

We are IntechOpen, the world's leading publisher of Open Access books Built by scientists, for scientists

5,200

Open access books available

128,000

International authors and editors

150M

Downloads

Our authors are among the

154

Countries delivered to

TOP 1%

most cited scientists

12.2%

Contributors from top 500 universities



WEB OF SCIENCE™

Selection of our books indexed in the Book Citation Index
in Web of Science™ Core Collection (BKCI)

Interested in publishing with us?
Contact book.department@intechopen.com

Numbers displayed above are based on latest data collected.
For more information visit www.intechopen.com



Exploratory investigation into preservice teachers' career-goal contents and their relationships with class participation motivation in higher education in South Africa

Byron Brown ¹ and Ntonghanwah Forcheh ²

¹ *Faculty of Education, University of Fort Hare
South Africa*

² *Department of Statistics, University of Botswana
Botswana*

1. Introduction

There is a pattern of low student enrolment in teacher education programmes in many countries (CEPD, 2005; HSRC, 2003; Kassiem, 2007; Nilsson, 2003a; Nilsson, 2003b; Sikkes, 2001; Siniscalco, 2002; UNESCO, 2003). Although the low enrolment trend is apparent, there is evidence that it is not uniform; indeed, it is more chronic in some subject areas than in others (HSRC, 2003; Kassiem, 2007). The trend has been blamed, however, for the shortage of teachers in many nations (Commonwealth Secretariat, 2002:1-12; Crouch & Perry, 2003:477; Kassiem, 2007). It seems the slump in interest in the teacher education field is taking place at a time when global demand for teachers is on the increase (Kassiem, 2007:2; Nilsson, 2003a:8; Nilsson, 2003b:10). Already, there is recognition of the strategic importance adequate supply of teachers is for achieving the education targets set in both the Dakar Framework for Action and the Millennium Development Goals (Dakar, 2000; UN, 2003).

But in interviews with higher education managers, Sikkes (2001:28), found that getting people to opt for studies in teacher training is a challenge for faculties and schools of education in countries, not only in Africa but in Europe and South Asia. There are clear evidences of such reluctance among grade 12 learners in South Africa (DoE, 2001; HSRC, 2003), although regional countries like Botswana is experiencing a contrasting response (TSM, 2006:5). The general thrust in much of these evidences is that the students who enter higher education are more motivated to pursue non-teaching related careers; they are less enthused to pursue teaching related careers (DoE, 2001; HSRC, 2003).

In countries rocked by dwindling student aspirations to opt for programmes in the teacher education field and with teacher shortage, the state of motivation and types of goals being pursued by the few students who have actually entered these programmes, are often ignored. But their motivational level has crucial implications for classroom practices (Schunk, 2004). We do not know much or understand in-depth how, for instance, the goals that a preservice teacher seeks to pursue in the teaching career is related to his/her motivation to engage in activities at the classroom level in pursuit of those goals. Most of the previous research on post-grade 12 student motivation, certainly within the African context,

has focused more on the demotivation to entry into the teacher education field, the potential stock of new entrants to teacher education and the teaching profession (CEPD, 2005:8; HSRC, 2003:477), and on the various problems linked to the low enrolment in teacher education programmes. For example, Kassiem (2007:1) argued that the disinterest in teacher education is a result of the poor image of teaching as a profession in the society. According to Kassiem (2007), the poor image has created apathy for teacher education and discouraged enrolment.

While there is merit in Kassiem's perspective, I assert that the argument is also skewed and problematic. Focusing mainly on why people *do not* opt for education programmes in higher degree institutions creates an exclusion of the debate surrounding, for instance, the career related goal-pursuit and motivation to engage in the learning and teaching process among those who have actually entered, and how these goals may have been shaped by social contexts. In contexts where there is teacher shortage and apathy for teacher education, generally, understanding these dynamics is crucial if student participation at the classroom level is to be maximized. The purpose of the chapter is to present evidence from a research which investigated, in the African country of Botswana, with historically different patterns of enrolment into teacher education programmes, the nature of preservice teachers' career-related goals and their relationship with the motivation of these preservice teachers to participate in class in pursuit of those goals.

2. The context: Botswana

Two reasons informed the decision to use Botswana preservice teachers. First, unlike many other regional African countries, Botswana is often seen as a stable country economically, with reports of over-supply of teachers (TSM, 2006); second, student enrolment into teacher education programmes in the country has steadily increased over the last decade (TSM, 2006). Teaching is perceived in Botswana as a stable and financially viable profession (Tabulawa, 2005). For instance, since 1993 in South Africa, while faculties and schools of education, have experienced significant declines in enrolments (Crouch & Perry, 2003:477), Botswana's experience, over the same period, has been much different. Average enrolment rate into teacher education programmes increased and, according to one report, students seeking training to become professional teachers are now more likely to be turned away or placed on waiting list (TSM, 2007:4). These contrasting experiences in enrolment trends between Botswana and South Africa would perhaps allow the researcher to frame a sense of the underpinning motivation and goals driving people into teaching in Botswana, contrary to global trends in the teaching profession.

3. Goal-framing and Self-determination theory

3.1 Self-determination theory

Within the African and European educational settings, a large number of studies suggested the types of goals that students often frame and pursue in higher education, or in teaching as a career, vary (DoE, 2001; Houle, 1961; HSRC, 2003; Ryan, Sheldon, Kasser, & Deci, 1996). One theory that helps clarify and describe differences in these goals is the self-determination theory (Deci & Ryan, 2000).

Self-determination theory (SDT) is an empirically verified theory of motivation. To Deci and Ryan (2000:227), SDT is built on the assumption that students, whether in higher education or elsewhere, are intrinsically motivated toward learning, growth, intellectual challenges,

and well-being. Within this framework therefore, individuals pursue goals for the satisfaction of three basic needs of competence, relatedness, and autonomy, which are essential for psychological growth and well-being (Deci & Ryan, 2000:229). In SDT's framework, autonomy concerns the basic need to experience one's behaviour as volitional (Goodenow, 1993). The need for competence is the need to experience satisfaction in exercising and extending one's capabilities (Deci & Ryan, 2000). Finally, the need for relatedness concerns feeling connected with significant others. It is for these needs satisfaction, according to the SDT, that goals are framed (Elliot & Thrash, 2002). This pursuit can be deliberate or accidental.

The notion that goal-directed behaviour is linked to psychological needs satisfaction informs this research. Needs give goal-directed behaviours psychological potency (Goodenow, 1993). An important aspect of the everyday life of most university preservice teachers involves completing coursework and being successful in their studies. For many of these students, the completion of those works represents the antecedent to realizing the career goals that they frame. The quality of the psychological potency underpinning the goal-directed behaviour should have a bearing on the way students pursue these goals. Thus, when goals are being pursued, concerns have to be given to whether basic needs are being satisfied. Deci and Ryan (2000:229) concluded that the fulfillment versus the thwarting of goal-directed behaviours bears inherent consequences. But the effects of these consequences depend on the nature of the goal itself. The SDT is adopted in this research to clarify the nature of goals. It is also adopted because, unlike other theoretical perspectives, it posits a conceptual distinction between goal-types and motivation (Deci & Ryan, 2000:227). It is this distinction that makes the framing of hypotheses possible, for instance, between preservice teachers' goal-pursuit and their class participation behaviours (Vansteenkiste, Simons, Lens, Soenens, & Matos, 2005:483).

3.2 Aspects of goal framing

According to the SDT theory, one way to describe differences between goals is to state that the goal is either intrinsic or extrinsic (Deci & Ryan, 2000). Intrinsic goals reflect people's natural growth tendencies (Kasser, 2002). These goals, scholars (Vansteenkiste, Simons, Lens, Soenens, et al, 2005:483) have claimed, create an 'inward orientation', which manifests, for instance, in concerns for affiliation, community contribution, health, and self-development. When intrinsic goals are framed, they are directed at the satisfaction of basic needs essential for growth and well-being. In contrast, extrinsic goals, research suggested, create an 'outward orientation' (Vansteenkiste, Simons, Lens, Soenens, et al, 2005:484). They tend to orientate individuals toward engaging in interpersonal comparisons (Sirgy, 1998:227), obtaining contingent approval and acquiring external signs of self-worth and success (Kasser, Ryan, Couchman, & Sheldon, 2004:11). Williams, Cox, Hedberg, and Deci (2000:1756) report that extrinsic goals manifest in concerns for financial success, rewards, prestige, image, status, physical attractiveness, power, and publicity. The classification of goals as intrinsic versus extrinsic suggests that some goals are expected to be more closely linked to basic need satisfaction than others. But the concept of intrinsic and extrinsic goal, within the SDT framework, specifies the contents of the goal (Deci & Ryan, 2000:244).

