.

I. INTRODUCTION

Recent reforms of the Australian Higher Education sector has added pressure on universities to improve research performance, as research outcomes become increasingly critical for funding and for a university's standing¹. The path to postgraduate research studies (Masters and Doctor of Philosophy) is usually via an honours' degree where an undergraduate student undertakes a fourth year of study. During this year, the student is trained to conduct independent research through a program of structured coursework and a supervised dissertation based on a research project. The quality of learning experienced by students enrolled in the honours year thus has important implications for their research outcomes as well as for attracting honours' graduates in higher degree studies.

Previous research has suggested that there is considerable variance in the completion rates of honours degrees across different disciplines and that only a relatively small proportion of students

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¹ See, for example, Organisation for Economic Cooperation and Development (1995), Ramsden (1998), Linden (1999) and Alauddin and Tisdell (2000).

continue with postgraduate research studies (Moses, 1992)². One of the possible determinants of poor retention rates relates to the supervisory quality. Moses (1992) argues that "it is obvious that many students are not enthused to the extent that they want to commit themselves to research studies. A contributing factor may be inadequate supervision" p.9. Evidence of poor supervisory practice is also documented by Rudd (1985). Rudd's (1985) study of the student experience of supervision reports detailed evidence of flaws in the supervisory process ranging from the unstructured nature of supervision, through to the most damaging claim of supervisory neglect.

Yet, good supervisory practice is essential for honours' students because the honours candidature is not only a culmination of the undergraduate study but the students are also expected to transcend to a higher level of analytical reasoning in a chosen research area. Students in their honours' program are required to learn how to critically evaluate an extensive body of literature, to develop research skills and to conduct research projects independently. The guidance provided by a good supervisor, no doubt, becomes an important determinant of a student's learning outcomes. Unfortunately, there is a paucity of empirical evidence on the supervisory practices and student experience of learning in the honours' year.

In an effort to provide greater insight into the factors affecting students' approaches to learning from the student-supervisor relationship in an honours programme, this paper considers the following four questions: First, what type of roles do honours' students perceive their supervisor ought to 'ideally' undertake?; What type of roles did students perceive as being 'actually' undertaken by their supervisors?; What type of intervention strategies used in the supervisory relationship are perceived as being most helpful?; and, finally, how did students cope when they perceived gaps in the roles and intervention strategies undertaken by their supervisors? In considering these questions, we commence our discussion with an analysis of the received theoretical framework for understanding the processes and outcomes of teaching and learning – the Presage-Process-Product (3P) model (Biggs, 1999).

II. THEORETICAL FRAMEWORK

The framework for this study adopts an adaptation of the received presage-process-product (3P) model. The 3P model of student learning is an interactive system that describes how student learning outcomes are systematically related to their prior experience and factors related to the extant learning environment. The model proposed by Biggs (1979), Prosser, Trigwell, Hazel and Gallagher (1994) and Prosser and Trigwell (1997, 1999) is premised on the notion that the two presage factors i.e. students' personal prior experiences of learning and teaching, and the actual learning and teaching context or environment affect their perceptions of the learning and teaching context. In turn, students' perceptions of the processes inherent in their learning and teaching context affect their

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² Hockey (1991, 1995, 1996) observes that the completion rate of research projects in the United Kingdom has been traditionally lower for students in the social sciences than for those in the physical sciences. Moses (1992) provides corroborating evidence of higher completion rates for honours projects in the physical sciences domestically. While the reasons for this disparity remain unclear, the trend raises concerns over the quality of supervisory practices. Moreover, empirical findings at the postgraduate level by Whittle (1992) indicate that students from the Arts faculty are less satisfied with supervisory practices and tend to more frequently change to part-time status than Science faculty students.

approaches to learning (such as deep or surface learning styles), which eventually affects the quality of their learning outcomes i.e. the product ³.

Whilst Biggs' (1999) model was developed in relation to student learning in a tertiary classroom, the present study specifically focuses on the learning processes and outcomes related to the supervisor-student relationship at the Honours level. Figure 1 outlines the model, as adapted by the authors.

There are two types of presage factors that may potentially affect student's learning experience within the 'Process' stage: pre-determined student factors and the supervision learning environment. First, we note that pre-determined student factors in terms of their grade point average requirements to enter the honours' year program are normally well specified at the honours' level. However, it is argued that each student possesses individual experiences and preferences based on their previous learning experiences. Some may be more independent, organised learners, while others may be less organised and/or require greater guidance in critical thinking. The second presage factor deals more with the institutional arrangements e.g. outline of assessment practices and datelines, number and type of coursework subjects and other institutional procedures relating to their candidature. It is argued that these two presage factors, working together, generate certain expectations by a student, about supervisory roles and intervention strategies, prior to engaging in the supervisory relationship. When the supervisory roles and intervention strategies match the student's expectations, it is thus likely that the effectiveness of supervision is improved and the desired learning outcomes are achieved.

