

CORRELATION BETWEEN ACHIEVEMENT GOAL ORIENTATION AND MOTIVATED LEARNING STRATEGIES OF BACHELOR OF TECHNOLOGY AND LIVELIHOOD EDUCATION OF MARINDUQUE STATE COLLEGE

Clarivel Marciano-Miranda, LPT, MA

Abstract

The motivational processes affecting learning, the academic success of a student is highly dependent on what motivates a person to study or also known as someone's goal orientation. Moreover, motivation affects the willingness to learn and predicts learners' self-regulatory strategies. To further explore the nature of achievement goals, motivation, and learning strategies, this quantitative study is conducted to determine the relationship between achievement goal orientation and motivated learning strategies of BTLED students of the Marinduque State College wherein the instrument used will be questions from the Motivated Strategies for Learning Questionnaire (MSLQ) by Pintrich and DeGroot (1990) and the Achievement Goal Questionnaire-Revised (AGQ-R) by Elliot and Murayama (2008). For the results of the study, the researcher found out that BTLED students mainly focus on understanding and learning their course materials through using their task motivation and perception regarding the importance of course works. Thus, it implies that the achievement goals have an influence on the motivated beliefs and learning strategies wherein students who are motivated to learn through a variety of goals may adapt learning strategies during their learning process. Therefore, the researcher recommends the implementation of intervention programs designed to directly teach students optimal approaches to studying which can aid their learning process of course materials and adopting particular achievement goal orientations.

Keywords: *goal orientation, intrinsic value, mastery approach, motivation, mastery avoidance, performance avoidance, self-efficacy, self-regulation, test anxiety, goal orientation*

I. The Problem

Introduction

Being academically successful is highly dependent on what motivates a person to study, something which can also be expressed as someone's goal orientation (Dweck, 1986). While students undergo formal education in academic institutions, many personal and contextual situations may occur that can strongly influence the progression of their learning process. One of the examples of situations that may influence one's learning process is the COVID-19 pandemic which caused the cancellation of face-to-face classes and transition to online and remote learning. Furthermore, motivation and learning strategies are elements attached to learning processes wherein motivation affects the willingness to learn and predicts learners' self-regulatory strategies. Consequently, some students may not have the necessary strategies and capabilities to successfully satisfy the demands of academic life which can induce the development of a negative perspective on education, loss of interest in learning, uncertainties on the personal capacities and abilities in accomplishing tasks, and even exhaustion. As a result, lack of motivation becomes apparent which reduces academic performance and can be a cause to drop out. In the process of analyzing the causes of poor academic performance and/or academic failure, the motivation theory often arises. Therefore, students must be adequately motivated to comprehend and perform effectively. Apart

from this, motivation is required for students to progress into independent learners and excel in their academics wherein the importance of the relationship between goal orientation and academic performance is seen.

In the field of education, school motivation is one of the most studied psychological variables that strongly influence the explanation of many conducts in the educational context. The function of goals is a prominent feature in motivational theories. Goals are defined as the endpoint to which effort and initiative are directed (Dweck & Elliott, 1983). In other words, goals are what a person is trying to achieve (Pintrich, 2000). It has been said that learning is more than cognition.

It is an internal process of affective, cognitive, and behavioural factors where the end result is dependent on our ability for self-regulation. Thus, motivation and learning strategies are elements attached to the learning process. Motivation predicts learners' self-regulatory strategies therefore students who are more motivated to engage in learning tasks generally will opt to be more strategic. Weinstein, et.al. (2005) described learning strategies as "tools used in the service of goals". This means that a learner's goal and motivational orientation determines how and if learning strategies are used. In some cases, several students do not have the necessary strategies and expertise to fulfill academic requirements which leads to developing a negative attitude towards education, losing interest in learning, doubting their abilities and feeling physically and mentally exhausted. All this may lead to students' complete lack of motivation which could negatively affect their academic performance and could even lead them to abandon their studies early.

In the Conceptual Framework, the method is illustrated on how the research will be conducted. In the input section, the materials needed are enumerated; these are related literature and studies about goal orientation and academic performance. Documents such as student profiles are needed in determining the respondents who will participate in the research conduction. The researcher used two questionnaires which are the Motivated Strategies for Learning Questionnaire (MSLQ) (Pintrich & DeGroot, 1990) and Achievement Goal Questionnaire-Revised (AGQ-R) (Elliot & Murayama, 2008) in order to obtain information from the sample of the study regarding the motivation and strategies college students employ to learning, examine the relationship between achievement goal orientation and motivated learning strategies, and determine the student's achievement goal orientations namely mastery-approach, mastery-avoidance, performance-approach, and performance-avoidance and motivated learning strategies such as self-efficacy, intrinsic value, test anxiety, self-regulation, and cognitive strategy. Lastly, the response of the students will be used for the data analysis and will be a basis to answer the research problem of the study.

The process section includes the following methods to be used by the researcher in conducting the study. To gather the needed data, the researcher will conduct the survey questionnaires which are widely used by achievement goal researchers and were adapted from previous research works related to the study. The survey questionnaire is divided into three sections: demographic section, MSLQ section, and AGQ-R section. For the analysis of the gathered data, Pearson's correlation, weighted mean, frequency, and percentage were utilized. Mean and standard deviation was used to describe the data; the Cronbach's alpha to measure the internal consistency which is how closely related a set of items are as a group; the Pearson product-moment correlation to identify the relationship among variables of the study; and frequency and percentage to determine the most and least apparent among the variables. The researcher also used descriptive analysis to determine the highest and lowest mean scores of students in the occurrence of each scale based on the frequency and percentage of students' scores in the different sections of the survey questionnaire.

Lastly, the result of the study is to determine the relationship between achievement goal orientation and motivated learning strategies of BTLED of Marinduque State College.

The purpose of this correlational study is to determine the relationship between achievement goal orientation and motivated learning strategies of the Bachelor of Technology and Livelihood Education (BTLED) students of Marinduque State College (MSC). The results of the study will be a basis for assessing determinant factors that can influence students' learning process and manifestation of motivation among the students.

Assessing the relationship between achievement goal orientation and motivated learning strategies has an important leading role to make the teaching-learning process to be effective and efficient and to produce independent and self-regulated learners.

At this stage of the research, achievement goal orientation can be defined as the purpose of academic engagement and motivated learning strategies are divided into motivation beliefs and self-regulated learning strategies. In addition, the study primarily focuses on major variables that can contribute to the motivation and self-regulated learning of students to illustrate significant theoretical and practical implications that can serve as a basis for an effective and efficient learning process. To achieve this, the study is based on the following purposes:

- To determine the most and least apparent subscale of achievement goal orientation and motivated learning strategies present among BTLED students.
- To distinguish the difference between the achievement goal orientation and motivated learning strategies of BTLED students.

