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Self-reflection, growth goals, and academic outcomes: A qualitative study

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Background. Goal-setting theory continues to be among the most popular and influential theories of motivation and performance, although there have been limited academic applications relative to applications in other domains, such as organizational psychology.

Aims. This paper summarizes existing quantitative research and then employs a qualitative approach to exploring academic growth via an in-depth reflective growth goal-setting methodology.

Sample. The study focuses on 92 UK final-year students enrolled in an elective advanced interpersonal skills and personal development module, with self-reflection and growth goal setting at its core.

Method. Qualitative data in the form of regular reflective written diary entries and qualitative questionnaires were collected from students during, on completion of, and 6 months following the personal growth goal-setting programme.

Results. About 20% of students' self-set growth goals directly related to academic growth and performance; students reported that these had a strong impact on their achievement both during and following the reflective programme. Growth goals that were indirectly related to achievement (e.g., stress management) appeared to positively impact academic growth and other outcomes (e.g., well-being). A follow-up survey revealed that growth goal setting continued to impact academic growth factors (e.g., self-efficacy, academic performance) beyond the reflective programme itself.

Conclusions. Academic growth can result from both academically direct and indirect growth goals, and growth goal setting appears to be aided by the process of simultaneous growth reflection. The implications for promoting academic growth via this unique learning and development approach are discussed.

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Goal-setting theory (GST; Locke & Latham, 1990, 2002, 2013) continues to be among the most popular and influential theories of motivation and performance. However, relative to application in other branches of psychology (e.g., organizational), there have been limited applications in academic settings. Quantitative methodologies have tended to dominate goal-setting research. This state of affairs has been driven by a need to measure objective changes in performance following goal-setting exercises, but has been insufficient for examining the detailed nature of the changes that occur. Particularly for studies that deal in 'growth goals' (Bauer & McAdams, 2004), or goals that are created to impact an individual's personal growth in life, we suggest that a qualitative approach is imperative for delving into the 'black box' of the change process (Haggis, 2002) and gaining access to the intricacies of the transformation that takes place (Harachi, Abbott, Catalano, Haggerty, & Fleming, 1999). Many quantitative studies have identified mediators (e.g., persistence) and moderators (e.g., feedback) of the effects of goal setting and have highlighted the statistical effects of these variables. To retain statistical power and to secure the generalizability of results, these studies have often concentrated on the identification of common mechanisms. Therefore, measurement and manipulation are focused on a small number of variables that can be examined using reliable and standardized measures. This approach, however, may fail to uncover important nuances and subtleties in the way that growth goal setting works for different people working towards similar growth goals, including the 'active ingredients' in the process (Levack, Dean, McPherson, & Siegert, 2014).

Accordingly, in this paper, we describe the application of a qualitative approach to research in growth goal setting that helps to address these issues. In doing so, we summarize relevant quantitative research related to goal setting in the academic context and then outline a qualitative approach to investigating academic growth via a diary-based reflective growth goal-setting methodology. Diaries are being increasingly employed to investigate social, psychological, and physiological processes within everyday situations in work, education, and vocational training (Kacewicz, Slatcher, & Pennebaker, 2007; Poppleton, Briner, & Kiefer, 2008). A fundamental benefit of diary methodology is that it permits the examination of reported events and experiences in their natural, spontaneous context, providing information complementary to that obtainable by more traditional research designs (Reis, 1994). Also, diary keeping reduces the likelihood of false retrospection due to the minimum amount of time elapsing between an experience and the account of this experience.

Specifically, we explore the self-selected 'personal' or 'life' growth goals of university students, with regard to (1) the nature and amount of academic performance-related growth goals chosen, (2) the 'active ingredients' (factors and processes) of the reflective growth goal-setting process that support the academic growth of students, and (3) the potential impact of reflective growth goal setting on academic growth beyond the reflective process. Gaining insight into the active processes and approaches impacting on academic growth will enable greater support and design of, and outputs from, individual students' growth goal-setting activities.

Quantitative studies: Goals and growth

Despite a previous long-standing reliance on correlational data to support goal setting in school settings, recent rigorous, randomized, and controlled studies have begun to yield strong evidence to support the positive and causal impact of personal-goal intervention programmes on student performance and general well-being (Morisano, Hirsh, Peterson,

Pihl, & Shore, 2010). In contrast to vague 'do your best' goals, researchers have shown that specific and difficult, yet attainable, goals across multiple domains lead to better task performance outcomes, with meta-analyses yielding effect sizes of 0.42 to 0.80 (Locke & Latham, 1990, 2002). When tasks are complex or multilayered, however, sometimes 'do your best' goals can ease performance anxiety and inspire better strategizing (e.g., setting specific or challenging learning goals vs. outcome-based strategies; cf. Locke & Latham, 2002; Seijts, Latham, & Woodwark, 2013).

