

UNIVERSITÉ DE SHERBROOKE

Faculté d'éducation

Le rôle de l'auto-efficacité, la structure perçue des objectifs en classe et les stratégies
d'auto-handicapant sur l'orientation des étudiants

The role of academic self-efficacy, perceived classroom goal structure and academic self-
handicapping strategies on students' goal orientation

By

Emily Gervasi

13129713

Essai présenté à la Faculté d'éducation
En vue de l'obtention du grade de
Maître en enseignement (M. Éd.)
Maîtrise en enseignement au collégial

June 2019

© Emily Gervasi, 2019

UNIVERSITÉ DE SHERBROOKE

Faculté d'éducation

Le rôle de l'auto-efficacité, la structure perçue des objectifs en classe et les stratégies
d'auto-handicapant sur l'orientation des étudiants

The role of academic self-efficacy, perceived classroom goal structure and academic self-
handicapping strategies on students' goal orientation

Emily Gervasi

a été évalué par un jury composé des personnes suivantes:

Mrs. Priscila Castillo-Ruiz _____ Research Supervisor

First name and Last name

Mr. Sean Hughes _____ External Evaluator of the Master's Paper

First name and Last name

Acknowledgment

This study is the final research paper for a Master's in Education for College Teaching from the University of Sherbrooke.

I would like to acknowledge and thank the invaluable patience, support, guidance, and availability that my supervisor, Mrs. Priscila Castillo Ruiz regularly provided throughout this project. Her comments and feedback significantly improved this research, and positive discussions kept me driven and motivated. Thank you so very much Priscila Castillo-Ruiz.

Also, I would like to express gratitude to all the tourism students at Champlain Regional College Saint-Lambert who spared their time to participate in this research. To my research assistant Lorelie Bouchard and my methodology advisor Valerie Hadd, who generously assisted me in various components in this research, I am sincerely grateful.

Furthermore, I would like to take the opportunity to acknowledge the contribution of all my Performa instructors and classmates, throughout the past six years, for their kind assistance, their constant challenges to question and improve my pedagogical practices, and for their cooperation during my MTP learning experience. It has been a rewarding and transformative learning experience.

Finally, a big thanks to my family for their love and support. I could not have gone on this incredible adventure and complete this project without them.

Abstract

The present research aimed to examine the goal orientation adopted by students in a college classroom that subsequently predicted motivation and achievement. Furthermore, the study analyzed the correlation of several important antecedents (e.g. academic self-efficacy, the perception of classroom goal structure, use of academic self-handicapping strategies), in foretelling the changes in students' goal orientation within an educational setting. The results indicated that all three groups aimed at adopting a mastery goal orientation in their learning, with a slight decrease between 1st to 2nd year students. Also, the results revealed distinct profiles for each of the achievement goals; the variability of mastery goal orientation is positively predicted by a student's level of self-efficacy, whereas, both performance goal orientations predict the use of self-handicapping strategies. With respect to motivation and competence, the findings denote that high achievement motivation and high competence expectations are associated with mastery goals; motivation due to fear of failure is related to performance-approach goals, and performance-avoidance demands lower levels of cognitive engagement and undermines intrinsic motivation. The findings contribute to the achievement goal literature by attesting to the need to attend mastery and performance as well as approach and avoidance and the impact specific variables have on the goal orientation adopted by students, resulting in different levels of motivation, commitment, and learning by the student, throughout a program.

Keywords: achievement goal theory, trichotomous achievement goal framework, mastery goal oriented, performance-approach oriented, performance-avoidance oriented, academic self-efficacy, perceived classroom goal structure, and academic self-handicapping strategies.

Résumé

La motivation est omniprésente dans la vie d'un individu. Dans un cours spécifique ou dans tous les aspects d'un programme, la motivation des étudiants influence leur apprentissage et leurs performances. La recherche existante examine les contributions relatives aux variables sur l'orientation des objectifs, car elles affectent indirectement la motivation et l'engagement, en affectant directement les objectifs de réalisation.

