An exploration of 'performativity' and the changing motivations of Advanced Level students

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ABSTRACT

Achievement goal theory currently proposes a 2×2 framework of mastery-approach, mastery-avoidance, performance-approach, and performance-avoidance goals. This paper proposes that achievement goal theorists needs to recognise 'performativity' goals in which learners strive to demonstrate their performance but are unconcerned with social comparisons, and that the approach-avoidance distinction should be incorporated into these goals as it is with mastery and performance goals. Surveys with established and original scales were used to assess the validity of the performativity construct and data from these was analysed using Cronbach's alpha, correlations and principle components analysis. MANOVA was used to assess whether there were differences in levels of performativity between AS and A level learners, and those individuals who attended either a sixth form college or school sixth form. Semi-structured interviews were undertaken with individuals whose survey scores indicated that they perceived a difference between performativity and mastery goals. These were used to further establish the validity of the performativity construct and to examine the motivations of learners in today's A level classrooms, whilst addressing methodological weaknesses in the current achievement goal literature. Performativity was found to be a valid construct which is relevant to today's A level classrooms. Results are discussed in terms of high-stakes testing and achievement goal theory.

Key Words:	Motivation	Achievement Goal Theory	Performativity

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Acknowledgement

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Introduction

Motivation is an issue at the heart of education – it determines the focus, intensity, doggedness and quality of learners' time and energy devoted to each learning task. As it currently stands, achievement goal theory hypothesises that there are four different types of learning goals which embody motivation. However, it seems that as a result of the high stakes testing culture that is widespread in today's educational landscape, students' achievement goals are beginning to centre around grades in a way that achievement goal theory may not currently account for. As a result, there may be six rather than four different types of achievement goal. This paper goes on to outline a brief history of achievement goal theory, before considering problems with its current conceptualisation, and introducing the present study and its aims.

Motivation is a concept that has been described as the "sine qua non" for learning (Maehr & Meyer, 1997), an important priority for educational research (Hastings, 1996), and has an almost overwhelming corpus of literature written about it. Further highlighting the perceived importance of motivation, Terrel Bell, the United States Secretary of Education once remarked "There are three things to remember about education. The first is motivation. The second one is motivation. The third one is motivation" (cited in Maehr & Meyer, 1997, p.372).

Motivation is important within education because it provides a basis for the sustained endeavour and concentration that learning necessitates, and it seems to account for a variety of key educational issues such as the direction, intensity, perseverance, and quality of the time and energy that pupils devote to each learning task (Kaplan, Middleton, Urdan, & Midgley, 2002). As a result, motivation can be used to explain differences in how students behave whilst on task (Dweck & Leggett, 1988) and varying levels of academic achievement (Church, Elliot, & Gable, 2001; Harackiewicz, Barron, Tauer, Carter, & Elliot, 2000).

The complexity of the concept of motivation has given rise to numerous theories attempting to explain human motivation. Over time the focus of these theories has shifted from explaining motivation in terms of needs, instincts or drives such as Freud's instinct theory (1914 – cited in Deci & Ryan, 1985) and Hull's drive theory (1943 – cited in Deci & Ryan, 1985) to more of a social-cognitive construct that is influenced by learners' subjective cognitions such as their goals (Brophy, 2004). Such theories include self-determination theory (Deci & Ryan, 1985), attribution theory (Weiner, 1985), and goal orientation theory (Elliott & Dweck, 1988) which currently dominates thinking about motivation (Midgley, Kaplan, & Middleton, 2001).

This piece of research centres on the predominant goal orientation theory of achievement motivation – also referred to as achievement goal theory – which stemmed from the work of researchers such as Carol Ames (1984), Carol Dweck (1986), Marty Maehr (1984), and John Nicholls (1984). These researchers sought to explain differences in the quality of different learners' motivation, alongside differences in the direction of their motivation (Kaplan *et al.*, 2002). They used goals to do so, conceptualising achievement goals as assortments of thoughts and feelings about accomplishment, effort, ability, mistakes,

assessment, and feedback, which combine to form broad, task-related aims (Elliot, 2005). One of the most notable roots of achievement goal theory, is the work of Diener and Dweck (1978; 1980).

Diener and Dweck (1978; 1980) were interested in why students of a similar ability responded to failure in different ways. From research with 10-11 year-old children, they conceptualised and analysed two different response patterns to failure on achievement tasks: mastery-orientated response patterns and helpless response patterns. They stated that children with a 'mastery-orientated' response pattern were positive about their performance and ability, and put failure down to lack of effort. Such individuals also showed continual or greater perseverance and performance and were more likely to engage in ensuing challenge. A mastery-orientated response was recognised as adaptive as it encourages ongoing commitment to valued goals, even when a task may be demanding. The alternative 'helpless' response was said to be characterised by viewing failure as 'insurmountable'. This was because failure was attributed to a lack of ability which reduces expectations for future success. Helpless response patterns were considered maladaptive as they are typically characterised by less persistence and an avoidance of challenge in the future, which prevents such learners from working effectively when encountering difficulty (Diener & Dweck, 1980).

Following the discovery that the maladaptive 'helpless' response pattern could be found in bright students as well as those who had poorly-developed skills or histories of failure, Dweck and Elliott (1983) sought an explanation in the idea of goals. They conceptualised two distinct goals: performance goals (in which individuals focus on achieving favourable appraisals of their competence judged on the basis of social comparisons) and learning goals (in which individuals aim to increase their competence and ability). Dweck and Leggett (1986 – cited in Dweck & Leggett, 1988) later confirmed these to foster the different response patterns.

These studies and other works (Anderman & Maehr, 1994; Nicholls, 1984) convincingly positioned goals as central to motivation and achievement. They were understood to embody learners' motives in achievement situations and result in distinct patterns of cognition, affect, and behaviour (Dweck & Leggett, 1988). In a review of the developing achievement goal literature, Ames and Archer (1988) recognised that two types of goal were consistently emerging under different labels. As a result, they rationalised that the terms 'task', 'learning' and 'mastery' goals; and 'ego', 'performance', and 'ability' goals should be converged to form a mastery and performance goal dichotomy that should take precedence in future work.

Elliot (1994 – cited in Elliot, 2005) provided the next large contribution to achievement goal theory. Entering the achievement goal arena he convincingly argued that a dichotomous achievement goal framework was too simplistic. Elliot proposed that the performance goals prevalent in the achievement goal literature were not always as harmful to achievement as assumed and subsequently introduced the approach-avoidance distinction into performance goals (1994; cited in Elliot, 2005), and later, mastery goals (Elliot, 1999). This resulted in a 2×2

achievement goal framework which is how achievement goal theory is conceptualised today.

To summarise, achievement goal theory states that the type of motivational goal that an individual has is crucial because it adds value to actions, and energises learners to work either towards competence or away from incompetence, with competence defined either in terms of increasing knowledge and learning, or performance relative to others. Importantly, the various goals are not understood to be mutually exclusive: what matters in achievement behaviour is the overall strengths of these four goals.