This might be where the concept of 'growth goals' comes in. Sheldon, Kasser, Smith, and Share (2002) discussed several perspectives on the timing and causes of personal growth and concluded that although most of them point to environmental stresses (e.g., trauma, situational challenge, role transitions) as the main trigger for positive change, there was also evidence for personal-goal striving as an alternate and positively focused pathway for transformation. Strong links have been found between personal-growth goals and well-being. Bauer and McAdams (2004) reported evidence that undergraduates and other adults with high levels of well-being and maturity tended to plan their futures in terms of 'growth goals'. The more that short-term growth goals were aligned with long-term growth goals, the greater the well-being. Growth goals, by definition, explicitly aim for personal growth (Bauer & McAdams, 2004; Elliot, Murayama, Kobeisy, & Lichtenfeld, 2015; Martin, 2015).

Some researchers (Martin, 2013) have suggested that personal-growth goals represent a possible means of reconciling the two major categories of achievement goals (mastery and performance goals; Ames & Archer, 1988) into a single approach. Indeed, several researchers have concluded that practically, there is enough evidence on the positive impact of both mastery-approach goals (focused on the acquisition of new knowledge and skills) and performance-approach goals (also called ability goals, ego goals, or self-enhancing goals) to endorse a combined and multiple-goal approach (Diseth & Kobbeltvedt, 2010; Morisano, 2013; Pintrich, Conley, & Kempler, 2003). In a sense, all personally referenced achievement goals can be seen as growth goals. By definition, achievement goals involve the desire to improve one's performance on a given task or develop a skill (Dweck, 1986), and having a goal that one has not yet met implies the need to reach beyond one's current state. If a growth goal is energizing and able to increase goal-relevant focus, effort, and persistence (Locke & Latham, 2002), then theoretically, when used in the academic context, academic outcomes should improve accordingly. Our approach to growth goal setting required final-year undergraduate students to choose a combination of mastery and/or performance growth goals and continue with these for the duration of a university semester, while keeping an ongoing written diary.

The process of writing down growth goals is not entirely unique to the current study. In a randomized and controlled study on the effects of personal goal setting on academic achievement by Morisano *et al.* (2010), academically struggling undergraduate students were asked to imagine and free-write about their ideal futures and to articulate a series of related self-set goals and subgoals that would help them to actualize those futures. Each goal was to be personally relevant and related to a state, trait, or skill that the student wanted to attain in the proximal or distal future. In this sense, all goals were 'personal-growth' goals. The experimental procedure took place at the start of the academic year over one 2- to 2.5-hr session completed online at a time, place, and computer of the students' choosing (e.g., at home, at night). Eighty-five students were randomized to one of two conditions: 45 set and planned out personal goals related to their ideal future, and 40 (controls) completed a face-valid

placebo 'intervention' matched for time and the incorporation of writing tasks. Although students who completed the goal-setting exercise were not restricted in their self-set goals, which ranged from being interpersonal or social in nature (e.g., spend more time with family) to being focused on academics (e.g., grades or graduation) or health (e.g., reducing substance use), students were forced via the steps of the programme to be specific in formulating each goal and how they would achieve it. Furthermore, they were asked to write about its level of attainability, to articulate potential consequences of goal success, and to outline strategies for its achievement. Students evaluated and ranked each goal and affirmed their level of commitment to it.

At the end of the academic year, the goal-setting student group demonstrated statistically significant improvements in overall grades (30%), despite no baseline group differences in academic performance. Every participant in this group also maintained the full-time course load that they were required to be taking at the study's start, while 20% of control students dropped out of school or reduced to a part-time course-load in the following semester. In addition to academic performance improvements, students who set personal goals also reported significantly greater reduced negative affect compared to controls and attributed these reductions to the goal-setting process. This is not surprising, given that Emmons and Diener (1986) showed that the mere 'having' of self-rated important goals was as strongly correlated with positive affect as actually attaining those goals. Morisano *et al.*'s (2010) study provided quantitative causal evidence that detailing personally relevant goals and strategies for achievement across multiple life domains could significantly improve school performance on multiple levels over time. As stated by Bauer and McAdams (2004), '. . .goals – particularly long-term life goals – need not be fulfilled for their meanings to exert an influence on one's life' (p. 123). In our current study, students not only wrote their goals down, but continued to diarise about them, which made it possible to identify hitherto undiscovered 'active ingredients' potentially mediating the link between goals and academic achievement.

