

When and Why the Role of Mastery Goal Becomes Prominent in Science Students' Academic Achievement at Secondary School Level

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Abstract

Goal orientation express the motivation behind learning engagement of the students and therefore predicts several performance indicators. Motivation is a powerful element of education as it relevant to goal orientation which influences students' to invest their time in learning process. Current study attempted to explore how different factors including gender and educational institute (public and private schools) effect goal orientation of students which in turn effect their academic achievement. For this, an adapted questionnaire containing four constructs of goal orientation including mastery, performance, performance avoidance and work avoidance was distributed among 400 science students studying at secondary school level. Data was analyzed through linear regression. The findings revealed that there is a positive association between mastery goal and academic accomplishment. However, performance avoidance and work avoidance goals were the negative predictors of academic accomplishment. Furthermore, male respondents were seen more mastery goal oriented as compared to female respondents. However, female participants had shown more value for performance goal. It was also revealed that public sector respondents were found more mastery goal oriented as compared to private sector respondents. On the basis of outcomes, few implications have been suggested, so that educators and administrators may develop professional development policies to educate students to make education meaningful and effective.

Keywords: Academic achievement, Mastery goal, Performance goal, Performance avoidance goal, Science education, Secondary level

1. Introduction

Secondary education has prominent role in the education particularly in the developing countries because it is the stepping stage towards professional and university life. Therefore, at this stage, academic achievement along with conceptual understanding is highly desirable. Mostly, academic achievement is viewed through variables like teaching and learning approaches, evolving technologies in education and classroom goal structure etc. (Wibrowski, Matthews, & Kitsantas, 2017). Several researcher also focused teacher and students' motivation for academic achievement (Filgona, Sakiyo, Gwany, & Okoronka, 2020; Senko, 2019).

Motivation is measure of human psychology that reflect individuals' investment of their time and energy, which describes their thought and feelings about the task (Bakar, 2014). Motivation encompasses various factors like internal and external inspiration. Another way of motivation is by the types of goals that a learner set for himself for his academic achievement. Achievement goal orientation (AGO) and academic performance

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are interrelated and underlined by many researchers in numerous disciplines (Bibi & Ahmad, 2022; Korpershoek, Canrinus, Fokkens-Bruinsma, & de Boer, 2020; Senko, 2019).

AGO is a fundamental component of students engagement in academic task (Duchesne, Larose, & Feng, 2019). Understanding AGO concept can help researchers to develop self-directed learning skills which will be beneficial for life-long learning (Hall and Hanna, 2015). These goals support along with other factors insure the success of the students (Filgona et al., 2020). Several factors including circumstantial and environmental like cultural values of learning, to precise like school surroundings and more like classroom culture had contributed to explain goal orientations. These goals includes mastery goal, performance goal, performance avoidance goal and work avoidance goal or social goals (Aisha, Abedalaziz, Ahmad, & Satti, 2018; Senko, 2019).

Mastery goal expresses motivation for tasks orientees stay motivated in difficult situations and are at urge to complete task (Sabti, Rashid, & Hummadi, 2019). People with this orientation engaged in real life learning, through putting effort for improvement and just not depend on rote memorization (Anderman & Patrick, 2012).

Performance goals are the intrinsic type of motivation. Advantage of this type of motivation leads to better grades and achievements as compared to mastery oriented students. These advantages may be in short-term like in assignments and in long term (overall grades). However, it is the evident the mastery oriented student learns better, deeply and conceptually than performance oriented students. Performance goals oriented individuals' overview learning as a mean of acquiring knowledge and skills to showcase talent to enhance dignity. Performance goals contradicts Mastery goal as such orientees always relate their educational accomplishments to others (Karlen, Suter, Hirt, & Merki, 2019). This view divides performance goals into two further groups' i.e. performance goals (PG) and performance avoidance goals (PAVG). PG is linked with extrinsic esteem with aiming at exceptional performance (Filgona et al., 2020). Such orientation holders cannot review their achievement unless compare it with others achievement around, while PAVG as an insensitive achievement motivation as it reduce internal enthusiasm. Such orientation holders have a view that they are ability deficient and have academic fears, and avoid displaying their skills publically (Tuominen-Soini, Salmela-Aro, & Niemivirta, 2012).