Evidential support for the 2×2 achievement goal framework has come from a variety of sources including factor analytic data (Elliot & McGregor, 2001), experimental studies (Bong, 2009; Karabenick, 2004; Wolters, 2004) and field research (Cury, Elliot, Da Fonseca, & Moller, 2006). These have consistently shown that people approach tasks in different ways according to which type of goal is dominant. However, Maehr and Meyer (1997) recognise motivation as an ongoing issue which needs constant revisiting and updating, and Bong (2009) has argued that the achievement goal framework requires more evidence before it can be accepted as the best and most accurate way to measure achievement motivation.

This paper argues that currently achievement goal theory is not as accurate as it could be in explaining achievement behaviour as it does not account for the motivations of students who become fixated on achieving particular grades (Covington & Wiedenhaupt, 1997). A critical examination of an article by Darnon, Dompnier, Delmas, Pulfrey, and Butera (2009) can illustrate where it is that achievement goal theory may currently be lacking.

Darnon *et al.* (2009), in an investigation of the achievement goals of university students, contend that whilst universities aim to promote mastery goals, by nature of classifying people based on their performance (their selective function), they end up promoting both mastery and performance goals: "*students... might infer that in order to succeed they not only have to learn and improve their skills, they also have to make it through the "filter", that is, to perform better than their fellow students*" (p.120). This theory is compatible with the multiple goal perspectives advocated in more recent years which propose that students can have a number of different goals at any one time (Pintrich, 2000).

However, as universities traditionally aim to promote mastery goals, students' performance is rarely published in comparison to their peers. This means that for students to get some grasp of how they are doing relative to others, they have to go and seek out this information from other students. At university level where course sizes can be very large and students may not know each other, this can be very difficult. As a result, students may instead adopt performance goals which are not dependent on immediate normative comparisons – such as focusing on achieving particular grades. Although it may be argued that there would still be some normative element here (because students focusing on grades are aware of the overall percentage of graduates obtaining particular degree classifications), these normative comparisons would be very long-term,

generalised, and indirect, which Schunk (1991) would argue to be ineffective at motivating individuals. Today's university students may therefore have strong performance goals, but ones in which normative comparisons are irrelevant. To overcome this, an achievement goal which focuses on performance but is not normatively judged, needs to be introduced.

This idea relates to the work of Brophy (2005) who suggests separating out performance goals that embrace social comparisons (normative goals) and performance goals that do not. Whilst Brophy (2005) makes a crucial point, his suggestion of phasing out the term 'performance goals' seems unnecessary as this can be retained in its current form without issue. From there, individuals who have performance goals which are not reliant on social comparisons – which Brophy (2005) hesitantly refers to as outcome or ability goals – should be recognised and incorporated into achievement goal theory.

Specifically, 'outcome' or 'ability' goals will extend achievement goal theory's ability to students who become fixated on achieving particular grades as a result of today's performance culture (Covington & Wiedenhaupt, 1997; Kohn, 1999). Today's high-stakes testing rewards educational institutions on the basis of improved or superior performance, and punishes them on the basis of poor or decreasing performance, which is judged on the easily-measured basis of student grades (Ryan & Brown, 2005). This means that learning becomes judged on measurable performance such as grades, rather than on effective learning strategies. This can easily be communicated to students via teachers who feel pressured to ensure their students get the best possible grades (Barksdale-Ladd & Thomas, 2000). High-stakes testing and its inherent focus on grades can also lead to a narrowing of the curriculum and increased teaching to the test – in this case including teaching students how to demonstrate particular grade criteria in their work – which again promotes a focus on grades (Ryan & Brown, 2005). Additionally, the aggrandisation of achievement in the UK can result in achievement (measured by grades) becoming an important part of a students' identity and vital to their self-worth (Covington, 2000). These factors make it likely that students are developing motivational goals which centre on demonstrating competence by achieving particular grades.

Due to what Brophy (2005) tentatively offers up as 'outcome' or 'ability' goals being intertwined with high-stakes testing, this article strongly proposes the name 'performativity' for goals in which students demonstrate their competence without worrying about how other students do. This would mirror the way the term 'performativity' is used in work which discusses how schools are pushed to demonstrate performance in relation to measurable Government targets (Ainscow, Conteh, Dyson, & Gallanaugh, 2007; Ball, 2003). This is appropriate for a number of reasons. Firstly, it would reflect the fact that students adopt goals which centre on demonstrating performance rather than on the process of learning because schools push them to achieve particular grades. It also recognises that schools do so because of Government high-stakes testing policies and performance targets (Deci & Ryan, 2002). The term 'performativity' will also minimise confusion in the field. This will allow the well-recognised term 'performance goal' to stay as it is, whilst simultaneously acknowledging that two

goals exist in which individuals focus on validating their ability, but that competence with respect to these two goals is evaluated differently.

In summary, achievement goal theory's accuracy in explaining achievement motivation could be enhanced by adding a new goal: one labelled 'performativity' in which individuals are motivated to do just enough to demonstrate a specific level of ability. In education, students with a performativity goal would be motivated to demonstrate only that which is needed to meet particular grade criteria. Such students would not be concerned with developing their understanding and learning of the material and subjects they are introduced to at A level, and would not be concerned with how others are performing; they would just want to learn enough to produce work which meets particular grade criteria. As in the other types of goals, individuals with a performativity goal would be motivated either towards competence or away from incompetence, so the approach-avoidance distinction should be utilised to produce performativity-approach and performativity-avoidance goals (Rogers, 2011). The introduction of performativity goals into the achievement goal framework will necessitate a change from the current 2×2 achievement goal framework to a 3×2 framework.

Though there has been some notice of this difference between performance and performativity goals (Brophy, 2005; Grant & Dweck, 2003; Rogers, 2011), issues with the current conceptualisation of achievement goals may have gone largely unnoticed because achievement goals are currently measured and researched using self-report scales (e.g. Duda & Nicholls, 1992; Elliot & McGregor, 2001). A limitation of such survey research is that participants have to select a particular answer – they are not provided with the option to disagree and provide their thoughts on the issue. This may mean that until now performance goals have become a proxy for performativity goals: the inability to disagree with either of the goal types in current surveys may mean that participants merely select performance responses as they are the next best thing in describing their motivation.

Since achievement goal theory does not currently account for the concept of 'performativity', the present study was designed to test the validity of the construct and to ascertain whether or not it is a real construct that proponents of achievement goal theory need to explore in more detail. It was thought that this research question had both substantive and methodological value (Arksey & Knight, 1999) as it makes use of semi-structured interviews which is a method that has been underutilised in achievement goal research (Brophy, 2005), and calls into question achievement goal theory's existing models, ideas and findings whilst adding to the current focus on high-stakes testing in the literature (Ryan & Brown, 2005; Wentzel & Wigfield, 2009).

Current Study
The current study made use of both a quantitative and qualitative approach. The two approaches were used for different purposes at different stages of the research to provide complementary data in the exploration of the concept of performativity (Arksey & Knight, 1999).

Established and adapted scales were used to investigate the validity of the performativity construct as they were felt to facilitate the elicitation of appropriate validity indices from a suitable sample size in the time available. The resulting data also served to identify individuals the researcher wished to interview. The interviews aimed to subsequently explore the validity and meaning of the 'performativity' concept, and to allow participants to voice their own beliefs and feelings about their achievement goals and motivation (Christensen & James, 2000).