Au cours des années 2015-2017, le département de gestion du Tourisme, un programme technique, a constaté une baisse significative du rendement et de la motivation des étudiants, résultant en des apprentissages diminués, des problèmes de santé mentale et une perte d'intérêt envers du programme. Ces résultats négatifs justifient une recherche critique pour traiter les variables antécédentes; il faut pouvoir prévoir les objectifs spécifiques poursuivis par nos étudiants dans un contexte académique pour augmenter la motivation, l'engagement et l'apprentissage.

Quatre questions de recherche ont été posées pour guider l'étude, et six hypothèses au total ont été formulées pour répondre à ces questions.

Question de recherche n°1: *Comment les différentes variables antécédentes sont-elles en corrélation avec les objectifs de réalisation?* Les hypothèses formulées sont les suivantes: H1 L'auto-efficacité est liée à l'orientation vers la réalisation des objectifs. H2 La structure des objectifs de la classe perçue est liée à l'orientation des objectifs de réalisation. H3 Les stratégies académiques d'auto-handicap sont liées à l'orientation envers la réalisation des objectifs.

Question de recherche n°2: *existe-t-il des corrélations significatives entre l'auto-efficacité, la structure des objectifs perçus en classe et les stratégies scolaires auto-handicapantes?* Une hypothèse a été proposée: H4: Il existe des corrélations significatives entre l'auto-efficacité, la structure des objectifs perçus en classe et les stratégies académiques de handicap.

Question de recherche n° 3: *l'orientation vers un objectif spécifique se rapporte-t-elle à la compétence, à la motivation et à l'engagement tels qu'exprimés dans la littérature?* L'hypothèse formulée était H5: Chaque objectif est associé à la compétence, l'engagement et la motivation à différents niveaux.

Enfin, une hypothèse a été proposée pour répondre à la question de recherche finale: *existe-t-il une variation des orientations des objectifs des étudiants entre les différentes années du programme de gestion du Tourisme?* Était H6: Les orientations des objectifs spécifiques varient entre les étudiants de 1re, 2e et 3e années.

Les recherches existantes font allusion à divers facteurs contribuant à la variation de l'orientation des objectifs. Cependant, en fonction de la littérature existante, des commentaires des professeurs et des étudiants, les variables sociales cognitives sélectionnés peuvent être réduits à l'auto-efficacité académique (Anderman et Young, 1994; Bandura, 1997; Zimmerman, 2000); perception des structures d'objectifs en classe (Ames et Archer, 1988; Anderman et Anderman, 1999) et stratégies académiques d'auto-handicapant (Midgley et Urdan, 2001; Schwinger et al., 2014). Zimmerman (2000) a défini l'efficacité personnelle comme notre propre jugement des capacités de chacun à organiser et à mettre en œuvre des actions visant à atteindre les objectifs souhaités. L'environnement perçu dans une salle de classe ou la relation dans cet environnement consiste à inciter les étudiants à rester et à appliquer leurs capacités ou les obstacles qui les obligent à quitter. En ce qui concerne les stratégies académiques d'auto-handicap, cela constitue une stratégie antérieure qui précède le succès ou l'échec dans le but d'influencer la perception des autres. Compte tenu de ces variables, les corrélations entre elles et leur relation avec le cadre d'objectifs de réalisation trichotomiques, établi par Elliot et Church (1997) et leurs collègues, doivent être examinées en vue d'une adoption et des trajectoires de ces objectifs par les étudiants.

