“I learn for a job promotion!“: the role of outcome-focused career goals in motivating distance learners to learn

Clarence Ng

To cite this article: Clarence Ng (2018): “I learn for a job promotion!“: the role of outcome-focused career goals in motivating distance learners to learn, Distance Education, DOI: 10.1080/01587919.2018.1476839

To link to this article: https://doi.org/10.1080/01587919.2018.1476839

Published online: 20 Jun 2018.

Submit your article to this journal

Article views: 14

View Crossmark data
"I learn for a job promotion!": the role of outcome-focused career goals in motivating distance learners to learn

Clarence Ng

Learning Sciences Institute Australia, Australian Catholic University, Brisbane, Australia

ABSTRACT
Outcome-focused career goals are concerned about studying for tangible career benefits. To what extent do these goals motivate distance learners to learn? Using a mixed-method design, Study 1 found that career-focused learners, when compared with non-career-focused counterparts, had a propensity to endorse outcome-focused career goals, use surface strategies, value their learning, and achieve better course results. Interview findings showed that career-focused learners used a strategic approach to ensure the timely completion of tasks and examination preparation. Study 2 located two groups of career-focused learners (autonomous and controlled) who endorsed outcome-focused career goals, alongside a non-career-focused group. MANOVA analyses found that autonomous and non-career-focused learners had engaged learning patterns. Although controlled learners were less engaged in learning, they achieved better results. It was concluded that outcome-focused career goals are significant sources of motivation for distance learners, despite being extrinsic to learning.

ARTICLE HISTORY
Received 5 September 2017
Accepted 11 May 2018

KEYWORDS
Motivation; career; achievement goals; learning and achievement

Introduction

In the era of globalization, a pivotal role of higher education is to fulfil an economic imperative to produce skilled graduates capable of working in knowledge economies. In line with this development, many adult learners enrol in distance-learning programmes to achieve desired career outcomes, such as improvement of career prospects (Ng, 2008, 2012). Kember, Hong, Ho, and Ho (2011), in their study of Chinese university students’ learning motivation, maintained that “many were motivated to apply for particular programmes because they had a career in mind” (p. 220). There is, however, a dearth of published research, which has systematically investigated the effects of pursuing career outcomes, or outcome-focused career goals, in different higher education settings, including the distance mode of learning, and examined how these widely held motivations may influence learning and achievement. The current paper reports findings derived from two studies designed to bridge this gap.

Theoretically, viewing distance learning from a career-goal perspective facilitates a better understanding of distance learners’ learning motivation associated with pursuing
career outcomes by unveiling the underpinning cognitive, affective and behavioural responses. Additionally, the current research on outcome-focused career goals is significant for two practical considerations. First, distance learners are predominantly working adults who self-finance their higher education through distance learning. It is unwise, and unlikely, for distance learners not to take career outcomes into consideration in distance learning. Second, many working adults may drop out of their distance-learning programmes (Simpson, 2013). It is important to understand the extent to which learning for career outcomes can support the distance-learning journey, given the concern about dropout.

**What are outcome-focused career goals?**

Goals influence cognition, affect and behaviour (Dweck, 1986; Fishbach & Ferguson, 2007). Fishbach and Ferguson (2007, p. 493) defined goals as “a cognitive representation of a desired end-point that impacts evaluations, emotions and behaviors”. Aligning with Fishbach and Ferguson (2007), outcome-focused career goals refer to distance learners’ cognitive representations of career outcomes as desired end points, which they intend to achieve through distance education. The outcome focus of these goals is defined in terms of tangible benefits derived from their actualization and the personal valence attached to goal pursuit, which can involve both concrete outcomes (salary raise or promotion) and abstract outcomes (improved career prospect).

As cognitive representations of what one intends to accomplish in the future, outcome-focused career goals provide standards for evaluating progress and directing actions (Carver & Scheier, 1998; Ng, 2010). They also represent a distal goal that motivates current actions (Carver & Scheier, 1998). In the context of distance learning, the actualization of these distal goals involves a lengthy learning process whereby different combinations of orientations, strategies and attitudes come into play, dependent upon the actions considered by the distance learner to be facilitative towards their desired career outcomes. It is important to point out that whilst outcome-focused career goals are themselves motivational, distance learners’ choice of action to achieve them, or the means they select to actualize these desired ends, are also important sources of motivation (Hennecke & Freund, 2014), as these action choices directly influence the process of learning whilst outcome-focused career goals provide an overall direction.

**Research on career goals**

Studies that used samples of campus-based learners (e.g. Livneh & Livneh, 1999; Mansfield & Beltman, 2014) and distance learners (e.g. Lyall & McNamara, 2000; Ng, 2008) have consistently highlighted the importance of employment and career considerations to learning. However, studies that have examined the effects of career goals on learning are infrequent and rare, which is incongruent with the widely held notion of learning for career development at the tertiary level (Kember et al., 2011).

In the study by Livneh and Livneh (1999), students’ desire for job advancement was part of a construct of external motivation that predicted time spent on tasks. Nevertheless, it was unclear whether such a prediction was due to concerns about career development or professional learning as the construct contained items assessing
learning opportunities as well as job advancement. Ng (2010) separated career-related motivation into professional learning goals and outcome-focused career goals. In this study, outcome-focused career goals predicted learners’ positive learning attitudes, but these goals also predicted low levels of self-monitoring, especially when learners’ sense of control was low. In another study, Ng (2008) located a group of distance learners who endorsed outcome-focused career goals alongside other achievement goals. Compared to distance learners in other groups, these career-focused learners used fewer strategies to regulate their learning and focused less on deep understanding. Albeit with less-engaged learning patterns, these career-focused learners had better achievement results than those attained by other learner groups. It seems that distance learners’ outcome-focused career goals may bring mixed blessings to learning and achievement. There is a need to reconcile how it can be that these goals, on one hand, appear responsible for drawing learners away from the pursuit of learning whilst also being attributable to positive attitudes and better achievement.

Profiling career-focused learners’ learning patterns using achievement goal orientations

Following Freund and Hennecke (2015), this study conceptualizes outcome-focused career goals and achievement goals as two distinct categories of goal constructs, which are connected in a means-end relationship. Although outcome-focused career goals represent distal desired end states, achievement goals are immediate goals that distance learners adopt for engaging in specific learning tasks in order to achieve their desired career outcomes. In this sense, achievement goals, defined as perceived purposes for learning and achievement, are process-focused goals guiding cognitive, affective and behavioural responses for learning during the lengthy journey leading towards the desired career outcomes (Dweck, 1986).