Previous studies on goal-content found differential effects for intrinsic versus extrinsic goal. Sheldon, Ryan, Deci, and Kasser (2004:475) report that people's goal content (intrinsic vs. extrinsic) and their motives (autonomous vs. controlled) have independent effects on personal adjustment. In analysis of the effects of goal contents on certain life-related variables, Deci and Ryan (2000:245) found that when people value intrinsic aspirations, they

tend to be more autonomous in pursuing them, whereas there is a tendency for people to be controlled in their pursuit of extrinsic aspirations. These evidences indicate that different goal contents can result in different behavioural and affective consequences.

Previous researches have also investigated the effects of different goal contents from an individual difference perspective. These have been used to classify people in terms of the degree to which a person focuses on the attainment of intrinsic rather than extrinsic goals (Vansteenkiste, Simons, Lens, Soenens, & Matos, 2005:484). But it seems that not only the individual but also the social environments can be classified in terms of the types of goals that they promote or emphasized (Kasser & Ahuvia, 2002). This means some social contexts such as the home or school environments might encourage and reinforce the pursuit of intrinsic goals while others focus on the pursuit of extrinsic goals. In a set of experimental field study of college students, Vansteenkiste, Simons, Lens, Sheldon, and Deci (2004) investigated the effects of the goals promoted by the classroom environments on students learning. They (2004:246) found that presenting the learning material as serving the attainment of an extrinsic goal (financial success) undermined academic achievement, persistence, and deep processing of the learning material, compared with intrinsic goal framing.

Although the result of these studies on intrinsic versus extrinsic goal contents reveal a reasoned picture, it needs to be noted that these goals were framed in relation to students' in-class academic achievements, rather than in respect of a teaching career. Hence, since social environments can shape the goals framed people frame, an important focus of this research was to explore the career goal contents being pursued by the preservice teachers in their current contexts.

4. Motivation in context

4.1 Dimensions of motivation

To Schunk (2004:177), motivation represents a basic dimension by which people make sense of their own or others' behaviour. It concerns drive, direction, persistence, and all aspects of activation and intention (Goodenow, 1993). There is a prevailing view in the field of motivation that humans initiate and persist at behaviours to the extent that they believe the behaviours will lead to desired goals (Kasser & Ahuvia, 2002; Sagiv & Schwartz, 2000). Motivation then is a behaviour sustaining phenomenon, linking people's goal pursuit with attainment and basic needs satisfaction. This research is informed by this broad interpretation of motivation because it draws attention to a conceptual link between goal and motives, which is crucial in the context of this investigation.

There are different types of motivation, according to Deci and Ryan (2000:227), which reflects different levels of self-determination. The two broad strands used to categorise motivation types are labeled intrinsic and extrinsic. But the concept of intrinsic versus extrinsic goals is conceptually different from the classical motivational constructs above of intrinsic and extrinsic motivation. Vansteenkiste, Simons, Lens, Soenens, et al (2005:483) explain that whereas the former reflects the differential contents (or what) of goals that preservice teachers can pursue, the latter pertains to preservice teachers' motives or reasons for pursuing particular goals. Motivation then represents the 'process' (or why) of goal pursuits (Deci & Ryan, 2000:227). This distinction between intrinsic versus extrinsic goal and intrinsic versus extrinsic motivation allows us, for instance, to see that a student could establish intrinsic goals (e.g. for self development) for opting for teacher education related career but relies on extrinsic motivation (e.g. only does classwork that will be grades) in

pursuit of these goals. It means that the goals for entering teacher training and the motivation that energise preservice teachers in their daily engagement in school activities may be one characterised by tension. There is implication in such tension for class participation and instructional leadership.

But in the broad discourse on motivation, for instance, intrinsic motivation, which is seen as '...engaging in an activity for its own sake and the experience of pleasure and satisfaction derived from participation' (Goodenow, 1993:21), is fully self-determined or autonomous; it is an innate quality which does not result from an internalisation of ambient values and regulations (Deci & Ryan, 2000:239). However, extrinsic motivation, which is seen as '...engaging in an activity as a means to an end rather than for its intrinsic qualities', varies in its relative degree of autonomy. Based on this analysis, Vansteenkiste, Simons, Lens, Soenens, et al (2005:484) concluded that behaviours which are extrinsically motivated are guided by the pursuit of an outcome that is separate from the activity. This bimodal view of motivation informs this research because it provides the basis for clarifying the main variables.

Empirical researches on motivation, within the SDT framework, have isolated three types of extrinsic motivation. These have been labeled: (a) external regulation (e.g. when a student engages in an activity to comply with reward, constraints or other externally pressuring demand); (b) introjected regulation (e.g. when a student engages in an activity to meet internally pressuring feelings of guilt, shame, and self-aggrandization); and (c) identified regulation (e.g. when a student identifies with the personal importance of the activity and engages in it with a sense of volition and willingness) (Deci & Ryan, 2000:237). External and introjected regulations, collectively, create a form of controlled motivation because when students engaged in activities for these reasons/motives, their actions are said to be relatively controlled (Vansteenkiste, Lens, Dewitte, De Witte, & Deci, 2004:345). However, identified regulation bears close qualities with intrinsic motivation because it induces action that results from one's choice based on one's assessment of its importance (Vansteenkiste, Lens, Dewitte, De Witte, & Deci, 2004:345). The combining of identified regulation and intrinsic motivation to form an autonomous motivation composite have been reported (Vallerand, Fortier, & Guay, 1997).

It is possible that a student could have no motivation for pursuing a goal; that is, an absence of intrinsic or extrinsic drives (Deci & Ryan, 2000:237). Deci and Ryan (2000:237) claim that the condition of no motivation (called 'amotivation') pertains to a person's lack of intentionality. SDT researchers (Pelletier, Dion, Tuson & Green-Demers, 1999:2481) found that students are likely to be amotivated when they lack either a sense of efficacy or a sense of control with respect to desired outcomes. Goodenow (1993:24) reports that amotivated students experience feelings of incompetence and expectancies of uncontrollability. There is evidence to suggest that the different forms of extrinsic motivation and amotivation have different behavioural consequences (Deci & Ryan, 2000:237). Amotivation, for instance, can be an impediment to both goal attainment and efforts to increase preservice teacher participation in the learning and teaching process.

4.2 Internalisation of extrinsic motivation

Extrinsic Motivation has been extensively researched and it is shown that this type of motivation can be internalized (Deci & Ryan, 2000:236). Numerous theories utilize the concept of internalization as a central process in socialization (Meissner, 1988), providing differing perspectives that range from internalization being something that gets done to individuals by the socializing environment (e.g., Mead, 1934) to something that represents

the individual's active transformation of external regulations into inner values (Ryan, 1993). SDT proposes that, like intrinsic motivation, internalization is an active, natural process in which individuals attempt to transform socially sanctioned mores or requests into personally endorsed values and self-regulations (Deci & Ryan, 2000). It is the means through which individuals assimilate and reconstitute formerly external regulations so the individuals can be self-determined while enacting them. When the internalization process functions optimally, people will identify with the importance of social regulations, assimilate them into their integrated sense of self, and thus fully accept them as their own.

4.3 Goal-contents and motivation

The relationships between goal contents and motivation have been explored by some researchers, but these have mainly been in relation to certain life goals and well-being. Carver and Baird (1998:290) assessed the relative importance participants placed on the aspiration for wealth (extrinsic goal), and also the strength of their autonomous reasons (intrinsic motivation) and the strength of their controlled reasons (extrinsic motivation) for pursuing wealth. They found that autonomous reasons for pursuing wealth were positively related to self-actualisation, but controlled reasons for pursuing wealth were negatively related to self-actualisation. In other words, the extrinsic goal was in tension with the intrinsic motivation. Vansteenkiste, Simons, Lens, Soenens, et al (2005:485) theorized that because intrinsic goals are more closely lined with people's inner-growth tendencies, learning in the service of such goal is more likely to prompt a deep and task-oriented commitment toward learning. They tested this hypothesis on a sample of early adolescents and found that the effects of intrinsic versus extrinsic goals on learning were mediated by task involvement: linking learning to intrinsic goal content yielded greater task engagement. The degree of task involvement is a crucial indicator to judge preservice teachers' progress and pace of pursuit of their career goals. The evidence seems to suggest that an anticipation of greater task involvement from preservice teachers, whose learning is linked to intrinsic goal contents. But educators would need to know preservice teachers' goal contents in order to be in a position to make such link. Furthermore, although the evidence is suggesting that when people's goal contents (e.g. intrinsic) are similar in nature to their motives (e.g. intrinsic) for engaging in an activity, their task commitment to the activity increases (Deci & Ryan, 2000), it is possible that among preservice teachers the school environments in which they entered could promote a type of motivation which stand in contrast to the goal contents that they are pursuing. These possibilities lead this research to explore whether preservice teachers' career-related goal contents for entering teacher training are consistent with the motivation that they seek to engage in class activities in pursuit of those goals.