Furthermore, the direct recipient of the output of this research is the school management of Marinduque State College. The data gathered may provide useful information for teachers, educators, curriculum designers, and researchers to get insight into the impacts (if any) of achievement goals and utilization of motivated learning strategies in planning academic activities to assist the students' learning process. It may help teachers in designing interventions to change the goal stresses in their classroom.

II. Research Methodology

Research Design

This quantitative research will be conducted in a correlative manner as the study aims to determine the relationship between achievement goal orientation and motivated learning strategies of BTLED students of MSC. The researcher believes that the chosen research design is effective towards describing the relationship between the four subscales of achievement goal orientation: mastery-approach, mastery-avoidance, performance-approach, and performance-avoidance and motivated learning strategies: self-efficacy, intrinsic value, test anxiety, self-regulation, and cognitive strategy.

Population/Sample/Participants

In order to achieve the sample of this research, the respondents will be chosen by using the universal sampling. According to Richard & Margaret (1990), universal sampling refers to the selection of sample where not all the people in the population have the same profitability of being included in the sample and each one of them, the probability of being selected is unknown.

Research Instruments and Procedure

The researcher will be using the questions from Motivated Strategies for Learning Questionnaire (MSLQ) by Pintrich and DeGroot (1990) and Achievement Goal Questionnaire-Revised (AGQ-R) by Elliot and Murayama (2008) which are widely used by achievement goal researchers to assess the role achievement goal orientation, investigate the motivation and strategies grade 12 students employ to learning, and examine the relationship between motivation defined as goals and self-regulated learning. The survey questions from the Motivated Strategies for Learning Questionnaire (MSLQ) consists of forty-four (44) items which are divided into nine (9) items for self-efficacy, nine (9) items for intrinsic value, four (4) items for test anxiety, thirteen (13) items for cognitive strategy use, and nine (9) items for self-regulation. The survey questions from the Achievement Goal Questionnaire-Revised (AGQ-R) consist of twelve (12) items.

After obtaining the information needed from the research instrument, the researcher will be getting the distribution of scores will then be segregated according to the different subscales of achievement goal orientation and motivated learning strategies. The scores will be totalled per frequency of the Likert (1- Very untrue of me = red; 2 - Untrue of me = orange; 3 – Somewhat untrue of me = yellow; 4 -Neutral = green; 5 – Somewhat true of me = blue; 6 - True of me = purple and 7 - Very true of me = magenta).

Before analysing the data gathered for the objectives of the study, the researcher used the Cronbach’s alpha to determine the internal consistency of the Achievement Goal Questionnaire-Revised (AGQ-R) as it adapted the 7-point likert-type scale and the “Reflect Me” anchor of the Motivated Strategies for Learning Questionnaire (MSLQ) to maintain the cohesiveness of the survey questionnaire. The Cronbach's alpha or coefficient alpha is the most common test score reliability coefficient for single administration. It is used to identify how closely related a set of test items are as a group.

Furthermore, other statistical treatments are Pearson Product Moment Correlation to determine the relationship between two variables; Descriptive analysis using weighted mean to determine the highest and lowest mean scores of students’ responses; find the average amount by which scores differ from the mean; and lastly, Percentage formula wherein this will help in order to find out the percentage and frequency of the results.

III. Results and Discussion

Table 1

Demographic Profile of BTLEd respondents

	Frequency	Percentage
<i>Sections</i>		
First Year	23	32%
Second Year	15	21%
Third Year	16	21%
Fourth Year	19	26%
Total	73	100%

The total sample size of the research is seventy-three (73) Bachelor of Technology and Livelihood Education (BTLEd) students wherein there are 23 first year students with a percentage of 32%, 15

second year students which composes 21% of the total sample as well as 16 third year students which also composes another 21%, and 19 fourth year students who belongs to the 26% of the total sample.

Table 2
Internal Consistency of Achievement Goal Questionnaire-Revised

Item No.	Variance of Total Scores	Variance per Item
1	80.56	0.89
2		0.87
3		0.47
4		1.22
5		3.29
6		1.51
7		0.5
8		2.05
9		2.72
10		1.83
11		1.54
12		2.17
Sum of Variances per Item		19.06
Cronbach's Alpha		0.83
Internal Consistency		Good Internal Consistency

Table 2 indicates the internal consistency of the Achievement Goal Questionnaire-Revised (AGQ-R) that the researcher utilized in survey questionnaire. The AGQ-R adapted the 7-point Likert-type scale and the “Reflect Me” anchor from the Motivated Learning Strategies Questionnaire (MSLQ) instructed by the authors, Pintrich and DeGroot. Before analysing the data from the Achievement Goal Questionnaire-Revised, the researcher calculated the Cronbach’s alpha to measure how closely related and reliable the set of test items are as a group.

Based on the findings, the adaptation of the 7-point likert-type scale and the “Reflect Me” anchor resulted to a good internal consistency which also implies that the data gathered is reliable. Therefore, the researcher is able to use the data from the achievement goals section for the objectives of the study.