Achievement goal research has focused predominantly on contrasting the effects of two main categories of goals on learning and achievement, mastery and performance goals. Elliot (2005, p. 58) called these two types of goals the “big two” in achievement goal research. Subsequent studies (see Senko, Hulleman, & Harackiewicz, 2011) have further elaborated the approach and avoidance orientations of these two types of achievement goals. Mastery goals are task-focused goals that draw students’ attention to how well they have learnt. The approaching form of mastery goals is concerned about competence improvement and development whilst mastery avoidance goals focus on avoiding failure of learning whatever is possible. In contrast, performance goals are achievement-focused goals; they draw students to seek opportunities to demonstrate their performance or to outperform others. The approaching form of performance goals focuses students on demonstrating their competence or gaining favourable evaluation of their abilities whilst performance-avoidance goals are concerned with hiding a lack of ability or relatively poor levels of performance (Senko et al., 2011). This current study focused on the original big two, that is, mastery- and performance-approach goals. Research shows that these two main types of achievement goals are significant sources of motivation for distance learners (e.g. Ng, 2015; Remedios & Richardson, 2013).

Three decades of research have confirmed that each type of achievement goal will run off a different programme of motivation, thoughts, emotions and behaviours (Elliott &
Dweck, 1988), and hence different learning profiles are linked to specific achievement goals. Three distinct theoretically grounded and empirically verified goal profiles can be identified, that is, achievement-focused, task-focused and multiple-goal profiles. Each of these goal profiles is a coalescence of strategies, feelings and behavioural responses brought forth by different types of achievement goals (Dweck, 1986; Vansteenkiste, Lens, Elliot, Soenens, & Mouratidis, 2014). Wormington and Linnerbrick-Garica (2016) reviewed studies on goal profiles and confirmed that task-focused profiles (focusing predominately on mastery-approach goals) and multiple goals profiles (focusing on both mastery- and performance-approach goals) are most commonly found, whilst achievement-focused profiles (focusing on performance-approach goals or combining performance-approach and performance-avoidance goals) are less frequently observed. Their review study also located goal profiles dominated by avoidance goals; however, these are not the focus of the current study.

A task-focused profile is dominated by mastery-approach goals. In this profile, students adopt strong mastery-approach goals but weak performance-approach goals and weak avoidance goals. Learners who hold a task-focused profile are more likely to use deep strategies, regulate their learning, feel interested in learning and consider learning valuable (Kolíc-Vehovec, Rončević, & Bajšanski, 2008). However, a task-focused profile is not necessarily associated with high achievement levels as mastery-approach goals are often unrelated to achievement (Pekrun, Elliot, & Maier, 2009).

An achievement-focused profile is dominated by performance-approach goals or simultaneous endorsement of both performance-approach and -avoidance goals (del Mar Ferradás, Freire, Núñez, Piñeiro, & Rosário, 2017). In this profile, students care less about how well they learn but focus specifically on demonstrating competence or hiding incompetence. Luo, Paris, Hogan, and Luo (2011) showed that success-oriented students who had strong performance-approach goals in their profile were more efficacious, engaged in classwork and homework, valued learning tasks and regulated their study time. It can be expected that learners who hold an achievement-focused profile dominated by strong performance-approach goals are likely to have better achievement results (Linnenbrink-Garica, Tyson, & Patall, 2008). To ensure high achievement, achievement-focused learners will, in some cases, endorse surface strategies alongside regulatory strategies (Ng, 2009; Senko, Hama, & Belmonte, 2013). However, when performance-avoidance goals are strong, maladaptive motivation, withdrawal of effort, and poor performance can be expected (del Mar Ferradás et al., 2017).

A multiple-goal profile is characterized by simultaneous endorsement of both mastery- and performance-approach goals. Increasingly more studies (Kolíc-Vehovec et al., 2008; Luo et al., 2011) have found that multiple-goal students endorsed an engaged learning pattern characterized by using deep learning strategies and various forms of regulatory strategies, high levels of control and self-efficacy, and positive attitudes including learning interest and valuing of learning. However, multiple-goal learners do not necessarily have better results. This may be related to the need to manage different goals (Ng, 2008). In addition, the presence of strong mastery-approach goals in one’s goal profile may focus learners’ attention on learning and fail to draw sufficient attention to assessment areas, which the tutors and lecturers consider important (Senko et al., 2011).

The key question is whether career-focused learners who hold strong outcome-focused career goals would endorse a task-focused, achievement-focused or multiple-goal–focused profile in order to facilitate their pursuit of desired career outcomes. These career-focused learners will consider themselves successful when they
can achieve desired career outcomes, which provide an evaluative standard centring predominantly on tangible career benefits, such as gaining a professional qualification, which can mostly be achieved towards the end of a lengthy learning process and are extrinsic to the learning process. It is likely that career-focused learners will focus on performance-approach goals in order to secure desired career outcomes, resulting therefore in the endorsement of either an achievement-focused profile or multiple-goal profile, whilst the chance of holding an exclusive focus on mastery-approach goals, that is, endorsing a task-focused profile, is relatively slim. Previous studies (e.g. Eppler & Harju, 1997; Ng, 2008; Remedios & Richardson, 2013) showed that distance learners often endorse a range of goals in learning including both mastery-approach and performance-approach goals. Given the fact that learning is a precursor to high performance, career-focused learners will be more likely to adopt a multiple-goal profile than focusing solely on achievement (Ng, 2008).

The discussion of goal profiles that may be adopted by career-focused learners needs to include underlying reasons for their career pursuit. Many distance learners may embark on their learning journey in response to the employer’s demands despite not considering these goals to be their own choice. In this case, they feel controlled in their career goal pursuit. According to self-determination theory (Deci & Ryan, 1985), learners who feel controlled will be less engaged in their learning compared to those who feel autonomous (Koestner, Otis, Powers, Pelletier, & Gagnon, 2008). In addition, Senko and Tropiano (2016) found that pursuing performance-approach goals for controlled reasons will lead to maladaptive behaviours such as self-handicapping actions. Compared to controlled students, autonomous students tend to use more mastery-approach goals (Vansteenkiste et al., 2014). It follows that an important question must be whether career-focused learners, who are autonomous in their pursuit of career outcomes, will learn differently compared to those who feel extrinsically controlled.

**Overview of studies**

Will distance learners who learn with outcome-focused career goals engage differently in learning compared to those who do not endorse such career goals? Will distance learners who feel autonomous in their career goal pursuit learn differently compared to those who feel controlled? The current paper reports findings derived from two exploratory studies addressing these questions using a person-centred approach to clarify the effects of outcome-focused career goals at the individual level (Reizle, 2013). Study 1 is a mixed-method study commencing with a survey, followed by a semi-structured interview with selected distance learners who learnt with outcome-focused career goals. Building on the findings of Study 1, Study 2 explored whether outcome-focused career learners who feel autonomous would learn differently when compared to those who feel controlled in their career pursuits.

