

Student teacher stress and coping mechanisms

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Abstract

This article reports on a study that focused on the lived experiences and concerns of final year Bachelor of Education (Primary) students undertaking a nine-week internship in a rural location. The study had two aims: one, to identify the main sources of stress faced by student teachers as they progressed through the internship; and two, to explore how the student teachers coped with this stress. Both qualitative and quantitative research methods were adopted to meet the aims of the study. Qualitative research methods, based on the principles of grounded theory, guided the data collection and analysis. These methods included interviews with and diary accounts kept by four student teachers. An analysis of these data generated five categories of stress, and these categories were also indicative of the coping strategies adopted to deal with stress related to the internship. A quantitative research method was employed to complement the qualitative approach and was applied to survey data from the cohort of student teachers (N=54) undertaking the internship. The responses were analysed using a content analysis. Four main categories of stress were derived and five coping strategies employed by the cohort of student teachers were identified. Taken together, the findings provided an insight into the experiences of the student teachers involved in the rural-based internship. The implications of the study are wide ranging, and a number of recommendations arising from the study are outlined.

Introduction

Research has consistently shown that those in the professions, particularly helping professions, have significantly high levels of stress (Gold & Roth, 1993). Teacher stress, more specifically, has become a major concern, with writers such as Gold and Roth (1993) and O'Connor and Clarke (1990), arguing that teaching is one of the most potentially stressful occupations. This is hardly surprising, given its nature. Kyriacou (1987) notes that teacher stress is "the experience by a teacher of unpleasant emotions, such as tension, frustration, anxiety, anger and depression, resulting from aspects of work as a teacher" (as reported in Woods, 1990, p. 174). O'Connor and Clarke (1990) believe that such frustrations or demands may arise in one or more of four relatively distinct areas of the teacher's occupational role. The areas are: 1. overall time and workload pressures; 2. daily interactions with students, including student behaviour problems and coping with the individual demands of students' personal problems; 3. interactions with fellow professionals within the school and other members of staff; and, 4. interactions extending outside the school, including relations with the education system and perceptions of negative community attitudes towards teachers individually, or the teaching profession generally.

Stress can occur in those areas where teachers feel that there is little or nothing they can do to remove or modify the stressor and that they must learn to live with the particular stressor (O'Connor & Clarke, 1990). The consequences of a stressor or stressors will depend on the type of coping mechanisms the teacher has developed. In many instances, teachers have not been trained either to handle their stressors or to develop a variety of successful coping mechanisms.

Given that many researchers now recognise stress as a problem within the teaching profession, it is surprising that limited research exists on student teacher stress. The relevant literature that does exist in this area suggests that many student teachers experience stress, particularly during the 'practicum' (Costin, Fogarty, & Yarrow, 1993, 1992; MacDonald, 1993; Morris & Morris, 1980; Murray-Harvey, Silins, & Saebel, 1999; Regan, 1989).

A review of both overseas and Australian research literature on student teacher stress highlights a number of stressors for student teachers during the practicum. These common stressors include: fear of not fulfilling self expectations (Costin et al. 1992; Murray-Harvey et al. 1999; Sinclair & Nicoll, 1981); workload (Costin et al. 1992; D'Rozario & Wong, 1996; Morris & Morris, 1980); being evaluated (D'Rozario & Wong, 1996; MacDonald, 1993; Sinclair & Nicoll, 1981); lack of time for preparation (Costin et al., 1992; D'Rozario & Wong, 1996); and, relationships with others (Sinclair & Nicoll, 1981; Sumsion & Thomas, 1995).

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The above-mentioned literature also indicates that teacher education programs in this country and overseas vary in their structure and duration, and contain, in varying proportions, 'practical experiences'. The practicums discussed in the studies ranged in length from one day per week, for eight weeks, as in the study conducted by a team of academics from Queensland University of Technology (Costin et al., 1993), to a six-week teaching block as investigated in a South Australian context (Murray-Harvey et al., 1999). Research on extended block practical experiences is notably lacking.

Few studies have monitored how student teacher stress may change over time. Morris and Morris (1980, p. 58) found that "generally, the level of stress declines near the end of the student teaching experience", whilst Sinclair and Nicoll (1981) recorded that initial 'anxiety' is high and, in the course of the teaching practice, some reduction in anxiety is achieved.