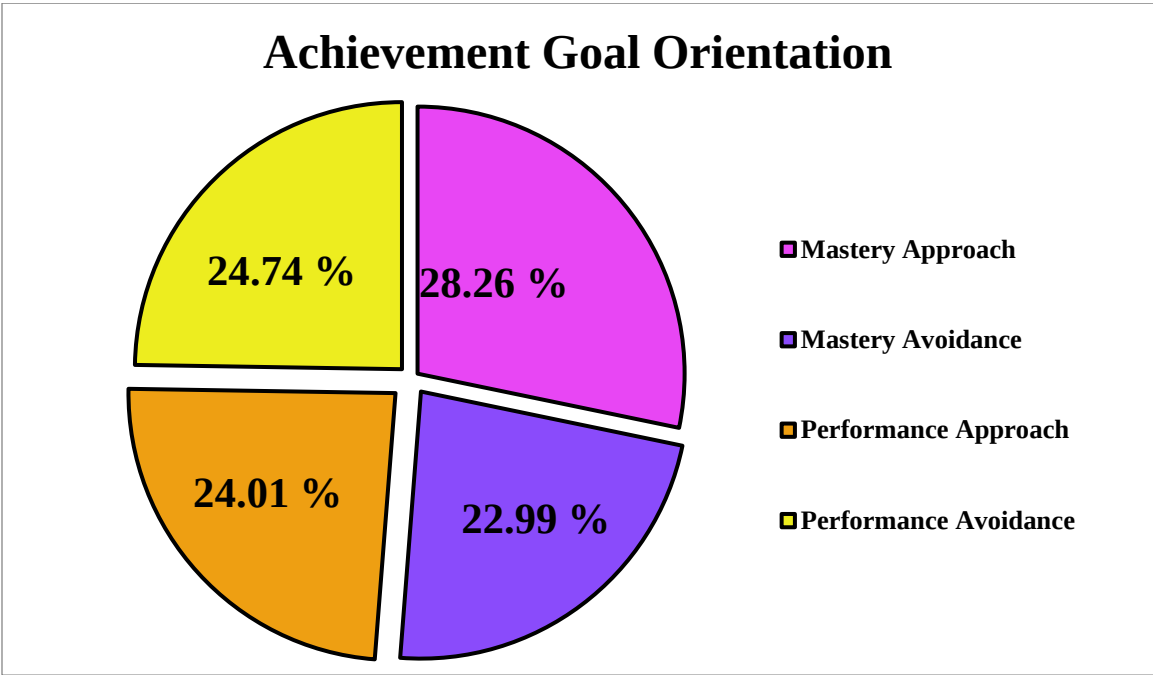


Figure 1. Percentage of Achievement Goal Orientation among BTLEd students

In this framework, goal constructs are defined in two dimensions according to definition of competence (performance versus mastery) and valence of competence (approach versus avoidance). Thus, for the second part of the questionnaire, the Achievement Goal Questionnaire-Revised, the scores of each student for each subscale were computed by summing the scores of each item that make up the subscale to determine the percentage of each subscale present among the students.

In Figure 1, it shows the percentage of Achievement Goal Orientation of BTLEd students wherein based on the findings, mastery-approach orientation is the most apparent with a percentage of 28.26%. Moreover, performance-approach orientation has 24.01 % and performance-avoidance orientation has 24.74 %. On the contrary, the least apparent achievement goal orientation is the mastery-avoidance orientation with only 22.99 %.

Based on the findings, it can be concluded that most of the BTLEd students mainly possess a mastery-approach orientation. This implies that these students are focused on learning, understanding the course materials and developing their skills. Furthermore, the implicit theories of intelligence states that those students who perceive their classes as emphasizing effort and understanding are likely to adopt mastery-oriented goals.

Table 3
Descriptive Statistics & Analysis of Achievement Goal Questionnaire-Revised

Top Three Highest Weighted Mean			
Subscale	Statement	Weighted Mean	Descriptive Analysis
Mastery Approach	3	6.22	Very true of me

Mastery Approach	7	5.78	True of me
Mastery Approach	1	5.63	True of me
Top Three Lowest Weighted Mean			
Subscale	Statement	Weighted Mean	Descriptive Analysis
Mastery Avoidance	5	4.51	Somewhat true of me
Mastery Avoidance	9	4.70	Somewhat true of me
Performance Approach	8	4.88	Somewhat true of me

In addition, the averages of the weighted means per subscale were calculated to identify the ratings per statement that are included in the achievement goals section of the questionnaire. The students could score the items as follows: 1 – very untrue for me to, 2 – untrue for me, 3 – somewhat untrue for me, 4 – neutral, 5 – sometimes true for me, 6 – true for me, and 7 – very true for me.

According to the findings on Table 3, the statement number 3 “My goal is to learn as much as possible” received the highest rating with a mean of 6.22 and is described as “Very true of me”. This means that most of the BTLEd students are positively motivated to exert a significant amount of effort to understand the course materials which are aspects of mastery-approach orientation. Apart from this, the statements number 7 “I am striving to understand the content thoroughly as possible” and number 1 “My aim is to completely master the materials presented in this class” received the second and third highest rating with means of 5.78 and 5.63 and are both described as “True of me”. These statements also belong to the mastery-approach orientation which focuses on the development of competence for one’s own sake.

On the other hand, the findings also show that statement number 5 “My aim is to avoid learning less than I possibly could” received the lowest rating with a mean of 4.51 and is described as “Somewhat true of me”. This states that some of the BTLEd students try to avoid situations in which they are unable to learn which a characteristic of mastery-avoidance orientation. Similarly, statement number 9 “My goal is to avoid learning less than it is possible to learn” received the second lowest rating with means of 4.70 is described as “Somewhat true of me” as well. This indicates that BTLEd students somewhat avoid learning to lessen the work they have to do in class which depicts a mastery – avoidance quality. Lastly, statement number 8 “My goal is to perform better than the other students” received the third lowest rating with a mean of 4.88 and is also described as “Somewhat true of me”. This may show that some students do not possess a drive to outperform other students but there is still a possibility some may do.