But for student-teachers in training, their career goals may be seen as constituting long-term goals; that which they are striving to accomplish later in life (Ryan & Connell, 1989:749). Researchers have examined the effects of goal attainment proximity on behaviours (Schunk, 2004; Sheldon & Kasser, 1995). Sheldon and Kasser (1995:531) indexed the strivings (i.e. relatively short-term, semester-long, goals) of undergraduate students and their reasons for pursuing each striving, and the helpfulness of each striving for attainment of intrinsic versus extrinsic life-goals (i.e. long-term aspirations). They found, inter alia, that the extent to which the students believed that each striving would lead to the attainment of long-term goal intrinsic goals was positively related to well-being, as against unrelated to well-being for extrinsic goals; these extrinsic goals were however related to controlled orientations. In other words, the progress that preservice teachers make toward the attainment of extrinsic related life-goals can be controlled. The incremental strivings show that students quite often

make a deliberate connection between what they do in class and their personal aspirations, which sometimes have no direct link with each other.

4.4 Motivation and class participation

Motivating students to achieve in traditional classroom environments is a topic of practical concern to instructional designers, and of theoretical concern to researchers. Important variables that have been identified as motivators for student effort are perceived importance, usefulness, and the value of engaging in a task (Schunk, 2004). Student perceptions of their ability to accomplish the task, that is, their self-efficacy, has been found to affect effort and achievement (Bandura in Schunk, 2004:289). Task characteristics such as task difficulty can be instrumental in providing cues as to the efficiency of effort. If the effort expenditure is perceived as a waste of energy or as unnecessary for success, learners will not be motivated to exert sufficient mental effort. In other words, their participation would be low. Also, learner preconceptions about the effort required by a learning task influence the effort expenditure (Cennamo, 1993). These preconceptions are influenced not only by task characteristics, but also by characteristics of the learner (Woolfolk, 2004).

The present research does not relate the attainment of goal contents to well-being variables as previous research have focused upon; it, instead, investigated the interaction between the goal-contents and the motivation itself, which is an unexplored issue in the broader research context in Africa. The specific issues investigated are outlined in the research problems below.

5. The present research

The present research was developed around the following research problems:

1. What are the contents of the main career goals being pursued by the preservice teachers in training? What factors do they perceived to influence the framing of these goals?
2. What motivational expectations do preservice teachers have or seek for participating in classroom activities in pursuit of their career goal attainment?
3. Are there significant relationships between the contents of preservice teachers' main career goals and the forms of motivation which they have/seek for engaging in class activities in pursuit of those goals? (what are the implications for class participation?)

The questions posed above address the link between and consequences of goal-framing and motivation in the classroom, which are critical issues in motivational research and in instructional leadership in schools.

5.1 Method

5.1.1 Combined-methods design

The study adopted a combined-methods design; this results from a merger of the quantitative and the qualitative approaches (Brown, 2004:74). Within this paradigm, aspects of both the quantitative and qualitative techniques are applied on a phased basis (Saunders, Lewis and Thornhill, 2007:340). Creswell (in De Vos 1998:360) developed a dominant-less-dominant framework for carrying out research using the mixed paradigm; this framework guided this study. The quantitative phase dominated, while the qualitative phase was less-dominant. This is because the investigation was built around testing the relationships

between the goal-contents and motivation types (*cf. problem statement 3*). A small qualitative investigation was done as a follow-up to solicit clarification on the results of the quantitative phase. This facilitated a holistic view and strengthened the internal validity of the design. A survey design was adopted in the quantitative phase because the researchers wanted to include a large number of preservice teachers; a semi-structured interview was used in the qualitative phase since it was a follow-up investigation.

5.1.2 Research participants

College students in Botswana comprised the sample for this research. The research participants were pursuing a Diploma in teaching. Participants were in different years of study, ranging from year 1 to year 3. Preservice teachers were selected from across the different year groups in order to have a broad mix of goal framing. In the cohort, there were 123 preservice teachers who participated. These participants were selected purposive. These were taken from the main teacher training institution in the North Eastern region of the country. The sample of preservice teachers consisted mainly of females (60.2%); this was consistent with the wider college population; age range from 20 to 25 years, $M = 21$ years. All preservice teachers were pursuing programmes leading to qualification to teach at the intermediate (junior secondary) phase.

5.1.3 Instruments

Two separate instruments (questionnaire and interview schedule) were used to collect data; each was influenced by the design adopted above (*cf. mixed-method design*).

Questionnaire

A self-administered questionnaire was used to collect data for the quantitative phase. The questionnaire was developed in the English language by the researcher and consisted of three sections, as follows: Section one covered demographic data (e.g. gender, age, and year group). Section two had one open-ended type measure which asked participants to list their *main* career goal which they intend to pursue in teaching. Participants also had to specify the perceived factors which caused them to choose these goals. The open-ended measure was adopted to allow participants to reflect on their life-history and consider possible influences. The measure allowed for the collection of 'rich' qualitative data, which would not have been possible had participants been asked to respond to predetermined statements.

Section three had 20 statements, measuring preservice teachers' class participation behaviours and motivation. The statements were developed from an indepth review of the literature, and included three dimensions of class participation as follows: lesson attendance, study-hard, class involvement preparation, and modes. Each measure of participation was phased to reflect one of the following forms of motivation: intrinsic motivation; extrinsic motivation. Three different forms of extrinsic motivation, based on the SDT, were incorporated: external regulation, identified regulation, and introjected regulation. Participants rated on a 5-point Likert scale ranging from 1 (strongly disagree) to 5 (strongly agree) their class participation and motivation behaviours.

Five scholars who specialized in the area of pedagogy checked whether the draft questionnaire appeared to be a suitable measure of the aspects being measured and whether the constructs were accurately captured. The instrument was also pilot tested to ensure that all relevant factors were included in each of the sections. Thus, content and face validity were addressed.

Interview schedule

The qualitative follow-up data was collected via interviews. This was designed to gain clarification on a single theme which emerged from the quantitative data: that is, the influences on preservice teachers' goal framing. A semi-structured interview facilitated the asking of probing questions.

5.1.4 Procedure

To gain access to students in the different sites, the researcher used the Programme Coordinators as gatekeeper (Brown & Schulze, 2002:4). For the quantitative data collection, the researcher asked the Programme Coordinators in the institution to recruit fellow colleagues to administer the questionnaire. As many preservice teachers as possible were asked to participate. Participants responded to the questionnaire during one of their scheduled lecture sessions.

Questionnaires were given to all preservice teachers who volunteered. They were asked to complete the instrument on the spot. This was to ensure maximum return. They were instructed to consider each statement carefully and use as much time as they needed to provide complete responses. In cases where the written responses were unclear or irrelevant, a decision was taken to exclude them. The researcher judged that a response was irrelevant where it deviated from providing answers to the research questions, or was illegible. Eight of the questionnaires fell into this category. Follow up interviews arrangements were made during the administration of the questionnaires. This was done by research assistants recruited on both research sites specifically for this exercise.

Data from the questionnaire was analysed using various tests: Chi-Square Tests. The main method of data analysis used for the qualitative data was thematic content analysis. This entailed identifying, coding and categorizing patterns in the data (Corbin & Strauss, 1990; Miles & Huberman, 1994). The results of these analyses are presented in the sections below.

Trustworthiness of the findings was addressed by means of Guba's model of trustworthiness (Brown & Schulze, 2002:5). This model includes: (a) truth value, (b) applicability or the degree to which the findings can be applied to other contexts or with other groups, (c) consistency or whether the findings would be consistent if the enquiry was replicated, and (d) neutrality or the freedom from bias in the research procedures and results. These dimensions were addressed through (a) triangulation of methods (b) prolonged engagement in the research setting to establish good rapport, and (c) the analysis of interviews transcripts with external coder to ensure peer examination.

6. Results

6.1 Quantitative results

Result 1: The contents of the main career goals being pursued by the preservice teachers in training

Goal-contents	Frequency	% Responses
Intrinsic goal contents		
Community contributions	10	8.13
Affiliation related	8	6.5
Health-related	0	0.0
Self-development	0	0.0

Extrinsic goal contents		
Financial success	62	50.41
Status/prestige	38	30.89
Publicity	5	4.07
Power	0	0.0
Personal image	0	0.0
Total	123	100

Table 1. The contents of preservice teachers’ main goals for entering teacher

The intrinsic and extrinsic goal-contents that emerged from the main career goals of preservice teachers are shown in Table 1. The intrinsic goal-contents measured included self-development, improvement in personal health, quest for affiliation, and community contribution; the extrinsic goal-contents measured included financial success, personal status/prestige, publicity, power, personal image.