Latterly in 19th century "work avoidance goal orientation" is also emerged which expresses desire to finish their tasks without any hard work, having such goals are significant reason of academic failure. Learners adopt WAvG to just overcome learning situation and to avoid negative academic outcomes (Wolters, 2003). WAvG is focused on effort mitigation strategies; such goal orientees do not express any inspiration for learning. Such people to evade severe undesirable learning outcomes try to push themselves with minimum possible effort (Roebken, 2007). Researchers also have belief that other factors like context familiarity and non-routine nature of tasks also affect science students problem solving and academic achievements (Bibi, Ahmad, Shahid, Zamri, & Abedalaziz, 2019; Bibi, Zamri, Abedalaziz, & Ahmad, 2017; Bibi, Zamri, Abedalaziz, Ahmad, & Dad, 2018).

Overall goal orientation are highly affecting the academic achievements. However, mostly available data is from the developed countries or relating university level students. It is essential to comprehend how learners' put forth goal and how these are associated with their performance at the crucial period of secondary level education in developing countries (e.g Pakistan). The current study was carried out to correlate students' achievement with their set goals at school level to integrate inside classroom for enhance learning.

2. Conceptual Framework

Several researchers reported that the goal orientations and academic performance are interrelated (Bibi & Ahmad, 2022; Filgona et al., 2020). For developing desirable learning, the environment of classroom is very

important. Was (2006) adapted a structural model by combining two concepts. One concept of Elliot (1999) which had focused to distinguish two performance as PG and PAVG. The other concept of Harackiewicz, Barron, Tauer, Carter, and Elliot (2000) which had focused on three goals that are mastery goal, PG and WAVG. The purpose of combining these structures was to get more suitable structure to assess AGO. For the current study this framework containing four goals (MG, PG, PAVG, and WAVG) as sub variables of AGO was the used (Fig. 1). The rationale for using this framework was its unique focus on networking goal orientation and implicit theory with a belief that it will bring more effective tool to measure students' goal orientations.

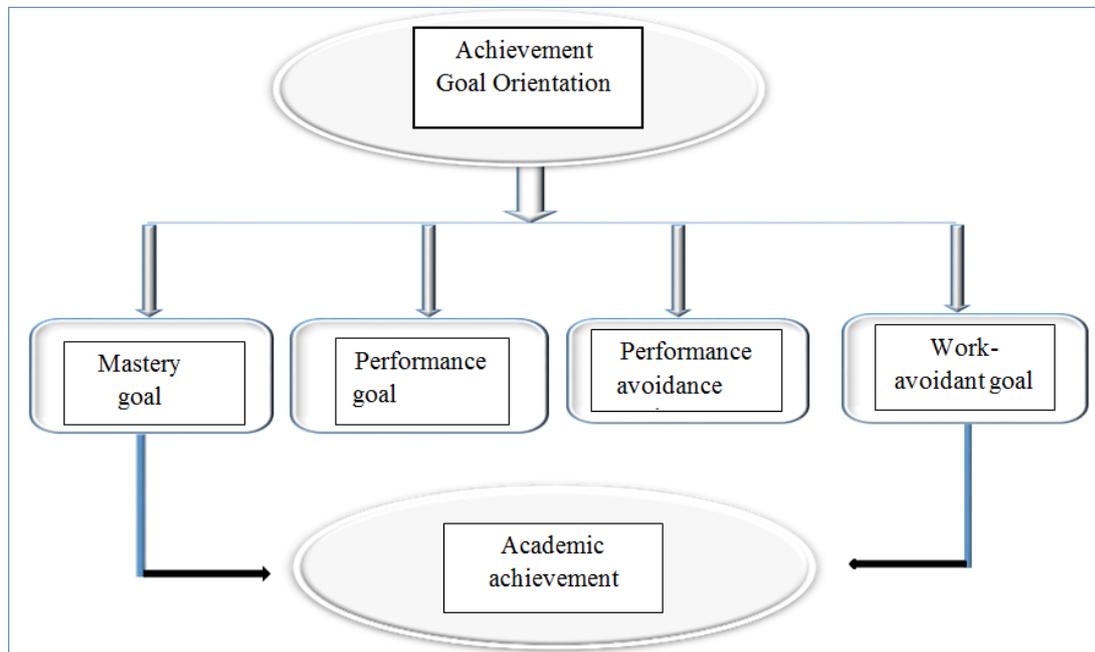


Fig. 1 Proposed conceptual framework for this study

3. Research Objectives

The current study aimed at exploring the effect of goal orientation on academic achievement. To achieve this objective following sub objectives were established.