In an effort to be reflexive (Alvesson & Sköldberg, 2009) and in accordance with the idea that researchers cannot be the objective agent that they are depicted in more positive lines of enquiry (Patton, 1990), it is acknowledged that the researcher expected that performativity goals develop when students feel expected to demonstrate their ability to achieve particular grades. The researcher thought that a focus on grades can narrow some individuals' perception of learning down to a very superficial process in which students 'learn' how meet particular grade criteria in their work rather than focus on the processes of learning. Based on their own experience of education, the researcher believed that individuals who leave their high schools to attend new educational institutions may have higher performativity goals because they have less time to form relationships with their teachers, meaning teaching becomes more about getting students the grades they need to go to university than on enjoying developing a learner's interest in particular subjects. As a previous student of the sixth form college used in this study, the researcher also recognised that the college environment differs strongly from that of a high school sixth form, and thus felt it may be necessary to investigate whether there was a difference in the motivations of students of different types of institution. The researcher also felt it was appropriate to examine whether there are differences in the motivations of AS and A level students. The researcher's academic background and class was felt to be similar to those students at the grammar school sixth form and the sixth form college, but less was known about the second school sixth form. In order to improve the replicability of this study, the procedure, findings and analysis have been written up in a very detailed way to provide transparency and consistency.

This was designed to answer one main research question, and two supplementary research questions. Chiefly, the study was intended to answer the question 'Is performativity a valid construct?'. Supplementary research questions were: 'Are there differences in the type of achievement goals between school sixth form students and college students?'; and 'Are there differences in the achievement goals of AS and A level students?'. It was hypothesised that the concept of performativity would indeed prove to be a valid construct, and that it would be more akin to mastery than performance goals. Furthermore, it was thought that there would be differences between the types of goals and levels of performativity between college and school sixth form students, and AS and A level students.

Method

Design
This investigation was made up of two parts in order to progressively focus on the validity of the performativity concept (Arksey & Knight, 1999). The first stage of the study took the form of a self-designed questionnaire which included both established and adapted scales. The second stage was a set of eight semi-structured interviews. Students in their first and second year of studying A levels at a sixth form college or school were each given a questionnaire asking about their current study, previous achievement and achievement goals. Those with either high 'performativity' or high mastery scores were subsequently identified and invited for interview.

Participants
The 239 participants in this study, aged 16 to 19 years, were students in their first year (130 students) or second year (109 students) of school sixth form (65 students) or sixth form college (174 students), and were studying Psychology as part of their A levels.

Participants came from two school sixths forms in Lancashire and one sixth form college in Cheshire, and were initially recruited using volunteer sampling. To recruit participants for the second part of the research, it was explained to all individuals who completed the survey that providing their name meant that they were willing to be interviewed in a later stage of the study. Of those students who provided their name (153/239) eight were later interviewed. Students were considered for interview if a visual inspection of their average sub-scale scores revealed comparatively large differences on mastery and performativity scales, suggesting that they atypically perceived a difference between the two constructs. Based on their mean scores on the performativity and mastery subscales, four of the students who were interviewed had dominant mastery goals and four had prevailing performativity goals. Five of these learners belonged to the sixth form college, and the other three came from one of the school sixth forms. All of the names of the interviewees have been changed to protect their privacy.

Materials/Measures
The questionnaire used in this study was devised to collect a variety of demographic data, information about students' A level study, and their achievement goals. The questionnaire as it appeared on the SNAP survey software in this study is attached in Appendix 1. SNAP was the brand of survey software used which allowed the questionnaire to be completed online and accessed via a URL (http://www.lancs.ac.uk/fass/data/reap/sixthform/sixthform.htm).

The first 15 questions which made up this questionnaire were created by the researcher. Question 1 identified that participants gave their full-informed consent and understood the relevant ethical information of the study. Questions 2-9 collected demographic data: participants' age, year of A level study, gender, previous qualifications, type of current educational institution, and information

relating to when after their GCSE's started their A levels, and what they did if they took a year or more out of education in this time. Questions 10 and 11 asked school sixth form students to detail why they chose to attend a school sixth form, whilst questions 12 and 13 asked sixth form college students to identify why they chose to attend that college. Questions 14 and 15 asked participants to identify which grades they expect to achieve and which grades they would like to achieve at the end of their study.

Question 16 assessed students' current achievement goals and levels of self-efficacy through established and adapted scales. Established scales from Elliot and Murayama's (2008) AGQ-R were used to measure the well-established constructs of mastery-approach, mastery-avoidance, performance-approach and performance-approach achievement goals in an effort to achieve high internal consistency reliability. These scales had high Cronbach's α values of .84, .88, .92 and .94 respectively. Three questions measured each construct and these were scored using a 5-point Likert-scale. The researcher then added in six performativity-approach and four performativity-avoidance items adapted by Rogers (personal communication, November 28, 2011) to try and establish whether the performativity concept does exist. These were adapted from Elliot and Murayama's (2008) AGQ-R in an effort to maximise internal consistency scores. Six self-efficacy questions were also included. It was decided that the best questions would be identified through principal components analysis later in the study.

The interview schedule that was used in the second stage of the study is attached in Appendix 2. Before writing the interview schedule, the researcher devised a list of information and topics that they intended to cover, and these were used as the rationale for the questions. Questions were organised under the headings of 'Beliefs', 'Experiences' and 'Explanations' which helped the researcher to focus their question development. This method also resulted in the interview beginning with more concrete, factual information before moving onto the more abstract and general questions. This was done because it is widely suggested that more difficult and abstract questions should be left until the ending stages of the interview when participants feel at ease, have built up a level of rapport with the researcher, and are more likely to persevere with difficult questions (Bell, 1993; Denscombe, 2007).

Procedure
To ensure that the research was conducted in a competent manner, the researcher consulted guidance books on how to carry out research projects and more specifically, interviews, such as 'Interviewing for Social Scientists' (Arksey & Knight, 1999) and 'Researching Education' (Scott & Usher, 2000). The researcher then examined the ethical guidelines published by the British Educational Research Association (BERA, 2011) and British Psychological Society (BPS, 2009) so as to ensure that the research was carried out in an ethically appropriate manner.

After receiving full ethical approval for the study from a departmental committee, the researcher made contact with either the Head of Sixth Form or Head of Psychology at three different institutions involved, and explained the study before

asking them if they would be willing to allow their students to participate. The two school sixth forms were selected based on their proximity to the researcher, and the college sixth form was selected based on the researcher's accessibility and its large student population. Emails were sent to the aforementioned gatekeepers with an attached document detailing further what would be involved for both teachers and students (see Appendix 3). After each institution agreed to participate, researcher visitation was scheduled.

At all of the educational institutions a volunteer sample was used. In the sixth form college and one of the school sixth forms, those students which took part were those in that day's scheduled Psychology classes with teachers who were willing to devote 20 minutes to the study. Such classes were sent to a computer room, where the study was explained to them, and all students were then informed that completing the survey was optional and that they did not have to take part if they did not want to. At the other school sixth form, all AS level psychology students were sent to a large computer room where the study was explained to them and they were given the option to complete the survey during registration. In adherence to ethical guidelines (BERA, 2011; BPS, 2009) participants were briefed on the purpose and focus of the study, the likely publication of the study findings, and appropriate details of when, how and from whom consent was obtained were kept. Participants were also notified of their rights to confidentiality and anonymity – particularly how and why their data would be stored, to what use it would be put, and to whom it would be made available. They were further informed of their right to withdraw both themselves and their data from the study at any time without reason, that they were free to refuse to answer any of the questions involved in either the questionnaire or interview, and that these rights were not affected by the offer or receipt of the Amazon vouchers. In recognition of the BPS' (2009) ethical guidelines, whilst introducing the study the researcher disclosed that this was their second and largest individual research project, and a requirement of their degree, so as to notify participants of their affiliations, expertise and experience.