**Study 1**

**Aims and hypothesis for survey**

Study 1 examined differences in learning and achievement between distance learners who learn with outcome-focused career goals and those who do not have these motivations. It
was hypothesized that both types of learners are likely to endorse a multiple-goal profile, as in previous studies, as in previous studies (Ng, 2015; Remedios & Richardson, 2013), which showed that distance learners often endorse a range of goals for learning. In addition, career-focused learners, compared to noncareer-focused learners, would consider their learning important and use more achieving and surface strategies but fewer deep strategies. Career-focused learners would achieve better course scores.

Participants for survey

The participants were drawn for a purposeful sample consisting of distance learners who were likely to hold different levels of outcome-focused career goals. They were drawn from the Bachelor of General Studies (BGS; \(N = 76\)) and Bachelor of Primary Education (BPE; \(N = 68\)) offered by a distance-learning university in Hong Kong. These two degree programmes differed in terms of career articulation and targeted student groups. The BGS programme was a general degree programme, with its flexible programme structure allowing distance learners to select from a wide range of courses to create a personalized degree programme. This degree programme does not lead to a specific career pathway or professional qualification. In contrast, the BPE programme is a two-year top-up programme designed to enable practising teachers to upgrade their professional qualification. An invitation letter together with a copy of the questionnaire was sent to distance learners \((N = 400)\) who were enrolled in a selected year-long course in these two programmes at the time of survey. One hundred and fifty learners responded (response rate = 37.5%) and returned the mailed questionnaire alongside a signed consent of participation. Six learners did not complete the questionnaire and were deleted from the data set. The final sample contained 144 distance learners from these two degree programmes, with 16.3% women and 83.7% men. These learners were adults, with 39.6% aged 21–30 years, 36.1% aged 31–40 years, 18.1% aged 41–50 years, 2.1% aged 51–60 years and 0.7% aged over 60 years. Five learners did not provide their age information. The two groups did not differ in gender mix, though the overall sample was gender-biased.

Measures

The main constructs are described in the following paragraphs. Sample items for each construct are shown in Appendix. The Cronbach’s alpha values for these constructs ranged from .62 to .82.

Outcome-focused career goals

Outcome-focused career goals assessed distance learners’ desired career outcomes, which they intended to achieve at the end of their distance-learning programme. In this study, these career goals included, for example, meeting the employer’s demand and getting a professional qualification. Four items assessing these career goals were taken from Ng (2012).

Mastery- and performance-approach goals

Mastery-approach goals assessed the extent to which distance learners learnt with a focus on improvement and knowledge development. Performance-approach goals
assessed learners’ intention to achieve good results and outperform others. Items for these two types of goals were adapted from the Patterns of Adaptive Learning Scales (Midgley, Maehr, Hruda, Anderman, Anderman, Freeman, & Urdan, 2000). Five items assessed mastery-approach goals; two items formed the construct of performance-approach goals, after the removal of several items to improve the scale consistency.

**Strategies**

Three types of strategies were included: deep, achieving and surface strategies. Deep strategies included strategies, for example, relating new learning to prior knowledge, which promote deep understanding. In contrast, surface strategies included strategies such as rote learning, which lead to superficial understanding. Achieving strategies focus learners on organizational and regulatory strategies to ensure high achievement. Items that assess these strategies were adapted from Biggs (1987). Each type of strategy was assessed by four items. In constructing the surface-strategy construct, two items were removed to improve the scale consistency.

**Learning interest and valuing attitudes**

Learning interest assessed whether learners enjoy distance learning and find the materials interesting. Valuing attitudes assessed whether they consider distance learning to be valuable and important for career development and other everyday purposes. The items on learning interest were adapted from the Motivated Strategy Learning Questionnaire (Pintrich, Smith, Garcia, & Mckeachie, 1993). Items assessing valuing attitudes were taken from Ng (2008). Each of these constructs was assessed by two items.

**Career considerations for enrolment**

Distance learners responded to an item, which required them to indicate if they enrolled in their degree programme with or without career considerations (Was your decision to enrol in the current programme due to career considerations?). Distance learners were to respond either “yes” or “no”.

**Course scores**

Indicators of distance learners’ course performance were collected from relevant course coordinators. Three performance indicators were included: average assignment scores, examination scores and overall course scores. These scores ranged from 0 to 100. The overall course scores were based on a weighted combination of average assignment scores and examination scores, which varied between different courses.

**Survey results**

Table 1 shows the descriptive statistics and correlation results. All the BPE learners (N = 68) attributed their enrolment to career considerations whilst all but four BGS learners (N = 72) did not have these considerations when they enrolled. An ANOVA analysis confirmed that BPE learners had stronger outcome-focused career goals (M = 3.66; SD = .69) than did BGS learners (M = 2.83; SD = .96), F(1,143) = 35.26, p < .0001.

Three sets of MANOVA analyses (Table 2) were conducted to examine whether career-focused BPE learners were different from noncareer-focused BGS learners in their achievement goals, use of strategies, learning interests and valuing attitudes. The
results showed that these two groups did not differ in their achievement goals. However, they differed in their use of strategies (Pilliai’s trace = .06; F(3, 138) = 2.94, p < .05, $\eta^2 = .06$), learning interest and valuing attitudes (Pilliai’s trace = .20; F(2,136) = 17.22, p < .001, $\eta^2 = .20$). In particular, the career-focused learners had stronger surface strategies than their noncareer-focused counterparts, whilst their use of deep and achieving strategies were not significantly different. Career-focused learners considered their course useful for their job and other daily engagements, whilst noncareer-focused learners thought that their courses were interesting. The two groups of learners also differed in their achievement scores (Pilliai’s trace = .27; F(2, 140) = 17.11, p < .001, $\eta^2 = .27$). Although the two groups did not differ significantly in their assignment scores, career-focused learners did better in the examination and had better overall course scores. The effect sizes, as shown in Table 2, indicated small to high levels of effect (Cohen, 1988). The effect size of examination scores was rather large (.22), indicating pronounced difference between these two groups in their examination scores, whilst the differences in surface strategies, learning interest and valuing were less marked. However, at the individual level, these differences signify a rather particular approach to learning amongst the career-focused learners. The interview findings, in the section that follows, revealed how career-focused learners used learning strategies strategically to achieve good results.
Interview

Aim, interviewees and interview questions
To elaborate the survey findings, eight career-focused learners were selected from the performing learners group in the BPE programme for interview. These interviewees, four men and four women, were qualified, practising teachers who enrolled in a top-up degree programme to upgrade their professional qualification in teaching to a degree level. They were aged between 28 and 33 and their teaching experiences ranged from 5 to 10 years. The interview questions included: Why did you enrol in the programme? What did you intend to achieve? How did you study for this course? Have you experienced any difficulties and how did you overcome them? These semi-structured interviews lasted for about 20 min and were conducted at the end of the course by a research assistant.