1. To examine the effect of goal orientation beliefs on science student's academic achievement at secondary school level. This objective aims at determining the effect of mastery goal, performance approach goal, performance avoidant goal and work avoidant goals on students' academic achievement at secondary school level.
2. To compare science student's goal orientation beliefs among public and private school sectors at secondary school level. This objective aims at compare the perceptions of public and private schools' students regarding performance approach, performance avoidant and work avoidant goal orientation beliefs at secondary school level. The objective intent to explore whether students in different educational sectors have different motivation behind learning.
3. To compare science students goal orientation beliefs with respect to demographic variables/gender. This objective aims to compare the perceptions of male and female science students regarding performance approach, performance avoidant and work avoidant goal orientation beliefs at secondary school level. The objective intent to explore whether male and female secondary school students have different motivation behind learning i-e goal orientation.

4. Research Methodology

4.1 Participants

This study employed a descriptive survey followed by quantitative approach for a population of 1682 science students from 10th class students. Random sampling technique was used and 24% of total population i-e 400

was chosen as a sample of study. Population was divided on the basis of gender (male and female) and educational institute (public and private). a total of 200 (50%) male students from both public and private schools were chosen and similarly 200 (50%) female from both sectors were chosen for data collection. The reason for choosing this sample was to give equal share to all strata's of population. The data was collected with an adapted questionnaire by Was (2006) and rated on five-point Likert scale.

4.2 Research Instruments

The questionnaire was divided into two major parts first part was made to collect information regarding demographic variables and the other part contains 34 question items regarding goal orientation (MG, PG, PAVG and WAVG).

Six items were made to determine students' beliefs about intelligence either incremental or entity. Hau (1992) argued achievement goal is a wide conceptual frame that comprises AGO, model of intelligence and effort of pupil. Therefore, 6 items were added for the reason as GO and view about intelligence are association and shape motivation hence build learners goal structure. Learners with incremental beliefs view intelligence as a flexible trait which can be developed through hard work and effort on the other side learners with entity beliefs view intelligence as a fixed trait which can never change with any amount of hard work. Dweck (2012) found learners with incremental perception at difficult learning situations try to seek help in comparison to those who hold entity perception about intelligence.

Remaining 28 question items collectively measured all four types of orientation beliefs. 13 items was developed for determining MG orientation, 08 for PG, while 07 for PAVG and 05 items for determining WAVG orientations. Responses choices were given on five point Likert scales including strongly disagree, disagree, uncertain, agree and strongly agree. Academic achievement in this article is view through students' final year result of grade 9th. Students' board exams marks in science subjects including mathematics, biology, physics and chemistry were recorded and their average was calculated. The gathered data was analyzed through correlation, and regression.

Limitation of this work might be the limited data that cannot completely illustrative of all schools subsequently; results must be applied to secondary school level. Other reason might be the private and public sector environments which effect the findings of this work. The study was also confined to examine educational accomplishment of students' through goal direction only and not engaged to look at different factors that could likewise meaningfully affect the subject. To overcome these issues, an appropriate choice of rural -urban areas and public and private sectors were selected. Therefore, the researchers examined students' goal direction in Tehsil Havelian area Abbottabad (KPK) which can vary with in socio-economic background in various geological locales. Similarly 50% of sample size had included females from both sectors to give equal stake to all of the population.

5. Data Analysis

To evaluate the strength, accuracy and consistency of the scale used in this study, few steps were taken. First validity (construct and content) of the scale was done by the field experts and secondly reliability of the scale was determined through Cronbach Alpha, reliability test.

The scale was found consistent as Cronbach Alpha of overall scale was 0.84; with MG 0.86, PG 0.87, PAVG 0.87, and WAVG 0.89 respectively.

The correlation was applied to determine association between MG, PG, PAVG and WAVG. After sub construct were found correlated regression analysis was applied to determine the effect of goal orientation on academic accomplishment.