The Process phase of the adapted 3P model involves the interaction between students' learning focused activities and the roles and intervention strategies undertaken by the supervisor. The model suggests that coherence between key learning focused activities at the honours' level, (e.g. identification of a topic, writing a literature review, etc.) and the supervisory roles and interventions undertaken is likely to impact the students' learning outcomes. Table 1 and Table offer a more detailed description of the various supervisory roles, and intervention strategies that could be adopted by a supervisor.

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Our study interprets the 3P model by adopting a constitutionalist approach towards understanding teaching and learning. Prosser and Trigwell (1999) explain that the essence of this approach is that meaning is constituted through an internal relationship between the individual and the world. In this context, learning is about experiencing the object of study in a different way, where the experience is a relationship between the person experiencing and the object experienced. Thus, the constitutionalist conception of student learning proposes that students' perceptions of their learning context plays a critical role in affecting their learning outcomes. Biggs (1999) and Prosser and Trigwell (1999) argue that students adopt approaches to learning consistent with their perceptions, thus resulting in variation in the quality of their learning outcomes b3ased on the individual students' perceptions of their learning context.

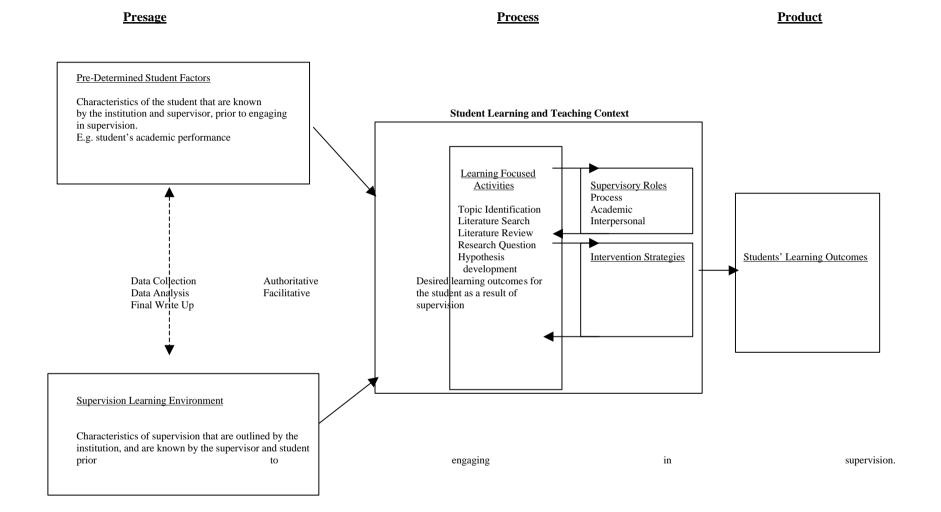


Table 1 Description of Supervisory Roles

Role Group

Specific Roles and Description

Academic Roles

Supervisor plays an important part in the development of the research and thesis, and checking of the students' work

The Expert

Supervisor must be able to provide insight and be knowledgable in the field of study and offer relevant information to student as required

The Mentor

Supervisor must be able to guide and counsel the student across a wide range of issues associated with the research project

The Innovator

Supervisor offers suggestions to the project, including new ideas and possible alternatives to approaches

Supervisor evaluates the students work across the research project, outlining key issues that need to be reviewed

The Stern Critic

Validatio n Roles Supervisor must be able to challenge the student and offer critical appraisal of the student's work

The Judge

Supervisor offers judgement on the type of work being produced by the student

Process Roles

Supervisor plays an important part in the 'process' of the research project and monitors the project throughout its duration

The Bureaucrat

Supervisor must be able to inform the student of relevant institutional procedures and policies regarding how research work is carried out and submitted

The Initiator

Supervisor have to be able to initiate key activities and decision making processes

Interpersonal Roles

Supervisor plays an important part in emotional and psychological support of the student, often the 'make or break' of the student-supervisor relationship

The Friendly Helper

Supervisor must be able to provide support and help when student experiences times of stress and frustration