Interview analyses and results
The data-analytical process began with reading and re-reading of all the interview transcripts followed by the development of a coding system to categorize interviewees’ responses. The coding system was revised after two trained research assistants individually coded two transcripts and their coding results were compared. Differences in coding were solved by the author. Using the revised coding system, all the transcripts were coded by the research assistants and their results compared to ensure consistency. The inter-rater reliability exceeded 95%. Based on the coding results, related and similar codes were combined to develop analytical themes. For example, personal reasons and employer’s expectations were combined to form the theme “reasons for enrolment”. Distance learners’ reported goals for learning, including mastery-approach goals and performance-approach goals, were combined to form a theme on “learning motivation”. Finally, codes on learning strategies and difficulties were combined to form the theme “studying the course”. These analytical themes are described as follows:

Reasons for enrolment. The interviewees’ motivation for enrolment included getting a professional qualification, upgrading professional status in teaching, seeking promotion, and improving career prospects and job security. All the interviewees mentioned at least one of these outcome-focused career goals during the interview. In addition, the high level of flexibility in distance learning was another major reason for enrolment. The following are excerpts that describe these views:

I enrolled in the top-up program because it can upgrade my professional status. The government, and my school, want all the teachers to have a degree. This is very important to me. I want a promotion. (Interviewee 1, female, aged 30)

I do this program because I need it to improve my career prospect. The bottom line is: if I don’t complete this top-up degree, I may lose my teaching job. It is as simple as that. I am pleased that the Open University offers us this flexible choice. (Interviewee 4, female, aged 32)

I am eager to take this program. I can learn and I can secure my job in this school. (Interviewee 6, male, aged 30)

Six learners specifically mentioned that their school principals expected them to complete the top-up programme within a certain time period. The following excerpts
describe this perceived work demand. A notable finding was that the interviewees felt the need to meet their employer’s expectation by getting good results:

My principal expected me to finish the top-up degree in three years. He didn’t say why but I thought it was better to meet his expectation, and to get good results. I am a contracted teacher and it seems to me that my job security is at stake. (Interviewee 5, male, aged 28)

I was asked to take the top-up program. For some reasons, the principal was interested to know whether I am doing well in the program. And I am proud to tell him that I have had good results. (Interviewee 4, female, aged 32)

I took the degree with my colleagues. We were expected to complete it in two or three years. It was hard. I managed to get good results and the principal was happy to know that I am doing well and progressing. (Interviewee 7, male, aged 30)

**Learning motivation.** In addition to meeting the employer’s expectations, all the interviewees were keen to get good results and indicated that they had spent extra time to prepare for the examination. When asked why getting good results was important, two common reasons were given. Two interviewees explained that good results made them “feel capable”, whilst the rest used good results to monitor their progress and ensure that they were “on-track for graduation”. In line with their concern for good results, the interviewees unanimously described how they had struggled to complete the assignments, whilst spending extra time to prepare for the exam. They found it easier to prepare for the exam as it was held at a time when their school work was less intense. This offers important insights to understand why career-motivated learners had better examination scores than did noncareer-motivated learners, as shown in the survey results.

It was easier for me to work on the exam, which was held at the time when I was rather free. I spent a lot of my time to prepare for the exam in order to get a good grade. It accounts for 50% of the overall grade and I was hoping to do well as I don’t think I have done very well in the assignments. (Interviewee 2, female, aged 32)

All the interviewees considered the courses relevant to their teaching job. However, only two interviewees spoke specifically about the growth of interest in the courses.

**Studying the courses.** All but one interviewee limited their studies to the university-set course materials. They did not read extra materials, because as practising teachers, they constantly faced work pressure and time constraints. Interviewee 3 succinctly described these difficulties:

I can’t even finish my work and marking. I virtually find it hard to read any extra materials. (Interviewee 3, female, 33)

Interviewees reported different strategies to overcome time constraints due to work pressure, including cramming, delaying the study until weekends and school holidays, reading intensively, requesting help from the tutor, attending tutorials and discussing with colleagues. When asked whether they would learn well using these strategies, many expressed their anxiety and explained why they had engaged in learning in this specific way:
I know cramming is not good but what can you do when you have to finish marking all your students’ homework every day? I find that asking the tutor to explain the assignments helps. At least I know very quickly what to read and what not to read. (Interviewee 8, male, 30)

**Discussion**

As hypothesized, Study 1 survey results showed that career-focused and noncareer-focused learners endorsed multiple goal profiles adopting simultaneously mastery- and performance-approach goals. However, their multiple-goal profiles were rather different, which can be attributed to the presence of strong outcome-focused career goals, which career-focused learners endorsed. Whilst outcome-focused career goals might have shifted career-focused learners’ attention away from the learning process, resulting in the use of surface strategies over deep and achieving strategies, they achieved better results in the examination, as well as the overall course. Career-focused learners considered their learning valuable. These findings are in line with Ng (2012). The follow-up interview elaborated the survey results and revealed learners’ various reasons for enrolment, which were consistent with our conceptualization. Underpinning their outcome-focused career goals were concerns about meeting their employers’ expectations and demands, which to a great extent were their reasons for seeking and ensuring good performance. The follow-up interview provided insight to reconcile why surface strategies could link with better achievement levels in the examination and for overall course performance (Senko et al., 2013). These career-focused learners engaged in surface learning in a strategic manner. In doing so, they did not use deep or achieving strategies but focused on doing sufficient work to ensure good results, which included arranging timely completion of assignments and allowing extra time to prepare for the examination. The main reasons for adopting this strategic approach, as explained by the interviewees, were due to constant work pressure and meeting the employer’s expectation. This triggered the question about the effects of autonomous and controlled outcome-focused career goals on learning and achievement and the need to take into consideration the effects of work pressure. Study 2 addressed these issues.

**Study 2**

Building on Study 1, Study 2 examined the differential effects of autonomous and controlled pursuit of career outcomes on learning and achievement. It was hypothesized that distance learners who are autonomous in the pursuit of their career goals would be more likely to use deep strategies, regulatory strategies and feel more efficacious and in control during the learning process than would those who feel controlled.