At all of the educational institutions, students were then provided with a web address which they typed into web browsers to bring up the survey. The first page of this study provided further information about the study and participants' were asked to acknowledge this to clarify that they gave their fully informed consent to being involved in the research.

The survey was submitted in Microsoft word format to a member of Lancaster University's Educational Research team who put it into SNAP format. On receipt of the file, the researcher noticed that the instructions for Question 16, Question 10 and 11, had been mistyped which could result in confusion, but there was not enough time for this to be corrected before data collection started. To overcome this, the researcher wrote on a whiteboard and/or repeated verbally the instruction that on Question 16, a response of 1 indicated strong disagreement, and a response of 5 indicated strong agreement. As well as this the researcher informed college sixth form students to answer questions 12 and 13, but not 10 and 11; and school sixth form students to answer 10 and 11, but not 12 and 13. Participants were also instructed not to answer questions 8 and 9 unless they had had a gap year between their GCSE and A level study.

Submitted survey data was pooled by staff in Lancaster University's Educational Research department and then given to the researcher in the form of an SPSS data file.

The first page of the questionnaire explained the study in more detail, and the last page of the survey provided participants with contact details for the researchers in case they had further questions or wished to withdraw.

Once the data were received, the researcher first used a random number generator to produce a number between 1 and 239 to decide which participant should receive the first reward voucher. This voucher was offered to participants on the basis that they provided their name and thus indicated that they would be willing to take part in the second stage of the study. The first number generated was the number of participant who had provided their name, so they were recipient of the voucher. The researcher then began to code the answers to question 16. In the original data file, each sub-question on question 16 had 5 boxes under it in which the student's answer was in binary form. For example, a person who scored a three on sub-question 2 would have the data 00100 for sub-question 2, rather than the figure 3. The researcher turned these 5 boxes under each sub-question into one box which a numerical value between 1 and 5.

The survey data was analysed using Cronbach's α, principal components analysis, and a MANOVA and subsequent *t*-tests on the survey data. The Cronbach's α was conducted to assess the internal reliability of both the original and established subscales in question 16. A principal components analysis was undertaken to reveal whether the factors that best fit the data would support the hypothesised six-factor framework. The MANOVA and ensuing *t*-tests were conducted to investigate other factors which impacted on students' self-reported achievement goals.

Following this, the researcher devised the interview schedule, thinking both about the original research questions and issues which emerged from the statistical analysis. Semi-structured interviews were selected over unstructured methods as it was recognised that the researcher wanted to explore specific issues and thus needed some degree of control over participants' responses. Structured interviews were not felt to provide enough room for clarification and elaboration on interesting or unexpected issues relating to this new concept (Braun & Clarke, 2006).

The aim of the interviews was to explore and develop themes about students' perceptions of their achievement goals as well as to investigate the concept of performativity in more detail. As a result of the statistical analyses, the researcher wished to interview participants who appeared to perceive a difference between performativity and mastery goals. It is important to note that students who appeared to perceive a difference between the two appeared atypical because these two concepts correlated highly, but the researcher felt that this was necessary to thoroughly investigate the validity of the performativity construct. The questions were looked over by the research supervisor before being piloted to more appropriately assess the feasibility and order of the questions. Nothing

was altered as a result of the pilot study, as the question order worked well and the interview ran to time.

After conducting the statistical analyses and pilot interview the researcher selected students suitable for interview. These students were split into two groups – dominant mastery goals or dominant performativity goals, depending on which subscales the participants had their highest average score on. In each group, those who provided their name were identified and a random number generator was subsequently used to select four students. This meant that four students with dominant performativity goals and four with dominant mastery goals were selected for interview – all of whom appeared to perceive a difference between mastery and performativity goals. These students were then contacted through their relevant gatekeepers and asked to indicate their availability on particular days.

The interviews took place face-to-face on a one-on-one basis in empty classrooms. Participants were again provided with the relevant ethical information, and asked to sign a consent form indicating that they were willing to participate in the interviews and aware of their rights as participants. A copy of this form is provided in Appendix 4. These eight interviews were audio-recorded and then transcribed at a later date (see Appendix 5 for a sample extract of an interview transcript). As is good practice, interviewees were debriefed at the closure of the interviews to identify any unforeseen discomfort and/or misconceptions. They were also provided with a debriefing slip which the researcher's contact details (see Appendix 6) and were informed that a copy of their transcript would be made available to them the following week.

The interviews were transcribed using a deductive, theory-driven thematic analysis in accordance with the six steps outlined by Braun and Clarke (2006). Thematic analysis was selected over alternative methods of qualitative data analysis such as grounded theory (Strauss and Corbin, 1990) as it was felt to be more theoretically flexible, whilst still providing an appropriate way to distinguish, analyse and report themes within the interview data at the level the researcher wanted. The thematic analysis was deductive in nature in order to: explore what motivates students in today's classrooms; elicit interviewees' perceptions of their achievement goals including what has shaped these and how they have changed over time; try and investigate perceived differences between the mastery and performativity constructs; and finally, to investigate the validity of the performativity construct. In this respect, the thematic analysis was a qualitative exploration of the validity of the performativity construct and scales. The overall aim of the thematic analysis was to answer the two-pronged question 'What themes in the data describe students' motivations and relate to performativity'?

Results

Reliability of the Achievement Goal Scale
Normally Cronbach's α for original scales would be reported alongside other scale reliability and validity information. However, this information is currently being assessed in another, related study by Rogers (personal communication, February 16, 2012) and the researcher does not have access to this data.

Furthermore, the type of analyses required for this are beyond the scope of a third-year research project such as this, so here Cronbach's α is reported in a manner consistent with that of more established scales.

Cronbach's α internal consistency reliability estimates were satisfactory for all the subscales, and are reported in Table 1. The mastery-approach and performance-approach internal consistency reliability estimates from this sample were consistent with those reported by Elliot and Murayama (2008), but those for mastery-avoidance goals and performance-avoidance goals were lower. The reliability coefficients of the subscales ranged from .71 to .88, with the lowest estimate obtained for the Mastery-approach subscale scores.

Table 1
Medians, means, standard deviations, and Cronbach's α values of the self-efficacy and achievement goal scales

Scale	Number of Scale Items (*N*)	Median	Mean	*SD*	Cronbachs α
Self-efficacy	6	4.00	3.90	.82	.90
Mastery-approach	3	4.00	4.01	.91	.84
Mastery-avoidance	3	4.00	3.75	.92	.71
Performance-approach	3	3.67	3.45	1.06	.88
Performance-avoidance	3	3.67	3.53	1.04	.83
Performativity-approach	6	4.09	4.02	.83	.88
Performativity-avoidance	4	3.75	3.77	.96	.76

Construct Validity
Construct validity evidence for the performativity scales was assessed using correlations and principal components analysis. The data from each subscale was checked for normality and found to be normally distributed.