6. Results

The correlation was applied to determine association between MG, PG, PAVG and WAVG. The correlation results revealed a remarkable relation between academic achievement and goal orientation. The tables 1, 2 & 3 describe the results of correlation and regression model.

6.1 Direct effects of goal orientations

The correlation results revealed a remarkable relation between academic achievement and goal orientation. Mastery goal revealed a progressive association with academic achievement at $P = (.485)$ whereas, PG, PAVG and WAVG revealed remarkable adverse relation with academic achievement. Instead mastery goal revealed remarkable adverse correlation with PG, PAVG and WAVG. PG revealed significant inter item correlation with PAVG and WAVG.

Linear regression was applied to determine the effect of goal orientation on students' academic achievement. The result shows that goal orientation can measurably predict students' academic achievement ($T = 8.642$, $P < 0.05$). At $B = (.365)$ goal orientation foresee a progressive academic achievement. Accordingly, 23% of educational accomplishment could be defined by students' goal orientations. Mastery goal orientation can measurably anticipate students' academic accomplishment ($T = 10.278$, $P < 0.05$). Thus, 21% of educational accomplishment could be defined by students' mastery goal orientations. With respect to PG orientation the results revealed adverse effect on students' academic accomplishment ($T = -4.387$, at $P < 0.05$). ($B = -.367$). Accordingly 4.6% of educational accomplishment could be defined by students' PG orientations. Performance avoidance goal orientation can negatively predict academic achievement ($T = -7.89$, at $P < 0.05$). Thus 13.5% educational accomplishment could be defined by students' PAVG orientations. Likewise, WAVG orientation revealed adverse effect on students' academic accomplishment ($T = -7.717$, $P < (0.05)$). The unstandardized coefficient $B = (-.855)$ indicates 13% negative academic variability through work avoidant goal orientation.

Table 1 Intersection correlation of goal orientation assessment scale (N=400)

Factor Name	Academic achievement	MG	PG	PAVG	WAVG
Academic achievement	1				
MG	.485**	1			
PG	-.215**	-.297**	1		
PAVG	-.368**	-.636**	.444**	1	
WAVG	-.361	-.487**	.552**	.620**	1

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

Regression Analysis

Factor Name	B	Std Error	Beta	T	P	R Square
Goal Orientation	.365	.046	.353	8.642	.000	.230
MG	.473	.046	.458	10.278	.000	.21
PG	-.367	.084	-.215	-4.387	.000	.046
PAVG	-.811	.103	-.368	-7.89	.000	.135
WAVG	-.855	.111	-.361	-7.717	.000	.13

Note: MG: Mastery goal, PG: Performance approach goal, PAVG: Performance avoidance goal, WAVG: Work avoidance goal

6.2 Educational institute wise distribution of science students' goal orientation

Table 2 expresses the statistics of public and private schools regarding their goal orientation. The results revealed a significant difference between public (45.74) and private (42.77) school respondents related to mastery goal orientation, public school respondents were found more mastery goal oriented as unlike to private school respondents. Regarding performance approach goal public and private school participants were not at significant variation (25.01) and (25.42) respectively thus participants from both sectors were at same level of performance approach goal orientation. For performance avoidant goal orientation private (19.56) school respondents were found more performance avoidance goal oriented as compared to public (22.06) school respondents Referring to work avoidance goal public (14.98) and private (15.95) science school students were holding almost same level of work avoidant goal orientation beliefs at secondary school level.

Table 2 Educational institute wise comparison of secondary school science students' goal orientation (N=400)

Variables	Educational sector	N	Mean	T	Df	Sig
MG	Public	203	45.74	2.519	386.62	.013
	Private	196	42.77			
PG	Public	203	25.01	-0.562	387.642	0.576
	Private	196	25.42			
PAvG	Public	203	19.56	-4.56	392.92	.000
	Private	196	22.06			
WAvG	Public	203	14.83	1.89	397	.059
	Private	196	15.81			

Note: *significant at 0.05; Public schools (N=203), private schools (N=198):* MG: Mastery goal, PG: Performance approach goal, PAvG: Performance avoidance goal, WAvG: Work avoidance goal

6.3 Gender wise distribution of science students' goal orientation

Table 3 illustrates mean and standard deviations of goal orientation between male and female participants. The results revealed a significant difference between male (45.85) and female (42.68) respondents related to mastery goal orientation, male respondents were found more mastery goal oriented as unlike to female respondents. Regarding performance approach goal male and female respondents were at significant variation (24.24) and (26.23) respectively unlike to male participants female participants were high at performance approach goal orientation. For performance avoidant goal orientation both genders were at same level. Referring to work avoidance goal female (15.87) participants were at high level than male (14.77) participants.

