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Exploring Achievement goals tendencies in students: The link between achievement goals and types of motivation

Albulene Grajcevci

Faculty of Education, University "Isa Boletini" Mitrovice
Rr. Ukshin Kovacica, Mitrovice, Republic of Kosove
E-mail address: albulene.grajcevci@umib.net
ORCID: https://orcid.org/0000-0002-5697-3691

Arif Shala

Faculty of Social Sciences, AAB College
Rr. Elez Berisha Nr. 56, Prishtine, Republic of Kosove
E-mail address: arif.shala@universitetiaab.com
ORCID: https://orcid.org/0000-0002-6605-0532

Abstract

Aim. This research explored the link between motivation types and achievement goals. More specifically the research focuses on exploring goal endorsements among learners as well as their correlation with motivation.

Methods. The sample of 600 participants was gathered among students enrolled in private (N= 156) institutions and public universities (N=444). The study was a quantitative one and utilized the Achievement Goal Questionnaire (AGQ-R) as well as the Intrinsic and Extrinsic motivation scales (Lepper, Corpus, &Iyengar, 2005).

Results. The results stipulate that achievement goals are closely linked to situation factors such as university and department. Supporting the premise of fluidity of goal constructs. Ultimately, mastery approach, performance approach and performance avoidance goals did not discriminate between types of motivation, with three goals being positively correlated to both types of motivation. Mastery avoidance goals were not correlated to any of the motivation types (intrinsic or extrinsic), but they showed a tendency to be negatively correlated to extrinsic motivation, a correlation that was not significant.

Conclusion. Present research reveals that there are significant differences among participants in goal adoption according to year of study. Specifically, as expected first year students were significantly more mastery oriented than participants attending the second and third year of studies. Gender differences were also evident, with female students reporting higher levels of mastery orientation compared to male students. Finally, the inconclusive results regarding motivation types and achievement goals need future studies to reestablish the stipulated link

Key words: Intrinsic motivation, extrinsic motivation, achievement goals, Kosove.

Introduction

Mastery and performance goals are ways of competence acquisition in achievement situations (Ames, 1992; Dweck & Leggett, 1988) and have attracted considerable attention from researchers. Mastery goals emphasize learning and skill acquisition compared to performance goals which build on the establishing of competences (Harackiewicz, et al., 2000) researchers maintain that mastery goals correlate to adaptive behaviour in learning including deep processing of learning materials, and involvement in tasks, among others (Ames & Archer, 1988; Nicholls, Cheung, Lauer, & Patashnick, 1989; Nolen & Haladyna, 1990). Unlike mastery goals, performance goals are reported to signal maladaptive behaviour including surface learning(E. S. Elliott & Dweck, 1988).

The trichotomous goal framework (Elliot & Harackiewicz, 1996) incorporates three distinct goals, mastery goals-representing emphasising competence building according to intrapersonal standards, performance approach goals-competence acquisition depending on normative standards and performance avoidance goals which note the tendency to avoid incompetence.

Students who adopt mastery avoidance goals will primarily compare performance to some existing personal standards of performance(Maehr and Zusho, 2009).Learners who embrace performance approach goals focus on outperforming other students and exhibit a preference for extrinsic motivation (Linnenbrink&Pintrich, 2002; Maehr&Zusho, 2009).In addition performance avoidance learners focus on not looking incompetent before other students, they compare their performance with only the goal of not performing at a lower level than other students (Linnenbrink&Pintrich, 2002; Maehr&Zusho, 2009).

Studies have linked mastery goals to higher order learning and higher levels of competence acquisitions. On the other hand performance goals have been reported to have the opposite impact, specifically to correlate to lower levels of learning and competence building (Maehr&Zusho, 2009). Other studies have linked achievement goals to different emotions. As such mastery approach learners report positive emotions including but not limited to enjoyment and pride. It is not just the experience of positive emotions that is important but also the lack of negative emotions. It is of key importance to note that students who adopt mastery approach goals will experience less negative emotions. Unlike mastery approach students, the performance approach learners experience more negative emotions such as anger and anxiety (Linnenbrink&Pintrich, 2002). Conclusively, approach goals, according to research, are linked to positive cognitive and emotional outcomes, unlike avoidance goals (Tamir&Diener, 2008).

Achievement goal theories

Achievement goals are reported to have five characteristics, they are focused on an object, direct and guide behaviour, focus on the future, are not needs or drives, but are cognitive representations, and students can choose to either approach or avoid them. To generalise, achievement goals represent cognitive

tendencies which guide students' behaviour in achievement situations (Hulleman, Schrager, Bodmann, &Harackiewicz, 2010).Accordingly, achievement goal theory explains that goals are what gives an activity meaning and purpose (Kaplan & Maher, 2007). To illustrate, if a learner says "my goal is to get an A" than this statement represents a goal. However, achievement goal theory does not focus on the wants of learners but instead struggles to understand why a student wants an A. Achievement goals theory is much more interested in exploring what makes a learner approach some actions but avoid others, it is its main goal to explain this behaviour. In this particular example, the theory, aims to explain why a learner approaches behaviour such as completing homework, or researching for learning opportunities (Maehr and Zusho, 2009).