Correlations Among the Achievement Goal Subscales
The correlations between the self-efficacy and achievement goal subscales are shown in Table 2. There were significant positive correlations between all of the subscale scores which may be expected from the sample size, and these ranged from weak positive correlations such as *r* = .28 to notably high positive correlations such as *r* = .81. Those results which would be identified by Cohen (1992) as a large effect size have been highlighted and are those which will be discussed.

Table 2
Correlations between participants' scores on the self-efficacy and different achievement goal scales

	Self-efficacy	Mastery-approach	Mastery-avoidance	Performance-approach	Performance-avoidance	Performativity-approach	Performativity-avoidance
Self-efficacy	1	.67**	.45**	.29**	.30**	.69**	.50**
Mastery-approach		1	.58**	.28**	.34**	.80**	.50**
Mastery-avoidance			1	.29**	.42**	.59**	.70**
Performance-approach				1	.81**	.30**	.38**
Performance-					1	.35**	.46**

avoidance		
Performativity-approach	1	<mark>.65**</mark>
Performativity-avoidance		1

**. Correlation is significant at the 0.01 level (2-tailed)

Overall, the correlations between the various sub-scales reveal that the concepts of mastery and performativity goals are somewhat similar: mastery-approach and performativity-approach scales are highly correlated; as are mastery-avoidance and performativity-avoidance scales. This was expected to some extent, as in today's high-stakes testing culture, learning is often communicated to students as being about increasing their grades, rather than about developing their learning strategies.

Large, positive correlations between self-efficacy and mastery-approach resemble the results of previous studies (Bong, 2001; Meece, Blumenfeld & Hoyle, 1988), and large positive correlations between self-efficacy and performativity-approach scales may also be expected given the level of positive correlation between mastery and perfomativity scales. Though there were significant positive correlations between the approach-avoidance distinctions for each type of goal (particularly performance-approach and performance-avoidance goals), this is in line with other research findings (Murayama, Elliot, & Yamagata, 2011; Huang, 2012).

Principle components analysis was used to uncover the factors that best fit the data to see if achievement goal theory for AS and A level students should be reconceptualised as a multidimensional model composed of six factors – mastery-approach goals, mastery-avoidance goals, performance-approach goals, performance-avoidance goals, performativity-approach goals and performativity-avoidance goals. The analysis was conducted on the 22 items which made up the six goal sub-scales of question 16. The sample size of 239 would be classified as 'fair' for factor analysis according to Comrey and Lee (1992) and has 10 subjects per item which meets Kass and Tinsley's (1979 – cited in Tinsley & Tinsley, 1987) advocation of between 5-10 subjects per item up to a total of approximately 300 respondents. However, it should be noted that this sample size would not meet Tabachnick and Fiddell's (1996) recommended sample size of 300 respondents. A direct oblimin rotation strategy with Kaiser Normalization was used, and an oblique solution was selected as there is a plethora of both theoretical and empirical evidence which demonstrates that the sub-scales used in this study are correlated. As recommended by Thompson and Daniel (1996) multiple criteria were used to decide on the number of factors to retain. Initially, those factors with eigenvalues > 1 were identified, and an inspection of the scree plot was used to confirm that four factors should be extracted. Table 3 reports the structure coefficients of the principle components analysis.

The analysis revealed four factors accounting for 69% of the variance. The first factor, which accounted for 41% of the variance, contained two performativity-avoidance items, one mastery-avoidance item, and four performativity-approach items. The performativity items which loaded onto this factor spoke of performing, matching requirements, and understanding material, and so the factor was

labelled 'Performativity Achievement Goal'. The second factor, which accounted for 15% of the variance, included all of the performance items – both approach and avoidance. This factor was thus identified as 'Performance Achievement Goal'. The third factor, which accounted for 7% of the variance, included two performativity-avoidance items and two mastery-avoidance items. The performativity measures which loaded onto this factor described 'learning less' and 'doing less' than was needed, and was recognised to be a 'Mastery-Avoidance Achievement Goal'. The fourth factor, which accounted for 5% of the variance, included the three mastery-approach items and two performativity-approach items which spoke of 'mastering' and 'learning' particular material. This factor was suggested to be 'Mastery-Approach Achievement Goal'. The correlation between Factor 1 and Factor 2 was .29; between Factor 1 and Factor 3 was .33; between Factor 1 and Factor 4 was .53. The correlation between Factor 2 and Factor 3 was .30; between Factor 2 and Factor 4 was .22; and between Factor 3 and Factor 4 was .24. The EV of the first factor not retained was .75. The items and their factor loadings are presented in Table 3. Highlighted figures indicate which factor each item loads onto.

Table 3
Factor Structure Coefficients From the Principal Components Analysis with Oblimin Rotation of twelve iterations.

Measure	Item	Factor 1	Factor 2	Factor 3	Factor 4	Communality
Performativity-Avoidance 2	I am striving to avoid performing below the grade descriptors for my desired grade	.77	.39	.40	.44	.64
Performativity-Avoidance 3	I am striving to avoid performing below the grade descriptors for the grade I wish to achieve	.82	.38	.41	.44	.70
Mastery-Avoidance 1	I am striving to avoid an incomplete understanding of the course material	.74		.45	.57	.63
Performativity-Approach 1	My aim is to match the requirements for the grades I wish to achieve in my course	.77			.46	.60
Performativity-Approach 3	I am striving to understand the material needed to obtain my desired grade	.78			.74	.76
Performativity-Approach 4	My goal is to perform at the level determined by the descriptors for my desired grade	.81			.43	.66
Performativity-Approach 5	I am striving to match the grade descriptors for the level I wish to achieve in my course	.80		.32	.52	.65
Performance-Avoidance 1	My goal is to avoid performing poor compared to others		.76			.60
Performance-Approach 1	My goal is to perform better than the other students		.87			.78
Performance-Avoidance 2	I am striving to avoid performing worse than the others		.81			.67
Performance-Avoidance 3	My aim is to avoid doing worse than other students		.86	.38		.77
Performance-Aproach 2	I am striving to do well compared to other students		.88			.79
Performance-Approach 3	My aim is to perform well relative to other students	.35	.84			.75
Performativity-Avoidance 1	My aim is to avoid learning less than I need to reach my desired grade			.76		.62
Performativity-Avoidance 4	My aim is to avoid doing less than is required by my descriptors for the grade I wish to achieve	.54		.69		.60
Mastery-Avoidance 2	My goal is to avoid learning less than I possible could	.37		.80	.40	.70
Mastery-Avoidance 3	My goal is to avoid learning less than it is possible to learn		.35	.77	.34	.64
Mastery-Approach 1	I am striving to understand the content of this course as thoroughly as possible	.71			.77	.72
Performativity-Approach 2	My aim is to completely master the material needed to reach my desired grade	.62			.78	.68
Performativity-Approach 6	My goal is to learn as much as possible of the material needed for my desired grade	.61			.82	.72
Mastery-	My goal is to learn as much as possible	.41			.87	.77

Approach 2 Mastery-Approach 3	My aim is to completely master the material presented in this class	.54	.33		.86	.77
	Eigenvalue	9.20	3.25	1.62	1.13	
	Percentage variance	41.82	14.77	7.37	5.14	

Note: Loadings with absolute values less than 0.32 are not reported.