**Participants**

Distance learners were drawn from five degree programmes offered by a distance-learning university in Hong Kong. These degree programmes included two career-articulated undergraduate programmes (Primary Education and Nursing) and three noncareer-articulated programmes (Chinese Humanities, General Studies and Social Sciences). Distance learners who took the nursing programme were registered nurses aiming to improve their professional status. It was likely that these nursing professionals enrolled in the programme out of
their own autonomy, whereas the teaching professionals in the education programme were likely to hold controlled career goals due to the demand of their school employer and the government’s policy focus at the time of research. An invitation letter together with a copy of the questionnaire was sent to distance learners \((N = 700)\) who were enrolled in a selected course in these programmes at the time of survey. Three hundred and ten learners (a response rate of 44.28%) completed the mailed questionnaire and sent it back with a signed consent agreeing to the release of their course scores. Nineteen questionnaires were incomplete and removed from the final data set, which contained 291 distance learners. Amongst these learners, 24.4% \((N = 71)\) were men and 72.9% \((N = 212)\) women; eight did not report their gender information. These learners were mature students with 1.4% aged under 20, 36.8% aged 21–30 years, 40.9% 31–40 years, 16.5% aged 41–50 years, 2.1% aged 51–60 years and 0.3% aged over 60 years. Six learners did not specify their age category.

**Measures**

Measures on goals (mastery, performance-approach and outcome-focused career goals), strategies (deep, achieving and surface strategies), learning interest, valuing attitudes and career consideration for enrolment were taken from Study 1. Study 2 added items assessing strategies for regulating learning, which included self-monitoring strategies (8 items), effort management (2 items), time management (2 items) and help-seeking (2 items). These four types of regulatory strategies are important for distance learners to manage the learning process, and their time and effort expenditure, and to seek help when necessary. Learners’ efficacy beliefs (2 items) and control beliefs (2 items) were also assessed as these beliefs are critical for regulating learning and motivation. All the items measuring this additional set of variables were adapted from the Motivated Strategy Learning Questionnaire (Pintrich et al., 1993). Study 2 also assessed distance learners’ perceived work pressure. Three items were written to assess this variable. The sample items for each construct are shown in Appendix. The Cronbach’s alpha values in this study ranged from .65 to .84. Due to varying assessment practices in different courses, assignment and examination scores were not available in all the courses in which the participants were enrolled. To facilitate comparison, course scores (ranging from 0 to 100) were used as the common indicator of distance learners’ learning performance, which were collected from relevant course coordinators at the end of the academic year.

To understand whether distance learners’ outcome-focused career goals are autonomous or controlled, distance learners responded to two questions about four specific different outcome-focused career goals: meeting the employer’s demand and expectation, improving career prospect and promotion opportunities, getting professional qualifications, and seeking a new career pathway. Distance learners were required to answer (1) whether they considered these outcome-focused career goals important (Was this career goal important for you when you enrolled in your degree programme?); and (2) whether they considered these goals autonomous (Do you pursue this career goal out of your own personal choice?). Distance learners responded by indicating their agreement, using “yes” or “no” options. Distance learners were also required to respond to three items assessing their levels of work pressure and time constraint on study due to work commitments.
Results

Table 3 shows means, standard deviations and correlations. Distance learners were divided into three different career-motivated groups based on their responses to the two questions assessing perceived importance and autonomy in relation to different outcome-focused career goals (see Table 4). Noncareer-focused learners indicated that they did not have any career considerations when they enrolled. In contrast, autonomous and controlled career-focused learners enrolled out of career concerns, though such consideration was derived from different sources amongst these two groups of learners.

(1) Noncareer-focused learners \((N = 85)\). This group did not learn with any career considerations; they did not consider any of the outcome-focused career goals important and did not rate these career goals as their own personal choice.

(2) Autonomous career-focused learners \((N = 109)\). This group did not take the degree programme in response to their employer’s demand. They rated this specific career goal unimportant and did not consider that it was their personal choice. Instead, they rated at least one of the three remaining outcome-focused career goals as being personally important and considered these goals their own personal choice.

(3) Controlled career-focused learners \((N = 97)\). This group took the degree to meet their employers’ demands. However, they did not rate this goal as their own personal choice. They also rated one of the other three career goals important but, again, they did not rate them as their personal choice.

ANOVA analytical results \((F[2,287] = 106.17, \ p < .0001)\) confirmed that autonomous \((M = 3.54; \ SD = .78)\) and controlled career-focused learners \((M = 3.56; \ SD = .75)\) had stronger outcome-focused career goals than did noncareer-focused learners \((M = 2.15; \ SD = .67)\). These three groups also differed from one another in terms of age \((\chi^2 [15, \ N = 282] = 43.93, \ p < .001)\) and gender \((\chi^2 [3, \ N = 280] = 9.95, \ p < .05)\). In particular, all three groups were dominated by females. As for age, the non-career motivated group was populated by older adults, whilst the other two groups were comprised of younger adults. These two factors were dummy-coded and entered as covariates in the subsequent analyses.

After controlling for the effects of age and gender, MANOVA analyses showed that these groups differed in the use of achievement goals \((\text{Pillai’s trace} = .11, \ F[4, 536] = 7.48, \ p < .0001, \ \eta^2 = .05)\), learning strategies, \((\text{Pillai’s trace} = .05, \ F[6, 534] = 2.68, \ p < .05, \ \eta^2 = .03)\), regulatory strategies \((\text{Pillai’s trace} = .10, \ F[8, 534] = 3.67, \ p < .0001, \ \eta^2 = .05)\) and learning beliefs \((\text{Pillai’s trace} = .25, \ F[12, 1068] = 8.07, \ p < .0001, \ \eta^2 = .08)\). Table 5 shows these results. The effect sizes ranged from .03 to .15, suggesting small and to medium effects. The most pronounced difference was found in valuing of learning.

Compared to other learner groups, the autonomous learners had the most engaged pattern of learning. These learners had significantly higher scores in both mastery- and performance-approach goals. They used more deep and achieving strategies. These learners also used more self-monitoring, effort management and help-seeking strategies to regulate their learning process. In terms of learning beliefs, they felt efficacious, held strong beliefs of control, valued their learning and showed strong interest in what they had learnt in the courses. Noncareer-focused learners were engaged and had a learning
Table 3. Mean, SD and correlation analyses.