To date, there are a number of achievement goals theoretical frameworks. The differences between them rely on what they perceive more important the learner or the context. An additional difference between these frameworks is the distinction between the situation or the predispositions of the individual (Maehr and Zusho (2009). Achievement goals theories rest on attribution theory and achievement motivation which is why it is no surprise that these theories assume that students posess goal tendencies which are detrimental in deciding what goals students will adopt for each achievement situation (Dweck and Elliot, 1983). Achievement motivation is considered to be a personal trait which is unique for every person and represents different levels of motivation. The existing triad is stable across time and development (Maehr and Zusho, 2009). By resting on these assumptions, goal models differentiate between mastery and performance goals. In cases when learners attribute intelligence and competence to predispositions as well as change and improvement possibilities, the learners will be more likely to adopt mastery goals. Learners, who consider intelligence and competence to be stable tendencies, will embrace performance goals (Dweck& Leggett, 1988). In addition to beliefs of learners, situational factors are extremely important in goal adoptions. As such, when learners consider that a particular situation in academic settings, notes learning and understanding these learners will be more likely to adopt mastery goals. The same is true for performance goals, if students perceive that academic settings promote competition and comparison they will develop performance goals (Barron &Harackiewic, 2001). Due to this research, the role of situation factors in goal adaptation is a valuable topic of research (Maehr&Zusho, 2009).

The research of the past two decades has resulted in the development of three notable frameworks for achievements goals (Elliot & McGregor, 2001). The first framework distinguishes between mastery and performance goals. The second theory supports the assumption that there are three types of achievement goals: mastery goals, performance approach goals and performance avoidance goals. The last theory represents the 2x2 model of achievement goals that supports the idea that achievement goals can be divided into four types.

The 2x2 framework of achievement goals notes that goals differ in their valance and definition. A learner can improve performance, skills or know-

ledge by fulfilling interpersonal standards or focusing on comparing performance and thus aim to perform better than others.

The difference in definitions of competence is documented in the left to right diagonal in the figure below. The second dimension pertains to the difference in the valance of competence. When valance is positive, learners tend to approach success or desirable results. If valance is negative then the learner will aim to prevent failure or undesirable results (Elliot & McGregor, 2001). The figure below shows valance in the top-down diagonal. This model of assessing achievement goals is the latest model in research and it establishes a difference between approach goals or the focus on personal advancement, and avoidance goals that highlight the prevention of failures as opposed to competence building (Elliot &McGregor, 2001;Maeher&Zusho, 2009). This model developed by Elliot and McGregor, (2001) postulates that there are four separate achievement goals linked to academic situations. First, mastery approach goals note learning and understanding across academic setting, mastery avoidance goals instill in learners the need to prevent the loosing of competences or skills. Performance approach goals emphasise competition and outperformance across learning situations finally, performance avoidance goals represent the need to not perform worse than others (Elliot & McGregor, 2001; Harackiewicz, Barron, Carter, & Elliot, 2000; Harackiewicz, Barron, Tauer, & Elliot, 2002).

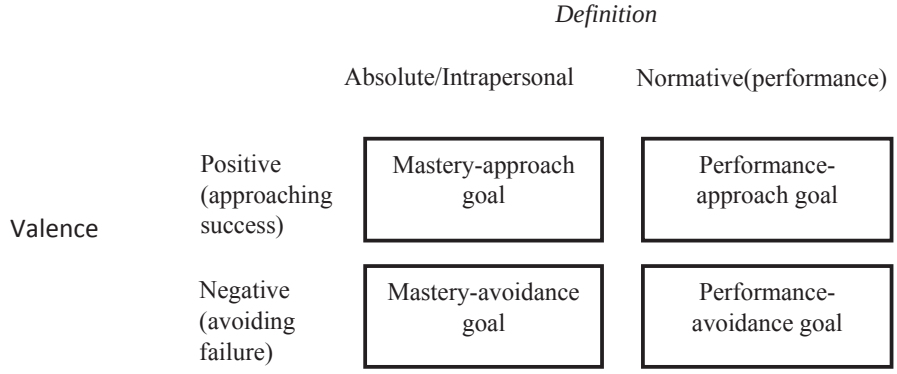

Figure 1. The 2X2 Achievement Goal Framework

Note. From *A 2X2 Achievement Goal Framework,* by A. J. Elliot and H. A. McGregor, 2001, *Journal of Personality and Social Psychology, 80*(3), 501-519.

Accordingly, research studies report that mastery approach goals, correlate to higher academic competences, while the opposite is true for performance avoidance goals which correlated to lower academic competences (Maehr and Zusho, 2009). Additional implications are reported for mastery goals which are

documented to promote academic interest (Harackiewicz et al, 2000) as well as correlate to higher achievements (Linnenbrik-Garcia, Tyson, &Patall, 2008). Evidently, performance goals correlated to increased levels of emotionality (Elliot & McGregor, 2001), while performance avoidance goals inhibit learning, as well as correlate to anxiety, low levels of academic interest and achievement (Elliot & McGregor, 2001; Maehr&Zusho, 2009).

Motivation and Achievement Goals

In the literature, motivation is usually defined as an inner state which initiates, directs and maintains behaviour (Leea, McInerneyb, Liemc, &Ortigad, 2010). Motivation contains two subdivisions: intrinsic and extrinsic motivation. The distinction between these two types of motivations ultimately encouraged hypothesis on how motivation comes about and once individual differences were considered important, the two types of motivation were seen as completely opposite poles (Lepper, Corpus &Iyengar, 2005).