Intrinsic goals were not popular (14.63%). Table 1 shows that less than one tenth (8.13%) of the preservice teachers considered making contributions to the community as the main goal pursuing in teaching. Community contribution meant: “...imparting knowledge, skills and values to the younger generation; contributing to the achievement of Botswana vision 2016 pillar of building an educated/informed nation; building/serving the nation; and contributing to society by replacing dying and retiring teachers.” Even fewer preservice teachers (6.5%) had the pursuit of affiliation-related aspirations (e.g. the desire to work with and enjoy being among young children), as a main career goal.

However, Table 1 shows, in contrast, that the majority (85.37%) of the preservice teachers had extrinsic-related goals as a main aspiration to pursue in teaching. Over one-half percent (50.41%) of preservice teachers had the pursuit of financial success (i.e. to earn a good salary; earn a living and take care of family) as a main career goal. A smaller percentage (30.89%) were mainly in pursuit of status-related career aspirations (e.g. for the qualification/certification to become teacher; to gain employment; to enhance personal social status). The status-related goals also included the benefits associated with teaching, such as the holidays, job security, loans, promotions, flexible working hours, and accommodation.

Other extrinsic forms of career goals with contents linked to personal *publicity* (e.g. to please or satisfy family members or past teachers), and to *power* and personal *image* were not popular as a main career goal to pursue in teaching (see Table 1).

Result 2: *Preservice teachers’ motivational expectations to participate in classroom activities*

Table 2 shows responses to class participation behaviours. Measures of participation were linked to specific types of motivation. Class participation was defined in terms of the following four aspects: lesson attendance, study-hard, involvement preparation and modes.

Participation behaviours and motives	% Responses		
	*Agr ee	Someti mes	Disagr ee
<i>Lesson attendance:</i>			
I attend lessons to get <i>grades</i> to pass my modules to qualify as teacher	85.4	10.5	4.1
I attend lessons to learn; i.e. because I <i>enjoy</i> learning /	65.9	21.1	13.0

academic work			
I attend lessons in order to be in the <i>company of friends</i>	40.5	47.0	12.5
I often only attend some lessons because the duration of my training to become a qualified teacher is too long	18.7	11.4	69.9
<i>Involvement preparation:</i>			
I always read related lesson materials before lessons to learn more so that I can participate (i.e. ask questions, engaged in discussion, make presentation)	39.1	38.2	22.7
<i>Study-hard:</i>			
I study hard for <i>grades</i>	78.0	7.0	15.0
I study hard (i.e. frequently rehearse and practice learning tasks; spend time thinking about and linking old and new learning; completing coursework)	68.3	25.2	6.5
I <i>study-hard</i> to finish my schooling in order to start working	60.2	12.1	27.7
I study hard for the <i>sake of learning</i> , i.e. because its fun & I love learning	55.3	24.4	20.3
I study hard because it gives me time to be with my friends	20.3	12.7	67.0
<i>Involvement modes:</i>			
I prefer to participate in more than just note-taking and listening to lectures when I attend lessons	77.3	14.5	8.2
I participate in class only when I want to <i>avoid the negative</i> consequences of not doing so	65.0	15.4	19.6
I participate in class (i.e. ask questions, engage in discussion, make presentation)	64.3	30.0	5.7
I participate in class because I <i>enjoy</i> learning more	44.1	34.0	21.9
I participate in class only when I know the <i>tasks will be graded</i>	38.2	15.5	46.3
I participate in class only when I am <i>called upon</i>	30.0	25.2	44.8
I <i>prefer</i> classes which allow me to participate	27.0	44.0	29.0
I participate in class because I get the chance to <i>help</i> others	24.4	11.2	64.4
Participating in class has little/no immediate benefits to me so I <i>do not</i> bother to prepare to take part	14.6	15.5	69.9
<i>Valuing and Internalising:</i>			
Although I do not find learning experiences enjoyable, I freely choose to work hard because these experiences are important to reach a valued goal in my life	78.1	13.0	8.9

Table 2. Distribution of preservice teachers' class participation and motivation behaviours

Table 2 shows a mixed response to the different dimensions of class participation. While the majority (85.4%) of preservice teachers agreed that they attended lesson for academic grades to pass their modules to qualify as teacher, there were others (10.5%) who only did so sometimes, or disagreed (4.1%) to doing so. Over one-half (65.9%) of the preservice teachers attended lessons for the sake of learning, or because they found it enjoyable, but fewer (21.1%) indicated that they did so sometimes, or disagreed to doing so for those motives (13.0%). However, a high proportion agreed that they sometimes (47.0%) or always (40.5%) attended lessons to be with friends. The duration of the training programme influenced the attendance pattern of some of the preservice teachers (see Table 2).

Table 2 also shows that perceptions about class participation planning varied. Few (22.7%) preservice teachers disagreed that they prepare themselves (i.e. read lesson materials) for class participation prior to the lesson. Those who agreed only did so sometimes (38.2%), or always (39.1%).

Over one-half (64.3%) of the student cohort agreed they participated (i.e. ask questions, engage in discussion, make presentation) in class; but few (30.0%) did so sometimes or disagreed (5.7%) to doing so. The majority of those who participated did so to avoid the negative consequences of not participating (65.0%), or only when they know the tasks would be graded (38.2%), when called upon (30.0%), or because they enjoy learning (44.1%). But there were a high proportion of preservice teachers who disagreed to participating for these motives (see Table 2).

Over one-half (68.3%) of the preservice teachers agreed that they study hard, that is, frequently rehearse and practise learning tasks, spend time thinking about and linking old and new learning, completing their coursework. The majority of those who study hard did so for grades (78.0%), to quickly finish their training (60.2%), because of finding learning fun/enjoyable (55.3%). Few preservice teachers study hard because of friendship motives (20.3%); in fact, the majority (69.9%) disagreed they study hard for friendship motives (see Table 2).

In addition, more than three-quarters (78.1%) of the preservice teachers did not find their learning experiences in the school enjoyable, but they freely chose to work hard because they perceived the learning experiences were important to reach a valued goal in their life.

Motivation classification	Motive indicators
Intrinsic motivation	Enjoy learning / academic work
	Learning for its sake
Extrinsic motivation	
• External regulation	Grades to pass
	Training duration
	Friends' company
	To finish schooling to start working
	To avoid negative consequences
	When called upon

• <i>Identified regulation</i>	To help others
	Perceived benefits
	Free choice

Table 3. Motivation classification and motive indicators for participating in class

Table 3 shows the motivation classification and the various indicators of motives for which the preservice teachers participated in class. Preservice teachers who indicated that they participated in class for the sake of learning and or for the enjoyment of learning or academic work (cf. Table 2) had an inward orientation for their actions. These motives reflect intrinsic motivation (see Table 3).

In Table 3, preservice teachers who indicated that they participated in class for grades, friends' company, to avoid negative consequences, only when called upon, to finish schooling, or motives linked to the duration of the training period had an outward orientation for their actions. These reflect the extrinsic motivation of external regulations (i.e. engaging in an activity to comply with reward, constraints or other externally pressuring demand).

However in Table 3, preservice teachers who indicated that they participated in class to help others, or out of free choice, or because of perceived benefits reflect the extrinsic motivation of identified regulation (i.e. when the personal importance of the activity is identified and one engages in it with a sense of volition and willingness).

The data reported in Tables 1 to 3 was further measured to explore how they influence class participation and other variables. To test these hypotheses, Chi Square tests were conducted. Significant relationships are reported in Tables 4 and 5a-5e.