<table>
<thead>
<tr>
<th></th>
<th>Mean (SD)</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
<th>8</th>
<th>9</th>
<th>10</th>
<th>11</th>
<th>12</th>
<th>13</th>
<th>14</th>
<th>15</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mastery-approach goals</td>
<td>3.80 (.57)</td>
<td>–</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Performance-approach goals</td>
<td>3.36 (.89)</td>
<td>.24**</td>
<td>–</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Outcome-Focused-career goals</td>
<td>3.14 (.97)</td>
<td>.11</td>
<td>.20**</td>
<td>–</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Deep strategies</td>
<td>3.19 (.60)</td>
<td>.55**</td>
<td>.26**</td>
<td>.07</td>
<td>–</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Achieving strategies</td>
<td>3.18 (.61)</td>
<td>.46**</td>
<td>.23**</td>
<td>.05</td>
<td>.52**</td>
<td>–</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Surface strategies</td>
<td>2.87 (.73)</td>
<td>.25**</td>
<td>.15**</td>
<td>.13*</td>
<td>.28**</td>
<td>.21**</td>
<td>–</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Self-monitoring strategies</td>
<td>3.15 (.53)</td>
<td>.39**</td>
<td>.21**</td>
<td>.08</td>
<td>.62**</td>
<td>.62**</td>
<td>.22**</td>
<td>–</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Effort management</td>
<td>3.56 (.62)</td>
<td>.29**</td>
<td>.16**</td>
<td>.02</td>
<td>.40**</td>
<td>.44**</td>
<td>.23**</td>
<td>.47**</td>
<td>–</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Time management</td>
<td>2.85 (.76)</td>
<td>.22**</td>
<td>.22**</td>
<td>.03</td>
<td>.26**</td>
<td>.54**</td>
<td>.16**</td>
<td>.35**</td>
<td>.39**</td>
<td>–</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Help seeking</td>
<td>3.02 (.82)</td>
<td>.13*</td>
<td>.10</td>
<td>.06</td>
<td>.36**</td>
<td>.28**</td>
<td>.04</td>
<td>.38**</td>
<td>.29**</td>
<td>.18**</td>
<td>–</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Efficacy beliefs</td>
<td>3.05 (.64)</td>
<td>.37**</td>
<td>.41**</td>
<td>.22**</td>
<td>.39**</td>
<td>.39**</td>
<td>.26**</td>
<td>.37**</td>
<td>.26**</td>
<td>.31**</td>
<td>.16**</td>
<td>–</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Control beliefs</td>
<td>3.77 (.63)</td>
<td>.39**</td>
<td>.25**</td>
<td>.16**</td>
<td>.41**</td>
<td>.35**</td>
<td>.12**</td>
<td>.33**</td>
<td>.24**</td>
<td>.20**</td>
<td>.04</td>
<td>.59**</td>
<td>–</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Interest</td>
<td>3.49 (.84)</td>
<td>.61**</td>
<td>.21**</td>
<td>.09</td>
<td>.51**</td>
<td>.34**</td>
<td>.23**</td>
<td>.32**</td>
<td>.25**</td>
<td>.22**</td>
<td>.14*</td>
<td>.46**</td>
<td>.47**</td>
<td>–</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Valuing attitudes</td>
<td>3.23 (.86)</td>
<td>.41**</td>
<td>.21**</td>
<td>.68**</td>
<td>.32**</td>
<td>.22**</td>
<td>.03</td>
<td>.24*</td>
<td>.13**</td>
<td>.13**</td>
<td>.18**</td>
<td>.32**</td>
<td>.31**</td>
<td>.45**</td>
<td>–</td>
<td></td>
</tr>
<tr>
<td>Work pressure</td>
<td>3.08 (.50)</td>
<td>.31**</td>
<td>.05</td>
<td>.28**</td>
<td>.24**</td>
<td>.19**</td>
<td>.08</td>
<td>.13*</td>
<td>.09</td>
<td>.09</td>
<td>.02</td>
<td>.13*</td>
<td>.21**</td>
<td>.27**</td>
<td>.49**</td>
<td>–</td>
</tr>
<tr>
<td>Course scores</td>
<td>57.96 (14.38)</td>
<td>−.10*</td>
<td>.12*</td>
<td>.08</td>
<td>−.06</td>
<td>−.09</td>
<td>.03</td>
<td>−.11</td>
<td>.07</td>
<td>.07</td>
<td>.05</td>
<td>.01</td>
<td>−.03</td>
<td>−.09</td>
<td>.03</td>
<td>.03</td>
</tr>
</tbody>
</table>

Note. *p < .05; **p < .01.
pattern similar to that held by autonomous learners, except that they had weaker scores in performance-approach goals, outcome-focused career goals, and valuing attitudes.

In contrast, controlled learners had less engaged learning patterns compared to autonomous and non-career motivated groups. In particular, controlled learners had the lowest scores in mastery- and performance-approach goals, use of deep, achieving, effort management and help-seeking strategies. Nevertheless, controlled learners had significantly better course scores than did autonomous and noncareer-motivated learners. The controlled learners had the highest score in surface strategies, though it was not significantly different from the other two groups. All learners from the three groups were under work pressure ($F(3, 385) = 1.09, p > .35$).

**Discussion**

The findings of Study 2 further clarified the relationship between learning, achievement and outcome-focused career goals. Distance learners’ personal autonomy plays an
important role in moderating the relationship. Career-focused learners who feel controlled would engage strategically to achieve high performance, whilst those who feel autonomous in their pursuit of career outcomes are driven by a strong multiple-goal profile and engaged pattern of learning which may not lead to better results (Senko et al., 2011).

Conclusion

This research project set out to investigate the learning profiles of career-focused learners who hold outcome-focused career goals that focus their attention on desired career outcomes. Two research questions were raised: Will distance learners who learn with outcome-focused career goals engage differently in learning compared to those who do not endorse such career goals? Will distance learners who feel autonomous in their career goal pursuit learn differently compared to those who feel controlled? The findings derived from both Study 1 and 2 repeatedly showed that career-focused learners endorsed a multiple-goal profile characterized by simultaneous use of mastery- and performance-approach goals. However, career-focused learners’ goal profiles were somewhat different from those held by noncareer-focused learners. In Study 1, career-focused learners’ profiles were characterized by strong surface strategies, valuing of learning, and better achievement. In Study 2, a similar pattern of difference was observed between noncareer-focused and controlled career-focused learners. To answer question 2, Study 2 found that autonomy in career goal pursuit would result in a multiple-goal profile that is more engaged, characterized by the use of deep and regulatory strategies, stronger sense of efficacy and control beliefs.

However, controlled career-focused learners had better course results, with the concern to meet the employer’s demand potentially driving their focus towards achievement.