It has been suggested that the very process of setting personal-growth goals might induce a learning or mastery orientation (Seijts, Latham, Tasa, & Latham, 2004), the benefits of which might generalize to other domains. Hirsh, Mar, and Peterson (2012) suggested that performance improvements and reductions in negative affect, similar to those observed in Morisano *et al.*, might, in theory, be attributed to reductions in both psychological uncertainty and the associated experience of anxiety. Certainly, students and youth in general can suffer from decreased perceptions of academic control and uncertainty or anxiety about the future, and this can impact school performance (Perry, Hladkyj, Pekrun, Clifton, & Chipperfield, 2005; Ruthig, Perry, Hall, & Hladkyj, 2004). Accordingly, this paper will also present findings on the transfer of learning beyond the goal-setting programme itself and examine the potential impact on other performance areas and domains.

Method

Final-year UK business-school students attended a first semester, 15-week-long (October–January) optional module based on theoretical and practical approaches to personal-growth goal setting.

Sample

This paper reports on findings drawn from a cohort of 92 attendees in 2012/2013. Of these, 48 (52%) were female. They were studying one of five degree courses: Banking and Financial Management (*n* = 18, 20%), Accounting and Financial Management (*n* = 4, 4%), Retail Management (*n* = 17, 18%), Management Science (*n* = 24, 26%), and International Business (*n* = 29, 32%). All students were aged 21 or 22, except one aged 23, who had taken a break from studies prior to his final year. The majority (*n* = 72, 78%) were UK-born students, with English as their first language. Informed consent was obtained from all students to enable the use of their reports and diaries, and confidentiality was assured. All student names have been changed for this paper.

Approach to data collection

Each of the 92 students worked on 3 goals each. This resulted in a set of 276 goals to examine. In terms of goal focus, 35 of the 92 students worked on one or more goals of a specifically academic nature.

Formal growth goal setting ended as the first semester examination period started, but ran alongside other academic performance indicators such as coursework assignments. Students produced a 3,500-word report, plus an unlimited ongoing written diary. An end-of-module reflective review included questions related to academic progress and the impact of the reflective growth goal-setting process. Some of these data will be presented to address the first two key research questions: (1) What types of academic performance-related growth goals do students choose to set? and (2) What are the 'active ingredients' (factors and processes) of the reflective growth goal-setting process that support the academic growth of students?

A follow-up qualitative survey was emailed to all students following graduation asking about the continued impact of the growth goal setting on aspects of their lives, such as academic growth and achievement. As this was post-graduation, students could assess the perceived impact on their actual final-degree grade. A total of 27 students returned these questionnaires (28%), and of these, 10 were from those who had set academic growth goals. These data thus shed light on the third research question: (3) What is the potential impact of the reflective growth goal-setting programme on academic performance growth beyond the programme itself?

Approach to reflective goal setting

Students were required to set personal-growth goals and many of those included academic goals. An academic-growth goal might involve endeavouring to do better on a forthcoming examination compared with a previous examination (Martin, 2006, 2011). The reflective growth goal-setting programme took part in five stages as outlined in detail in Table 1. Students received lecture input on goal-setting theory (GST), models of reflection (Gibbs, 1988), and reflective diary keeping (Travers, 2011, 2013), along with lectures on key interpersonal skills and personal development theory and concepts. Background research for each growth goal was undertaken by students depending on the nature of the goal chosen. The process was further supported by each student attending a coaching meeting with the module lecturer, who was also an occupational psychologist. In accordance with GST, students were instructed to set specific, relevant, and challenging growth goals based on their self-awareness assessments and any feedback they could gather.

Table 1. Stages of reflective goal setting

Stage 1 – Self-Awareness
  Students engaged in a range of in-depth self-awareness activities to help them identify suitable goals for their personal development. Established personality measures and scales (e.g., Myers-Briggs Type Indicator or MBTI; Myers & McCaulley, 1985; Oxford Happiness Inventory; Hills & Argyle, 2002), along with several other tools and techniques for gaining feedback and self-insight (e.g., placement/internship appraisals and their old school reports) were used.

Stage 2 – Selecting Suitable Growth Goals
  Following the in-depth self-awareness analysis, students identified potential personal-growth goal areas. For example, they could choose to a) improve their focus and concentration; b) increase their ability to understand and learn new material; or c) enhance their ability to present their ideas in a group-coursework meeting more assertively. After identifying suitable growth goals, they began the process of choosing and implementing the three that they felt would have the greatest impact on their lives.

Stage 3 – Visualizing Future Growth Goal Behaviour
  Students were asked to visualize the desired behavioural outcomes of attaining their goals so that they could explore the discrepancy between their current behaviour and their 'ideal' to help determine what growth would look like. This would also generate potential measurement criteria for the goals to enable comparisons between current behaviour and new goal behaviour.
  For example, a student who might struggle to control his impulses in order to prioritize work over social life would be able to note the times he rejected invitations to go out with friends in order to work on coursework assignments. Subsequent measurement might entail completion times and the meeting of deadlines, his own satisfaction with the quality of work produced, and later, the final mark achieved. Visualization can be powerful in aiding goal setting with self-management skills (Morin & Latham, 2000;), but has been largely underutilized in goal-setting interventions.