Table 3 Gender wise comparison of secondary school science students' goal orientation (N=400)

Variables	Gender	N	Mean	T	Df	Sig
MG	Male	202	45.85	2.680	322.747	.008
	Female	198	42.68			
PG	Male	202	24.24	-2.785	398	0.006
	Female	198	26.23			
PAvG	Male	202	20.66	-0.47	391.69	0.633
	Female	198	20.91			

WAvG	Male	202	14.77	-2.12	393.14	.034
	Female	198	15.87			

Note: *significant at 0.05; Male participants (N=202), Female participants (N=198):* MG: Mastery goal, PG: Performance approach goal, PAvG: Performance avoidance goal, WAvG: Work avoidance goal

7. Discussion

The main purpose of the study was three fold. To determine the effect of goal orientation on students' achievement, and to compare gender wise and educational sector wise difference of goal orientation beliefs of science students at secondary school level. MG revealed positive relation with educational achievement. While other goals (PG, PAvG and WAvG) revealed adverse relation with educational achievement.

7.1 An Explanation for mastery goal supporting the educational achievement

A number of studies revealed progressive relationship between MG and learners achievements (Bibi & Ahmad, 2022; Filgona et al., 2020; Senko, 2019). Nganga, Mwaura, and Dinga (2018) reported consistent result in terms of MG while PG were negative forecaster contradictory to PAvG which is also positive predictor of success. King and McInerney (2014), concluded that WAvG goal is the silent feature of educational failure. Hidayat, Moosavi, and Hadisaputra (2022) revealed a direct association of MG and PG with life-long learning. In their study on mathematical modeling competency PG (approach and avoidance) revealed no substantial difference between metacognition and mathematical modeling proficiency. Hidayat, Zamri, and Zulnaidi (2018) revealed MG significantly associated with metacognition and mathematical modeling proficiency. Kaplan and Flum (2010) also revealed consistent results in term of positive effect of association between MG and educational accomplishment and adverse association between PG and educational achievement.

MG are significantly related with internal inspiration, task orientated personal growth and self-realization. Students with internal inspiration, emphasizes on personal growth through task orientation leads toward high educational success (Kaplan & Flum, 2010; Karlen et al., 2019).

7.2 An Explanation for performance goal not supporting the educational achievement

For PG orientees the main focus is attached with outperforming others which promotes rote memorization and less focus on learning something new and challenging. Dweck (2012) also justified the poor academics through PG due to maladaptive nature of PG as avoidance of challenging situations and minimal participation in difficult task. PG brings maladaptive actions including avoiding difficult challenges, poor internal inspiration and task abolition (Kozlowski and Bell, 2006). There are few other factors described by researchers that plays their part in shaping goal structure of students including parenting style and goal structure, teachers goal structure and evaluation system.

In many Pakistani families parents expect from their children to outperform others to meet their expectations as they believe it a best way to recompense parental investment such reasons promotes PG in students. Basit and Rahman (2017) in their study in Pakistani context also justify the finding through revealing that students observe more PG expectations from teachers and parents, also learners GO is related with educators perception of goal. The researcher also found multiple goal structures in teachers with high PG and low MG.

Another reason is our evaluation system at this level promotes rote memorization. Over evaluation system rather assessing students on the bases of new acquired skill, situational understanding and dealing along general concept of the topic focuses on how much of bookish knowledge is memorized by students such system brings PAvG in students. Inflexible assessment process endorses PG whereas situation factors with relevant engagement endorse MG (Kaplan & Flum, 2010).

Recently, Cayubit et al. (2020) reported that private tutoring or shadow education may stimulate counterproductive because with extensive education learning, parents and society expect high performance. These high expectations and thought of probable failure may increase the level of anxiety. Such reasons promote PG in students. In extreme case, promote PAVG.