MANOVA results – Demographic Differences in Achievement Goals

Multivariate analyses of variance (MANOVA) were computed to examine sex, age, year of study and current institution differences for the six self-report goal subscales. No overall MANOVA effect was found for year of study $F(1, 31) = .40$, *ns*, partial $\eta^2 = .01$, and current institution $F(1, 230) = 1.18$, *ns*, partial $\eta^2 = .03$. The effect of gender and age were not reported as the value for Box's test was significant and thus the data violated the assumption of equality of covariance matrices.

Table 4
Demographic Differences in Self-Reported Achievement Goals

Achievement Goal Subscale	Sex			Age					Present Year of Study			Current Educational Institution		
	Female	Male	*F*	16	17	18	19	*F*	First	Second	*F*	School sixth form	Sixth form college	*F*
Mastery-Approach														
M	4.10	3.59	11.54*	4.02	4.06	3.89	3.67	.41*	4.02	3.98	.11	4.04	4.00	.08
SD	.82	1.16		.87	.88	1.14	.00		.88	.96		.85	.93	
N	187	43		78	112	35	2		126	107		63	169	
Mastery-Avoidance														
M	3.80	3.60	1.62*	3.75	3.81	3.56	3.50	.67*	3.76	3.72	.12	3.74	3.75	.02
SD	.89	1.03		.90	.94	1.02	.71		.89	.98		.84	.97	
N	187	43		78	112	35	2		126	107		63	169	
Performance-Approach														
M	3.44	3.47	.02*	3.44	3.49	3.36	2.33	.87*	3.44	3.45	.01	3.46	3.44	.01
SD	1.05	1.07		1.14	.95	1.20	.00		1.11	.99		1.00	1.08	
N	187	43		78	112	35	2		126	107		63	169	
Performance-Avoidance														
M	3.52	3.51	.01*	3.65	3.46	3.38	3.67	.75*	3.52	3.50	.02	3.56	3.50	.17
SD	1.02	1.13		1.01	1.03	1.16	.94		1.06	1.01		.88	1.09	
N	187	43		78	112	35	2		126	107		63	169	
Performativity-Approach														
M	4.13	3.62	13.54*	3.98	4.10	3.95	3.75	.54*	4.00	4.05	.17	4.13	3.99	1.34
SD	.74	1.07		.74	.82	1.05	.12		.76	.91		.79	.84	
N	187	43		78	112	35	2		126	107		63	169	
Performativity-Avoidance														
M	3.83	3.57	2.65*	3.77	3.83	3.58	3.63	.61*	3.79	3.74	.17	3.71	3.80	.45
SD	.92	1.11		.90	.90	1.30	.18		.88	1.06		.89	.99	
N	187	43		78	112	35	2		126	107		63	169	

*data violated assumption of equality of covariance matrices

Thematic Analysis

Thematic analysis of the interview data indicated five common themes which support the results of the quantitative analyses and relate to previous motivation research. These were prevalent across the data set as they appeared in all eight interview transcripts.

Pressure to perform

One of the central themes brought to light in the analysis was that students felt pressured to perform well at A level in order to get into university and get a good job. They often seemed to feel that how they did at A level was critical to the level of job they could get, and this often influenced their motivation;

> *Interviewer: What would you say motivates you do to your A levels?*
>
> *Lauren: Erm probably my career prospect at the end of it. It's like, I know that if I don't get good grades I won't get into university, so, I need to get into a good university to get a good job.*

Only one interviewee did not say he felt pressured to do well for these reasons. When discussing with Michael why thought he was mastery orientated, he replied that the fact that his father had left school at fifteen contradicted the idea that performance at A level is critical to success later in life:

> *Michael: 'Cause he left school when he was fifteen, and he sort of left home as well, and he just sort of did things to get by really. So, I sort of, a lot of people seem to think they have to do well because of other people and school and stuff. Whereas I sort of think, I don't have to do well in school. I'm doing it because I want to. So I don't really feel pressured. Because I know he didn't so well in school so, there are other options. I don't have to, I just want to.*

Students felt pressure to perform from a variety of sources. They often wanted to live up to their own expectations, the performance of their siblings, and their parents' expectations. Lauren for instance, highlighted the importance of her own values and expectations in a discussion about her family:

> *"I don't know. We all, we all sort of, if we don't achieve what we want to achieve we all get a bit annoyed with ourselves so [laughs]*

Students also recognised that what grades they achieve was crucial to getting a place at their chosen university, and also felt that what they achieved impacted how much they were valued by their school and society in general. For instance, in describing why she thought she focused so much on grades, Lauren described:

> *"Just because of university and the fact that I need the higher grades to get into university and, I think also 'cause it, it proves to other people, if you say like 'I'm an A student' they think a lot more of you than if you say that you're a C student".*

Similarly, Marcus stated:

> *"Well if you've got good grades, society's gonna have a better look on you, rather than loads of fails and D's and E's and stuff, so".*

Rachel however, saw less pressure from society, and more pressure from her school:

> *"And I think sixth forms seem to be a lot less accommodating to differing, like abilities? I think because like you've gone on to sixth form everyone expects you to be a certain level in every subject. So you're kind of made to feel that you shouldn't be happy with a B or a C, that you should always want the A."*

Aiming to please

Another theme extremely prevalent throughout the interviews was that participants wanted to do well at school to please their parents and/or teachers. In describing his motivations, second to wanting to become a doctor, Bradley stated that his mum was a big source of motivation and that he wanted to please her:

> **Bradley:** *Er, yeah. She's not pushy. I know, I know what I expect from her. What she expects of me so I don't, she doesn't need to reinforce anything because I try my hardest to impress anyway so it tends to follow that way anyway.*

When asking Libby what motivated her, she first mentioned her parents but then said:

> *"There's teachers as well I think, 'cause I think you get a relationship with teachers. For instance, I wanna do psychology at university and for me to please my psychology teachers in a big thing you know. And if my psychology teachers say I've done a good piece of work that really motivates me to sort of carry on".*

Efa supported this view:

> **Interviewer:** *And anything else that you think motivates you?*
>
> **Efa:** *I think what teachers think of you as well like, if you've got a teacher you particularly like, you want to almost prove yourself to them as well. Like if you get on with your teacher you want to say 'Yeah I do like your subject and I do well in it as well'*

Motivating classroom factors

As has been found in a plethora of work on motivation, a number of factors specific to the classroom also influenced participants' motivations. These included teacher pedagogies (Blatchford, Kutnick, Baines & Galton, 2003), rewards/consequences which relates to behavioural theories of learning (Skinner, 1981), peers' motivation (Ryan, 2001), and caring relationships with teachers (Wentzel, 1997).