Stage 4 – Identifying Theory, Tools, and Techniques to Apply and Generate Goal
  Statements
  Students were required to explore the types of techniques/models/frameworks that would enable them to put their goals into practice to achieve personal growth and change (e.g., new time-management techniques to enhance study-life balance to bring about better performance in both domains). Next, they were to produce growth-goal statements which clearly articulated a) growth-goal behaviour, b) the desired growth outcome, c) the techniques to be used to achieve the growth goal, and d) the ways that they would measure progress, attainment, and personal growth. Morisano *et al.* (2010) found that the number of words used to describe an ideal future when setting goals was the only predictor of academic improvement in students, suggesting that the development of a detailed specification of the desired outcome is crucial for goal commitment. In short, a well-differentiated representation of the goal is an important component of effective growth goal setting

Stage 5 – Putting Growth Goals Into Practice With Ongoing Reflection and Review
  Finally, students were to put their growth goals into practice whenever possible, reflect on these in their diaries when they occurred, and make goal adjustments where necessary. The diaries were also a way of logging personal change and growth, because the entire reflective goal-setting process was recorded in an ongoing fashion. They were either handwritten or word-processed, depending on the medium the student preferred.

In order for students to get into the habit of writing reflectively and to process their goal-related thoughts and ideas, diary keeping started immediately. Students were advised to write regularly (daily, ideally) about their goal-related behaviours, thoughts, and feelings, as well as when a goal attempt took place. Reflective goal setting provides a self-

generated feedback mechanism that aids monitoring and measurement of progress (Brockbank & McGill, 1998). Documenting goal attempts, setbacks, and outcomes helps individuals engage in self-control throughout the process (Baumeister, 2013). This enables the as-needed modification of chosen strategies and accurate predictions of future growth goal-related responses. Students were asked to log attempts at behaviour change in the reflective diary, noting all aspects of the reflective cycle (Gibbs, 1988). This included describing what happened; examining feelings and thoughts; engaging in subsequent analysis to enable sense-making; drawing conclusions regarding what else could be done; and creating an action plan, including actions which could be taken in pursuing the growth goal further.

Analysis of the data

Each student provided a detailed description of the entire growth goal-setting process. As diary keeping was open in terms of content and frequency, the amount written varied per goal-setter and so was not sufficiently uniform to enable quantitative or template analysis (cf. King, 1998). Taking a realist perspective, themes were identified by finding commonalities and key concepts, rather than imposing preconceived coding (Braun & Clarke, 2006). Data analysis took an interpretative approach, in order to try to capture the essence of each student's account in a phenomenological sense (cf. Berg, 2007). As they progressed, students became action researchers, validating their own experiences and providing credibility checks, summaries, and debriefs via their written reflection. They analysed their growth goal setting in action, observed their ongoing development, and made spontaneous diary comments on their academic growth that were extracted for analysis. In the end-of-module review, students were asked specific questions about the academic impact of growth goal setting, 'active ingredients' in the process, and transfer of growth goals beyond the reflective programme itself.

The nature and richness of the qualitative data allowed for the exploration of the 'black box' contents of each individual's learning and development experience (e.g., the intervening psychological processes) as well as the specific strategies they used (e.g., improved planning and timetabling of their studies). This enabled identification of the 'active ingredients' that were perceived to lead to academic growth.

Results

For the purposes of this paper, the findings will be presented as follows. We will first provide a thematic analysis of the types of academic performance-related growth goals chosen, then the 'active ingredients' that seemed to impact academic performance and growth, and lastly, an examination of the impact of reflective growth goal setting on academic growth and performance beyond the reflective process itself.

Which types of academic performance-related growth goals do students choose to set?

A summary of the chosen academic performance-related growth goals is given in Table 2. The goals highlight the students' awareness of areas of concern with regard to their studies and future performance and consist of a combination of mastery goals (e.g., improving time management or organizational skills) and performance goals (e.g., obtaining a higher