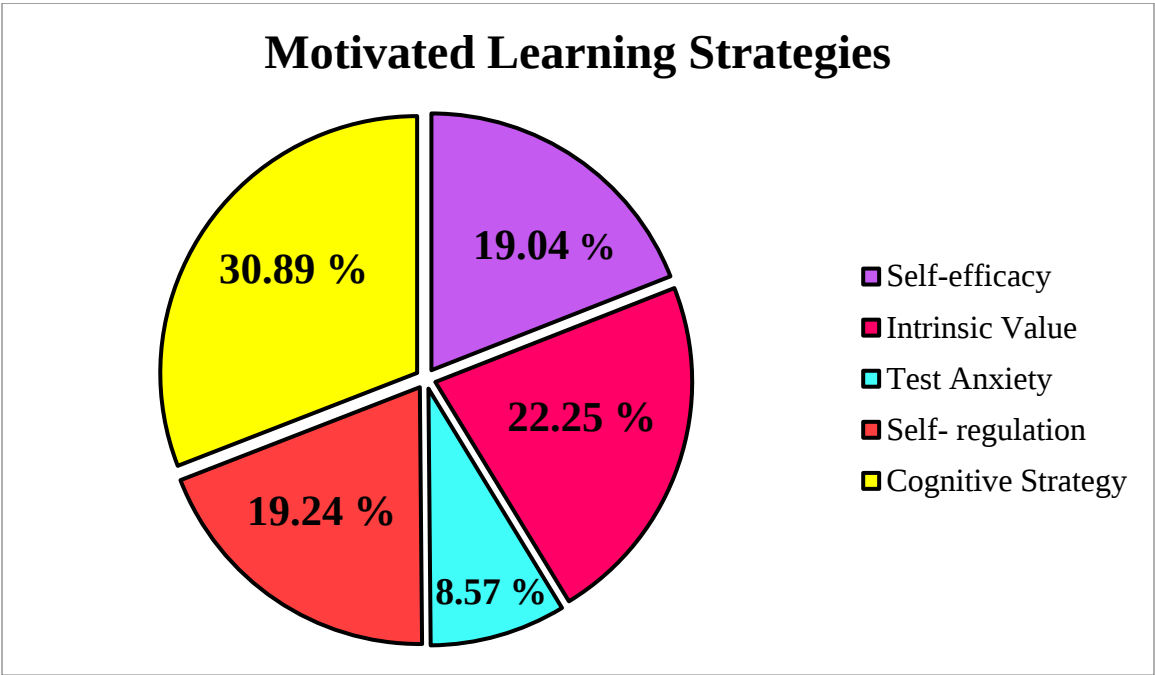


Figure 2. Percentage of Motivated Learning Strategies among BTLEd students

For the third part of the questionnaire, the Motivated Strategies for Learning Questionnaire, the scores of each student for each factor were computed by summing the scores of each item that make up the factor to determine the percentage of each one present among the students. In Figure 2, the percentage of motivated learning strategies of BTLEd students is shown wherein the cognitive strategy which is under the learning strategies is the most apparent motivated learning strategy among BTLEd students with a percentage of 30.89%. On the other hand, the least apparent motivated learning strategy would be test anxiety with 8.57%. If the results are analyzed it can be concluded that the majority of the BTLEd students utilize basic and complex strategies for processing information from text and lectures. Some examples of these strategies are the use of rehearsal, elaboration strategies, and critical thinking. Furthermore, identifying these strategies could be a significant step toward appropriate academic interventions and could improve students' achievements by determining the strengths and weaknesses in their studies and providing them with adequate interventions.

Table 4
Descriptive Statistics & Analysis of Motivated Strategies for Learning Questionnaire

Top Three Highest Weighted Mean			
Subscale	Statement	Weighted Mean	Descriptive Analysis
Intrinsic Value	21	6.19	Very true of me
Intrinsic Value	4	6.15	True of me
Intrinsic Value	15	6.11	True of me
Top Three Lowest Weighted Mean			

Subscale	Statement	Weighted Mean	Descriptive Analysis
Self-regulation	27	4.25	Neutral
Self-regulation	38	4.32	Neutral
Self-efficacy	16	4.44	Somewhat true of me

Additionally, the items of the Motivated Strategies for Learning Questionnaire were further analyzed by taking averages of the weighted means per subscale were calculated to identify the ratings per statement that are included in the motivate learning strategies section of the questionnaire. The scoring of the items are as follows: 1 – very untrue for me to, 2 – untrue for me, 3 – somewhat untrue for me, 4 – neutral, 5 – sometimes true for me, 6 – true for me, and 7 – very true for me. As stated by Kubischta (2014) who also adopted the Motivated Strategies for Learning Questionnaire (Pintrich & DeGroot, 1990) to their research, the answers to items 26, 27, 37 and 38 have to be subtracted from 8 to calculate the real score for students answer to that item, because they are marked as reversed coded in the MSLQ, and have to be reflected before scoring the item correctly.

According to the finding in Table 4, statement number 21 “Understanding this subject is important to me” received the highest rating with a mean of 6.19 and is described as “Very true of me”. This means that nearly all BTLEd students’ primary goal is to be able to comprehend the information in their course materials and lectures which are aspects of the intrinsic value, a motivation belief. Apart from this, statements number 4 “It is important for me to learn what is being thought in the class” and number 15 “I think what I am learning in this class is useful for me to know” received the second and third highest rating with means of 6.15 and 6.11 respectively and is both described as “True of me”. This signifies that the majority of the BTLEd students set objectives before engaging in a particular activity wherein in this case, during course lectures. Moreover, there is an emphasis on the perception of the student regarding interest, importance, and how beneficial it may be used for future and/or other purposes. Hence, these ideas are some of the characteristics of intrinsic value, a motivation belief.

In contrast, the findings also show that statement number 27 “When work is hard I either give up or study only the easy part” received the lowest rating with a mean of 4.25 and is described as “Neutral”. This statement refers to the lack of proper metacognitive control, an aspect of self-regulation, in oneself which may result in avoidance behaviour as an escape mechanism from difficulties such as course work. Similarly, statement number 38 “I find that when the teacher is talking, I think of the other things and don't really listen to what is being said” received the second lowest rating with a mean of 4.32 and is described as “Neutral”. This refers to a difficulty in focusing during their lectures in some instances which also shows the lack of self-regulation which is defined as the ability to manage one’s behaviour toward surroundings. A neutral statement such as number 27 and 38 depicts that BTLEd students neither have a positive response nor a negative response but rather are unsure regarding how these statements apply to themselves. Lastly, statement number 16 “My study skills are excellent compared with others in this class” received the third lowest rating of 4.44 and is both described as “Somewhat true of me”. This signifies that some BTLEd students may perceive their learning techniques as superior to others in terms of showing one’s competence and confidence in performing tasks which is an aspect of self-efficacy, a motivation belief.

Table 5

Relationship between the four subscales of achievement goal orientation and motivated learning strategies of BTLEd students

Variable	1	2	3	4	5	6	7	8	9
1. Mastery Approach	-----								
2. Mastery Avoidance	0.38*	-----							
3. Performance Approach	0.48*	0.30	-----						
4. Performance Avoidance	0.45*	0.52*	0.49*	-----					
5. Self-efficacy	0.45*	0.38*	0.40*	0.37*	-----				
6. Intrinsic Value	0.46*	0.29	0.39*	0.37*	0.42*	-----			
7. Test Anxiety	0.35*	0.08	0.11	0.19	0.25	-0.10	-----		
8. Self-regulation	0.46*	0.12	0.39*	0.16	0.42*	0.55*	-0.10	-----	
9. Cognitive Strategy	0.40*	0.21	0.32	0.30	0.33*	0.40*	-0.10	0.45*	-----

(Note: * significant at p < 0.05 level)

Based on the correlation matrix, mastery-approach orientation has a weak positive correlation with mastery-avoidance with an R-value of 0.38 and performance-approach with an R-value of 0.48. The definition of mastery approach is the desire to learn while mastery-avoidance is the inability and fear to master all materials. The goal of mastery-avoidance, to avoid doing worse than one has done before, uses a negative outcome as the hub of regulation, the individual is constantly reminded of this negative possibility during goal pursuit that may affect the learning process and hinder the development of skills and knowledge. Relative to mastery-avoidance goals, mastery-approach goals would seem optimal forms of regulation in a context highlighting intrapersonal standards of competence wherein these goals can facilitate task absorption and enhance performance during the learning process.

Meanwhile, the goal of performance-approach orientation is to do better than others and desire to show their achievements publicly. According to Midgley et.al. (2001), mastery-approach objectives may improve performance in the absence of externally-provided feedback or public evaluative processes of any sort, in that case, mastery-approach goals only improve performance for intrinsically engaging tasks. Furthermore, mastery-approach and performance-avoidance orientation also have a weak positive correlation with an R-value of 0.45. That may be an indication that the motivation of students to master their course materials may also influence their extrinsic motivation.

Statistically speaking, both mastery-approach and mastery-avoidance of BTLEd students tend to go up in response to one another but the relationship is not very strong as they negate each other in terms of the valence of competence while mastery-approach and performance-approach also tend to go up relative to each other but they both belong to the same valence of competence but differ in terms of the definition of competence as well as performance-avoidance.