A Survey of Practicum Stresses (SPS) has been used by a number of researchers in investigating student teacher stress during the practicum. D'Rozario and Wong (1996) first developed and used the SPS to examine areas of stress experienced by first year teacher education students in Singapore. The SPS was then used in an adapted form by Murray-Harvey et al. (1999) in South Australia comparing Singaporean and Australian student concerns relating to practice teaching. The focus in their paper was a cohort of students completing its first practicum. Significant differences between the stressors experienced by Singaporean and Australian students point to the need to understand student stress within the cultural context. In another study conducted by Murray-Harvey, Slee, Lawson, Silins, Banfield, and Russell (1999), data were gathered from Australian teacher education students enrolled at Flinders University. In this study, responses were gained from undergraduate and graduate-entry students during two teaching experience placements — their first practicum and during their second practicum. Examination of the data found that there was a significant reduction in stress from the first to the second practicum for both student cohorts.

It is surprising to find that despite the increasingly serious phenomenon of student teacher stress, and the importance of practicums in teacher education programs, very little research has been undertaken to study the coping strategies employed by student teachers to manage stress related to the teaching practicum. Sumsion and Thomas (1995) carried out a study with early childhood student teachers from Macquarie University, New South Wales. This study explored the feasibility of having teacher educators assist student teachers in developing skills to manage stress specifically associated with the practicum. Morris and Morris (1980) made eight suggestions as to how university supervisors and supervising teachers could help the student teacher to cope with stress during student teaching. These include: 1. the establishment and maintenance of open communications among the student teacher, supervising teacher, and university supervisor; 2. encouraging students to schedule some time each day for themselves; 3. providing opportunities for student teachers to share their experiences; 4. recommending student teachers to get sufficient amounts of exercise, rest and sleep; 5. strongly suggesting or even requiring students to prepare unit and lesson plans well in advance; 6. promoting regular, in-depth self evaluation by the student teachers; 7. providing inservice programs and opportunities for supervising teachers and university supervisors to develop competencies in assessing classroom environments for source of stress, recognising stress symptoms, and assisting student teachers in developing coping skills; and, 8. implementing a comprehensive orientation program to student teaching.

More recently, MacDonald (1993) identified communication, conformity, initiative, goal setting, and relaxation techniques as strategies for coping with stress. In conducting this Canadian study, MacDonald examined the students' perspectives using a number of sources, namely, focus group interviews, observation visits, and journal writings. Little research in this area has been concerned with seeking information directly from those affected.

It therefore appears evident that there is a need for research that focuses on student teacher stress, and particularly how student teachers cope with stress during the practicum. The few studies that have been conducted in this area have generally used quantitative methods to examine the problem, exposing the need for a study that focuses more on the 'lived experiences' of student teachers during their internship. Those studies which have incorporated interview data (see e.g., MacDonald, 1993;

Sumsion & Thomas, 1995) have generally failed to provide an indepth picture of the reality of student teachers' stressors and experiences. Further, as no study has used an extended practicum in a rural location as its focus, it is timely to conduct such a study. Consequently, this study has two aims: to identify the main sources of stress faced by student teachers as they progress through the internship; and, to explore how the student teachers cope with the stress associated with the term-long internship. The results of this study have implications for tertiary educators and other professionals concerned with the preparation and professional development of teachers.

Method

a. Participants

Fifty-four student teachers formed the participant sample being drawn from fourth year B.Ed. (Primary) students who undertook the Charles Sturt University (Riverina) rural-based 2000 Internship program. This sample was approached to complete a survey.

From this sample, a sub-sample of four students was asked to participate in an indepth case study. The selection of the participants for the case study was to some extent constrained by what Glaser and Strauss (1967, p. 66) refer to as "structural conditions". They maintain that the ideal is to be able to choose different groups, individuals or situations as the data dictate. The interns were selected on the basis of a number of criteria, namely, school setting, year level or levels of class and intern age so that a diverse range of internship experiences could be considered.