Result 3: Significant relationships between the contents of preservice teachers' main career goals and the forms of motivation which they have/seek for engaging in class activities in pursuit of those goals

Participation behaviours and motivation types	Categories of goal-contents								
	df	Intrinsic-related goals		Extrinsic-related goals					
		Community contributions		Financial success		Status/Prestige		Publicity	
		X ²	p-value	X ²	p-value	X ²	p-value	X ²	p-value
External regulation: Attend lessons to get grades to pass my modules to qualify as teacher	2	3.08	0.215	11.29**	0.004	6.13 *	0.047	0.81	1.078
External regulation: Participate in class only when the tasks will be graded	2	7.06*	0.029	0.14	0.93	3.77	0.152	4.60	0.082

External regulation: Often only attend some lessons because the duration of my training to become a qualified teacher is too long	2	0.26	0.878	4.39	0.111	8.00 *	0.018	2.78	0.210
Identified regulation: I always read related lesson materials before lessons to learn more so that I can participate (i.e. ask questions, engage in discussion, make presentations)	2	2.37	0.306	7.11 *	0.029	5.68	0.059	1.36	0.416
Identified regulation: I participate in class (i.e. ask questions, engage in discussion, make presentation)	2	1.23	0.542	3.96	0.138	6.43 *	0.04	2.13	0.202

* X² Critical value for *df*= 2 is 5.99 at the 0.05 level of significance; ** X² Critical value for *df*= 2 is 9.21 at the 0.01 level of significance

Table 4. Significant relationships between the contents of main career goals for entering teacher training and motivation for class participation

Table 4 shows the various motivations for class participation behaviours that associated significantly with preservice teachers’ main career goal-contents. Five behaviours showed significant associations with the different goal-contents:

- Behaviours that were motivated by the external regulation of ‘attendance to lessons to get grades to pass the modules and qualify as teachers’ associated significantly with the extrinsic goal-contents of financial success ($X^2=11.29$; $p=0.004$), and status/prestige ($X^2=6.13$; $p=0.047$), respectively;
- Behaviours that were motivated by the external regulation of ‘participation in class only when the tasks would be graded’ associated significantly with the intrinsic goal-content of making community contributions ($X^2=7.06$; $p=0.029$);
- Behaviours that were motivated by the external regulation of ‘often only attending some lessons because the duration of training to become a qualified teacher is too long’ associated significantly with the extrinsic goal-content of status/prestige ($X^2=8.00$; $p=0.018$);
- Behaviours that were motivated by the identified regulation of ‘always reading related lesson materials before lessons to learn more so as to participate in class’ associated significantly with the *extrinsic* goal-content of financial success ($X^2=7.11$; $p=0.029$);
- Behaviours that were motivated by the identified regulation of ‘participating in class (i.e. ask questions, engage in discussion, make presentation)’ associated significantly with extrinsic goal-content of status/prestige ($X^2=6.43$; $p=0.04$).

These relationships were further investigated for behavioural differences, and the results are displayed in Table 5a to 5e.

Motivation type in participation behaviours	Career goals to pursue in teaching					
	Extrinsic		Non-extrinsic		Total	
	N	%	N	%	N	%
External regulation: I attend lessons to get grades to pass my modules to qualify as teacher						
Agree	97	89.0	8	57.1	105	85.4
Disagree/Sometimes	12	11.0	6	42.9	18	14.6
Total	109	100.0	14	100.0	123	100.0

Table 5a. Behavioural differences between preservice teachers who ranked extrinsic and those who ranked non-extrinsic career goals as main goal to pursue in teaching

Attendance to lessons for external regulation related motivation (i.e. to get grades to pass the modules and qualify as teachers) is significantly associated with two types of extrinsic goal-contents: financial success and status/prestige, respectively (cf. Table 4). Table 5a shows that the majority (85.4%) of preservice teachers who agreed that they attended lesson for academic grades were pursuing extrinsic goal-contents. This means that those preservice teachers who ranked financial success and status/prestige related career goals as their main goal pursuing in teaching were significantly *more* motivated to attend lessons to get grades to pass the modules and qualify as teachers than those who did not rank these as primary goals.

Motivation type in participation behaviours	Career goals to pursue in teaching					
	Extrinsic		Non-extrinsic		Total	
	N	%	N	%	N	%
External regulation: Often only attend some lessons because the duration of my training to become a qualified teacher is too long						
Agree	8	11.1	15	29.4	23	18.7
Sometimes	11	15.3	3	5.9	14	11.4
Disagree	53	73.6	33	64.7	86	69.9
Total	72	100.0	51	100.0	123	100.0

Table 5b. Behavioural differences between preservice teachers who ranked extrinsic and those who ranked non-extrinsic career goals as main goal to pursue in teaching

Attendance to only some lessons because of the perceived duration of the teacher training programme (external regulation) is significantly associated with the extrinsic goal-content of status/prestige (cf. Table 4). Table 5b shows however that the majority (69.9%) of preservice teachers disagreed to this class participation behaviour; the larger proportion (73.6%) of those who disagreed were pursuing extrinsic career goal-contents. This means that those preservice teachers who ranked status/prestige related career goals as their main goal

pursuing in teaching were significantly *less likely* to become demotivated to attend lessons or to attend only some lessons because of the training duration time-span.

Motivation type in participation behaviours	Career goals to pursue in teaching					
	Extrinsic		Non-extrinsic		Total	
	N	%	N	%	N	%
Identified regulation: Participate in class (i.e. ask questions, engage in discussion, make presentation)						
Agree	50	69.4	29	56.9	79	64.2
Sometimes	21	29.2	16	31.4	37	30.1
Disagree	1	1.4	6	11.8	7	5.7
Total	72	100.0	51	100.0	123	100.0

Table 5c. Behavioural differences between preservice teachers who ranked extrinsic and those who ranked non-extrinsic career goals as main goal to pursue in teaching

Class involvement mode (i.e. ask questions, engage in discussion, and make presentations), which is a form of extrinsic motivation (i.e. identified regulation), is significantly associated with the extrinsic goal-content of status/prestige (cf. Table 4). Table 5c shows that the majority (64.2%) of preservice teachers who agreed that they participated in class were pursuing extrinsic career goal-contents. This means that those preservice teachers who ranked status/prestige related career goals as their main goal pursuing in teaching were significantly *more* motivated to ask questions, engage in discussion, and make presentation than those who did not rank these as primary goals.

Motivation type in participation behaviours	Career goals to pursue in teaching					
	Extrinsic		Non-extrinsic		Total	
	N	%	N	%	N	%
Identified regulation: Always read related lesson materials before lessons to learn more so as to participate (i.e. ask questions, engage in discussion, make presentations)						
Agree	38	34.9	10	71.4	48	39.0
Sometimes	44	40.3	3	21.5	47	38.2
Disagree	27	24.8	1	7.1	28	22.8
Total	109	100.0	14	100.0	123	100.0

Table 5d. Behavioural differences between preservice teachers who ranked extrinsic and those who ranked non-extrinsic career goals as main goal to pursue in teaching

Preparing to participate in class (always read related lesson materials before lessons to learn more), which is a form of extrinsic motivation (identified regulation), is significantly associated with extrinsic goal-contents linked to financial success (cf. Table 4). Table 5d

shows that the majority (71.4%) of preservice teachers who disagreed that they prepare them for class participation were pursuing non-extrinsic career goal-contents. This means that those preservice teachers who ranked financial success related career goals as their main goal pursuing in teaching were significantly *less likely* to feel motivated to read related lesson materials and prepare themselves before the lessons than those who did not rank these as primary goals.

Motivation type in participation behaviours	Career goals to pursue in teaching					
	Intrinsic		Non-intrinsic		Total	
	N	%	N	%	N	%
<i>External regulation:</i> Participate in class only when the tasks will be graded						
Agree	24	37.5	23	39.0	47	38.2
Sometimes	5	7.8	14	23.7	19	15.4
Disagree	35	54.7	22	37.3	57	46.3
Total	64	100.0	59	100.0	123	100.0

Table 5e. Behavioural differences between preservice teachers who ranked intrinsic and those who ranked non-intrinsic career goals as main goal to pursue in teaching

Preparation to participate in class for external regulation related motives (i.e. only when the tasks will be graded), which is a form of extrinsic motivation, is significantly associated with the intrinsic goal-content of community contribution (cf. Table 4). Table 5e shows that about the same proportion of preservice teachers who were pursuing intrinsic goal contents (37.5 percent) and those pursuing non-intrinsic goal contents (39.0%) agreed to that they participated in class for external regulation related motives. But more (54.7%) preservice teachers who were pursuing intrinsic (community contributions) career goal disagreed. This means that preservice teachers who ranked community contributions related career goals as their main goal pursuing in teaching were significantly *less likely* to participate in class only when they know the tasks will be graded than those who did not rank these as primary goals.