For instance, when describing her particular motivation in theatre, Lauren said:

> *"Erm and then, I'm quite motivated like in theatre, I do theatre so, if my group is motivated, it tends to motivate me because of the people that I'm around"*

Motivating aspects of the A level experience

Alongside more general classroom factors there were also a number of factors relating the A level experience which related to Deci and Ryan's (1985) work on intrinsic motivation and self-determination theory which students felt impacted upon their motivation. One such factor was the fact that A level provided students with more freedom;

> **Lauren:** *Erm, I think the fact that we get like spare time here is definitely a motivation cause you do get like, a break from you're subjects, and you can sort of pick and choose what you want to do it.*

In the majority of the interviews, participants suggested that the harder work at A level pushed them to become more autonomous and self-motivated. Bradley, for

instance, when describing how the change from GCSE to A level had impacted upon his motivation, suggested:

> *"I came here and it was, it was quite hard, so I just, I started motivating myself more and I've worked harder."*

Students also cited the fact that the limited number of subjects meant they were increasingly related to their own interests, which suggests that A level is more intrinsically motivating for students:

> *Interviewer: So, do you think anything about changing from GCSE to A level changed how motivated you are, or how you're motivated?*
>
> *Martin: Yeah. The fact that in GCSE, there were quite a few subjects which I really wasn't too keen on and that sort of affected my motivation. Whereas here, I chose all my subjects.*
>
> Liz, in answering the same question, provides support for this notion:
>
> *Liz: Oh yeah I wasn't motivated at GCSE [laughs]. Erm, I think because I was doing subjects – some subjects that I didn't like at all and I didn't want to be doing them, whereas at A level I've been choosing subjects that I wanted to do.*

Students also felt that their teachers began to value them as individuals at A levels, which they found motivating:

> *Rachel: At A level you feel a lot more comfortable with the teachers, so I think you're more motivated to kind of do well because you know the teacher a bit more and you feel like, you'll get a bit more kind of back from them if you do better at A level. Whereas at GCSE there's so many pupils and their teaching so many people that you're not really an individual.*

Evaluation criteria

One of the key differences between students with different motivational goals was the way in which students evaluated their academic performance which has been found in other achievement goal research (Dweck & Leggett, 1988). The criteria students used ranged from grades, to their own opinion of their work, the amount of time and effort spent on a piece of work, to a written comment or special mention from the teacher, to beating someone else.

Under this theme, the distinctions between the different types of achievement goal became very apparent. For instance, Efa said:

> *"I would say some people directly want to, or like set out to think that 'I want to beat' a certain person in certain subjects, and I wouldn't set out to do that. Like obviously I think the only time I would, that I would compare myself to other people in once I've actually got my results. And I wouldn't do it on purpose, it's just like 'Oh they got that. Maybe I should've got that'. But I think some people would set out thinking 'I need to better than you. I need to do better than you'."*

This highlights that there are students who with performance achievement goals who judge their performance by contrasting it with that of their peers. Efa also provides support for the notion that some students solely judge their performance based on the grades they get:

> *Interviewer: So when you've done a piece of work, what sort of determines how happy you are with it*
> *Efa: Well I'd probably say the grade that I get back once it's been marked rather than what I actually think of it myself which is probably quite bad.*

This contradicted the views of other students such as Martin who was identified as having a mastery achievement goal. When posed with the same question, Martin answered:

> *Martin: How much effort I've put in. I'm not really too bothered about what sort of, I get back. I think if I've tried hard at it then, yeah.*

Discussion

Both the quantitative and qualitative results of this study confirmed the hypothesis that students are beginning to develop a 'performativity' motivation wherein they focus on what is required to achieve a specific grade. No evidence was found to support either of the supplementary hypotheses of this study: that performativity motivations are more prevalent amongst sixth form college students than school sixth form students, or that A level students have higher levels of performativity than individuals studying for their AS levels.

When items attempting to measure the hypothesised performativity-approach and performativity-avoidance goals (Rogers, personal communication, November 28, 2011) were added to Elliot and Murayama's AGQ-R (2008), each of the six subscales achieved a satisfactory level of internal consistency reliability. Of critical importance to this study, principal components analysis revealed a four factor achievement goal framework, but one that is different to that proposed in earlier work (Elliot, 1999).

The results of the principal components analysis revealed that as in earlier work, mastery-approach and mastery-avoidance goals loaded onto different factors (Factors 3 and 4 respectively). However, all of the performance items loaded onto a single factor (Factor 2). Achievement goal theory as it is currently conceptualised therefore loaded onto only three of the four emergent factors. Six of the seven items which loaded onto the fourth factor (Factor 1,) were performativity items, which suggests that this factor is the theorised 'performativity' construct. Again the approach-avoidance distinction was not apparent. These results provide evidence for the performativity construct as a goal that is unrelated to either of the two currently proposed ways of defining competence.

Interviews with students and a thematic analysis of these provided further support for the validity of the performativity construct. In describing why he perceived a difference between learning and grades for instance, Martin provides validation for the idea that performativity is a type of goal in which students identify and learn what they need for a particular grade:

> *Martin: ... if I was just focusing on grades, I'd just go do the specification and I'd do papers and I'd just focus on everything to do to do that exam right. Whereas if I was more interested in learning, you know, maybe I wouldn't try as hard like reading the specification, but I'd go out and read*

like books that aren't on the specification just for interest, and stuff like reading around the subject, learning more about it.

In an earlier interview, Marcus provides support for the proposition that a performativity goal is conceptually distinct from both mastery and performance goals. This discussion emerged after Marcus said he thought his motivations might be different to when he first answered the first survey because of his recent decision not to go to university.

Interviewer: But do you think it would be different in that you weren't focused on grades, you were focused more on either of the other things which I said? Which was, you know, learning because you enjoy learning and you want to develop your knowledge or...

Marcus: [interrupts] well that didn't motivate me

Interviewer: ...compared to other people?

Marcus: Erm, no i think it's definitely more towards grades, getting to uni and stuff like that. I'm not really interested in what other people are doing I suppose.

Despite the fact that principal components analysis and the interviews indicated performativity to be separate from mastery achievement goals, two performativity-approach items loaded onto the mastery-approach factor, and two performativity-avoidance items loaded onto the mastery-avoidance factor. Examination of the terminology in these performativity items revealed that they spoke of 'learning' and 'mastering' – for instance 'My aim is to completely master the material needed to reach my desired grade'. In contrast, the performativity items on the performativity factor all referred to 'performing' or 'matching grade descriptors' such as 'My aim is to match the requirements for the grade I wish to achieve on my course'. On reflection, performativity items which employ the terms 'learning' and 'mastering' may not distinguish clearly enough between valuing the process of learning and wanting to achieve a particular grade, leading them to load onto mastery factors. This finding that some performativity items were actually more akin to mastery items may also partially account for the high, positive correlations between mastery-approach and performativity-approach scales, and mastery-avoidance and performativity-avoidance scales.

The finding that the approach-avoidance distinction did not emerge in performance or performativity goals when a factor analysis was run, and strong significant positive correlations between the approach and avoidance scales for both performance and performativity goals, implies that these constructs lack discriminant validity. The approach-avoidance distinction was also not apparent in any of the interview participants' descriptions of their own, or their peers', motivations. However, questions over the discriminant validity of approach-avoidance distinctions are not unique to this research and have been raised before (Murayama *et al.*, 2011). Writing on this issue, Huang (2012) suggests that whilst the discriminant validity of the approach-avoidance distinction appears to be poor, the constructs are actually conceptually distinct as they correlate differently with various study behaviours and academic achievement, and has consequently advocated that this distinction between approach-avoidance motivations remains.