Table 2. Examples of academic performance-related growth goals

Personal organization and time management approaches	Psychological and emotional control approaches	Interpersonal-skills development approaches
Keeping more up-to-date with tutorial work and doing wider reading to stay informed	Improving coping strategies to reduce the stress and anxiety related to examinations	Developing better listening skills to enable improved focus, concentration, and understanding in lectures and group work
Beginning to create and refine to-do lists and coded revision timetables to enhance study skills and outcomes	Improving focus and concentration to reduce procrastination	Developing greater assertiveness to improve the sharing of ideas and asking of questions in group work and presentations
Preventing the use of procrastination and leaving things to the last minute by becoming more timely with tasks, for example beginning coursework assignments earlier	Improving management of health by incorporating rest and recuperation into routine	Enhancing writing style and structure to create a better impression in coursework and examinations
Starting to build 'me-time' into work plans to begin to achieve a better work-life balance	Reducing impulsiveness when choosing social life over studies to get work done on time	Improving presentation skills to influence and persuade others to lead to better group performance
Working harder and smarter by reviewing previous examination papers to achieve higher grades on future papers	Improving motivation to work on tasks and studying to improve the quality of work	
Taking more time than usual to fully prepare for group coursework meetings and make a greater contribution	Increasing positive thinking to enable better self-belief and greater performance	
Waking up earlier than usual in the morning and sticking to this as a new routine to get more done	Improving self-confidence to ask more questions in lectures and of tutors	
Increasing personal organization and tidiness to begin to create more effective and calming study spaces	Breaking the ruminative cycle to enable greater capacity to continue with work	
Acquiring better revision techniques to lead to improved examination performance		
Taking care to be more on time for meetings and social gatherings		

grade in coursework assessment than usual). Some relate to proximal issues (e.g., ensuring that one's desk is tidy before starting work each day) and others to more distal objectives (e.g., improving final grades).

These growth goals fell into three key themes: (1) personal organization and time management; (2) emotional and psychological control; and (3) interpersonal-skills development. These are not necessarily discrete categories: For example, as one student stated, 'I want to improve my revision and learning techniques in order to increase my self confidence in exams. This should help me to achieve a 2:1 [degree result].'

It is contended that these growth goals might not have been chosen if students had not engaged in deep self-awareness activities and reflection to gain insight into what hindered their ability to progress, grow, and achieve. An illustration from one student highlights why he felt he had never fully achieved his academic potential:

> I had a meeting with my personal tutor. After reviewing my previous marks and realising I finished year two with an average of 59.2, she told me she thought it would be very difficult for me to achieve a 2.1 degree. . . In secondary school I did not work to the level I was capable of and always had teachers doubting my ability: Telling me they could not see me gaining the grades to go to university. I am now even more determined to work harder and achieve my target grade of a 2:1 [degree result].

The reflective process also highlights issues and personal characteristics that can assist goal setting for academic progress and growth, in that knowing the source of the problem (e.g., low self-esteem or a lack of self-confidence) means more precise goal targeting. For example, a number of students identified issues with self-control and self-discipline and devised revision/work plans and 'to-do-lists' to improve focus, avoid distractions, overcome procrastination, and manage competing social and work pressures. To illustrate, one student explained in his diary:

> I am very determined to achieve a 2:1 grade in my degree. As demonstrated by my year 12 school report, I was once "highly motivated", "punctual" and "organised." Since being at university, however, I have become more inclined to leave things to the last minute. I feel this is the result of no-one monitoring me. For instance, in college teachers would constantly be there to tell you to work harder, but at university you are not given this, and are expected to manage yourself.

The process of reflection helped him realize that he struggled with independent study, due to his lack of self-discipline. Therefore, he felt he would benefit from a more structured approach to timetabling, coupled with communicating his intentions to others to provide some degree of accountability, and he set a relevant growth goal.

What are the 'active ingredients' of the reflective goal-setting process that support academic growth?

Reflective goal setting enabled students to make sense of certain growth-goal behaviours in practice and match them to outcomes. Using the diaries, and the end-of-process reflective reviews, themes were identified that captured the key 'active ingredients' for perceived academic growth and personal change.

The power of subgoals and proximal targets
Proximal targets (i.e., subgoals) were repeatedly reported to be important in enabling short-term breakthroughs on the road to a more distal goal (consistent with GST). As an illustration, one growth goal-setter explained

> Instead of setting myself one large challenge to complete in a given time frame, which feels impossible and therefore de-motivates me, I set myself mini-goals to complete, and each time I completed a goal it filled me with a sense of achievement, which in turn encouraged me to complete the next goal.

The diary data show that, if setbacks are managed effectively, students can develop 'academic tenacity' and 'growth goal-oriented mindsets', which, when coupled with suitable skills, aid longer-term growth goal focus and perseverance (Dweck, Walton, & Cohen, 2011).

The importance of study approach and techniques
The process of reflective growth goal setting enlightened students on the importance of 'classic' study techniques and the management of their work, and this insight brought about a changed conceptual perspective (Boyd & Fales, 1983) with a growth orientation in a number of cases. This is illustrated by one student who was able to match the new found higher grades on coursework with the new behaviours he was implementing.