Discussion

The Self-Determination Theory (SDT) provides a framework for distinguishing between goal contents and motivation. Informed by the SDT framework, this research investigated the career goal contents and motivation among preservice teachers in the African state of Botswana. It provides, within the context of the cohort studied, a better understanding of the preservice teachers' career goal types and motivational issues. The evidence shows that the preservice teachers were in pursuit of a diverse range of career goals, which were predominantly extrinsic in nature for the majority of trainees (research problem 1). This was evident, for instance, in the ranking of extrinsic related goal contents by over three quarters (85.37%) of the preservice teachers as their main career goals for pursuit in teaching. In fact, the pursuit of intrinsic related goals was unpopular as a main career goal. Of all the extrinsic goals considered in the research, those related to financial success, social status/prestige, and personal publicity were most important for the majority of preservice teachers. One explanation for the prevalence of these extrinsic related goals

seems to be the socioeconomic standing of teaching, generally, in the Botswana society. Teaching is perceived in Botswana as a stable and financially viable profession (*cf. Botswana context section*). Botswana's government use of financial and other incentives over the years to attract migrant/expatriate teachers to, and to promote teaching career in, that country may have also added to the notion of financial viability of teaching (*cf. Botswana context section*). This explanation points to the influence of social environment on preservice teachers' goal framing (*cf. aspects of goal framing*).

The extrinsic emphasis in the preservice teachers' main career goals, it should be noted, reflects an instrumental view of teaching. This view suggests, for instance, that for preservice teachers, the value of teaching lies in what they can obtain from their job as teachers. This outward orientation in the preservice teachers' goal pursuit is in contrast with the few preservice teachers who ranked intrinsic goal-contents (to develop affiliation; make community contributions) as their main goals for pursuit in teaching. For these few preservice teachers, it appears that they hold a caring, socio-romantic view of teaching. The desire to help others through teaching (i.e. make contributes to community) implies that the seriousness, and societal value, of education is also recognised. But this desire may merely be reflective of the collectivist cultural nature of the local populace in Botswana (Hofstede in Poole 1999:75).

SDT isolates external, identified, and introjected regulations as three main types of extrinsic motivation (*cf. motivation section*). This research found evidence of two of these types of extrinsic motivation underpinning class participation behaviours among the preservice teachers. Indeed, the majority of preservice teachers participated in class (i.e. attend lessons, study-hard, read related material before lessons in order to prepare to ask questions, engage in discussion and, or, make presentations) predominantly for external regulation (academic grades, being with friends, to avoid negative consequences, be called upon) and identified regulation (judging the importance of the activity and choosing, volitionally, to act) related forms of motivation (research problem 2). This finding is consistent with previous research, which reported support for the extrinsic motivational focus of college students, with grades (external regulation) being a powerful motivator for performance in academic work (*cf. goal framing and self-determination theory*). In post-modern societies, it is argued, the measurement of academic progress is based largely on extrinsic standards. The expectation of extrinsic motivation in order to participate in scholastic activities may thus be a learnt behaviour, grounded in the social nature of schools. This explanation is plausible because, among the preservice teachers with intrinsic goals, there were those who had extrinsic motivation to participate in class (*cf. Table 5e*).

The external and identified regulations expected by the preservice teachers represent contrasting forms of extrinsic motivation. Based on the SDT, people engaged in an activity for external regulation motives when they act to comply with reward, constraints, or other externally pressuring demand, whereas, for identified regulation motives, action is based on the person's judgement and volitional choice regarding the value of the activity. While the evidence of external and identified regulations draws attention to the need to use motivation as a resource to maximize student class participation behaviour, which is a critical issue in instructional leadership, it also reveals important power mechanisms. For instance, external regulations generate a form of control motivation. When preservice teachers engaged in class for these reasons, their actions are not autonomous. In other words, the progress that preservice teachers make toward the attainment of their career goals can be controlled, or frustrated, at the classroom level by virtue of how the teacher manipulates the dispensation of externally regulated forms of extrinsic motivation. This is a

pertinent point because significant relationships emerged in this study between various forms of extrinsic motivation and class participation behaviours (*cf. Table 4*).

Previous researches conducted within the SDT framework reported a natural tendency of people to internalise values and regulations, especially when they understand or grasp the meaning or rationale behind those regulations, and have an ability to enact it (*cf. Deci and Ryan, 2000:238*). Support for this argument is found in this research. There are indications of internalisation of regulation because although a significant number of the preservice teachers did not often find their learning experiences enjoyable, many chose freely to work-hard, academically, because they recognized that the activities were important for them to achieve certain goals that they have set in life (*cf. Table 2*). These actions suggest that the preservice teachers might have judged the importance of the class participation activity, and participated volitionally. Such behaviours are typical of individuals motivated by identified regulations. The perceived internalisation of identified regulations (extrinsic motivation) is unsurprising considering that preservice teachers are outwardly orientated in their main career goals (*cf. Table 1*).

But while many of the preservice teachers participated in class for different forms of extrinsic motivation, there were a few who appeared intrinsically motivated to participate in as far as attending lessons and study hard was concerned) (*cf. Table 1*). However, the intrinsic nature of there motivation is questioned. The SDT suggests that identified regulation bears some of the qualities of intrinsic motivation (*cf. dimension of motivation section*). The theory also suggests that when regulations are internalised, they prompt actions in ways that seem intrinsically driven (*cf. self-determination theory section*). It is argued therefore that the few preservice teachers who reported intrinsic motivation to participate in class might have done so by virtue of internalising extrinsic regulations, than anything else. It is conceivable that those preservice teachers who internalised regulation, volitionally, and who perceived the personal benefits of their actions, would report more instances of finding the activity enjoyable or fun, than others who did not (*cf. Internalisation section*). Since many of the preservice teachers (78.1%) were driven by identified regulation for participating in class in terms of study-hard (*cf. Table 1 and 2*), it is possible that these preservice teachers were among those reporting intrinsically driven motivation to participate in class. But of course this perspective is speculative, and requires further investigation to clarify the nature of the claim.

Nevertheless, in contrast to the above class participation motivation behaviours, the study found no evidence of amotivation or participation for introjected regulation-motives (feelings of shame, guilt, remorse, self-aggrandization). This is understandable given that the preservice teachers were generally adults (*cf. research participants*), who are often less susceptible to peer pressure (Kroger, 2000:79).

A key finding of this research, however, is the emergence of significant relationships between the contents of preservice teachers' main career goals and the motivation that they seek to participate in class activities in pursuit of these goals (research problem 3). The research found significant relationships between three main types of career goal-contents (financial success, social status/prestige, and community contributions) and two forms of extrinsic motivation (external regulation and identified regulation) (*cf. Table 4*). These relationships have important implications for preservice teachers' class participation behaviours. For instance, preservice teachers who ranked extrinsic goals related to financial success and social status/prestige as their main career goals for pursuit in teaching were significantly *more* motivated to participate in class for extrinsic motivation (i.e. attend lessons to get grades to pass the modules and qualify as teachers) than those who did not

rank these as primary goals. In other words, the goal contents and the motivation types are both extrinsic in nature. This similarity is unsurprising given the outward orientation of the majority of preservice teachers. But it may be a result of the nature of preservice teachers' social (societal and school) environments, where the extrinsic aspects of teaching are often emphasized.

At the same time, 'financial-success' goal seekers placed parameters on how they participated in class. Indeed, they were significantly *less likely* to feel motivated to prepare (i.e. read related lesson materials before the lessons) to participate in class, compared with other preservice teachers who did not rank the pursuit of financial success as a primary goal (cf. Table 4). It means therefore that these 'financial-success' goal seekers were not particularly interested in engaging in class activities for its sake. Participation in the learning process was pursued for its end-gains, which confirms what other studies such as Schunk (2004:275) have predicted. This is typical of extrinsically motivated individuals.

In contrast to the financial success goal seekers, the social status/prestige goal seekers wanted to be more altruistic in their class participation. In other words, preservice teachers who ranked the pursuit of social status/prestige as their main career goal were significantly *more* motivated to participate in class by asking questions, engaging in discussion, and making presentation, than those who did not rank these as primary goals. These altruistic behaviours are symbolic of active class participation, which is vital for educative learning and teaching. But the SDT posits that goals are framed and pursued to satisfy specific needs (cf. *Self-determination theory*). Since the seeking of social status/prestige reflects, within the SDT framework, needs linked to relatedness - feeling connected to others - it means a desire to satisfy relatedness needs at the classroom level may explain the participation mode preferred by preservice teachers who were in pursuit of social status/prestige goals. In other words, their behaviours may be directed at obtaining external signs of worth and approval, which is typical of individuals seeking to establish a social posture among peers.

Furthermore, it is noteworthy that asking questions, engaging in discussion, and making presentations are indicative of identified regulation. Identified regulation is extrinsic in nature. Since volition is inherent in identified regulations, it seems that the social status/prestige goal oriented preservice teachers recognised the value and benefits of participating in class through these altruistic modes. Perhaps it is for this reason that these preservice teachers were significantly *less likely* to get demotivated to attend lessons generally, or to attend only some lessons because of the training duration time-span (cf. Table 4).