La méthodologie appliquée était une méthode quantitative, qui comprenait trois hiérarchies d'échelles de mesure préexistantes adaptées sur la base des Modèles d'échelles d'apprentissage adaptatif, pour un total de trente-neuf articles (Midgley et al., 2000). Au début de la session, un formulaire de consentement était fourni à tous les futurs participants, expliquait l'objet du projet de recherche, la participation volontaire, l'option de retrait et l'importance de la confidentialité. Les participants étaient tous des étudiants du programme de gestion du Tourisme du Collège Champlain à Saint-Lambert; 1^{ère}, 2^{ème}, et 3^{ème} année. Le questionnaire était distribué aux trois groupes, à deux intervalles différents durant la session d'automne 2018, par un assistant de recherche. Les hypothèses ont été testées pour établir des relations entre les variables afin de comparer les groupes au moyen d'une analyse descriptive, de mesures répétées de l'ANOVA et d'un coefficient de corrélation.

Les résultats indiquent que les personnes très efficaces sont susceptibles d'adopter la maîtrise ou, parfois, l'orientation vers les objectifs de la performance. Une forte efficacité personnelle et une structure de classe favorable ont été prédites pour une orientation d'objectif de maîtrise. Les classes structurées par objectif de performance ainsi qu'entre structure de classe d'évitement de performance sont postérieurement liées à l'utilisation de stratégies auto-

handicapantes. Les résultats ont montré que l'orientation des objectifs d'évitement de la performance prédit de manière positive l'utilisation de stratégies auto-handicapantes.

Compte tenu de ces résultats et discussions, chacune des trois orientations des objectifs de réalisation présente un profil distinct: l'orientation de la maîtrise est axée sur l'apprentissage, la compréhension, le progrès et le perfectionnement personnel. Les résultats démontrent que les trois groupes sont axés sur la maîtrise. L'approche axée sur la performance est généralement utilisée par les apprenants de surface qui se focalisent sur l'apparence d'intelligence, car leur objectif est de surpasser les autres. Par conséquent, leur motivation ou leur persistance est motivée par un jugement favorable, surmontant la peur de l'échec et paraissant plus intelligent que par l'apprentissage. L'évitement des performances est d'éviter de paraître incompetent, ce qui, à son tour, exige un niveau d'engagement cognitif moindre et mine la motivation intrinsèque. Les résultats obtenus indiquent que les étudiants ne sont pas orientés vers la performance-évitement.

Une hypothèse était qu'un changement s'était produit entre la 2^e et la 3^e année du programme de Tourisme, mais les résultats montrent que le changement se produit entre les étudiants de 1^{re} à 2^e année. Il a également été supposé que l'orientation vers l'objectif des élèves fût passée de la maîtrise à la performance, mais les résultats ont montré que ce n'était pas le cas. Il est intéressant de noter que le deuxième type d'orientation des objectifs choisi par les étudiants, est l'évitement de la performance plutôt que de l'approche de la performance; ils s'orientent vers les extrêmes.

Les limites de l'étude de recherche incluent, la petite taille de l'échantillon du groupe qui a fourni une certaine signification statistique pour étayer les recherches existantes et a mis en évidence une tendance parmi les années du programme. Il est possible que les participants ne puissent pas faire la distinction entre approche de performance et évitement de performance, et qu'ils réagissent souvent d'une manière qui ne correspond pas aux intentions du chercheur. Des recherches plus approfondies pourraient examiner le lien entre l'utilisation de stratégies auto-handicapantes et l'orientation axée sur les objectifs d'évitement de la performance.

En fin de compte, les résultats permis au programme de Tourisme de mieux comprendre les convictions des compétences des étudiants et leur niveau de connaissances acquises, ainsi que de déterminer l'environnement de la classe nécessaire pour accroître la motivation, l'engagement et l'apprentissage tout au long du programme de trois ans.