Furthermore, the relationship between the mastery-approach goal orientation and the motivated learning strategies such as self-efficacy, intrinsic value, and self-regulation seem to have a weak positive relationship with each other with R-values of 0.45 and 0.46. In 1996, Elliot and

Harackiewicz described achievement goal orientations as motives or reasons for completing a task. Accordingly, achievement goal beliefs are similar to self-efficacy as they are theorized to influence affective, cognitive, and behavioral outcomes in the same way self-efficacy beliefs guide a learners' aspirations and choice of behaviors to mobilize their effort, persistence, and academic achievements. In the same way, intrinsic value concerns the interest and perceived importance of coursework. If the results are analyzed, one's interest and how they perceived their course based on significance and preference influences how they concentrate and comprehend course materials. Relative to motivation beliefs such as self-efficacy and intrinsic value, self-regulation includes persistence at difficult or monotonous tasks and working diligently. Zimmerman and Schunk (2001) defined self-regulation as the self-directive processes through which learners transform their mental abilities into task-related academic skills. That justifies the positive correlation between the mastery- approach and self-efficacy; students can focus on learning their course materials through persistence and diligence. Besides, previous research findings such as Dweck & Elliott (1983) and Pintrich (2000) also reported positive associations between mastery-approach achievement goals and self-regulation, utilization of learning strategies, and self-evaluation of comprehension. Further mastery approach and cognitive strategy also have a weak positive relationship with an R-value of 0.40. That means that as students use fundamental (e.g., rehearsal) and complex (e.g., summarizing) strategies, they can process the information in course materials and classroom lectures much better.

In addition, one of the items included in the test anxiety factor concerns students' perception of their inability to master the study material ("I am so nervous during a test that I cannot remember facts I have learned."). The remaining three items attempt to explore students' worries about their performance. Based on the matrix, mastery approach and test anxiety have a weak positive association with an R-value of 0.35. This may imply that as a student worry, their mastery, and learning gets disrupted or as students have negative thoughts about their abilities, the chances of them learning and understanding the information in course materials significantly increases and vice versa.

As for the relationship between the mastery-avoidance and performance goal orientations, both performance-approach and performance-avoidance have a weak and moderate positive relation with mastery-avoidance orientation with an R-value of 0.30 and 0.52 respectively. This is an indication that when students fear losing skills and being unable to master materials, they also tend to be negatively motivated to avoid looking incompetent and compare themselves with other people. The motivated learning strategies such as intrinsic value, test anxiety, self-regulation, and cognitive strategy have a negligible positive relation with mastery-avoidance with an R-value between 0.21, 0.08, 0.12, and 0.21 respectively. This implies that a student's task motivation, emotional state, active monitoring of their learning, and use of study methods do not nor has little effect on their fear of losing their skills or competencies. Nevertheless, both mastery-avoidance orientation and motivated learning strategies such as intrinsic value, test anxiety, self-regulation, and cognitive strategy of BTLEd students slightly affect each other positively but not enough to make a significant effect on each other. Despite the negligible association between the other motivated learning strategies, self-efficacy has a weak positive correlation with mastery-avoidance with an R-value of 0.38. This means that one's judgments of their ability to accomplish a task and expectancy for success can influence their fear of being unable to master the information in the task.

Moreover, the findings of the correlation matrix also reveal that performance-approach orientation and performance-avoidance have a weak positive relationship with each other with an R-value of

0.49. If the results are analyzed, as students try to do better than others, the greater they try to avoid looking incompetent relative to others. Also, it appears to be that performance-approach orientation and self-efficacy also have a weak positive relationship with an R-value of 0.40. According to Pintrich, et.al. (1996), a learner's confidence in one's skills to perform indicates performance goals. Based on previous research, high self-efficacy was associated with performance-approach goals (Elliot & Church, 1997). In the same way, performance-approach orientation and intrinsic value as well as self-regulation, appear to have a weak positive association with each other based on the correlation matrix with an R-value of 0.39. This implies the students' perception, of the importance of course, work as well as monitoring and managing themselves, they also become positively motivated to try to do better relative to other students thus, performance-approach orientation has a positive relationship with self-regulation and intrinsic value but enough to become a strong link. As follows, many studies linked students' self-reported use of cognitive strategies with their learning and challenge-seeking as well as with the beliefs that the task was interesting and important wherein the dispositions were commonly shown by the approach-oriented students (Ames & Archer, 1988; Dweck & Elliott, 1983; Meece, et.al., 1988).

Then again, performance-approach has a negligible positive relationship with test anxiety and cognitive strategy with an R-value of 0.11 and 0.32 respectively. Statistically speaking, both performance-approach orientation and motivated learning strategies such as test anxiety and cognitive strategy of BTLEd students slightly positively affect each other but not enough to make a significant effect on each other. This indicates that a student's emotional state, and use of skills to encode, memorize, and recall information during their cognitive process are not enough to make a significant effect on their desire to demonstrate their ability and achievement publicly.

Lastly, for the relationship between the four subscales of achievement goal orientation and motivated learning strategies, self-efficacy and intrinsic value have a weak positive relation with performance-avoidance as observed by the R-values of 0.37. This is an implication that one's beliefs of their capabilities to organize and execute the courses of action required and importance of course work has a slight positive outcome on one's motivation to avoid appearing incompetent. In addition, performance-avoidance also has a negligible and weak positive relationship with test anxiety, self-regulation, and cognitive strategy with an R-value of 0.19, 0.16, and 0.30 respectively. In the same way, performance-avoidance orientation and motivated learning strategies such as test anxiety and self-regulation of BTLEd students slightly positively affect each other but not enough to make a significant effect on each other. According to Elliot (1994), one's fear or expectations of failure generally reflect avoidance goals. Consequently, previous research has shown that students who did not want to look incompetent about their performance, or who lacked in ability relative to others, tend to adopt performance-avoidance goals (Elliot & McGregor, 2001). However, in this current research, a student's task motivation, emotional state, and active monitoring of their learning are not enough to make a significant effect on one's motivation to avoid appearing inadequate.

Meanwhile, for the relationship between motivated learning strategies, self-efficacy has a weak positive with intrinsic value, self-regulation, and cognitive strategy with an R-value of 0.42, 0.42, and 0.33 respectively. This shows that someone's effort management strategies, cognitive processes, and perception of the importance of course work have a direct relationship with their aspirations and choice of behavior in mobilizing their effort, persistence, and academic achievements. Nonetheless, self-efficacy and test anxiety have a negligible positive relationship wherein one's perspective of competence and confidence in their performance has little to no association with their worries and cognitive interferences.