Intrinsic motivation is considered as the motive which keeps students engaged in a task due to inherent qualities (Ryan &Deci, 2000; Leea, McInerneyb, Liemc, &Ortigad, 2010). Students who are intrinsically motivated are enthusiastic, open to experiencing adventures, striving for excellence, set goals, as well as work hard in order to improve. Typically, students who are intrinsically motivated tend to think of tasks as interesting and important which in turn makes it possible for them to persist in their work as well as develop strategies to achieve goals (Leea et al., 2010).

Extrinsic motivation is the motive which keeps students engaged in a task through external rewards (Ryan &Deci, 2000, Leea et al, 2000). Extrinsic motivation is related to worrying about grades, about rewards, praise, and feedback. Students, who are extrinsically motivated, tend to engage in surface learning and will usually not continue in a task when they perceive that there will be no extrinsic rewards. Although, positive extrinsic rewards such as good grades, give the student the message that he/she is successful and competent thus significantly increasing the chances that the student will continue to be engaged in the task. Nevertheless, if negative feedback is given it has a devastating effect on the student since to them it is a sign that they are neither competent nor successful (Leea et al., 2010).

Motivation is being discussed in this study due to its undeniable relation to achievement goals. A number of studies report that achievement goals the individuals utilise in achievement situations explain a considerable amount of achievement motivation (e.g. interest, persistence, and strategy) (see Ames, 1992; Dweck & Leggett, 1988; Elliott & Dweck, 1988; Harackiewicz, Barron, Carter, Lehto, & Elliot, 1997).

The impact of achievement goals on the students' enjoyment of achievement related activities is of crucial importance because it establishes the link between achievement goals and intrinsic motivation (Rawsthorne& Elliot,

1999). The majority of researches in the topic of achievement and motivation argue that mastery and performance goals are different processes which have also different impacts and consequences on intrinsic motivation (Rawsthorne& Elliot, 1999). To date, research has supported the assumption that mastery goals are connected to intrinsic motivation (Rawsthorne& Elliot, 1999) due to their focus on the intrinsic value of learning (Leea, McInerneyb, Liemc, &Ortigad, 2010), while performance goals seem to be connected to extrinsic motivation (Rawsthorne & Elliot, 1999) due to the focus on doing better than others and achieving success with little effort (Leea et al., 2010). Researchers argue that mastery goals promote intrinsic motivation by emphasising challenge, excitement, and task involvement, among others, while performance goals are said to undermine intrinsic motivation by emphasising threat, undermining task involvement and creating anxiety and evaluative pressure (Elliot &Harackiewicz, 1996; Elliot &Rawsthorne, 1999). Students who are performance-avoidance oriented view achievement situations as threats, consequently facing a need to escape from the situation. This need to escape from achievement situations elicits anxiety, stops task engagement, and undermines cognitive and affective involvement which consequently undermines intrinsic motivation. (Elliot &Harackiewicz, 1996).

The meta-analyses conducted by Elliot &Harackiewicz (1996), showed that 90% of the studies done on achievement goals and intrinsic motivation supported the fact that performance-avoidance goals undermine intrinsic motivation, while performance-approach and mastery goals foster intrinsic motivation, consequently the undermining effects of achievement goals on intrinsic motivation being evident only for performance-avoidance goals. Additionally, the results of this study showed that students who are performance-approach and mastery oriented showed similar levels of intrinsic motivation (Elliot &Harackiewicz, 1996; Rawsthorne& Elliot, 1999). However, Rawsthorne and Elliot (1999) argue that two things need to remain clear: (a) not all studies have not been able to provide evidence that performance-avoidance goals undermine intrinsic motivation and (b) performance-approach goals, although linked to intrinsic motivation are not necessarily beneficial to it. Some studies maintain that goals do not influence performance but they mostly impact intrinsic motivation (e.g., Barron& Harackiewicz, 2001; Harackiewicz et al., 1997; Harackiewicz, Barron, Tauer, Carter, & Elliot, 2000). Other studies reported the exact opposite, specifically that performance goals predict higher academic performance but exert no influence on intrinsic motivation (e.g., Barron& Harackiewicz, 2001).

The literature review shows that intrinsic motivation is expected to be linked with performance-approach and mastery goals, while performance-avoidance goals are expected to undermine it. Therefore, in this study the intrinsic and extrinsic motivations of students will be measured in order to see whether the opposite is true.

In order to test these assumptions the following hypotheses have been developed:

H1: Students enrolled in public universities will be more mastery oriented then students in private institutions.
H2: Female students will be more mastery oriented than male students.

H3: Students attending private institutions will be performance oriented.
H4: First year students will be more mastery oriented compared to second and third year students.
H5: Intrinsic motivation will be related to the endorsement of mastery--approach goals and performance-approach goals, while extrinsic motivation will be related to the endorsement of performance-avoidance and mastery-avoidance goals.
H6: Intrinsic motivation will predict mastery-approach goal adaptation while extrinsic motivation will predict performance-approach and performance-avoidance goal endorsement.

Method

Participants

In this study 600 undergraduate level students participated. The participants were all undergraduate students enrolled at Universities in Kosova. They ranged in age from 17 to 37 (M = 20.64, SD = 2.39). In this sample, 444 (74%) participants were students enrolled at the University of Prishtina, which is the main public University in Kosove while 156 (26%) were students enrolled in three different private Universities. In terms of gender distribution 314 were male while 286 were female.