7.3 An Explanation for performance avoidance goal not supporting the educational achievement

In the developing countries, like Pakistan, secondary school level is a crucial stage of students' life and led continuous pressure on both teachers and students to get good grades which promote rote memorization and test-taking skills. Educators' expectation from their learners builds their beliefs and behavior. High schools give great emphasis on competition to achieve good grades to pass entrance exams of professional colleges which promotes social comparison (PG) and avoidance goal (PAVG). Parental expectations and their view about child ability serve as a basic factor of child's performance. Students' during their learning build up their goal structure based on their understanding of parent nurturing which in turn impact their academics (Basit & Rahman, 2017). In many Pakistani families parents expect from their children to outperform others to meet their expectations as they believe it a best way to recompense parental investment such reasons promote PG in students. Basit and Rahman (2017) in their study in Pakistani context also justify the finding through revealing that students observe more PG expectations from teachers and parents, also learners GO is related with educators perception of goal. The researcher also found multiple goal structures in teachers with high PG and low MG.

Another reason might be the evaluation system that had promoted rote memorization. Over evaluation system rather assessing students on the bases of new acquired skill, situational understanding and dealing along general concept of the topic focuses on how much of bookish knowledge is memorized by students such system brings PAVG in students. Inflexible assessment process endorses PG whereas situation factors with relevant engagement endorse MG (Kaplan & Flum, 2010). Teachers' professional performance criteria is also limited to good results of students ignoring various factors like co-curricular activities that could also have effect on students growth (Basit & Rahman, 2017). Guardians, educators, and students are under strain to get good grades. For this purpose tuition centers have been laid out in the country to assist understudies with getting high scores and to keep away from failure. A raise PAVG bring maladaptive learning form which results in escaping learning situation (Appleton, Christenson, & Furlong, 2008)

7.4 An Explanation for Work avoidance goal not supporting the educational achievement

Many families with their poor financial status serves as a barrier for children education such students' know they will have to feed their families after certain level of education. Also students from educationally less supportive backgrounds know they will not have strong educational carrier such reasons serves as base for those students to just avoid failure and pass certain educational stage with less possible effort. Majority of participants belongs to MG group shadowed by other group of goals. Therefore, teacher may know, learn and understand students' goal orientation dynamics to build effective classroom goal structure. Future researchers should study approaches that can positively affect students' goal structure which could affect their academics.

7.5 An explanation for students in different educational sectors have different motivation behind learning

In the current study, public sector respondents were found more mastery goal oriented as compared to private sector respondents. However, in case of performance approach goal, both sectors had similar findings. Interestingly, private sector respondents had more tendency towards performance avoidance approach goal and work avoidance goals (Table 4).

Findings of this study are well aligned with previous studies (Bibi & Ahmad, 2022; Cayubit et al., 2020). There are multiple reasons behind mastery goal orientation of public sector participant like organizational environment, which can predict educators' teaching and students' goal orientation. One possible reason is the availability of better resources such as infrastructure, labs, and qualified educators as public sector schools are functioned by government. Educators are more active in their activities and are more satisfied with their job (Hassan, Awan, & Awan, 2018). Therefore, job security, satisfaction, and proper training help in providing encouraging teaching and learning climate. Educators' goal structure impacts learners' goal orientation. Shim, Cho, and Wang (2013) specified that educators' goal structure during teaching process influences overall goal structure of classroom. Other possible reason might be the mainstream education sourcing in public sector due to which the students start embracing their goals and values as their own leading to more focusing on mastery orientation (Cayubit, Bactung et al. 2020). Private sector institutes more focus on performance and grades of the students. These institutions are more content centered contrary to public institutes where learners' self-effort is appreciated. Private sector institutes just like shadow education or tutoring equips the students with the resources they need for testing and performance enhancement. Although the researchers of current study had belief that in the private sector best utilization of the available resources and additional help would facilitate the students in performance oriented goal. However, the findings of this study, did not show significant difference in their performance goal.

In contrary to researchers of current study belief, interestingly, private sector respondents had more tendency towards performance avoidance goal. This belief was based on the assumptions that in private sector skilled teachers had added objective and engagement to facilitate the students in friendly learning environment for their targeted goals. These additional focus might be act as buffer zone and learners would be free from fear of failure. However, the findings not supported the expectations. Possible explanation for this is that the shadow oriented extensive education and learning in private sectors had raised the expectations of parents, teachers and society from students to perform better (Cayubit et al., 2020). These high expectations and thought of probable failure may increase the level of anxiety. Such reasons promoted PAVG.