Surprisingly, the results of the current research agree with the results of Pintrich and DeGroot (1990) wherein higher levels of self-efficacy were correlated with higher levels of cognitive strategy use. Then for intrinsic value, it has a negligible negative relationship with test anxiety with an R-value of -0.10. This means that a student's negative concerns and worries are inversely related to their intentions of engaging in learning activities but not enough to make a significant effect on each other. Additionally, individual and interpersonal factors such as challenge, curiosity, control, fantasy, competition, cooperation, and recognition have been reported to affect students' intrinsic motivation (Malone & Lepper, 1987). Despite the negative with test anxiety, intrinsic value and self-regulation have a moderate positive association with each other with an R-value of 0.55 as well as a weak positive link with cognitive strategy with an R-value of 0.40. This signifies that metacognitive strategies such as setting goals for what you want to learn, monitoring learning processes, and adjusting strategies according to the contexts and learning outcomes can significantly affect a student's interest in course work.

Moreover, intrinsic value includes the reasons and objectives that are adopted by the students in order to engage in their learning activities or simply the student motivation. Also, self-regulation refers to the active monitoring of learning by the students by using effort management and organizational strategies. Therefore, the perfect positive relation between intrinsic value and self-regulation refers to how the motivation of the students affects their self-management and self-evaluation in terms of academic learning tasks. In the same way, the use of cognitive strategies in facilitating the construction of new knowledge from previous experience and new information processing determines their preference in challenges.

According to Pintrich and his colleagues (1991), test anxiety has two components, a worry or cognitive component, and an emotional component. The worry component refers to students' negative thoughts that disrupt performance, doubts about their ability, and negative beliefs about the consequences of doing poorly on the test (Pintrich et al., 1991) while, the emotional component refers to the effective and physiological arousal aspects of anxiety, for example, muscle tension, elevated heart rate, sweating, feeling sick and shaking (Pintrich et al., 1991). Hence, test anxiety has a weak negative relationship with self-regulation with an R-value of -0.10 and a negligible relationship with cognitive strategy with an R-value of -0.10. It implies that as negative thoughts increase, the use of metacognitive learning strategies to regulate their cognition, behavior, and performance as well as utilization of cognitive strategies to interpret and understand the topics decreases and vice versa. Nonetheless, both test anxiety and cognitive strategy of BTLEd students inversely affect each other but not enough to make a significant effect on each other. Lastly, self-regulation and cognitive strategy have a weak positive relationship with an R-value of 0.45. This denotes that the use of self-regulation to take control of and direct one's cognitive processes and behaviors has a significant positive effect on the application of cognitive strategies on course notes.

IV. Conclusions and Recommendations

Conclusions

The results from the data analysis gave enough information to the researcher to form conclusions. The study has gathered important data that will help to address the main problem of the study which is to determine the correlation between achievement goal orientation and motivated learning

strategies and to determine the most and least apparent subscale of achievement goal orientation as well as motivated learning strategies of BTLEd students of Marinduque State College; the researcher came up with the following conclusions:

Based on the findings, the correlation between the subscales of achievement goal orientation and motivated learning strategies ranges from weak negative correlation to moderate positive correlation. For instance, the moderate positive correlation between intrinsic value and self-regulation wherein the students' motivation and perception of importance regarding their tasks have a significant influence on how their self-management and self-evaluation will affect their preference for the challenge and mastery goals. Thus, achievement goals have an influence on the motivated beliefs and learning strategies wherein students who are motivated to learn through a variety of goals may adapt learning strategies during their learning process. Learners learn using a variety of goals to accomplish academic tasks which can lead to the adoption of learning strategies during the learning process. Nonetheless, there is correlation between the subscales of achievement goal orientation and motivated learning strategies of BTLEd students.

The researcher determined that BTLEd students mainly possess a mastery-approach orientation which is focused on learning, understanding the course materials and developing their skills. On the other hand, the least concern of BTLEd students is having the inability or fear of not understanding the course materials and lectures is the least apparent achievement goal orientation. In conjunction with the COVID-19 pandemic, students are less apprehensive with striving to avoid falling behind task mastery as a result of the implementation of purely online classes but rather strive to comprehend and master the learning materials as much as possible.

Lastly, the researcher also found out that BTLEd students commonly use cognitive strategies which are basic and complex strategies such as rehearsal, elaboration, organization and critical thinking in order to process the information in materials and lectures. Use of rehearsal refers to the method of repeating the words over and over to oneself to help in the recall of information while, elaboration includes the utilization of paraphrasing and summarizing. Organization is also one of the complex strategies used such as outlining and creating tables and/or charts. Lastly, critical thinking is necessary to assess student's use of strategies to apply previous knowledge to new situations or make critical evaluations of ideas. On the contrary, BTLEd students rarely have test anxiety which has two components, a worry or cognitive component, and an emotional component.

Recommendations

Based on the aforementioned findings and conclusions, the following recommendations were offered by the researcher to the direct recipient of the study, the management of educational institutions

In today's information societies, the main goal of schools should not be the direct transmission of knowledge to new generations. Instead, their goal should be to teach new generations how to learn. The researcher recommends the implementation of intervention programs designed to increase the frequency and quality of mastery-oriented experiences for the Bachelor of Technology and Livelihood Education (BTLEd) students based on the most apparent achievement goal orientation. For instance, developing "learning to learn" courses or workshops designated to directly teach students optimal approaches to studying which can aid their learning process of course materials.

The researcher also suggests that the intervention efforts should also be aimed at encouraging BTLEd students to adopt particular achievement goal orientations.

Motivation has several important factors influencing the study process of learners such as people, goals and aspirations, beliefs, and perspectives regarding good grades. In addition to motivation, the learner should have a definite goal. Thus, the researcher recommends the implementation of motivational interventions such as counseling, client assessment, multiple sessions, or a 30-minute brief intervention. This will foster hope and optimism by reinforcing students' beliefs in their own capacities and capabilities.

The findings regarding the most and least apparent achievement goal orientation and motivated learning strategies provide teachers with starting points to propose educational interventions that seek to motivate and increase the student's set of strategies; it also provides information to evaluate the motivational and cognitive effects of such interventions. As for the results of the relationship between achievement goal orientation and motivated learning strategies, the researcher recommends developing an effective curriculum by taking into consideration studies regarding motivational and learning strategies amongst diverse populations, different campus communities, varying societies, and different experiences that shape student's learning. Identifying these orientations and strategies could be a significant step toward appropriate academic alterations and actions that could improve students' achievements by determining the strengths and weaknesses in their studies.

Lastly, this study has significant contribution to the research gap regarding achievement goal orientation, motivation learning strategies, and factors affecting the manifestation of motivation in terms of different contextual situations. For instance, the current situation present for this study is the COVID-19 pandemic causing the cancellation of face-to-face classes and transition to the method of online learning which led to consequential effects on education and its aspects. Therefore, it is recommended that the current study will be compared to the relative studies in the next five years to determine the evolution of achievement goals, motivation, and self-regulated learning strategies.