Table1. *Number of Participants according to Year of Study, Gender and University*

University	F	M	1st Year (N)	2nd Year (N)	3rd Year (N)	N
Public University	218	226	167	188	89	444
Private Colleges	68	88	64	68	24	156

Note N=600.
Source: own research.

A number of the hypotheses in this study distinguish between genders, universities as well as departments and years of study. Therefore, it is important to look at the number of participants in each category, the information about which is given in table 3.2 below. To sum up the statistics beneath, there were more participants from social sciences compared to exact sciences, there were more students from the public university than the private universities. In addition, the third year students were the lowest in number, compared to second and first year students.

Table 2. *Number of Participants according to Field of Study and University*

University	Department	Study Year	N
Public University	Exact Sciences	1	103
		2	70
	Social Sciences	3	48
		1	64
		2	118
		3	41
Private Colleges	Exact Sciences	1	25
		2	28
	Social Sciences	1	39
		2	40
		3	24

Note N=600.
Source: own research.

Achievement Goals

This study used the revised version of the Achievement Goal Questionnaire (AGQ-R) in order to measure achievement goals in Kosovar students. This updated version of AGQ was developed to remove the negative affectivity and also to align the items with the achievement goal theory hence this revised questionnaire is a bit different compared to the initial AGQ developed by Elliot and McGregor in 2001 (Elliot & Murayama, 2008). The AGQ-R is comprised of 12 items which represent four different achievement goals where each goal is measured by 3 items. The mastery-approach goals were measured with items such as "My aim is to completely master the material presented in this class", mastery-avoidance goals were measured with items such as "My aim is to avoid learning less than I possibly could", performance-approach included items such as "My aim is to perform well relative to other students" while the performance-avoidance goals were measured with items such as "My aim is to avoid doing worse than other students". This instrument used a 5-pint scale ranging from 1 (strongly disagree) to 5 (strongly agree). Overall, the AGQ-R has been found to be reliable, valid and internally consistent. In the original study, for mastery-approach, mastery-avoidance, performance-approach and performance-avoidance goals Cronbach's α = .84, .88, .92, and .94, respectively (Elliot & Murayama, 2008).

The table below, shows the internal reliability scores for the scales and subscales, along with the descriptive analysis.

Table 3. *Descriptive Statistic and Cronbach's a for Measures of Achievement Goals*

Variable	Cronbach's a	Mean	SD	Possible Range	Skewness	Kurtosis
Mastery-approach	.52	4.43	.51	1-5	-1.08	-1.18
Mastery-avoidance	.55	3.17	1.00	1-5	-.20	-.68
Performance-approach	.76	3.96	.74	1-5	-.88	.95
Performance-avoidance	.64	3.94	.84	1-5	-.94	.63

Note N=600.
Source: own research.

Motivation

The intrinsic and extrinsic motivations were measured with the intrinsic and extrinsic motivation scales (Lepper, Corpus, &Iyengar, 2005). The measurement for intrinsic motivation includes 12 items and three subscales while the measurement for extrinsic motivation includes 8 items and three subscales. The motivation measurement, in the original study, yielded high internal consistency values for the intrinsic motivation (α= .90) and good values for the extrinsic measurement (α= .78). The authors argue that the measurement was overall reliable and valid (Lepper, Corpus, &Iyengar, 2005).

The measurement used to assess intrinsic motivation included three subscales: challenge, curiosity and independence mastery. Challenge was measured with 6 items, a sample item of this subscale is "I like hard work because it is a challenge" and "I like to do work that is at a more difficult level". Curiosity was measured with only 3 items, such as "I work on problems to learn how to solve them". Lastly, independent mastery subscale was comprised of 3 items, an example of which is "When I make a mistake I like to figure out the right answer by myself".

Similar to the above, extrinsic motivation was measured by 3 subscales: easy work, dependence on teacher and pleasing teacher. The subscale of easy work included 3 items, an example of items included in this subscale would be "I like easy work that I am sure I can do". In the subscale of pleasing teacher the following two items, such as the following, were used "I do my school work because the professor tells me to". The final three item subscale used to measure dependence on teacher included items such as "If I get stuck on a problem I ask the teacher for help". A 5-point scale, ranging from 1 (strongly disagree) to 5 (strongly agree) was used for the motivation scales.

The internal consistency for the intrinsic scale was higher in comparison to the extrinsic scale. A reason why there are low values is the low number of items in the subscales.

Table 3. *Descriptive Statistic and Cronbach's a for Measures of Intrinsic and Extrinsic Motivation*

Variable	Cronbach's a	Mean	SD	Possible Range	Skewness	Kurtosis
Intrinsic Motivation	.82	4.17	.50	1-5	-.77	1.56
Challenge	.80	4.16	.59	1-5	-.93	1.94
Curiosity	.55	4.28	.53	1-5	-.87	1.56
Independent mastery	.66	4.08	.71	1-5	-.87	.85
Extrinsic Motivation	.69	3.22	.61	1-5	-.08	.03
Easy work	.56	2.87	.81	1-5	.27	-.02
Pleasing teacher	.20	2.88	1.05	1-5	.01	-.83
Dependence on teacher	.66	3.80	.74	1-5	-.66	.50

Note N=600.
Source: own research.

RESULTS

Hypothesis 1 states that, students enrolled in public universities will be more mastery oriented then students in private institutions. This hypothesis was tested with an independent *t*-test.