While it is evident that the majority of preservice teachers were in pursuit of extrinsic goal-contents and sought extrinsic motivation in the process of this pursuit, the study found evidence of significant relationship, in one case, between extrinsic motivation and intrinsic goal contents (cf. Table 4). The intrinsic goal-content was the desire to make a contribution to the community (i.e. to replace dying/retiring teachers; impart knowledge/skills to the younger generation; build an educated/informed nation). This goal significantly associated with the extrinsic motivation of external regulation (i.e. participate in class only when the tasks will be graded) (cf. Table 4). Consistent with expectations, the nature of this relationship was negative. This means preservice teachers who ranked community contributions related career goals as their main goal were significantly *less likely* to participate in class only when they knew the tasks would be graded. In other words, these preservice teachers would participate in class regardless of whether the tasks would be graded or not. Task-grading was unimportant in determining their class participation. But

these may not so much be a unique group of preservice teachers in the cohort, but rather may be those who had internalized regulations.

Finally, while it is clear that the preservice teachers were in pursuit of different career goals and sought motivation to participate in class, there were a variety of issues, related to how the goals were framed, that emerged. It was therefore necessary to qualitatively explore with a small group of preservice teachers, the factors which they perceived to influence the career goals that they set.

6.2 Qualitative results

The following main findings emerged as influential in the goal-contents pursued by the preservice teachers.

- Socio-economic concerns

Among the ten preservice teachers interviewed, socio-economic issues were major influential factors. In fact, for all the teachers, socio-economic considerations were the common thread binding the ideas shared. The socio-economic features were variously expressed. This view was captured in the comments of one preservice teacher:

I want to my family...I was looking [for] a stable income job because we grew up poor and I am the only one in the family who has gone to college [tertiary school] so I have to first think of them and how to help them...there is a lot of pressure on you when you come out of those circumstances [poor situations].

The desire to support the family is evident as an influence. This desire can be seen as anything but misplaced for individuals who grew up in poverty conditions. In the African cultural context, this is often an expectation of families of their siblings. But many of the preservice teachers appeared to have had influences on their goal-contents from their own internalised ambition to improve their personal financial stature. A typical comment among all the student-teachers was:

...I think teachers earn a good salary [so] when I left secondary schools I though it would be the sort of work to do...it [teaching] is the kind of work that would allow me to become independent and acquire my own things...I can make a decent living and I need to develop myself that way.

The economic influences on the career goals that the preservice teachers pursued are evidence that forces within the environment do impact the goal contents that a person pursues.

- Service

It appears that the disposition to be of service to others also had a role in the nature of the goal contents that the preservice teachers pursued. There was clear sense of altruism. This is the view expressed by one preservice teacher:

...We have many expatriate [migrant] teachers in our school...government is paying them a lot of money...I want to reduce the dependence on these [migrant] teachers...the best way for me to do this is to become a teacher, that is my view. And the other thing is HIV/AIDS; many teachers are dying from AIDS, we have to replace them.

Some preservice teachers derived their career goals out of desires to be of service to the nation.

...Nation building is important to me...I have to think about how I can contribute to improving the nation because the government is sending us to school for free...many other countries don't do that...I had our vision 2016 pillars in mind when I consider teaching...I would say it influenced my choice because we want to become an educated and informed nation. I want to help in this.

The desire to service is clearly portrayed in these comments. But it seems the altruism was shaped in, and by, steep nationalistic forces. This is a further reflection of goals being shaped by the social environment in which one finds him/her self.

7. Implications and conclusions

This research establishes that there were a variety of specific career goals being pursued by the preservice teachers. With a few exceptions, the preservice teachers maintained an extrinsic focus in both their goal-contents pursued and class participation motives. Indeed, in an environment of global teacher shortage caused in some cases by poor compensation, new entrants into teacher education in Botswana pursued extrinsic career goals, linked to financial success, social status/prestige, and publicity. The relatively stable social-economic teaching environment in which the teachers work appears to profoundly shape the nature of the preservice teachers' goal-contents and the motivation to pursue same.

The evidence in this study confirms the existence of two types of extrinsic motivation, namely: external and identified regulations. The expectation of extrinsic motivation for participating in scholastic activities appears to be learnt behaviour, grounded in the social nature of schools and the way academic standards are measured. The internalisation of regulations, that is extrinsic motivation, seems a practice sustaining class participation among the preservice teachers.

A number of significant relationships emerged between the goal-contents of preservice teachers' main career goals and the different types of motivation that preservice teachers seek in order to engage in class activities in pursuit of those goals. In all but one of the significant relationships, the goal-contents and motivation types were the same, largely being extrinsic in nature. Preservice teachers' general reliance on extrinsic motivation to participate in class can be problematic. While it draws teacher-trainer's attention to an approach to maximized class involvement, it also reveals opportunities for teacher-trainers to control, or even frustrate, preservice teachers' behaviours in the learning context because aspects of extrinsic motivation are indicative of control motivation. When preservice teachers engaged in class for control motivation forces, their actions are not autonomous.

Three main types of career goal-contents (financial success, social status/prestige, and community contributions) and two forms of extrinsic motivation (external regulation and identified regulation) showed significant relationships. The seeking of social status/prestige reflects, within the SDT framework, needs linked to relatedness - feeling connected to others, which suggested that a desire to satisfy relatedness needs at the classroom level underlies social status/prestige goals seekers' class participation modes.

The pursuit of goals for extrinsic motives further holds implications for teaching and personal adaptation. The Literature on SDT (*cf. Deci & Ryan, 2000*) indicates that if people did not experience satisfaction from learning for its own sake (but instead needed to be prompted by external reinforcements) they would be less likely to engage the domain-specific skills and capacities they inherited, to develop new potentialities for adaptive employment, or both. They would thus be ill prepared for new situations and demands in

the physical world, and moreover, they would be less adaptable to the extremely varied cultural niches into which a given individual might be born or adopted. It means therefore that teacher-trainers should try to get preservice teachers to shift from the extrinsic motivation emphasis to more intrinsic focus for class participation by offering the extrinsic motivator initially, and work subsequently toward building the preservice teachers' pride in their participatory efforts and accomplishments (intrinsic motivator).

8. Further research

The following issues should be further researched:

- Why Botswana entrants into teacher education programmes are so extrinsic in their goal pursuit; exploring this would further facilitate the identification of causal relationships.
- This study draws attention to the possibility of the internalisation of extrinsic motivation, especially various regulations. The nature, extent and mechanism facilitating internalisation of extrinsic motivation would be a new direction to expand this research.
- The goal contents and motivation across different countries should be explored comparatively. This would expand the goal-motivation knowledge base and allow different aspects of the SDT to be tested.

9. Reference

- Brown, B. & Schulze, S. 2002. The development of working relationships between indigenous and expatriate teachers. *Journal of the Botswana Educational Research Association*, 10 (1):3-20.
- Brown, B. 2004. Teacher migration to Botswana: implication for human resources management in education. D.Ed. Thesis. Pretoria: UNISA
- Brown, B. 2006. Teacher migration and quality education in southern Africa: what lessons for the Caribbean? *Journal of Arts, Science and Technology*, 12, 5-20.
- Carver, C., & Baird, E. 1998. The American dream revisited: is it what you want or why you want it that matters? *Psychological Science*, 9, 289-292.
- Cennamo, K. S. 1993. Learning from video: Factors influencing learners' preconceptions and invested mental effort. *Educational Technology Research and Development*, 41(3), 33-45.
- CEPD. 2005. Teacher education in South Africa: proposal for research and development programme. Center for Education Policy Development. Pretoria. February 2005
- Commonwealth Secretariat. 2003. Teacher mobility and loss in Commonwealth member states – a study commissioned by the Commonwealth Secretariat. Oxford Center for Comparative and International studies in Education: University of Oxford.
- Corbin, J. & Strauss, A. 1990. *Basics of qualitative research: grounded theory, procedures and techniques*. Newbury Park: Sage.
- Crouch, L., & Perry, H. 2003. Teacher shortage. In HSRC. 2003. *Human resources development review: education, employment, and skills in South Africa*. Cape Town: HSRC Press
- De Vos, A.S. 1998. Combined quantitative and qualitative approach. In: A.S. De Vos, H. Strydom, C.B. Fouche, M. Poggenpoel, E. Schurink, & W. Schurink. (eds.). 1998. *Research at grassroots: a primer for the caring profession*. Pretoria: Van Schaik.