The Motivator

Supervisor must be able to offer praise for work carried out by the student, and encourage ongoing efforts in regards to the research work

Adapted from Bennett & Knibbs (1986)

Table 2 Description of the Intervention Strategies Used by Supervisors

Types of Intervention Strategies

Authoritative Interventions

Prescriptive

A prescriptive intervention seeks to direct the behaviour of the student

Informative

An informative intervention seeks to impart knowledge, information, and meaning to the student

Confronting

A confronting intervention seeks to raise the student's consciousness about some limiting attitude or behaviour of which they are relatively unaware

Facilitative Interventions

Cathartic

A cathartic intervention seeks to enable the student to speak out about certain frustrations, anger etc, that may be impacting on their work

Catalytic

A catalytic intervention seeks to elicit self-discovery, self-directed learning, and problem solving

Supportive

A supportive intervention seeks to affirm the worth and value of the student

Adapted from Heron (1986)

The classification of supervisory roles is based on Bennett and Knibb's (1986) study and the intervention strategies are conceptualised based on Heron's (1986) six-category intervention analysis. These studies offer a comprehensive set of supervisory roles and intervention strategies and thus facilitate great flexibility in understanding how different roles and strategies may be adopted to suit a wide range of student needs.

The third phase of the 3P model is described as the Product. This phase is represented as the student learning outcomes, i.e. the desired learning outcomes for the honours' student as a result of supervision. According to Biggs (1999), students' learning outcomes are represented by quantitative (e.g. facts, skills), qualitative (e.g. structure), and affective (e.g. involvement) qualities. For this study, student learning outcomes are related to the skills and qualities expected of Honours graduates. In specific, we focus on how students perceive their ability to conduct independent research, to critically analyse relevant literature in their field of study, effectively communicate complex conceptual ideas, adequate self-awareness, and whether they are willing to undertake further research-basic postgraduate studies such as a Masters or a PhD.

According to Shuell (1986), "if students are to learn desired outcomes in a reasonably effective manner, then the teacher's fundamental task is to get students to engage in learning activities that are likely to result in their achieving those outcomes" (p. 429, emphasis added). This quote provides the basic guideline in our inquiry. We argue that in the effort of developing a student as an independent researcher, both the role of the supervisor and the intervention strategies used in the supervisory relationship, can greatly impact firstly, students' perceptions of how conducive the environment is for learning, and secondly, whether the desired learning outcomes are achieved. More specifically, the current study aims to investigate the approaches to learning and teaching undertaken by an Honour's student based on the supervisory process. Research questions such as "What supervisory roles enhance student learning?", and "What type of intervention strategies are used in supervision and perceived acceptable by students?" will be addressed.

III. METHODOLOGY

Sample

A total of eight honours' students participated in the study, within a Business/Commerce Faculty at two major universities in Queensland, Australia. All students were enrolled full-time. Five were male and three were female. The students age ranged from 22 to 52 years.

Method

The present study adopted a series of interviews with student respondents for gathering data. The interviews were guided and supported by semi-structured questionnaires and reflective journals, and each student was interviewed twice in their candidature. The interviews were conducted at the beginning of the second semester of their one-year candidature where students had completed their basic coursework, and were in the early stages of their dissertation i.e. literature review and planning of their research projects. At the end of the first interview, students were asked to document a reflective journal outlining any issues or problems that arose in their candidature over a period of approximately eight weeks. These journals aimed to provide additional insight into learning behaviour of students as they coped with completing their research project. The subjects were asked to identify the course of action take to solve problems as they arose and what learning was gained as a result of the action taken.

The second set of interviews were conducted towards the end of the semester when the dissertation write-up was near completion. These interviews provided the opportunity to clarify issues raised in the reflective journals and to understand how students perceived to have achieved their learning outcomes.

In the first interview stage, a number of self-report instruments were used to measure variations in the student's perceptions of ideal and actual supervisory roles and intervention strategies. The two instruments are as follows:

Supervisory Roles Inventory

The first instrument was based on Bennett & Knibbs (1985) supervisory roles inventory, which identify 10 possible academic supervisor roles, grouped under four headings:

Process roles - bureaucrat, initiator Academic roles - expert, mentor, innovator Interpersonal roles - friendly helper, motivator

Validation roles – stern critic, judge

A 7-point Likert scale was used the elicit the subjects' responses. Students' perceptions of their ideal supervisor roles, as well as their current perceptions of their supervisor's role was recorded.

Heron's Six Category Intervention Analysis

Heron's Six Category Intervention Analysis (1986) was chosen to illuminate the supervisory role.