The results provided that on average, students in public universities are more mastery-approach oriented (M= 4.47, SD= .49) compared to students in private universities (M= 4.30, SD= .56). This difference was significant (t(598) = 3.55, p< .05), the effect size for the differences between groups was rather small d=.32. No significant differences were reported between groups on the remaining types of achievement goals. To illustrate, students in the public university, on average, were barely more mastery-avoidance oriented (M= 3.17, SD= 1.02) than students in private universities (M= 3.16, SD= .96), a difference which was not significant (t(598)= .140, p> .05, d=.01). Students enrolled in private institutions were more performance-approach oriented and barely less performance-avoidance oriented in comparison to students in the public university who emphasised less the performance approach goal. In the private universities students were more performance-approach oriented (M = 3.97, SD= .76) than students in the main public university (M=3.96, SD= .71). This difference between groups on performance-approach goal endorsement was not significant (t(598)= - .21, p> .05, d= .01). In contrast to what was expected, students in the public university were slightly more performance-avoidance oriented (M= 3.97, SD= .83) compared to students in private universities (M= 3.83, SD= .86) however, this difference was not significant (t(598)= 1.71, p> .05, d= .16). To conclude, the results of the t-test provided that students in public universities were more likely to report being mastery oriented compared to students in private institutions. It was not expected that the groups would not show any differences on mastery avoidance goals, performance approach goals and performance avoidance goals. Due to this the present hypotheses was only partially supported.

Hypotheses 2 states that female students will be more mastery oriented than male students.

The hypothesis was tested with an independent *t*-test which reported gender differences on goal adoption with females being more mastery approach oriented than male students. In mastery-approach goals females reported higher scores (*M*= 4.49, *SD*= .47) than males (*M*= 4.37, *SD*= .55). The difference between females and males in mastery-approach goal endorsement was significant (*t*(598) = -2.74, *p*< .05, *d*=.24) suggesting that females are more mastery-approach oriented than males. It was unexpected to discover that no gender effects were visible on mastery-avoidance, performance-approach and performance-avoidance. Females reported higher scores in mastery-avoidance (*M* = 3.19, *SD*=1.09), compared to males (*M* = 3.14, *SD*= 0.92), a difference which was not significant (*t* (598) = -0.54, p> .05, d=.04). Similarly, females were more performance-approach (M= 3.97, SD= .70) as well as performance-avoidance oriented (*M* = 3.94, *SD* = .83). While males were less performance-approach (M=3.95, SD= 0.79) and performance-avoidance oriented (M= 3.92, SD= 0.85). However, both differences yielded insignificant results for performance-approach (*t* (598) = -0.33, p> .05, d=0.03) and performance-avoidance goals (*t*(598) = -0.23, p> .05, d=.03). The second hypotheses was supported as the results reported significant differences between genders on the adoption of mastery approach goals.

Hypothesis 3 states that students attending private institutions will be performance oriented.

The third hypothesis similar to the previous one was tested through an independent t-test. Results of the t-test provided that participants enrolled in exact science departments are more mastery oriented compared to students enrolled in social science departments who were more performance approach oriented. Students in social sciences are more performance-approach oriented (M= 4.01, SD= 0.69) than students in exact sciences (M= 3.84, SD=0.79). This difference in goal adaptation is significant (*t* (598) = 3.75, p< .05, d=0.22). Students in social sciences are less performance-avoidance oriented (M=3.89, SD=0.84) than students in exact sciences (M=3.99, SD=0.83). In addition, students in exact sciences are slightly more mastery-approach oriented (M=4.46, SD= 0.47) as well as mastery-avoidance oriented (M=3.23, SD= 1.00) than students in social sciences (M= 4.40, SD= 0.55; M=3.10, SD=1.00). However, the differences between groups were only significant for performance approach goals and not for other goals, despite a clear tendency of participants of exact science departments to be inclined to adopt mastery goals.

Hypothesis 4 states that first year students will be more mastery oriented compared to second and third year students.

The hypothesis was tested with a one way analysis of variance with a post hoc comparison via Hochberg GT2 tests. The results provided that the year of study has significant effects on the type of goal endorsed. There was a significant effect of study year on the endorsement of mastery approach goals (F (2, 598) = 5.37, *p*< .01, η2=0.01). The post hoc analysis via Hochberg GT2 revealed that first year students were significantly more mastery-approach oriented

than third year students (p< .01) which signals a steady decline on the emphasis placed on mastery approach goals during the academic studies. The effect of the year of study in achievement-avoidance goals was also significant (F (2, 598) = 3.53, p< .05, η2=0.46). However, the effect was unexpected as second year students showed the highest scores on mastery-avoidance goals (M= 3.29, SD= 0.99), with the score significantly decreasing for the third year students (M= 3.00, SD= 1.12; p< .05) as shown by post hoc analysis via Hochberg GT2.

The significant effect of the year of study is again observed on performance, specifically on performance-approach goals (F (2, 598) =12.63, p < .01, η2=0.04), and performance-avoidance goals (F (2, 598) = 10.78, p< .01, η2=0.03). The results of a post hoc analysis via Hochberg GT2

revealed that the emphases placed on performance approach goals decreases with each academic year. The results showed a significant difference in performance-approach goals between first (M= 4.09; SD= 0.74) and third year students (M=3.66, SD= 0.84; p< .01), as well as a significant decrease between second (M= 3.99, SD= 0.67) and third year students (M= 3.66, SD=0.84; p< .01). A similar trend is noticed on performance-avoidance goal endorsement where there is a significant difference between first (M= 4.05, SD= 0.74) and third year students (M= 3.61, SD= 1.04; p< .01) and a significant decrease between second (M= 3.97, SD=0.80) and third year students (M= 3.61, SD= 1.04; p< .01).