> I have also learnt that, to do well in final year, you must work hard every day during the semester.

Another reported that the greatest impact was from 'actually doing all my further reading, on time, for the first time'. A number claimed they now had a better grasp of how to match study techniques to their personal states and traits (e.g., level of alertness at specific times of day). For example, one student described improvement through new attempts to tackle more difficult and challenging tasks when she was at her most alert:

> I'm definitely a morning person, so I did the most complex task in the morning. I couldn't believe how something so simple could improve my work performance so much.

For many students, seeing the academic consequences of these strategies written down in 'black and white' finally brought about a level of self-awareness and realization that laid a foundation for subsequent growth. Also, the use of an in-depth reflective approach ensured that they could develop cognitive clarity. As one student explained,

> In the process of reflecting I have come to realise that I often get overwhelmed when I initially start an assignment. . .I looked to overcome this by altering my mindset and overall approach to work. Although I am very hard working, I needed to take a calmer approach to getting work done as opposed to rushing into it and sometimes not completing it to the best of my ability.

Psychological factors affecting growth
The reflective growth goal-setting process seemed to trigger key psychological mechanisms (Bandura, 1997), which then had an effect on academic outcomes.

Psychological growth (e.g., heightened self-esteem, or self-confidence) appeared to affect students' beliefs in their own abilities, and this positivity subsequently impacted on their studies. For example, the following student explained how a growth in self-efficacy (cf. Bandura, 1997) motivated her to work harder:

> I have realised the importance of self-efficacy, and that talking positively about the things that scare you (such as not achieving the grade you want) can actually improve your confidence and ultimately motivate you to try harder. I will be taking this with me most definitely through exams, and hopefully through life as it is such a simple aspect to change.

This reinforces previous research arguing that skill development and maintenance can occur if goal-setting approaches form part of the self-management process (Wexley & Nemeroff, 1975) and thereby increase self-efficacy (Gist, Stevens, & Baretta, 1991). Such growth in key psychological resources meant that students, who may have previously been inhibited from trying harder, were motivated to challenge themselves towards self-improvement. For example, as one student explained,

> Having the confidence to try meant that I could really benefit from activities such as answering questions in my lectures without worrying what people might think of me. Basically, I just thought "what the hell!" and gave it a go, and when nothing bad happened – I had the confidence to do it again but push myself that little bit further.

As students proceeded through the module and their feelings of self-efficacy grew, their diary reflections indicated that they started to believe they could better tackle future academically challenging situations. This enhanced their personal expectations of performing better academically (e.g., examinations and coursework assignments; Bandura, 1986; Locke & Latham, 1990). One student stated,

> I have two pieces of coursework due in and three exams to revise for. . .usually I would be making myself ill from the stress of this workload, but I feel confident that I can get it done.

A growth in ability to manage stress and pressure enabled better psychological preparedness for examinations, as measured by diary entries:

> I didn't expect to see as much of a difference in myself as I have, I can't believe how calm I'm keeping with the upcoming exams and interviews I have.

The consequences of this calmer approach to examinations was that many students felt more in control of their work and were able to attain a healthier balance of work and play, all underscoring personal well-being growth through the self-reflection process.

The role of social support and social accountability

Another 'active ingredient' affecting academic growth was the role of (and involvement with) others. For example, goal accountability to self and others was a powerful factor. As this student outlined,

> Letting people know that I wanted to get a 1st, by people knowing what I was doing, I feel it created some kind of accountability.

This shows the importance of key group processes which may support the pursuit of learning and personal change. In addition, the identification and use of a support network was helpful for a number of students to push beyond their current states. One student explained,

> We all wanted to help each other achieve our goals. Which is another reason why it has been such a good experience. We also all went to the library together to write the first 1,000 words, to motivate each other to all go and complete the work.

Some students were keen to share their new found growth goal-setting skill with others. One explained that in semester 2, he was able to coach a peer:

> I helped one of my friends to devise a study timetable, and shared my knowledge of goal setting and my experiences to stop procrastinating.

This shows that the process of personal reflective goal setting is not only a within-person transferable skill, but also has the potential for a between-person transfer of learning.

What is the potential impact of the reflective goal-setting programme on academic performance growth beyond the programme itself?

Research reporting on the long-term benefits of goal-setting interventions (Howard, 2013; Krause, Seymour, & Sloat, 1999) is limited. In our follow-up survey with students, certain questions related to the impact that goals had had on academic growth. This yielded some interesting findings, particularly regarding (1) the interactive nature of growth goals and their direct and indirect effects and (2) the potentially transformational effects of growth goal setting.