In case of work avoidance goal, findings of this study, did not show significant difference. Private sector students had slightly more work avoidance goal oriented. One possible reason might be the higher mode of payments for every activity in the private sector and probable failure may increase the level of anxiety. Students might be worried that failure would cause to repay for these activities. Thus, in addition to parental and social pressure, financial stress had led towards work avoidance goal.

7.6 An explanation for male and female secondary school students have different motivation behind learning

Findings of the present study revealed that male respondents were more mastery goal oriented as compared to female respondents. However, female participants had shown more value for performance goal. For performance avoidance goal both genders were at same level. As per researchers' belief, female participants were more oriented for work avoidance goal than male participants.

Possible reason for the male participants' orientation towards mastery goal is the availability of more resources, encouraging environment and support which motivate students for better achievement. In the developing countries like Pakistan, man is responsible for all financial matters including groceries, rents, utility bills healthcare, and other food items. Therefore, mostly families view investment in boys' education as family's future while girls are not provided with same educational support. Gender is a pertinent indicator of reputation in our society, through occupying better social positions earning of men becomes relatively high, also attributed to be more capable contrary to women (Fiske, Gilbert, & Lindzey, 2010).

The other possible reason is the social norm like early girls marriages. About 63% from weak financial backgrounds and even 24% of girls from strong financial backgrounds get married before 18 (UN report, 2018). In some cases, career choices for women are confined and not same as for boys. Due to lack of opportunities and resources, mostly females do not groom well and could not be able to get chance in decisions making. These reasons strongly affect students' beliefs about learning (Mills, 2001).

8. Implications

In present work a detailed model was developed to explore the relationships between students' goal orientation and academic accomplishment. Findings of this work are highly encouraging. We, therefore recommend educators and policy makers to implement these factors for effective science education.

The findings indicated that mastery and academic accomplishment are positively related thus, all stakeholders might establish an uplifting environment that could improve personal psychological of students. Both performance and work avoidance goals (PAvG and WAvG) are negatively related with academic accomplishment. These outcomes can be fit to the education systems of developing countries, like Pakistan, where parents and teachers expect from their children to outperform others to meet their expectations.

Such type of education systems promote shallow memorization rather assessing students on the bases of new acquired skill, situational understanding and dealing along general concept of the topic. Therefore, the educators should be trained and equipped for creating a learning environment that actively engage students' performance and mastery goals to improve students' learning. In addition, an awareness programs should be launched for parents, teachers and whole society through seminars, televisions and social media about the drawbacks of parents' unrealistic expectations and shallow memorization for achieving good grades only. As a whole, culture for deep, meaningful and effective teaching and learning should be promoted.

9. Conclusions

The study was conducted to examine effect of students' goals on academic achievement at secondary school level. Findings of the present study revealed that mastery goal had positive relation with educational achievement. It implied that majority of students were active in acquiring new knowledge and skills which positively relates their academic accomplishments.

Other goals including performance and performance avoidance goals had shown negative relationship with educational academic achievement. Therefore, it may be concluded that academic failure is caused by students' estimation of skills with others and their anxiety of presenting their abilities publically. Work avoidance goal had also shown negative relationship with student' achievements it is therefore concluded that students work mitigating approaches cause academic failure.

It was also observed that male respondents were more mastery goal oriented as compared to female respondents. However, female participants had shown more value for performance goal. For performance avoidance goal both genders were at same level. In the current study, public sector respondents were found more mastery goal oriented as compared to private sector respondents. Interestingly, private sector respondents had shown more tendency towards performance avoidance approach goal and work avoidance goals.

For deep learning, the contributions of both performance and mastery goals are highly desirable. Therefore, the educators should be trained and equipped for creating a learning environment that actively engage students' performance and mastery goals to improve students' learning. In addition, an awareness programs should be launched that can highlight the disadvantages of unrealistic expectations from students to outperform others through achieving good grades only. As a whole, culture for deep, meaningful and effective teaching and learning should be promoted.

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Declaration of Conflict

The authors declare that they have not known competing financial or personal relationship that could have appeared to influence the work reported in this paper.

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