These results clarify the motivational nature of outcome-focused career goals. First, these goals are important distal targets that will impact current actions. In the context of the current studies, it seems that such impact on current actions are demonstrated by learners’ strategic engagement using surface strategies, valuing attitudes to learning and a focal concern regarding achievement. Lyall and McNamara (2000) argued that distance learners may take a strategic approach to learning, which involves the use of surface strategies. In Study 1, the use of surface strategies was a way to overcome time constraints. Cramming was used to ensure timely completion of assignments. The interesting point here is that the interviewees acknowledged that these strategies may not necessarily lead them to better understanding. Ironically, their strategic approach led to better examination and course results. In Study 2, controlled learners’ outcome-focused career goals, were associated on the one hand with less-engaged learning patterns, and on the other, with better achievement levels. Obviously, learners with outcome-focused goals directed their focus on achievement in order to achieve the career outcomes their employers demanded. They learnt in a strategic manner. Koestner et al. (2008) argued that controlled learners would “engage in studying behaviors when the situation cues the behaviors, such as when there is an exam” (p. 1226). This is likely to be a part of controlled learners’ strategic engagement, which resulted in better achievement levels compared to autonomous learners. It is conceivable that, when learners are autonomous in their career motivation, such a situation-cued focus may give way to the development of an engaged learning pattern associated with a task-focused orientation, as shown amongst autonomous career learners in Study 2. This pattern is in line with studies that found a close association between autonomy and mastery goals (Benita, Roth, & Deci, 2014). In
other words, autonomous career learners’ engaged learning patterns cannot be attributed to their outcome-focused career goals but should instead be attributed to their strong mastery-approach goals. These results lend support to our conceptualization that outcome-focused career goals and achievement goals are two separate types of goals that are connected in a mean-ends relationship (Freund & Hennecke, 2015). In short, outcome-focused career goals are a source of extrinsic motivation that provides overall direction for learning and draw learners’ attention to achievement. However, these goals have rather limited positive effects on promoting learning engagement.

Given the findings, should outcome-focused career motivation be promoted? How should distance educators deal with learners’ outcome-focused career goals that appear to have limited motivational effects on the learning process? From a learning perspective, outcome-focused career goals should not be encouraged as they are likely to draw distance learners’ attention away from the learning process. Nevertheless, such a recommendation will be impractical in knowledge economies where adult learners are increasingly “forced” and expected to continuously improve their professional practices, meet new work requirements, and acquire new qualifications. In Kember et al.’s (2011) study, undergraduate interviewees “criticized their learning programs as not relating closely enough to future careers and thus not enhancing the career motivation” (p. 220). Similarly, the Study 1 interviewees told us how important it was for them to complete the degree programme. Ng’s (2008, 2012) studies found major groups of adult learners who endorsed outcome-focused career goals. Taken together, it is inappropriate to deliberately ignore distance learners’ outcome-focused career goals, regardless of their extrinsic nature.

Distance learners need multiple sources of motivation to support their engagement in distance learning (Ng, 2008), as well as to focus them on task completion and achievement. It is important to acknowledge that outcome-focused career goals are important motives driving distance learners to embark on a distance-learning journey. These goals provide a future orientation to focus distance learners on achievement and the timely completion of tasks. Without such career considerations, many will not enrol in, let alone successfully complete, distance learning. In practice, this means that distance educators, especially those running profession-related degree programmes, need to create a distance-learning environment where distance learners are encouraged to learn, to achieve, and to build their future career. Distance learners should also be warned about the negative effects that outcome-focused career goals can have on strategy use and learning beliefs, particularly when these goals are externally controlled.

There are several limitations of this study that the reader needs to take into consideration. First, the Cronbach’s alpha values of some constructs did not reach .70 (Cohen, 1988) and the current results should be interpreted with this limitation in mind. The current investigation did not include avoidance goals and their role in the goal profiles of career-focused learners is unclear. In addition, the current studies are limited by their cross-sectional designs. Given the fact that outcome-focused career goals are distal and future-oriented, it is important to examine the longitudinal effects of these goals and how they impact distance learners in different learning and achievement situations (cf. Ng, 2015). Due to various constraints, an interview phase was not included in the second study. Qualitative findings based on interview or observation should enrich our understanding of autonomous and controlled learners and how they engage in the distance-learning process. Finally, the current studies used samples of
working adults who studied through distance learning. The findings, therefore, should not be generalized to students who have limited work experiences or are developing visions for their career futures (Kember et al., 2011). Additional research is required to examine these career motivations and their effects on learning and achievement using other student groups across different modes of learning.

**Disclosure statement**

No potential conflict of interest was reported by the author.

**Notes on contributor**

**Clarence Ng** is associate professor and director of the learning and learners research concentration at the Learning Sciences Institute Australia, Australian Catholic University. Previous appointments include senior lecturer at Griffith University and assistant professor at the Open University of Hong Kong. His current research areas include reading engagement, academic aspiration, motivation, learning engagement and pedagogy.