Table of Contents

ACKNOWLEDGMENT -----	2
ABSTRACT -----	3
RÉSUMÉ -----	4
TABLE OF CONTENTS -----	7
TABLE OF TABLES -----	9
TABLE OF FIGURES -----	10
INTRODUCTION -----	11
CHAPTER 1: STATEMENT OF THE PROBLEM -----	12
CHAPTER 2: THE CONCEPTUAL FRAMEWORK -----	13
CHAPTER 3: LITERATURE REVIEW -----	15
3.1 LITERATURE -----	15
3.1.1 <i>Achievement Goal Theory and Orientation</i> -----	15
3.1.2 <i>Goal Valence Dimensions</i> -----	18
3.1.3 <i>Antecedent Variables – “Enablers”</i> -----	21
3.1.4 <i>Summary</i> -----	26
3.2 RESEARCH QUESTIONS -----	28
CHAPTER 4: METHODOLOGY -----	29
4.1 TARGET POPULATION (SAMPLE/PARTICIPANTS) -----	29
4.2 TYPE OF RESEARCH -----	29
4.3 RESEARCH DESIGN (PROCEDURES) -----	29
4.4 INSTRUMENTS -----	30
4.4.1 <i>Personal Achievement Goal</i> -----	31
4.4.2 <i>Perception of Classroom Goal Structure</i> -----	31

4.4.3 *Academic Efficacy and Self-Handicapping Strategies* ----- 32

4.4.4 *Social-Economic/Demographic Data* ----- 32

4.5 ETHICAL CONSIDERATIONS----- 33

4.6 ADJUSTMENTS FOR DATA ANALYSIS ----- 33

CHAPTER 5: ANALYSIS OF DATA & DISCUSSION----- 35

5.1 RESULTS----- 35

 5.1.1. *Descriptive Statistics*----- 35

 5.1.2. *ANOVA* ----- 39

 5.1.3. *Correlation Coefficient*----- 40

5.2 DISCUSSION ----- 46

 5.2.1 *Research Question #1* ----- 46

 5.2.2 *Research Question #2* ----- 49

 5.2.3 *Research Question #3* ----- 50

 5.2.4 *Research Question #4* ----- 52

CHAPTER 6: CONCLUSIONS AND LIMITATIONS----- 54

6.1 CONCLUSION----- 54

6.2 LIMITATIONS----- 55

6.3 IMPLICATIONS & SUGGESTIONS FOR FUTURE RESEARCH----- 55

REFERENCES LIST----- 57

APPENDIX A CONSENT LETTER ----- 62

APPENDIX B GOAL ORIENTATION SURVEY----- 64

APPENDIX C RESEARCH ETHICS BOARDS APPROVAL LETTER----- 67

Table of Tables

TABLE 1 STUDY SCHEDULE-----	30
TABLE 2 DESCRIPTIVE TABLE OF GOAL ORIENTATIONS FOR ALL GROUPS -----	35
TABLE 3 DESCRIPTIVE STATISTICS FOR MASTERY GOAL ORIENTATION ITEMS -----	37
TABLE 4 DESCRIPTIVE STATISTICS FOR PERFORMANCE-APPROACH GOAL ORIENTATION ITEMS -----	37
TABLE 5 DESCRIPTIVE STATISTICS FOR PERFORMANCE-AVOIDANCE GOAL ORIENTATION ITEMS-----	37
TABLE 6 ANOVA TABLE FOR WAVE 1 -----	39
TABLE 7 ANOVA TABLE FOR WAVE 2 -----	39
TABLE 8 CORRELATION COEFFICIENT TABLE AMONG GOAL ORIENTATIONS 1 ST YEAR STUDENTS-----	40
TABLE 9 CORRELATION COEFFICIENT TABLE AMONG GOAL ORIENTATIONS 2 ND YEAR STUDENTS -----	41
TABLE 10 CORRELATION COEFFICIENT TABLE AMONG GOAL ORIENTATIONS 3 RD YEAR STUDENTS -----	41
TABLE 11 CORRELATION COEFFICIENT TABLE – MASTERY GOAL WITH INDEPENDENT VARIABLES -----	41
TABLE 12 CORRELATION COEFFICIENT TABLE – PERFORMANCE-APPROACH GOAL WITH INDEPENDENT VARIABLES	42
TABLE 13 CORRELATION COEFFICIENT TABLE – PERFORMANCE-AVOIDANCE GOAL WITH INDEPENDENT VARIABLES -----	42
TABLE 14 CORRELATIONS COEFFICIENT TABLE FOR INDEPENDENT VARIABLES “ENABLERS” -----	45