The present research noted that there are significant differences among participants in goal adoption according to year of study. Specifically, as expected first year students were significantly more mastery oriented than participants attending the second and third year of studies.

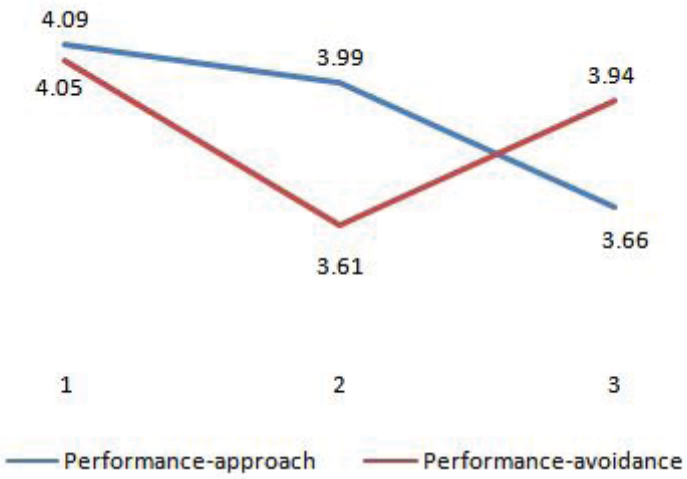

Figure 2. *Mean for performance-aproache and performance avoidance goals acording to years of study.*

Source: own research.

H5 assumes that intrinsic motivation will be related to the endorsement of mastery-approach goals and performance-approach goals, while extrinsic motivation will be related to the endorsement of performance-avoidance and mastery-avoidance goals. In order to test this hypothesis two Pearson correlation analysis were conducted to separately measure the correlation of achievement goals with intrinsic and extrinsic motivation.

Results showed a positive correlation between intrinsic motivation and mastery approach goals (r=.36, p<.01). The intrinsic motivation scale contained three subscales measuring: challenge, curiosity and mastery. The endorsement of mastery-approach goals was positively related to need for challenge (r= .32, p<.01), curiosity (r= .36, p<.01) and mastery (r= .21, p<.01). There was no correlation, positive or negative, between mastery-avoidance goals and intrinsic motivation. Performance-approach goals, as expected, were positively related to intrinsic motivation (r=.25, p< .01), and in terms of subscales, also positively related to challenge (r= .23, p< .01), curiosity (r=.15, p< .01) and mastery (r= .11, p< .01).

Performance-avoidance goals, on the other hand, showed some interesting results since they showed positive correlation with intrinsic motivation as a scale but also with the subscales of intrinsic motivation. Performance-avoidance goals were positively correlated with intrinsic motivation (r= .16, p< .01) as well as with the subscales of intrinsic motivation, namely challenge(r=.141, p< .01), curiosity (r= .15, p< .01) and mastery (r=.11, p< .01).

Table 5. *Pearson Correlation Matrix between Achievement Goals and Intrinsic Motivation*

		1	2	3	4	5	6	7	8
1.	Mastery approach	-							
2.	Mastery avoidance	.084*	-						
3.	Performance approach	.294*	.058	-					
4.	Performance avoidance	.208**	.313**	.499**					
5.	Intrinsic motivation	.368**	.075	.253**	.168**	-			
6.	Challenge	.327**	.082	.234**	.141**	.910**	-		
7.	Curiosity	.362**	.062	.242**	.158**	. 742**	.567**	-	
8.	Mastery	.218**	.028	.143**	.119**	.742**	.473**	.396**	-

Note.*p<.05.**p<.01.
Source: own research.

The second part of this hypothesis states that extrinsic motivation will be correlated to performance-avoidance and mastery-avoidance goals. As assumed, performance avoidance goals, showed significant positive correlations with extrinsic motivation in general (r=.12, p< .01) however further analysis showed that they were positively correlated only with the subscale of dependence on teacher (r= .14, p<.01). No significant correlations were reported between mastery-avoidance and extrinsic motivation. Surprisingly, the correlation analysis, showed a positive correlation between mastery-approach goals and extrinsic motivation (r= .09, p< .05), but only with the subscale of dependence on teacher (r= .20, p< .01). The hypothesis was supported on its initial statement however, it should be noted that unexpected correlations were found aside from the hypothesis. The results supported the hypothesis only partially, since mastery-avoidance goals exhibited no correlation with extrinsic motivation.

Table 5. *Pearson Correlation Matrix between Achievement Goals and Extinct Motivation*

	1	2	3	4	5	6	7	8
1. Mastery approach	-							
2. Mastery avoidance	.084*	-						
3. Performance approach	.294*	.058	-					
4. Performance avoidance	.208**	.313**	.499**					
5. Extrinsic motivation	.096*	-.068	.207**	.120**	-			
6. Extrinsic work	-.052	-.079	.057	.045	.762**	-		
7. Pleasing teacher	.072	-.049	.153**	.073	.787**	.478**	-	
8. Dependence on teacher	.201**	-.016	.259**	.147**	.633**	.153**	.273**	-

Note.*p<.05.**p<.01.
Source: own research.