V. References Cited

- [1] Alderman, M. K. (2004). *Motivation for achievement: Possibilities for teaching and learning* (2nd ed.). Lawrence Erlbaum Associates Publishers.
- [2] Ames, C., & Archer, J. (1988). Achievement goals in the classroom: Students' learning strategies and motivation processes. *Journal of Educational Psychology*, 80(3), 260–267. Retrieved from <https://doi.org/10.1037/0022-0663.80.3.260>.
- [3] Ames, C. (1992). Classrooms: Goals, structures, and student motivation. *Journal of Educational Psychology*, 84(3), 261. Retrieved from doi:10.1037/0022-0663.84.3.261.
- [4] Anderman, E.M. & Anderman, L.H. (2010), Classroom Motivation. Pearson. Retrieved from <https://www.pearson.com/us/highereducation/product/Anderman-Classroom-Motivation/9780131116979.html>.
- [5] Anderman, E. M., & Midgley, C. (1997). Changes in achievement goal orientations, perceived academic competence, and grades across the transition to middle-level schools. *Contemporary Educational Psychology*, 22(3), 269–298. Retrieved from <https://doi.org/10.1006/ceps.1996.0926>.
- [6] Bandura, A., (1986). *Social foundations of thought and action: A social cognitive theory*. Prentice-Hall, Inc.
- [7] Bandura, A. (1997). *Self-efficacy: The exercise of control*. New York: Freeman.
- [8] Chapman, E. (2003). Alternative approaches to assessing student engagement rates. *Practical Assessment, Research & Evaluation*, 8(13).

- [9] Church, M. A., Elliot, A. J., & Gable, S. L. (2001). Perceptions of classroom environment, achievement goals, and achievement outcomes. *Journal of Educational Psychology*, 93(1), 43-54. Retrieved from <http://dx.doi.org/10.1037/0022-0663.93.1.43>.
- [10] Dembo, M. H. (2004). *Motivation and learning strategies for college success* (2nd ed). New Jersey: Lawrence Erlbaum Associates.
- [11] Dweck, C. S., & Elliot, E. S. (1983). Achievement motivation. In P. Mussen & E. M. Heatherington (Eds.), *Handbook of Child Psychology*, 643–691. New York: Wiley.
- [12] Dweck, C. S. (1986). Motivational processes affecting learning. *American Psychologist*, 41, 1040-1048. Retrieved from <https://doi.org/10.1037/0003-066X.41.10.1040>.
- [13] Dweck, C. S. (1992). Article commentary: The study of goals in psychology. *Psychological Science*, 3(3), 165–167. Retrieved from <https://doi.org/10.1111/j.1467-9280.1992.tb00019.x>.
- [14] Dweck, C. S., & Leggett, E. L. (1988). A social-cognitive approach to motivation and personality. *Psychological Review*, 95(2), 256–273. Retrieved from <https://doi.org/10.1037/0033-295X.95.2.256>.
- [15] Elliot, A. J., & Church, M. A. (1997). A hierarchical model of approach and avoidance achievement motivation. *Journal of Personality and Social Psychology*, 72(1), 218. Retrieved from <http://dx.doi.org/10.1037/0022-3514.72.1.218>.
- [16] 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.
- [17] Elliot, A. J., & McGregor, J. A. (2001). A 2x2 achievement goal framework. *Journal of Personality and Social Psychology*, 80, 501-519. Retrieved from <http://dx.doi.org/10.1016/j.psychsport.2005.08.012>.
- [18] Elliot, A. J., & Murayama, K. (2008). On the measurement of achievement goals: Critique, illustration, and application. *Journal of Educational Psychology*, 100, 613–628.
- [19] Elliot, A. J. (1999). Approach and avoidance motivation and achievement goals. *Educational Psychologist*, 34(3), 169-189. Retrieved from doi: 10.1207/s15326985ep3403_3.
- [20] Elliot, A. J. (2005). A conceptual history of the achievement goal construct. In A. J. Elliot & C. S. Dweck (Eds.), *Handbook of Competence and Motivation*, 52-72. New York: Guilford.
- [21] Elliot, A. J., McGregor, H. A., & Gable, S. (1999). Achievement goals, study strategies, and exam performance: A mediational analysis. *Journal of Educational Psychology*, 3, 549-563.
- [22] Elliot, E. S., & Dweck, C. S. (1988). Goals: An approach to motivation and achievement. *Journal of Personality and Social Psychology*, 54, 5-12.
- [23] Geta, M. (2012, June). An investigation on the relationship between achievement goal orientation, approaches to learning and academic achievement of college students: The case of Bonga college of teacher education (Unpublished master's thesis). Addis Ababa University, Ethiopia.
- [24] Hall, M., Hanna, L., Hanna, A., & Hall, K. (2015). Associations between achievement goal orientations and academic performance among students at a UK pharmacy school. *American Journal of Pharmaceutical Education*, 79(5).
- [25] Harackiewicz, J. M., Barron, K. E., & Elliot, A. J. (1998). Rethinking achievement goals: When are they adaptive for college students and why? *Educational Psychologist*, 33(1), 1-21.
- [26] 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. Retrieved from <http://dx.doi.org/10.1037/0022-0663.94.3.562>.
- [27] Hassan, N. & Hassan, T. (2016). Female Students get More Marks as Compared to Male Students: A Statistical Study. *J Bus Fin Aff*, 5, 226. Retrieved from doi:10.4172/2167-0234.1000226.
- [28] Hulleman, C. S., Durik, A. M., Schweigert, S. B., & Harackiewicz, J. M. (2008). Task values, achievement goals, and interest: An integrative analysis. *Journal of Educational Psychology*, 100, 398-416.