Table of Figures

FIGURE 1. THE DICHOTOMOUS ACHIEVEMENT GOAL ORIENTATION FRAMEWORK18

FIGURE 2. THE TRICHOTOMOUS ACHIEVEMENT GOAL FRAMEWORK.....19

FIGURE 3. CONCEPTUAL FRAMEWORK OF MASTERY GOAL ORIENTATIONS AND RELATIONS TO THE INDEPENDENT
VARIABLES27

FIGURE 4. CONCEPTUAL FRAMEWORK OF PERFORMANCE-APPROACH AND PERFORMANCE-AVOIDANCE GOAL
ORIENTATIONS AND RELATIONS TO THE INDEPENDENT VARIABLES27

FIGURE 5. FREQUENCY OF MEANS FOR ALL THREE GROUPS AT THE START OF THE SEMESTER (W1).....36

FIGURE 6. FREQUENCY OF MEANS FOR ALL THREE GROUPS AT THE START OF THE SEMESTER (W2).....36

Introduction

Motivation is ever-present in an individual's daily life. In a specific course or across all aspects of a curriculum, students' motivation affects their successful learning and performance. In the past two decades, many theorists have studied the achievement goal theory (AGT) to understand emotions and motivation in an educational context. Moreover, the existing research examines the relative contributions of antecedent variables on goal orientation, because they indirectly affect the outcomes, such as motivation and commitment, by directly affecting the achievement goals. Students learning is central for all programs, especially for technical programs in CEGEP.

The Tourism Management technical program has noticed a significant decline in the student's academic performance and motivation. This alteration has resulted in adverse learning outcomes, mental health issues, and loss of interest in the program for the students. Therefore, an examination of the achievement goal orientation of students in higher education and the correlation of academic self-efficacy, perceived classroom goal structure and self-handicapping strategies (antecedents variables), to a students' goal orientation, is essential. The present research includes an extensive literature review of current knowledge and methodological contributions concerning AGT, and the antecedent variables mentioned above. Furthermore, the study contains a quantitative method through a self-report questionnaire based on a pre-existing hierarchy of measurement scales, from the revised Patterns of Adaptive Learning Scales. The questionnaire is administered to three groups, 1st, 2nd and 3rd-year students in two waves during the Fall 2018 semester, and data will be analyzed in the Winter 2019 semester.

It is expected that findings will allow the technical program to better understand student's competency beliefs and level of knowledge better, resulting in appropriate changes to the curriculum that would increase motivation, commitment and learning.

Chapter 1: Statement of the Problem

A distinct level of post-secondary education in Quebec is the CEGEP system. According to the Fédération des Cégeps (2018), as well as the Ministère de l'Éducation et de l'Enseignement Supérieur (MEES), formally known as Ministère de l'Éducation, du Loisir et du Sport (MELS), (2010; 2013), there has been an increase in technical program enrollment; however, it does not mean that students necessarily graduate or maintain their academic performance.

During the two years from 2015-2017, the Tourism Management department, a technical program, has noticed a significant decline in the student's academic performance and motivation. The Program Health Monitoring Data (PHMD) for Tourism Management (Champlain Regional College, 2018), showed that the average grades during the 1st semester has decreased from 77.3% in 2015 to 74.7% in 2017. The retention rate after 3rd semester has also decreased from 88.9% in 2014 to 80.6 in 2016 (Champlain Regional College, 2018). This alteration has become evident during our students' transition from second to the third year, resulting in adverse learning outcomes (e.g., surface learning), mental health issues (e.g., anxiety), and loss of interest in the program for the students. These negative results justify the need for critical research to address the antecedent variables that predict specific goal orientations pursued by our students in an academic setting. This issue of causality is relevant, and the information gathered could direct our technical program to make appropriate changes to the curriculum that will lead to an increase in motivation, commitment, and learning. It may likewise provide students with a feeling of satisfaction for their accomplishment and more importantly, generate excitement for the start of their career in the tourism industry.