**References**


### Appendix. Constructs and sample items.

<table>
<thead>
<tr>
<th>Construct</th>
<th>Sample items</th>
<th>Study 1</th>
<th>Study 2</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Outcome-focused</strong></td>
<td>I take this course and the related programme because I want to have a better career prospect.</td>
<td>.82 (4 items)</td>
<td>.85 (4 items)</td>
</tr>
<tr>
<td></td>
<td>I take this course and the related programme because I want to gain the related professional qualification.</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>I take this course and the related programme because I want to get a promotion.</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>I take this course and the related programme because I want to secure my current job and career future.</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Master-approach goals</strong></td>
<td>I take this course and the related programme because I want to learn something new.</td>
<td>.71 (5 items)</td>
<td>.76 (5 items)</td>
</tr>
<tr>
<td></td>
<td>I take this course and the related programme because I want to improve my understanding.</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Performance- approach</strong></td>
<td>I take this course and the related programme because I want to show that I am more capable than other students.</td>
<td>.79 (2 items)</td>
<td>.71 (2 items)</td>
</tr>
<tr>
<td></td>
<td>I take this course and the related programme because I want to get better results than my peers.</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Deep strategies</strong></td>
<td>Whilst studying this course, I think of real-life situations to which the materials that I am learning would be useful.</td>
<td>.74 (4 items)</td>
<td>.75 (4 items)</td>
</tr>
<tr>
<td></td>
<td>In reading new materials, I find that I’m continually reminded of the materials I’d already viewed before I am satisfied.</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Achieving strategies</strong></td>
<td>I try to work consistently throughout the term and review regularly when the exams are close.</td>
<td>.66 (4 items)</td>
<td>.73 (4 items)</td>
</tr>
<tr>
<td></td>
<td>I try to do all of my assignments as soon as possible after they have been set.</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Surface strategies</strong></td>
<td>I think browsing around is a waste of time, so I only study what’s given out in tutorials or in the course outlines.</td>
<td>.62 (2 items)</td>
<td>.65 (2 items)</td>
</tr>
<tr>
<td></td>
<td>I learn the materials in this course mainly by rote, going over and over them until I know them by heart.</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Interest</strong></td>
<td>I find this course interesting.</td>
<td>.83 (2 items)</td>
<td>.85 (2 items)</td>
</tr>
<tr>
<td></td>
<td>I enjoy studying the materials in this course.</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Valuing attitudes</strong></td>
<td>I value the materials in this course.</td>
<td>.65 (2 items)</td>
<td>.67 (2 items)</td>
</tr>
<tr>
<td></td>
<td>I think the materials in this course are useful.</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Self-monitoring</strong></td>
<td>When I am confused, I’ll read the relevant topics again.</td>
<td>.80 (8 items)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>When I find it difficult to understand some of the topics, I’ll change my usual study pattern and re-read the materials again.</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Effort management</strong></td>
<td>Even when the study materials are dull and uninteresting, I manage to keep working until I finish.</td>
<td>.69 (2 items)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>I work hard to do well in this course even if I don’t like what we are doing.</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Time management</strong></td>
<td>I make good use of the study time for this course.</td>
<td>.68 (2 items)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>I find it hard to stick to a study schedule.</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Help seeking</strong></td>
<td>When I don’t understand the materials in this course, I ask my tutor or others for help.</td>
<td>.84 (2 items)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>I try to identify students in my group whom I can ask for help if necessary.</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Efficacy beliefs</strong></td>
<td>I believe I will receive an excellent grade in this class.</td>
<td>.79 (3 items)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>I’m certain I can understand the most difficult concepts and theories presented in the course.</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Control beliefs</strong></td>
<td>If I study in appropriate ways, then I will be able to learn the materials in this course.</td>
<td>.74 (3 items)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>If I try hard enough I will understand the course materials.</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Work pressure</strong></td>
<td>I often work under pressure; I am often concerned about time constraints in work.</td>
<td>.71 (3 items)</td>
<td></td>
</tr>
<tr>
<td>Construct</td>
<td>Sample items</td>
<td>Study 1</td>
<td>Study 2</td>
</tr>
<tr>
<td>-------------------------------</td>
<td>------------------------------------------------------------------------------</td>
<td>---------</td>
<td>---------</td>
</tr>
<tr>
<td><strong>Outcome-focused career goals</strong></td>
<td>I take this course and the related programme because I want to have a better career prospect. I take this course and the related programme because I want to gain the related professional qualification. I take this course and the related programme because I want to get a promotion. I take this course and the related programme because I want to secure my current job and career future.</td>
<td>.82 (4 items)</td>
<td>.85 (4 items)</td>
</tr>
<tr>
<td><strong>Master-approach goals</strong></td>
<td>I take this course and the related programme because I want to learn something new. I take this course and the related programme because I want to improve my understanding.</td>
<td>.71 (5 items)</td>
<td>.76 (5 items)</td>
</tr>
<tr>
<td><strong>Performance- approach goals</strong></td>
<td>I take this course and the related programme because I want to show that I am more capable than other students. I take this course and the related programme because I want to get better results than my peers.</td>
<td>.79 (2 items)</td>
<td>.71 (2 items)</td>
</tr>
<tr>
<td><strong>Deep strategies</strong></td>
<td>Whilst studying this course, I think of real-life situations to which the materials that I am learning would be useful. In reading new materials, I find that I’m continually reminded of the materials I’d already viewed before I am satisfied.</td>
<td>.74 (4 items)</td>
<td>.75 (4 items)</td>
</tr>
<tr>
<td><strong>Achieving strategies</strong></td>
<td>I try to work consistently throughout the term and review regularly when the exams are close. I try to do all of my assignments as soon as possible after they have been set.</td>
<td>.66 (4 items)</td>
<td>.73 (4 items)</td>
</tr>
<tr>
<td><strong>Surface strategies</strong></td>
<td>I think browsing around is a waste of time, so I only study what’s given out in tutorials or in the course outlines. I learn the materials in this course mainly by rote, going over and over them until I know them by heart.</td>
<td>.62 (2 items)</td>
<td>.65 (2 items)</td>
</tr>
<tr>
<td><strong>Interest</strong></td>
<td>I find this course interesting. I enjoy studying the materials in this course.</td>
<td>.83 (2 items)</td>
<td>.85 (2 items)</td>
</tr>
<tr>
<td><strong>Valuing attitudes</strong></td>
<td>I value the materials in this course. I think the materials in this course are useful.</td>
<td>.65 (2 items)</td>
<td>.67 (2 items)</td>
</tr>
<tr>
<td><strong>Self-monitoring strategies</strong></td>
<td>When I am confused, I’ll read the relevant topics again. When I find it difficult to understand some of the topics, I’ll change my usual study pattern and re-read the materials again.</td>
<td>.80 (8 items)</td>
<td></td>
</tr>
<tr>
<td><strong>Effort management</strong></td>
<td>Even when the study materials are dull and uninteresting, I manage to keep working until I finish. I work hard to do well in this course even if I don’t like what we are doing.</td>
<td>.69 (2 items)</td>
<td></td>
</tr>
<tr>
<td><strong>Time management</strong></td>
<td>I make good use of the study time for this course. I find it hard to stick to a study schedule</td>
<td>.68 (2 items)</td>
<td></td>
</tr>
<tr>
<td><strong>Help seeking</strong></td>
<td>When I don’t understand the materials in this course, I ask my tutor or others for help. I try to identify students in my group whom I can ask for help if necessary.</td>
<td>.84 (2 items)</td>
<td></td>
</tr>
<tr>
<td><strong>Efficacy beliefs</strong></td>
<td>I believe I will receive an excellent grade in this class. I’m certain I can understand the most difficult concepts and theories presented in the course.</td>
<td>.79 (3 items)</td>
<td></td>
</tr>
<tr>
<td><strong>Control beliefs</strong></td>
<td>If I study in appropriate ways, then I will be able to learn the materials in this course. If I try hard enough I will understand the course materials.</td>
<td>.74 (3 items)</td>
<td></td>
</tr>
<tr>
<td><strong>Work pressure</strong></td>
<td>I often work under pressure; I am often concerned about time constraints in work.</td>
<td>.71 (3 items)</td>
<td></td>
</tr>
</tbody>
</table>