All participants were assured that their names, the name of the school in which they were placed, and the names of all other individuals (i.e., students, mentor, liaison lecturer, etc.) would not be used. Each survey was identified by an ID number, which related to an intern. The names of the schools were not requested by the researchers.

b. Procedure

Contrasting methods were used to gather and analyse the data in this study. By making use of contrasting methods, viz., qualitative and quantitative methods, the researchers attempted to raise the chances of providing data that were more accurate.

Qualitative approach

According to Kemmis (1983, p. 75) case study research is "a process of truth-seeking ... it is an empirical exercise ...". Case study research techniques (viz., interviews and diary accounts) were adopted for this study because they allowed the researchers to explore the lived experiences of a group of student teachers who existed within the 'bounded system' of the internship.

- **Interviews:** Interviews with the student teachers were conducted over a nine-week period and were semi-structured and informal in nature. The study relied on three interviews: at the beginning, in the middle, and towards the end of the internship. The length of each interview varied among participants, although most were approximately one hour in length. All interviews were conducted in a neutral area; however, specific times and places were selected by each participant. These interviews were audio-taped with the permission of each participant sought at the commencement of each interview. Using an open-ended style, the researchers asked student teachers to talk about their early experiences and perspectives on the internship. No specific interview schedules were used. In this way, the interviews were flexible and creative and provided the basis for further developing friendships with the interns (Roberts, 1991). The data collected from these interviews allowed the researchers to list issues that warranted additional treatment and expansion in subsequent interviews. The second set of informal interviews consisted of loosely-structured questions, developed partly as a result of responses to the survey. These second interviews occurred at the completion of week five of the nine-week internship with all participants.

- **Diary accounts:** Participants were asked to use a diary to record 'critical incidents' (Oxtoby, 1979, as cited in Bell, 1999) which occurred during each day. They were also encouraged to use the diary to produce a record of the internship experiences and concerns about which they felt the researchers should know. Along with the critical incidents approach, the diaries were used as a preliminary base-point to the other interviews. Two of the four interns regularly wrote in their diaries, and maintained lengthy entries, describing their feelings and reflecting on their experiences. Another intern kept brief notes, making seven entries only during the first two weeks of the study. The fourth intern did not make any entries, and this decision was respected. Personal identifiers were removed from the diaries and replaced with code names. The diary accounts were then transcribed onto computer disk, remaining secure in accordance with ethical principles (Burgess, 1989).

Quantitative approach

Writers such as de Vaus (1991), Hemmings (1994), and Lancy (1993) have noted that quantitative methods can make a significant contribution to qualitative studies. Further support comes from Merriam (1988) when she proposes that:

Quantitative data from surveys or other instruments can be used to support findings from qualitative data (p. 68).

In the current study, a survey was used to collect data from the participant sample, and the once only survey was also utilised to guide further qualitative data gathering. The first part of the survey asked respondents to indicate biographical characteristics such as age, gender, school size and year level/s of class. The second section of the survey asked interns to respond, voluntarily, to a number of open-ended questions concerning stressors experienced in the internship. In the third and last section of the survey, respondents were asked to respond to a number of open-ended questions concerning strategies they may have used to cope with stress during the internship.

The survey was sent to the 54 interns in approximately week three of the nine-week internship, along with a covering letter explaining the nature of the research, and a stamped self-addressed envelope. Student teachers were advised that completing the survey was voluntary, and as such 43 of the 54 questionnaires sent were returned to the researchers, representing a response rate of approximately 80 per cent. This is deemed appropriate, as according to Wiersma (1986), 70 per cent is the minimum response rate when surveying a professional population.

Results

a. Qualitative data analysis

The qualitative approach used in this study was directed by the work of Glaser and Strauss (1967) and their notion of grounded theory. It must be noted that these strategies guided the analysis and were not applied in the same way as they would in a true grounded theory study. Three strategies of grounded theory (*viz.*, theoretical sampling, constant comparative analysis, and theoretical saturation) were drawn upon to allow the researchers to collect data which reflected the experiences of the student teachers during their internship, and to permit the researchers to analyse the stressors experienced and the coping strategies employed by interns.

The early stages of analysis revealed 14 categories (see Table 1). This 'shopping list' of categories describes the data at a very simple level of conceptualisation (Woods, 1986). These emergent categories provided the researchers with direction for further data collection and, at the same time, data to generate categories (Lord, 1996; McAndrew, 1998).