Authoritative Interventions - prescriptive, informative, confronting

Facilitative Interventions - catalytic, cathartic, supportive

Where discrepancies occurred between the ideal and the actual supervisory roles and intervention strategies, we further queried on how the student saw such differences impacting their learning. Each interview lasted approximately 90-minutes and additional issues associated with the following areas were also examined.

- 1. General background of student, their stage of progress in the program and their interest in the research topic;
- 2. An open-ended assessment of their perceived strengths and weaknesses as a Honours candidate, and
- 3. Student perceptions of their candidature in terms of their level of satisfaction with their supervision, willingness to undertake a PhD, and the level of confidence they have in completing the project in time.

IV. FINDINGS

A. STUDENT PERCEPTIONS OF SUPERVISOR ROLES IN SUPERVISION

The most commonly cited and the largest gaps in the roles expected and actually undertaken by supervisors related to predominantly academic and validation roles. In specific, six out of the eight students perceived that their supervisor was not taking on *innovation* and *mentoring* roles. Comments from students suggested that they would have liked their supervisor to have been more innovative in the supervisory relationship by suggesting alternative ways for thinking about their research question and the method of analysis. There was strong preference for an environment where new ideas could be discussed and explored. Students also wanted their supervisors to not only guide them through their dissertation through a supportive role but also at the same time challenge their ideas and open their minds to new ways of thinking. As one student put it "..not spoon feeding, but push one to think". Mutual respect for each others ideas was deemed to be important as well. Table 3 provides a summary of these findings.

The findings also show that in an effort to fill in gaps in the roles one of the strategies that some students used was to become involved in peer supervision. This was evidenced by student comments like "the most useful discussions I have is with other honours' students, we bounce ideas off each other in a more relaxed environment".

B. STUDENTS PERCEPTIONS OF INTERVENTION STRATEGIES

In an effort to obtain a more holistic picture of the supervisory relationship, and the student learning that occurs, students were also asked to comment on the type of intervention strategies used by their supervisor. Both 'actual' and 'ideal' ratings were recorded.

The findings showed that students preferred more facilitative interventions, rather than authoritative interventions. Students sought supervisors that could provide an environment of "academic freedom" that supported the students' desire to "express [my] views without recrimination". Table 4 provides a summary of the types of intervention strategies used by supervisors and students' reactions / responses to such strategies.

C. MATCHING SUPERVISORY ROLES AND INTERVENTIONS

From this preliminary investigation, we suggest that students learning outcomes are influenced by the roles played by their supervisor, and the type of intervention strategies used in the supervisory relationship. By comparing supervisory roles and interventions to student learning, we can develop a better understanding of how to make supervision more effective, and overcome some of the problems of supervision, as outlined by Rudd (1985) and Moses (1992).

<u>Table 3</u> Students' Perceptions of Supervisory Roles

Students' Perceptions of the Roles to be undertaken by the Supervisor

Roles Academic	Student Comments		
The Mentor	" (my supervisor) needs to have more mutual respect, respect for my views, I want him/her to be less prescriptive and more willing to share and debate ideas"		
	" the discussions I have with my supervisor should be much broader, I want to better understanding the meaning of my research and have the time to talk more about how the topic fits into the bigger picture"		
The Innovator	" It would be great if my supervisor could bring in some new ideas to the research, it seems to be all one-way traffic from me to him/her"		
	" I think my research question is poor. We (my supervisor and I) did not discuss it enough, we didn't look at the question in different ways, the data I have collected doesn't seem to fit"		
Validation Roles The Critic / Judge	" (my supervisor) gives not clear direction on how to complete my dissertation. I am just going it alone as I just get confused and frustrated when I meet with him/her. I ask my supervisor what he/she would like me to do and I just don't get a definite response "		
	" I don't get a lot of feedback and I feel like I'm on my own most of the time"		
Lack of Clarity in Role Undertaken by supervisor	" I just can't handle how critical my supervisor is towards my work. This is the first time I have done this and he/she is always saying the drafts I give him/her are sub-standard. I will just keep chipping away on my own and try and get the thing (dissertation) done, but it would be good to get some positive feedback "		

Student Comments

Students' Strategies to Fill in the Gap of Supervision
"... the most useful discussions I have is with other honours' students, we bounce ideas off each other in a more relaxed environment"