The interactive nature of growth goals and their direct and indirect effects

Findings suggested that goal effects could interact with each other, and this interaction could act as a powerful lever for growth and change. For example, one student suffered a nervous breakdown in his final year that resulted in him taking some leave. He felt that he had lost momentum in terms of his academic potential, and set himself three initially discrete growth goals: Goal 1 – Improving his self-esteem; Goal 2 – Managing his stress levels; and Goal 3 – Developing a better work-life balance. He reported that, once in place, his growth goals interacted with each other to impact on his overall academic growth. For example, he explained,

> Having acquired techniques to manage stress during the module (Goal 2), I was able to successfully manage my stress levels in Semester 2, which involved balancing university work and attending job interviews etc. By socially interacting with other students more (Goal 3) I was able to ask them coursework related questions, which helped to reduce stress (Goal 2) as I felt supported and I could seek advice for problems. . . This also led to an increase in my self-esteem (Goal 1) as I felt more able to cope, generally.

Another goal-setter experienced the interactive effects of his growth goals, such that improved time management led to time for the gymnasium and enhancing his fitness, which was first a coping strategy and then a motivator. He explained,

> I feel the time management goal continued to play an important role in the second semester and it allowed me to achieve the First grade that I was aiming towards. The fact that I managed my time slightly better meant that. . . I was able to find enough time to go on a daily basis to the gym, which further relaxed me mentally and it made me more motivated once I began studying.

Transformational effects of growth goal setting on academic performance

Many students reported experiencing 'flow' (Csikszentmihalyi, 1990, 1996) due to this newly acquired tool of reflective goal setting. Some noted that they were motivated to attain increasingly higher growth goals in order to be satisfied with their performance following the end of the process (cf. Bandura, 2013; Locke & Latham, 1990). They reported that goal setting had become a transferable skill which positively impacted their self-confidence and self-control:

> Goal setting had a very high impact on my academic performance, which was of paramount importance to me and I finally got a First in the last semester, and a 2:1 [degree result] overall, which I was very pleased with. This was a huge improvement as I was only attaining a 2:2 [degree result] throughout Year 1 and Year 2.

The growth goal-setting approach enabled another student to 'manage to achieve the 2:1 by the skin of [his] teeth'. This had a great impact on growth in student's well-being as well as academic performance:

> Achieving a 2:1 [degree result], when I really didn't think I was going to, has put the icing on a wonderful summer and four years at university. I think this achievement is really key to my overall well-being, and I am much happier because of it. Pulling a 2:1 out of the bag had filled me with confidence and I really feel like I can do anything I set my mind to.

Jenny was a final-year student who felt she had never fully achieved her academic potential. She was increasingly worried that she might not leave university with a 2:1 grade in her degree. Table 3 illustrates in more depth the impact of the growth goal-setting process on her academic growth, and highlights how the focus on, and experience of, personal growth can energize to the point of excitement (Martin, 2011; Senko, Hulleman, & Harackiewicz, 2011). This student's experience was not unique, as others reported similar outcomes from setting growth goals, but it is a good illustration of how students can have a greater chance of success by tackling issues about their academic potential and developing strategies to progress.

Discussion

This paper has shared findings regarding the growth goal-setting activities of a cohort of final-year university students attending a self-reflective and personal growth goal-setting course. Students engaged in in-depth self-awareness activities, chose three growth goals, and recorded their progress in reflective written diaries. The setting of growth goals and making progress towards them (e.g., better academic performance) increased self-esteem

Table 3. Illustrative case of the impact of reflective goal setting on Jenny's academic growth

Stage 1 – Enhancing Self-Awareness
Following in-depth self-awareness and reflection, which included taking a look at her old school reports, she came to the conclusion that her lack of ability to concentrate on certain tasks was largely due to aspects of her personality and approach to life and work.

Three significant words (fun, excitable, friendly) greatly shape much of the way I have always lived my life. I often get distracted easily and opt for the more 'fun option' than more pressing or responsible ones.

Stage 2 – Selecting Suitable Growth Goal Areas
She used this enhanced self-insight and acknowledgement of weaknesses to decide on goal areas that would enable her personal and academic growth.

The main, notable area for growth is my inability to plan ahead. I am too often finding myself missing deadlines or altering things that I have planned, giving them up for things which are more entertaining . . . Choosing to address my poor time management is centred on managing myself and taking responsibility.

Stage 3 – Visualizing Future Growth Goal Behaviour and Setting Standards
One of the ways by which she visualized behaving in a more organized fashion was to imagine how her mother would behave, using her as a role model

She (Mum) is a teacher, incredibly organised and uses a calendar on a regular basis. . .planning has never come naturally to me before.

Stage 4 – Identifying Theory, Tools, and Techniques to Apply
Having explored the literature on study skills and time management, and investigated how more effective students approached their work, she devised a number of activities to aid her progression.