H6 states that intrinsic motivation will predict mastery-approach goal adaptation while extrinsic motivation will predict performance--approach and performance-avoidance goal endorsement. A linear regression analysis was conducted to test for the predictive effect of the three subscales of intrinsic motivation. The results showed that only the subscale of curiosity predicts mastery-approach goals, explaining thus 14% of the variance in mastery-approach goals. Two additional stepwise regression analyses reported that extrinsic motivation did not predict performance-approach and performance-avoidance goals. Consequently, the hypothesis was only partially supported.

Table 7. *Summary of Simple Regression Analysis for Curiosity*

Variable	B	SB(B)	β	*t*	Sig. (*p*)
Mastery-Approach goals	.35	.04	.36	9.52	.000

Note. R^2=.14.
Source: own research.

Discussion

Previous researchers, postulate that situation factors are important in the adoption of goals. Research studies have documented that when students consider the learning environment to encourage learning they will be more likely to develop mastery goals. Similarly, if an achievement situation, highlights social comparison, then the learner is likely to develop performance goals (Barron & Harackiewicz, 2001).

The results of the present research as expected report that the environment is detrimental in goal adoption. Reportedly, situation factors (e.g. type of university, year of study and study program) influence goal development. First the results provide that the type of higher education institution is important as regards mastery approach goals. Specifically, students attending the private university were less mastery approach oriented compared to students in the public university who reported being more mastery approach oriented. The second factor influencing goal endorsement is the year of study. First year students were more mastery oriented compared to others. One possible explanation is the fact that performance goals build on social comparisons, and students will have more possibilities to compare themselves with others as they progress in their academic studies. Consequently, the more possibilities for social comparisons the more likely it is for performance goal approaches to be developed (Maehr & Zusho, 2009). The year of study is also an important factor in goal endorsement with students who advance in academic years showing a preference for performance goals. In regard to this tendency it is of importance to explore possible implications of feedback, professors, and classrooms. Ultimately, the present study indicates that aside from the role of year of study and type of university, the study program is also influential in goal endorsement. The results postulate that students in social science programs are more performance approach and performance avoidance oriented than students in exact sciences. The latter were more performance approach oriented which may have been a result of the environment. Students in exact science programs involve in independent work in laboratories which limits the possibilities for social comparisons which are expected to result in performance goals. Social science programs emphasise group work and students have more opportunities to compare the self to others as result of which they exhibit an increased tendency to adopt performance approach and performance avoidance goals.

It is the result of this study that the students interact with every achievement situation by perceiving messages from the situation which ultimately define goal adoption. It is a conclusion of this research that the situation factors such as year of study, department and university type influence what goal a learner will adopt. The results postulate that mastery oriented will be those students who are on their first year of academic studies, attend a public university and are enrolled in a program of exact science.

The present study focused on assessing the implications of intrinsic and extrinsic motivation in achievement goals. The findings obtained through the AGQ-R suggest that there is a positive correlation between intrinsic motivation, all three subscales, and the three following types of achievement goals: mastery--approach, performance-approach and performance-avoidance. Suggesting that an increase in intrinsic motivation is linked to a higher likelihood of adapting mastery-approach goals. The performance goals were also related to intrinsic motivation, performance-approach goals and mastery-approach goals were positively related to the dependence on teacher subscale of the extrinsic motivation. The system of education in Kosove still emphasises the role of the instructor in academic settings. Even today students are not encouraged to argue or disagree with their professors therefore, students of all levels have a tendency to comply with professors and their requirements because they consider it to be the proper way of behaviour. Consequently, mastery-approach and performance--approach goals were not correlated to extrinsic motivation in general but were positively related to the extrinsic motivation subscale of dependence on teacher. Performance-avoidance goals, as expected were positively correlated to two subscales of extrinsic motivation, dependence on teacher and pleasing teacher. It is plausible to argue that the reason underlying this positive correlation is the tendency of complying with professors. Interestingly, the mastery-avoidance goals were not correlated to any type of motivation. Additionally, curiosity predicted the endorsement of mastery-approach goals.

The majority of researches in the topic of achievement and motivation argue that mastery and performance goals are different processes which also have different impacts and consequences on intrinsic motivation (Rawsthorne & Elliot, 1999). To date, research has supported the assumption that mastery goals are connected to intrinsic motivation (Rawsthorne & Elliot, 1999) due to their focus on the intrinsic value of learning (Leea, McInerneyb, Liemc, & Ortigad, 2010), while performance goals seem to be connected to extrinsic motivation (Rawsthorne& Elliot, 1999) due to the focus on doing better than others and achieving success with little effort (Leea, McInerneyb, Liemc, &Ortigad, 2010).

Limitation and recommendation for future studies

The present research has a number of limitations which may influence the generalisation and applicability of results. To begin with, the reliability

values for some subscales are below the accepted value. Additionally, the present study employed different group sizes, notable group size differences are noticeable on gender and achievement goals variables. A further limitation is the fact the effect sizes of several significant results are rather small which has implication for the value as well as the generalisation of findings. Finally, the present study measured perceptions on achievement goals and motivation tendencies which were also self-reported. Consequently, no objective measurement took place in this study.

Several results of this study are new and controversial which calls for future studies to replicate several results of the present research. First the present study, establishes that situation factors across academic settings shape the adoption of goals. Future studies should explore the degree to which achievement goals are fluid and dependent on situation factors. The paradigm that achievement goals are responses to environmental expectations and messages, as opposed to existing tendencies with which learners approach learning situations, needs further studies to be confirmed. Additionally, future studies should explore in depth the link between motivation and achievement goals. Of particular importance in this regard is the link between extrinsic motivation and performance avoidance goals. Furthermore the subscale of intrinsic motivation – curiosity – predicts the adoption of mastery approach goals. Both findings need to be replicated in future studies.