Limitations
The fact that the MANOVA results were not significant may indicate that the researcher's expectation that students would differ in their level according to their current educational institution was false. However, even if this was a misperception held by the researcher, it was important that this question was addressed in this investigation. Alternatively, the MANOVA may not have been significant due to a sampling issue. When looking to engage local sixth forms, the researcher contacted and used a grammar school as one of the two school sixth forms. Having no prior experience of grammar schools, the researcher was not aware of how grade-focused these can be in relation to non-grammar school sixth forms. The survey used in this questionnaire only asked individuals to identify whether they belonged to a school sixth form or sixth form college which meant that it was not possible to separate out the results of the grammar and non-grammar school sixth form pupils. This meant that is was not possible to see if there was a difference in students' levels of performativity between these two types of institution. However, the results in the data file are in chronological order and though the researcher is not aware of the exact number of participating students from the grammar and non-grammar sixth forms, they are thus aware of roughly which groups of pupils belong to each institution. This is noteworthy because when identifying those individuals with distinctly high mastery or high performativity goals, the researcher noticed that very few individuals with such goals came from the school sixth form.

A further limitation of this study is that the results of principal components analysis are not generalisable to other samples and populations, as this method of analysis does not provide information about statistical significance. Though principal components analysis cannot serve to prove that there is a distinction between performance and performativity goals, in this study the results were supplemented by the interview data and are also comparable to those found in other research (Grant & Dweck, 2003), which increases the level of confidence that we can have in the results.

Whilst the limitations of this study undermine the generalisability of the findings, this does not particularly harm the strengths of the conclusions that this study can come to, as it was focused more on critiquing the current conceptualisation of achievement goal theory and on proposing and providing evidence for the perfomativity construct, than on providing a generalisable account of the motivations of today's A level students. Despite its limitations, this study offers up an important contribution to achievement goal theory by providing supporting evidence for proposals to separate out performance goals into two separate constructs – performance goals in which competence is defined in normative terms, and performativity goals in which competence is defined in non-normative terms (Brophy, 2005; Grant & Dweck, 2003).

Implications for Educational Practice and Further Research
In proposing and establishing evidence for the performativity construct, this study extends achievement goal theory's relevance to today's A level classrooms. It has already been documented that some students focus very much on the grades that they achieve (Covington & Wiedenhaupt, 1997), and both the quantitative and qualitative results of this study support this notion. By

recognising such motivations, achievement goal theorists can help to provide educators with factual and productive advice, which is extremely important given achievement goal theory's salience in education (Brophy, 2004).

As mastery-approach goals lead to positive affect, encourage positive study habits, perseverance in the face of difficulty, and promote engagement with challenging work (Ames & Archer, 1988; Elliott & Dweck, 1988), it seems apparent that teachers should encourage students to adopt these achievement goals as far as is possible.

However, whilst mastery goals are ultimately seen as the best motivational goals to have, they have not been found to reliably predict academic achievement (Harackiewicz *et al.*, 2000). Furthermore, the seeming inescapability of grading which rewards absolute rather than improved achievement, has led some researchers to document fears that mastery goals alone are very difficult to encourage in today's classrooms (Blumenfeld, 1992; Urdan, 1997; Urdan, 2004).

On the basis of this, proponents of multiple achievement goals (Harackiewicz, Barron, Pintrich, Elliot, & Thrash, 2002) have advised that a combination of mastery and performance goals may be beneficial for students as whilst mastery goals lead to a range of positive outcomes, performance goals can encourage students to focus on what they need to learn in order to perform well (Barron & Harackiewicz, 2001; Harackiewicz, Barron, Carter, Lehto, & Elliot, 1997).

However, on the basis that educators are increasingly teaching students what they need to do to demonstrate specific grade criteria in their work, it is likely that it is performativity rather than performance goals which are being promoted in today's A level classrooms, and this needs to be recognised.

A combination of mastery and performativity goals may actually prove to be more adaptive than a balance of mastery and performance goals. Performativity goals importantly relate to outcomes which have future value for students, as it is grades rather than the performance of their immediate peers, which determine whether or not A level students wanting to go to university will get a place.

Performativity goals are also relatively optimistic goals to promote in the classroom as they focus individuals on what it is that they need to do to achieve. Furthermore, by making explicit what students have to demonstrate in order to achieve particular grades, teachers can help students feel empowered, which is important given that students often feel powerless and anxious in relation to grading (Pulfrey *et al.*, 2011).

However, performativity goals may still provide problems in a culture where achievement is aggrandised and performing poorly can threaten an individual's self-worth (Covington, 2000).

If students are focused on demonstrating their competence – either compared to others or by achieving particular grades – they may avoid challenge as this risks failure (Barron & Harackiewicz, 2001), and may withdraw effort in challenging or difficult situations, as being seen to try and then failing can imply that an

individual is incompetent (Covington, 2000). Furthermore, though performativity may work in A level classrooms where grading criteria are made very explicit, universities are less explicit and specific in their marking criteria as part of their aim to promote mastery goals, which may lead students who are dependent on identifying what they need to do and then producing that, struggling and frustrated.

On the basis of this, future research may wish to examine which combinations of mastery and performativity goals are optimal in A level classrooms. The researcher's own opinion, based on a review of the evidence and the data from this study, is that a combination of high mastery and low performativity goals would be ideal. This is because focusing on learning what is needed to achieve particular grades should empower students to perform at the level they wish, whilst limiting the focus on grades should reduce the damage that struggling can do to individuals' self-worth, and the anxiety that students experience whilst studying. Importantly, in the interview stage of this study, two of the students with high-mastery goals noted that they used grades to assess how well they have mastered information that they are supposed to be learning. This correlates with previous findings (Grant & Dweck, 2003) and could be an effective way of promoting high mastery/low performativity goals as it maintains a focused approach to learning. This use of grading may also limit the self-worth that students tie to their grades, as it corresponds more with an incremental rather than fixed view of intelligence (Dweck & Leggett, 1988).

Cognisant that the motivations of pupils at the grammar and non-grammar sixth forms appeared to differ, future researchers may also wish to separate out grammar school sixth forms from other sixth forms when looking to examine whether institution type affects levels of performativity. Future research may also go on to examine the motivations of students in a wider range of post-16 educational establishments such as further education colleges and independent school sixth forms, to examine relevant aspects of institutional culture which may affect the achievement goals that students adopt, and to use a more representative sample of different institutions. This may additionally help researchers to obtain a more representative sample, as in this research it is recognised that as well as being self-selecting, the sample was fairly homogenous with predominantly white students from middle-class backgrounds.

Interviews with students also emphasised the importance of trying to get parents to take a supportive interest in their child's learning, as parents seem to be a big source of support, and students actively seek to impress them. This supports and reinforces similar findings and calls in other academic literature (Wentzel, 1998). Interviews additionally demonstrated the importance of teachers developing caring, respectful, and supportive relationships with pupils, as this also increases students' motivation to achieve, which has again been reported in previous work (Skinner & Belmont, 1993).

To conclude, this research identified performativity as a valid construct which should be added to achievement goal theory in order to better account for the motivations of today's A level pupils. Importantly, performativity motivations may hold the key to making grades as user-friendly as possible, which Pulfrey *et al.*

(2010) state should be a priority for educational researchers. Future work should utilise those performativity measures that referred to 'performing' or matching grade descriptors in order to assess students' performativity goals, and should aim to obtain a sample of students from a broad range of educational institutions. In doing so, future research can assess the optimal combinations of achievement goals in today's classrooms and specify what educators can do to encourage their students to adopt these motivations.

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