This goal is to increase forward planning, by creating a weekly calendar of events, which I will evaluate weekly, and stick to a calendar and refresh when needed.

Stage 5 – Put Growth Goals Into Action With Ongoing Refection and Review
The ongoing reflection enabled continued insights and learning to be gained. Patterns of behaviour, especially with regard to motivational aspects of the process, were emphasized by the use of reflection in the diary.

As I saw the benefits of forward planning, my excitement to continue it and other goals increased. My forward-planning goal has been my success story, and the one I was most surprised about. This goal developed from a chore, to something I enjoyed and wanted to develop. I followed my plan and saw the impact it had on others.

Beyond the Reflective Programme
The 6-month follow-up questionnaire enabled us to examine extension of learning beyond the actual reflective programme itself. Jenny had stated at the end of her diary that she fully hoped and intended to continue with her growth goal setting into semester two, to take her through to her final examinations, as she had now developed a growth mindset. The opportunity to follow up on her success revealed the transcendence she experienced.

I continue to avidly use a calendar and track what I'm going to be doing. This really has revolutionized my life!! [sic]. I planned well ahead so I always knew I would have time for training etc.and therefore when I could work during exams and this definitely helped. I obviously cannot quantify cause and effect, but in first and second year I averaged 62% and 60.2% respectively (i.e., just into a 2:1 grade), but then I came out at the end of final year with a First !!!!!! [sic].

(positive self-evaluation) and self-efficacy (task-specific confidence). For many, a growth goal increased the efficiency of their time and improved stress management. Success encouraged many students to set higher growth goals for the future and energized those who were less motivated academically. Students made substantial gains in self-insight and became more skilled in monitoring their own thoughts and habits, including study habits. Many supported others in their growth-goal striving and provided feedback and accountability. They acquired key transferable skills and developed growth goal-setting mindsets, such that many experienced transcendence in academic growth.

In terms of our research questions, one point to note is that our qualitative approach to growth goal setting not only enabled identification of students' specific growth-goal concerns, but also provided in-depth understanding of the rationale for growth-goal choices. Findings highlighted the importance of initial and ongoing self-awareness and reflection to ensure that growth goals were relevant and specific. The importance of underlying psychological factors (some long standing, e.g., a lack of self-confidence) that may threaten to undermine growth goal success could be seen. Observing growth goal setting as 'lived' revealed growth-goal interaction and overlay, which suggests that growth goals may be a combination, or indeed a reconciliation of, both mastery and performance goals. The previously often inconclusive quantitative findings regarding the academic impact of mastery and performance goals may be due to a lack of sensitivity in capturing the impact of these interactions and goal dynamics on outcomes.

A second point is that this qualitative methodology created something of a 'viewing window' to the growth goal-setting process, illuminating the 'active ingredients' impacting academic growth outcomes. There can be many different developmental pathways to the same goal (Locke & Latham, 2006), with individuals being exposed to, shaping, interpreting, and acting on their own nuanced experiences. These heterogeneous processes may not always be revealed by quantitative methods, nor can quantitative methods always show how or why the process of working towards goals leads to growth and development. Quantitative methods also do not allow a great deal of insight into how differences in each goal-setter's experiences influence their actions and progress (Cullen, Baranowski, & Smith, 2001). Our findings suggest that a reflective diary methodology can overcome some of these limitations.

A final point is that our six-month follow-up provided insight into the potential longer-term impact and power of reflective growth goal setting, and showed that even academically indirect growth goals may contribute to academic performance by encouraging actions that facilitate good study outcomes (e.g., self and time management). In addition to performance improvements, reflective growth goal setting appeared to enhance reported positive affect, perhaps because having growth goals made the students' lives more purposeful and focused. Using in-depth self-reflection and ongoing diary keeping meant that students could engage in considerable cognitive processing (thinking) in both the short and long term and identify causal relationships between growth goals and their outcomes. The findings shared here are based on students' own reporting of academic and personal growth. Future research would benefit from utilizing a control group and including the actual grades achieved by students, to measure the quantitative impact of reflective growth goal setting on academic growth. Also, a longer-term follow-up study could assess reflective growth goal setting effects on other future transitional and learning periods in an individual's life and career.

Conclusions

Goal setting as a technique has been well established in the literature over a period that now exceeds 45 years (Locke & Latham, 1990, 2013). Promoting growth goal setting within the context of a students' life can lead to facilitation of personal growth, not only with respect to academic outcomes. This study's qualitative focus on self-reflection and written diaries offeres unique insights into growth goals and growth goal setting – and provides support for previous contentions that 'growth goals, particularly when studied in narrative form, open a window for researchers and therapists to understand whether people's intentions are likely to lead in personally desirable directions' (Bauer & McAdams, 2004, p. 125).

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