Table 1: Initial categories and their properties

CATEGORY	PROPERTIES
Finances	Accommodation, university financial assistance, HECS, travel, hardship
School Context	Size, community involvement, catholic/government
Performance	Academic achievement, staff perspectives, viewed as 'teacher', intern report, expectations of self, expectations of others
Background Factors	Previous practicums, children, work history, age, life experiences
Health	Tired, sick
University	Commitments (assignments, thesis), theory into practice, preparation, course structure, internship
Evaluation	School - mentor, university - liaison lecturer
Public Perceptions of Teachers	Falseness, striking, wages, lack of understanding, deprofessionalism
Supportive Relations	Staff (mentor, class teacher, other), fellow interns, family, partner
Time Management - School and Other	Workload, maintaining life outside school, executing planned lessons, family commitments, preparation/programming, timetable/routines, transition to school/adapting
Managing Students' Behaviour	Discipline, student/teacher relations, staff support
Roles and Responsibilities	Administrative tasks, assessment and reporting, team teaching, professionalism, independence, marking
Additional Roles	Playground duty, assembly items, staff meetings, dealing with students with special needs
Recreational/Relaxation Activities	Sleeping, meditate, reading, talking with others, time with family/partner, reflection, watching television, socialising, hot shower

In unison with the process of theoretical sampling, constant comparative analysis was also conducted. The next step in the analytical processes was to achieve a greater level of delimitation and refinement while, at the same time, seeking to establish linkages and relationships between and among categories (Hunt, 2000).

The secondary and final categories that were refined and re-categorised are shown in Table 2.

Table 2: Final categories and their properties

FINAL CATEGORIES	PROPERTIES
External Factors	Family commitments, personal background, accommodation, finances, public perceptions of teachers
University	Liaison lecturer, university commitments, course structure, academic performance
Relationships with Staff and Students	Mentor, class teacher, staff perceptions, students' perceptions, status/identification, coping - school support, school context
Managing Teacher Roles and Responsibilities	Routines, marking/assessing students' work, playground/bus duties, programming, assembly, behaviour management, managing students' with special needs, managing time, managing workload
Coping Strategies - Outside School	Health issues, communicating with others outside school, relaxation/recreational activities, reflection

The researchers felt that data had been verified and sufficient data had been gathered to fully explore the issues relevant to the research, and felt that they had worked towards theoretical saturation.

b. Quantitative data analysis

Most of the data obtained from the survey were content analysed manually. Content analysis investigates the thematic content of documents which serves as a basis of inference (Cohen & Manion, 1994). Such an analysis may be used in the context of a qualitative or a quantitative approach (Sarantakos, 1998). In this study, a content analysis was related to the latter approach and drew on responses to the open-ended questions posed in the survey. These responses were content analysed and the results of this analysis are reported for the following set of questions:

1. What do you consider to be the main cause of stress during the internship so far?

The analysis of the intern's comments to these questions indicated four main categories of cause: i) Students' Behaviour; ii) Roles and Responsibilities; iii) Managing Time and Workload; and, iv) Costs/Living Away from Home. A fifth category was also developed in relation to a 'mixed-bag' of causes, and was hence labelled 'Miscellaneous'. A total of 58 comments was categorised, and the categorisation of comments is shown in Table 3.

Table 3: Comments made by interns about the main cause of stress during the internship

CATEGORY	NO. OF RESPONSES	EXAMPLES OF COMMENTS MADE
Students' Behaviour	16	"Maintaining a level of discipline and ensuring it is adhered to". "Working out strategies that work". "Two individual children who continually disrupt the class".
Teaching Roles and Responsibilities	15	"Size of my class and being Kinder". "Trying to fit into school structure". "Remembering all the little things". "Managing 3 class levels at the same time".
Managing Time and Workload	13	"I've found the hours of work quite stressful". "Not getting through enough work". "The workload". "Finding the time to fit everything in".
Costs/Living Away from Home	5	"Hard to find cheap accommodation". "Travelling expenses". "Having to go home and work".
Miscellaneous	9	"Passing - getting a good report". "Teaching Yr 9/10 computer studies". "Fitting in with staff". "Lack of sleep".