Table 4 Students' Perceptions of Intervention Strategies Used in Supervision	
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of intervention Strategies Used in Supervision			
Students Comments			
" (my supervisor) has given me the confidence to research independently, he/she is very supportive and I have learnt to tackles problems on my own "			
" (the supervisor) is good at motivating students, after we discussed the framework for the literature review, I went about completing this myself " $$			
" (the supervisor) must be helpful, but not spoon-feeding, I want to be pushed to think about how best to complete my dissertation"			
" my supervisor is my coach. I am happy for him/her to tell me when I am going wrong and what I need to change"			

Table 5 offers a possible framework of student learning outcomes, and how supervisory roles and interventions can impact students' learning. From the existing findings we can see that at the beginning of supervision, the student is quite inexperienced and lacks self-awareness and conceptual understanding. In an effort to improve student learning the supervisor can play a role of initiator, and expert to encourage discussion and development of the dissertation. Intervention strategies such as informative and prescriptive, will also add value to the supervisory relationship and student learning.

The framework shows the continuation of student learning throughout the duration of supervision, and illustrates the changes in supervisory roles and interventions. In an effort for the student to develop into an independent researcher, it is necessary for the supervisor to become more aware of how to better meet student needs.

Table 5 Matching Supervisory Roles and Interventions to Student Learning Outcomes							
STUDENT PERCEPTIONS AT	SUPERVISORY ROLES:		INTERVENTION STRATEGIES				
DIFFERENT STAGES OF	The impact on student's learning ap	proach as a result of the possible	Possible supervisory reactions to students' learning				
<u>CANDIDATURE</u>	role/s undertaken by the supervisor		approach to counter negative aspects and enhance				
Early stages of supervision			positive learning				
" (I expected) a supervisor to have superior technical knowledge and be able to give clear instruction "	Dependent on Supervisor Lacks self awareness, minimal experience, limited conceptual understanding	Possible Supervisory Roles: The Bureaucrat, The Expert, The Initiator	Supervisor uses instruction and interpretation to structure the learning				
			<u>Possible Interventions:</u> Prescriptive, Informative				
" (the supervisor) must be helpful, but not spoon feeding, I want to be pushed to	Dependent/Autonomy Conflict High self-awareness, striving for independence, fluctuating motivation, becoming more self assertive, building confidence as an independent researcher	Possible Supervisory Roles: The Innovator, The Motivator, The Friendly Helper	Supervisor uses less instruction, and begins to challenge the student to think critically. Some motivation may also be required to build the student's confidence at this time				
think about how best to complete my dissertation"			<u>Possible Interventions:</u> Informative, Confronting				
" My supervisor is my coach. I am happy for him/her to tell me when I am going wrong and what I need to change"	Conditional Autonomy Identity as an independent researcher begins to develop, increased insight occurs, with more consistent motivation	Possible Supervisory Roles: The Stern Critic, The Evaluator, The Motivator	Supervisor begins to see the student as a colleague, and begins mutual respect begins to develop. More sharing and discussion of ideas begins to occur, where the supervisor challenges the students thinking on issues				
			<u>Possible Interventions:</u> Confronting, Cathartic, Catalytic				
Final stages of supervision " (my supervisor) has given me the confidence to research independently,	Independent Researcher Adequate self awareness, insightful of own strengths and weaknesses, student can adequately function independent of the supervisor	Possible Supervisory Roles: The Mentor, The Innovator	Supervision will become more collegial, if continued				
he/she is very supportive and I have learnt to tackle problems on my own"			Possible Interventions: Catalytic, Supportive				

Adapted from Stoltenberg (1981)

V. IMPLICATIONS OF THE RESEARCH

Some of the implications that result as a consequence of this framework are considered below:

<u>Implications for the Student</u>

• To demonstrate a willingness to communicate individual needs to the supervisor throughout the duration of supervision.

<u>Implications for the Supervisor</u>

• To incorporate reflection of professional practice as a supervisor in an effort to ensure student needs are being met. This would include analysis of supervisory roles and interventions used in supervision, both currently and in the future supervision work.

<u>Implications for the Student and Supervisor</u>

• To demonstrate and implement discussion at the commencement of the supervisory relationship of a 'psychological contract'. Exploring expectations of supervision.

Implications for the School/Faculty/Institution

• Introduction of workshops/seminars/information sessions for staff and students on how to make supervision more effective, and the role/s they can play in supervision.

Our preliminary findings suggest that the quality of supervisor-student relationship have direct implications for student learning and teaching outcomes. In particular, it appears that greater clarity and mutual understanding of supervisory roles and interventions strategies between students and supervisors are associated with more favourable student learning and teaching outcomes.

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