The following research questions will guide this study: RQ1. How do the various antecedent variables correlate with the achievement goal orientations? RQ2. Are there significant correlations between academic self-efficacy, perceived classroom goal structure, and academic self-handicapping strategies? RQ3. Does the specific goal orientation relate to competence, motivation and commitment as expressed in the literature? RQ4. Is there a variation in students' goal orientations between different years of the Tourism Management program?

Chapter 2: The Conceptual Framework

Quebec CEGEP daytime students can follow one of two pathways in their studies: technical or pre-university programs to obtain a DEC (Diploma of College Studies). We are concerned with the technical path, a three-year program that prepares students for specialized occupation. According to the Fédération des Cégeps (2018), in 2015, 46% of students in CEGEP selected the technical path. The MEES, affirms an increase in enrollment for vocational or technical programs between 1990 and 2012 of 18.6%, but also a decrease in the number of diplomas awarded in specialized programs (MELS, 2010; 2013). Therefore, the number of applicants increased, but the number of graduates in the original time frame decreased; why?

In 2014, the Tourism Management program at Champlain College Saint-Lambert did a local program update for several reasons, such as a lack of coherence in the course weightings and calculation of credits. The Program Health Monitoring Data (PHMD) for Tourism Management (Champlain Regional College, 2018), showed that the average pass rates in the 1st semester have improved with results showing 82.7% in 2014, 97.8% in 2015, 90.1% in 2016 and 88.8% in 2017. In the past two years, the problem that Tourism Management program visually noticed was a significant decline in the students' academic performance and motivation, perhaps due to the student's academic orientation to learning, from mastery to performance. This shift has resulted in adverse learning outcomes and mental health issues for the students; a decrease in student retention through to graduation; and negative emotions towards the program and student's future career.

The Tourism Management Program Monitoring Data (Bouchard, 2018), showed that the admissions rate had decreased to 47.6% in 2017, and although the retention rate has been consistently low, there has been improvement in the updated program; 80.6% in 2016, 83.3% in 2015 and 88.9% in 2014, which is higher than the rest of the sector at 72.4%. As for graduates, the number is low. In 2011, 38.1% of students graduated on time, which was higher than in previous years, but, still low, and the completion of the program within four or five years has increased; 35.9% in 2008 to 43.8% in 2009 (Bouchard, 2018). This data shows the need to address critical issues such as student retention and motivation as well as issues related to program coherence and effectiveness; therefore, explanatory research to establish causality or the likelihood of causality between selected variables and student's goal orientation is necessary.

Existing research alludes to various contributing factors for variation in goal orientation. The aim of identifying all these factors is beyond the scope of this research. However, based on

existing literature, faculty feedback, and student feedback, the elements or social cognitive variables selected can be narrowed down to academic self-efficacy (Anderman & Young, 1994; Bandura, 1997; Middleton & Midgley, 1997; Schunk, 1996; Zimmerman, 2000); perception of classroom goals structures (Ames & Archer, 1988; Anderman & Anderman, 1999; Church, Elliot & Gable, 2001), and academic self-handicapping strategies (Midgley & Urdan, 2001; Schwinger et al., 2014; Urdan & Midgley, 2001). Given these variables, the correlations among them and their relationship with the trichotomous achievement goal framework, established by Church et al. (1997), should be investigated with a view on adoption and trajectories of these goal orientations. Finally, a comparison between 1st, 2nd, and 3rd-year students' goal orientation will prove beneficial in determining when changes occur.