- Deci, E., & Ryan, R. 2000. The 'what' and 'why' of goal pursuits: human needs and the self-determination of behaviour. *Psychological Inquiry*, 11(4): 227-268.
- DoE. 2001. *National plan for higher education*. Ministry of Education. Pretoria.
- Elliot, A., & Thrash, T. 2002. Approach-avoidance motivation in personality: approach and avoidance temperaments and goals. *Journal of Personality and Social Psychology*, 82, 804-818.
- Goodenow, C. 1993. Classroom belonging among early adolescents: relationships to motivation and achievements. *Journal of Early Adolescence*, 13, 21-43.
- Houle, C. 1961. *The inquiring mind*. Madison: University of Wisconsin Press.
- HSRC. 2003. *Human resources development review: education, employment, and skills in South Africa*. Cape Town: HSRC Press
- Kasser, T., & Ahuvia, A. 2002. Materialistic values and well-being in business students. *European Journal of Social Psychology*, 32, 137-146.
- Kasser, T., Ryan, R., Couchman, C., & Sheldon, K. 2004. Materialistic values: their causes and consequences. In T. Kasser & A. Kanner (Eds.). *Psychology and consumer culture: the struggler for a good life in a materialistic world*, (pp. 11-28). Washington: American Psychological Association.
- Kassiem, A. 2007. Educators feel crunch of teacher shortage. IOL Bulletin. [online]. url: http://www.iol.co.za/index.php?from=rss_South+Africa&set_id=1&click_id=13&art_id=vn20070520235116644C994448. accessed: 18th August 2007.
- Kroger, J. 2000. *Identity Development: Adolescence through adulthood*. Thousand Oaks: Sage Publications.
- Mead, G. H. 1934. *Mind, self, and society*. Chicago: University of Chicago Press.
- Meissner, W. W. 1988. *Treatment of patients in the borderline spectrum*. Northvale, NJ: Jason Aronson.
- Miles, M.B. & Huberman, A.M. 1994. *Qualitative data analysis: an expanded sourcebook*. Thousand Oaks: Sage.
- Nilsson, P. 2003a. Teacher demand and supply in Africa. Education International Working Papers, No. 12: Education for all. Brussels: Education International.
- Nilsson, P. 2003b. Teacher demand and supply in South Asia. Education International Working Papers, No. 12: Education for all. Brussels: Education International.
- Pelletier, L., Dion, S., Tuson, K., & Green-Demers, I. 1999. Why do people fail to adopt environmental behaviours? Towards a taxonomy of environmental amotivation. *Journal of Applied Social Psychology*, 29, 2481-2504.
- Ryan, R. M. 1993. Agency and organization: Intrinsic motivation, autonomy and the self in psychological development. In J. Jacobs (Ed.), *Nebraska symposium on motivation: Developmental perspectives on motivation*, vol 40, pp 1-56. Lincoln: University of Nebraska Press.
- Ryan, R., & Connell, J. 1989. Perceived locus of causality and internalisation: examining reasons for acting in two domains. *Journal of Personality and Social Psychology*, 57, 749-761.
- Ryan, R., Sheldon, K., Kasser, T., & Deci, E. 1996. All goals are not created equal: an organismic perspective on the nature of goals and their regulation. In P.M. Gollwitzer & J.A. Bargh (Eds.). *The psychology of action: linking cognition and motivation to behaviour*, (pp. 7-26). New York: Guilford.
- Sagiv, L., & Schwartz, S. 2000. Value priorities and subjective wellbeing: direct relationships and congruity effects. *European Journal of Social Psychology*, 30, 177-198.

- Saunders, M., Lewis, P., & Thornhill, A. 2007. *Research methods for business students*, 4th ed., Harrow, Prentice-Hall
- Schunk, D. 2004. *Learning theories: an educational perspective*. Ohio: Pearson
- Sheldon, K., & Kasser, T. 1995. Coherence and congruence: two aspects of personality integration. *Journal of Personality and Social Psychology*, 68, 531-543
- Sheldon, K., Ryan, R., Deci, E., & Kasser, T. 2004. The independent effects of goal contents and motives on well-being: its both what you pursue and why you pursue it. *Personality and Social Psychology Bulletin*, 30, 475-486.
- Sikkies, M. 2001. The teacher shortage: how to get new talent into needy classrooms. *Dossier of Education International Magazine* (May 2001).
- Sinsicalco, M. 2002. *A statistical profile of the teaching profession*. Geneva: ILO/UNESCO.
- Sirgy, M. 1998. Materialism and quality of life. *Social Indicator Research*, 43, 227-260.
- Tabulawa, R. 2005. PBRs is bad news for teachers and education. *The Botswana Gazette*, June 10, 8
- TSM. 2006. Report on the state of teacher supply and demand in Botswana. Teaching Service Management, Gaborone, Government Printer
- TSM. 2007. Report on the status of applicants to Teacher Education Colleges in Botswana. Teaching Service Management, Gaborone, Government Printer
- UN. 2003. Millennium development goals. [Online]. Available url: www.un.org/millenniumgoals/index.html. Accessed: 5th March, 2003.
- UNESCO. 2003. *Annual statistical yearbook*. [Online]. Available url: www.qesdb.cdie.org/ged/index.html. Accessed: 26th August, 2003.
- UNESCO. 2005. Global monitoring report. Paris.
- Vallerand, R., Fortier, M., & Guay, S. 1997. Self-determination and persistence in a real-life setting: toward a motivational model of high school dropout. *Journal of Personality and Social Psychology*, 72, 1116-1176.
- Vansteenkiste, M., Lens, W., Dewitte, S., De Witte, H., & Deci, E. 2004. The 'why' and 'why not' of job search behaviours: their relation to searching, unemployment experience, and well-being. *European Journal of Social Psychology*, 34, 345-363.
- Vansteenkiste, M., Simons, J., Lens, W., Sheldon, K., & Deci, E. 2004. Motivating learning, performance and persistence: the synergistic role of intrinsic goal-content and autonomy-supportive context. *Journal of Personality and Social Psychology*, 87, 246-260.
- Vansteenkiste, M., Simons, J., Lens, W., Soenens, B., & Matos, L. 2005. Examining the motivational impact of intrinsic versus extrinsic goal framing and autonomy-supportive versus internally controlling communication style on early adolescents' academic achievement. *Child Development*, 76(2):483-501
- Williams, G., Cox, E., Hedberg, V., & Deci, E. 2000. Extrinsic life goals and health risk behaviours among adolescents. *Journal of Applied Psychology*, 30, 1756-1771.
- Woolfolk A 2004. *Educational psychology*. 9th edition. Boston: Allyn & Bacon.
- World Bank. 2003. *Accelerating progress towards Education for All (EFA): the fast track initiative*. Brussels.

IntechOpen

IntechOpen



Advances in Technology, Education and Development

Edited by Wim Kouwenhoven

ISBN 978-953-307-011-7

Hard cover, 474 pages

Publisher InTech

Published online 01, October, 2009

Published in print edition October, 2009

From 3rd to 5th March 2008 the International Association of Technology, Education and Development organised its International Technology, Education and Development Conference in Valencia, Spain. Over a hundred papers were presented by participants from a great variety of countries. Summarising, this book provides a kaleidoscopic view of work that is done, all over the world in (higher) education, characterised by the key words 'Education' and 'Development'. I wish the reader an enlightening experience.

How to reference

In order to correctly reference this scholarly work, feel free to copy and paste the following:

Byron Brown and Ntonghanwah Forchew (2009). Exploratory Investigation into Preservice Teachers' Career-Goal Contents and Their Relationships with Class Participation Motivation in Higher Education in South Africa, *Advances in Technology, Education and Development*, Wim Kouwenhoven (Ed.), ISBN: 978-953-307-011-7, InTech, Available from: <http://www.intechopen.com/books/advances-in-technology-education-and-development/exploratory-investigation-into-preservice-teachers-career-goal-contents-and-their-relationships-with>

INTECH
open science | open minds

InTech Europe

University Campus STeP Ri
Slavka Krautzeka 83/A
51000 Rijeka, Croatia
Phone: +385 (51) 770 447
Fax: +385 (51) 686 166
www.intechopen.com

InTech China

Unit 405, Office Block, Hotel Equatorial Shanghai
No.65, Yan An Road (West), Shanghai, 200040, China
中国上海市延安西路65号上海国际贵都大饭店办公楼405单元
Phone: +86-21-62489820
Fax: +86-21-62489821

© 2009 The Author(s). Licensee IntechOpen. This chapter is distributed under the terms of the [Creative Commons Attribution-NonCommercial-ShareAlike-3.0 License](https://creativecommons.org/licenses/by-nc-sa/3.0/), which permits use, distribution and reproduction for non-commercial purposes, provided the original is properly cited and derivative works building on this content are distributed under the same license.

IntechOpen

IntechOpen