2. What other stressors have you experienced?

Forty-four comments were categorised in response to this question. An analysis of the comments identified six categories of response as shown in Table 4.

Table 4: Categorisation of interns' responses

CATEGORY	NO. OF COMMENTS	SPECIFIC POINT
Teaching Roles and Responsibilities	10	Assessment Programming Teaching mixed grades Remembering routines
External Factors	9	Fatigue Assignments Costs Transport
Students' Behaviour	7	Swearing Attitudes of students Noise levels
Time Management — School and Other	7	Fitting in all KLAs/assessment Juggling normal life Lack of time to do everything
Performance	6	Expectations of others Wondering whether doing right thing
Miscellaneous	5	Isolation Computer technology

An analysis of the responses to these two questions revealed that whilst the 'main' source of stress may not be the same for all interns, overall, similar stressors may be experienced to varying degrees.

3. What strategies have you used to cope with stress experienced in the internship?

Five categories of response to this question were identified, and a total of 85 comments was coded and categorised (see Table 5).

Table 5: Categorisation of comments relating to coping with stress

CATEGORY	NO. OF COMMENTS
Communicating with Others	28
Self-help	21
Relaxation/Recreation	17
Teaching and Managing	11
Organisation	8

The above table shows that the main coping strategy for interns was categorised as 'Communicating with Others', noting that 'others' consisted of a range of people. This is evident in the following quote: "... communication is a big coping strategy — talking to other staff especially mentor, class teacher, Principal, sometimes other staff and in particular my mum and dad and my boyfriend (evening cleaning staff to a small degree)". Through discussion, interns felt they were able to release and share their concerns with others. Through sharing, interns may have found that they were not alone in their experiences.

By addressing the stressor, the problem may seem less severe, although if the stressor is unknown, this may be difficult. Self-help strategies such as reflection may help identify the stressor and become a form of coping as indicated in the following comment: "I have tried to evaluate what is causing the stress". Generally, comments categorised as 'Self-help' reflect the notion that a positive approach is important in dealing with stress, and is apparent in the following brief quotes made by different interns: "Adopt a positive attitude" and "Believe in yourself".

The third most adopted coping strategy as categorised by the researcher, was 'Relaxation/Recreation'. A number of activities were expressed as helpful in coping with stress and responses included watching TV, playing playstation, socialising, meditating, eating, sleeping, spending time with family, reading, sightseeing and having a bath. These activities were seen as time-out activities where interns were able to 'switch off' from school.

Approximately 13 per cent of the intern responses to the question on coping indicated that teaching and managing techniques helped them to cope with the stress experienced during the internship. Such techniques were coded and categorised as 'Teaching and Managing'. One intern felt that you should "not leave anything unresolved for another time", whilst another way of dealing with stress, as indicated by another intern, was to "approach each issue in small ways and continually".

The fifth category that was developed as a result of the content of the responses to the above question, was titled 'Organisation'. Not as many comments were recorded as part of this category compared with the other four, however, some people identified over-planning, utilising time effectively, setting goals, planning back-up activities and generally being prepared, as ways of coping with stress. Although a number of coping strategies have been identified above, it is not overly clear how they worked or how effective they were.

Discussion

Based on the literature relating to studies of student teacher stress and coping strategies, a number of factors were identified as causes of the stress experienced during practicum situations. Along with D'Rozario and Wong (1996) and Murray-Harvey et al. (1999), who have used the SPS to investigate student teacher stress during the practicum, the current researchers derived five categories from the qualitative data analysis. The categories that emerged in this study are consistent with much of the literature, although limited, that exists on student teacher stress. Table 6 highlights how the results of this study compare to D'Rozario and Wong's (1996) 7-factor model and the 4-factor model presented by Murray-Harvey et al. (1999).