References

[1] Ames, C., & Archer, J. (1988). Achievement goals in the classroom. Students' learning strategies and motivation processes. *Journal of Educational Psychology, 80*(3), 260-267.

[2] Ames, C. (1992). Classrooms: Goals, structures, and student motivation. *Journal of Educational Psychology, 84*, 261-271.

[3] Barron, K. E., &Harackiewicz, J. M. (2001). Achievement goals and optimal motivation: Testing multiple goal models. *Journal of Personality and Social Psychology, 80*, 706-722.

[4] Dweck, C. S., & Elliot, E.S. (1983). Achievement motivation. In P. Mussen& E. M. Hatherington (Eds.), *Handbook of Child Psychology* (pp. 643- 691). New York: Wiley.

[5] Dweck, C. S. and Leggett, E. L. (1988). A social-cognitive approach to motivation and personality. *Psychological Review, 95*, 256-273.

[6] Elliot, E. S., & Dweck, C. S. (1988). Goals: An approach to motivation and achievement. *Journal of Personality and Social Psychology, 54,* 5-12.

[7] Elliot, A. J., & Harackiewicz, J. M. (1996). Approach and avoidance achievement goals and intrinsic motivation: A mediational analysis. *Journal of Personality and Social Psychology, 70,* 461–475.

[8] Elliot, A. J., & McGregor, H. A. (2001). A 2 X 2 achievement goal framework. *Journal of Personality and Social Psychology, 80* (3), 501- 519.

[9] Elliot, A. L., & Murayama, K. (2008). On the measurement of achievement goals: Critique illustration, and application. *Journal of Educational Psychology, 100*(3), 613-628.

[10] Harackiewicz, J. M., Barron, K.E., Carter S.M., Lehto, A.T., & Elliot, A. J. (1997). Predictors and consequences of achievement goals in the college classroom: Maintaining interest and making the grade. *Journal of Personality and Social Psychology, 73*, 1284-1295.

[11] Harackiewicz, J. M., Barron, K. E., Tauer, J. M., Carter, M. S., & Elliot, A. J. (2000). Short-term and long-term consequences of achievement goals: Predicting Interest and Performance over time. *Journal of Educational Psychology, 92*(2), 316-330.

[12] Harackiewicz,J. M., Barron, K. E., Tauer, J. M., & Elliot, A. J. (2002). Predicting success in college: A longitudinal study of achievement goals and ability measures as predictors of interest and performance from freshman year through graduation. *Journal of Educational Psychology* 94 (3), 562- 2002.

[13] Hulleman, C. S., Schrager, S. M., Bodmann, S. M., &Harackiewicz, J. M. (2010). A meta analytic review of achievement goal measure: Different labels for the same constructs or different constructs with similar labels? *Psychological Bulletin*, 136(3), 422-449.

[14] Kaplan, A., &Maehr, M. L. (2007). The contributions and prospects of goal orientation theory. Educational Psychology Review, 19 , 141-184.

[15] Leea, J. Q., McInerneyb, D. M., Liemc, G. A., &Ortigad, Y. P. (2010). The relationship between future goals and achievement goals: An intrinsic-extrinsic motivation perspective. *Conemporary Educational Psychology ,35*(4), 264-279.

[16] Lepper, M. R., Corpus, J. H., &Iyengar, S. S. (2005). Intrinsic and extrinsic motivational orientations in the classroom: Age differences and academic correlations. Journal of Educational Psychology, 97(2), 184-196.

[17] Linnenbrink, E. A., &Pintrich, P. R. (2002). Achievement Goal Theory and affect: An asymmetrical bidirectional model. *Educational Psychologist*, 37, 69-78.

[18] Linnenbrik-Garcia, L., Tyson, D. F., &Patall, E. A. (2008). When are achievement goal orientation beneficial for achievement? A closer look at moderating factors. *International Review of Social Psychology, 21*, 19070.

[19] Maehr, M. L., &Zusho, A. (2009). Achievement goal theory: The past, present, and future. In K.R. Wentzel& A. Wigfield (Eds.), Handbook of motivation in school (pp. 1–104). New York: Taylor Francis.

[20] Nicholls, J. G., Cheung, P. C, Lauer, J., & Patashnick, M. (1989). Individual differences in academic motivation: Perceived ability, goals, beliefs, and values. *Learning and Individual Differences, 1*, 63-84.

[21] Nolen, S. B., *&* Haladyna, T. M. (1990). Personal and environmental influences on students' beliefs about effective study strategies. *Contemporary Educational Psychology, 15,* 116-130.

[22] Rawsthorne, L. J., & Elliot, A. J. (1999). Achievement goals and intrinsic motivation: A meta-analytic review. *Personality and Social Psychology Review, 3*(4), 326-344.

[23] Ryan R. M., & Deci E. L. (2000). Self-determination theory and the facilitation of intrinsic motivation, social development, and well being. *American Psychologist*, 55, 68-78.

[24] Tamir, M., & Diener, E. (2008). Approach-avoidance goals and well-being: One size does not fit all. In A. J. Elliot (Ed.), *Handbook of approach and avoidance motivation* (pp. 415-430). Mahwah, NJ: Erlbaum.