- [29] Hulleman, C. S., Schrager, S. M., Bodmann, S. M., & Harackiewicz, J. M. (2010). A meta-analytic review of achievement goal measures: different labels for the same constructs or different constructs with similar labels? *Psychological Bulletin*, 136, 422-449 Retrieved from doi:10.1037/a0018947.
- [30] Kaplan, A., & Maehr, M. L. (1999). Achievement goals and student well-being. *Contemporary Educational Psychology*, 24(4), 330–358. Retrieved from <https://doi.org/10.1006/ceps.1999.0993>.
- [31] Kaplan, A., & Maehr, M. L. (2007). The contributions and prospects of goal orientation theory. *Educational Psychology Review*, 19(2), 141-184. Retrieved from doi: 10.1007/s10648-006-9012-5.
- [32] Kaplan, A., Middleton, M.J., Urdan, T., & Midgley, C. (2002). Achievement goals and goal structures. In C. Midgley (Ed.), *Goals, goal structures, and patterns of adaptive learning*, 21-53. New Jersey: Lawrence Erlbaum.
- [33] Kayis, A. R., & Ceyhan, A. A. (2015). Investigating the achievement goals of University Students in terms of psycho-social variables. *Educational Sciences: Theory & Practice*, 15(2).
- [34] Lin, X. (2017). Achievement goal orientations and resource management strategies of adult and traditional learners (Unpublished doctoral thesis). Auburn University, Alabama.
- [35] Malone, T. & Lepper (1987). Making learning fun: A taxonomy of intrinsic motivations for learning. In Snow, R. & Farr, M. J. (Ed), *Aptitude, Learning, and Instruction*, 3: Conative and Affective Process Analyses. Hillsdale, NJ.
- [36] Meece, J. L., Blumenfeld, P. C., & Hoyle, R. H. (1988). Students' goal orientations and cognitive engagement in classroom activities. *Journal of Educational Psychology*, 80, 514-523.
- [37] Meece, J. L., Anderman, E. M., & Anderman, L. H. (2006). Classroom goal structure, student motivation, and academic achievement. *Annual Review of Psychology*, 57, 487-503. Retrieved from doi: 56.091103.070258.
- [38] Middleton, M., & Midgley, C. (1997). Avoiding the demonstration of lack of ability: An underexplored aspect of goal theory. *Journal of Educational Psychology*, 89, 710-718.
- [39] Ouyang, L. (2008). Motivation, cultural values, learning processes, and learning in chinese students (Unpublished master's thesis) Queen's University, Canada.
- [40] Pajares, F. (2002). Gender and perceived self-efficacy in self-regulated learning. *Theory into Practice*, 41, 116 –125. Retrieved from doi:10.1207/s15430421tip41028.
- [41] Phan, H. P. (2012). Relations between informational sources, self-efficacy and academic achievement: A developmental approach. *Educational Psychology*, 32(1), 81-105.
- [42] Pintrich, R. R., & DeGroot, E. V. (1990). Motivational and self-regulated learning components of classroom academic performance. *Journal of Educational Psychology*, 82, 33-40.
- [43] Pintrich, P.R., & Schunk, D.H. (2002). *Motivation in education: Theory, research and application* (2nd ed.). Upper Saddle River, NJ: Prentice Hall.
- [44] Pintrich, P. R. (1990). Implications of the psychological research on student learning and college teaching for teacher education. In R. Houston (Ed.), *The Handbook of Research on Teacher Education*, 826-857. New York: Macmillan.
- [45] Pintrich, P. R. (2000). An achievement goal theory perspective on issues in motivation terminology, theory, and research. *Contemporary Educational Psychology*, 25(1), 92-104. Retrieved from <http://dx.doi.org/10.1006/ceps.1999.1017>.
- [46] Pintrich, P. R. (2000). Multiple goals, multiple pathways: The role of goal orientation in learning and achievement. *Journal of educational psychology*, 92(3), 544. Retrieved from <http://dx.doi.org/10.1037/0022-0663.92.3.544>.
- [47] Pintrich, P. R., Smith, D. A., García, T., & McKeachie, W. J. (1991). *A manual for the use of the Motivated Strategies for Learning Questionnaire (MSLQ)*. Ann Arbor, MI: NCRIPTAL - The University of Michigan.
- [48] Riding, R., & Grimley, M. (1999). Cognitive style and learning from multimedia materials in 11-year children. *British Journal of Educational Technology*, 30(1), 43- 59.
- [49] Roeser, R. & Midgley, C. & Urdan, T. (1996). Perceptions of the school psychological environment and early adolescents' psychological and behavioral functioning in school: the <https://ijase.org>

- mediating role of goals and belonging. *Journal of Educational Psychology*, 88, 408-422. Retrieved from doi: 10.1037/0022-0663.88.3.408.
- [50] Rosas, J. S. (2015). Validation of the achievement goal questionnaire - revised in Argentinean university students (A-AGQ-R). *International Journal of Psychological Research*, 8, 10-23. Retrieved from doi: 10.21500/20112084.641.
- [51] Ryan, A. M., & Pintrich, P. R. (1997). "Should I ask for help?" The role of motivation and attitudes in adolescents' help seeking in math class. *Journal of educational psychology*, 89(2), 329-341. Retrieved from <http://dx.doi.org/10.1037/0022-0663.89.2.329>.
- [52] Ryan, A. M., Pintrich, P. R., & Midgley, C. (2001). Avoiding seeking help in the classroom: Who and why? *Educational Psychology Review*, 13(2), 93-114. Retrieved from <https://doi.org/10.1023/A:1009013420053>.
- [53] Santrock, J. W. (2011). *Educational Psychology* (5th ed.). New York: McGraw-Hill.
- [54] Shih, S. S. (2005). Taiwanese sixth graders' achievement goals and their motivation, strategy use, and grades: An examination of the multiple goal perspective. *The Elementary School Journal*, 106(1), 39-58. Retrieved from doi: 10.1086/496906.
- [55] Skaalvik, E. (1997). Self-enhancing and self-defeating ego orientations: relations with task and avoidance orientation, achievement, self-perceptions, and anxiety. *Journal of Educational Psychology*, 89, 71-81.
- [56] Voyer, D., & Voyer, S. D. (2014). Gender differences in scholastic achievement: A meta-analysis. *Psychological Bulletin*, 140(4), 1174-1204. Retrieved from <https://doi.org/10.1037/a0036620>.
- [57] Vroom, V. H. (1964). *Work and motivation*. NY: John Wiley & Sons.
- [58] Weinstein, C. E., Husman, J., & Dierking, D. R. (2005). Self-regulation interventions with a focus on learning strategies. In M. Boekaerts, Pintrich, P. R., & M. Zeidner (Eds.). *Handbook of Self-Regulation*. Burlington, MA: Elsevier Academic Press.
- [59] Wolters, C. A., Yu, S. L., & Pintrich, P. R. (1996). The relation between goal orientation and students' motivational beliefs and self-regulated learning. *Learning and Individual Differences*, 8(3), 211-238.
- [60] Zimmerman, B. J., & Pons, M. M. (1986). Development of a structured interview for assessing student use of self-regulated learning strategies. *American Educational Research Journal*, 23(4), 614-628.
- [61] Zimmerman, B. J., & Schunk, D. H. (Eds.) (2001). *Self-regulated learning and academic achievement: Theoretical perspectives* (2nd ed.). Mahwah, NJ: Lawrence Erlbaum.
- [62] Zimmerman, B. (2002). Becoming a self-regulated learner: An overview. *Theory into Practice*, 41, 64-70. Retrieved from doi: 10.1207/s15430421tip41022.
- [63] Zimmerman, B. J. (2008). Investigating self-regulation and motivation: Historical background, methodological developments, and future prospects. *American Educational Research Journal*, 45(1), 166-183.