Table 6: Summary of findings

Murray-Harvey et al.	D'Rozario and Wong	Hemmings and Hockley
1. Teaching	1. Overall Performance	1. External Factors
2. Preparation	2. Workload	2. University
3. University Evaluation	3. New Colleagues	3. Relationships with Staff and Students
4. School Evaluation	4. Cooperating Teacher	4. Managing Teacher Roles and Responsibilities
	5. Supervisor	5. Coping Strategies — Outside School
	6. Teaching and Managing	
	7. Helping	

The interviews were useful in providing information about changes in stressors over time. It appears that uncertainty and hence, stress, diminishes over time. During the nine-week internship, the researchers were able to seek the different sources of stress experienced by interns at four different times — approximately after week 1, week 3, week 5 and week 9 of the internship. Overall, the experiences of the intern were considerably less stressful towards the end of the internship. This finding is in accord with the work of Morris and Morris (1980, p. 58) who found that "generally, the level of stress declines near the end of the student teaching experience".

A content analysis revealed the following five categories of coping strategy: Communicating with Others, Self-help, Relaxation/Recreation, Teaching and Managing and lastly, Organisation. Communication was also found by MacDonald (1993) to be a strategy that students employ to deal with stress, as was relaxation. Recently, Lewis and Frydenberg (2002) have identified 18 conceptual areas of coping used by young people. Their conceptualisation has some linkage with the five coping mechanisms highlighted in our study. These linkages are reported in Table 7 below and show that 9 of the 18 areas of coping are aligned with the strategies employed by the sampled interns.

Table 7: A comparison of stress coping strategies

Hemmings and Hockley	Lewis and Frydenberg
Communicating with Others	a. Seek Social Support b. Invest in Close Friends c. Social Action
Self-help	a. Wishful Thinking b. Focus on the Positive
Relaxation/Recreation	a. Seek Relaxing Diversions b. Physical Recreation
Teaching and Managing	a. Seek Professional Help
Organisation	a. Focus on Solving the Problem

From a practical perspective, the findings of this study suggest that all primary school staff members need to be aware of the stressors that interns may encounter during the term-long internship; they should be sensitive to the individual needs of interns; and, be able to offer assistance and support to interns, and monitor the perception of interns, especially monitoring the extent to which interns' expectations are being fulfilled. Hence, this study could better inform school personnel how they can maximise the overall experience of the internship, and play a role in reducing some of the sources of stress that lie beyond the immediate control of the intern.

Without explicit knowledge and understanding of the stressors experienced during the internship, and the coping strategies used by interns to cope with that stress, educators cannot attempt to meet their charges' needs. To date, university personnel have done what they perceive would benefit interns during the practicum, yet this research study suggests that the perception of the intern should be of prime focus. Seeking feedback from interns should be viewed as a critical component of course design and improvement. Through an increased understanding of student teacher concerns and realities, teacher educators will be better informed of ways in which to improve their teacher education programs. The frank accounts of the interns' experiences provide a valuable basis for refining practicum requirements, and add to the current knowledge base about internship programs. This information may be useful in identifying those interns most in need of interventions aimed at ameliorating specific areas of concern, and may also have implications for placement decisions.

Interns' concerns should come to the attention of all parties interested in improving the internship and education per se. If the education systems are to pursue excellence, attention must be given to the needs of interns. District and state system administrators can deal with issues directly affecting the quality of instruction such as class size, behaviour management, excessive administration tasks, and non-teaching duties. They could also work toward consensus statements that would be in the best interests of all stakeholders in the internship. The information in this study could inform future directions for practitioners, policy makers and researchers.

As a result of this study the following recommendations have been suggested:

1. inservice mentors, teachers, and liaison lecturers to develop shared understandings of the internship program and expectations of all involved;
2. develop and implement pre-internship stress management sessions that could help interns generate/use appropriate resources and coping skills and hence allow interns to gain the maximum advantage from the internship; and,
3. as the internship program evolves, collaborate and strengthen the links between school personnel and those in the university setting to ensure that the goals of all are complementary, and that all parties have a vested interest in the education of primary school teachers.

This study has fulfilled the aims that were set out at the beginning and which guided the conduct of the research. The experiences of interns as they progressed through the Charles Sturt University (Riverina) rural-based 2000 Internship program resulted in some interesting insights about the stressors in a teaching practicum and the coping strategies adopted by interns. Hence, this study has made a contribution by adding depth to the available data on the experiences of student teachers.

Although this study has filled a gap in the literature pertaining to stress and the coping strategies adopted by interns during the internship, the field is still ripe for further investigation.

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