Additionally, the objective, as stated above, is to study the effect of specific antecedent (independent variables) on Tourism Management students' goal orientation (dependent variable). The methodology will be one of quantitative research, consisting of three separate pre-existing hierarchy of measurement scales to justify my study. Scales will be adapted based on the Patterns of Adaptive Learning Scales (PALS) (Midgley et al., 1998) with justifiable reliability and validity and with interval scales of measurement. Tourism Management program students at Champlain College St. Lambert will be the subjects in this study to understand student goals at the three different stages of the program; therefore, the sample will be non-random, convenient and with specific criteria. The questionnaire will be distributed to the three groups, at two different waves throughout the Fall 2018 semester, by a research assistant.

This research will be useful to improve the technical program curriculum, aids in increasing the percentage of student retention within the program and encourages students in becoming experts in our field. It may enable other disciplines to identify significant factors that can affect students' goal orientation applied within a course and their specific disciplines.

Chapter 3: Literature Review

3.1 Literature

For any discipline in higher education, maintaining student commitment, academic performance and motivation is a constant challenge. The level of motivation endorsed by a student affects their successful learning and performance in a specific course as well as across all aspects of a curriculum. A significant framework in behavioural science research for understanding emotions and motivation in an educational context is the achievement goal theory (AGT) (Elliot, 1999). Achievement goals, as referred to by Pintrich (2000b), are “the purposes or reasons an individual is pursuing an achievement task” (p.93). Taken one step further by achievement goal theorists, such as Dweck (1986) and Elliot (1999), they described a students' achievement goals as a variation in their approach, engagement, and evaluation of one's performance in an academic context. Thus, various achievement goal orientations that lead to different forms of learning are based on a student's definition of competency (Elliot, 1999). Given this information, it is important to review the distinction of goal orientations with their different outcomes or results, and then examine the correlation of specific antecedent variables, in predicting the changes in students' goal orientation within an academic setting.

These specific social cognitive variables, academic self-efficacy, perception of classroom goal structure and academic self-handicapping strategies, revolve around competence perception and achievement motives. Studies conducted on these specific social cognitive variables individually account for unique variance in the adoption of an achievement goal orientation, and very few existing researches have studied these social cognitive variables altogether. Therefore, a study of the combination of these enablers independently, cooperatively and interactively, to predict the adopted achievement goal by a student, at different stages in a technical program, would provide a better understanding of the level of commitment and motivation a student contributes to a course or discipline.

3.1.1 Achievement Goal Theory and Orientation

When we think of goals, various definitions depend on whether goals are viewed as a perspective, an orientation or a position relative to a specific task goal. For example, Pintrich (2000a) defines goals as the reason or purpose an individual pursues a particular achievement task; cognitive representation of the objective sought out. These achievement goals were thought, by some researchers, to operate as a cognitive schema that guides achievement events (Ames, 1992;

Ames & Archer, 1988; Dweck, 1986), while others refer to achievement goals as the aim by which students pursue a result and not as a deep need or motive (Elliot, 1999). Elliot and Dweck, as per Urdan and Mestas (2006), claim that the primary concern of any achievement goal is their connection to competency. Hence, goal orientation focuses on the why and how to approach a goal and the engagement to demonstrate competence or ability, addressing the essential question 'Can I do it?'

Additionally, theorists, such as Ames and Archer (1988), Dweck and Leggett (1988), Elliot (1999), and Elliot and Church (1997) argued that two types of achievement goals exist concerning the function of competency, often referred to as mastery and performance goals. Together, they created a framework for how individuals approach academic or achievement situations. Moreover, researchers of goal orientations suggested that these two types of goals vary in their definition of competence and success, as well as in the standard for evaluating performance, errors, ability, and effort (Elliot & Church, 1997; Pintrich, 2000b). While one goal orientation focuses on learning how to do a task, the other focuses on one's ability or performance relative to others.

These goal orientations were labelled and termed differently by researchers due to theoretical distinctions. For example, goal orientations were labelled as task-mastery versus ego-social involved by Meece and Holt (1993); and as learning oriented versus performance oriented by Dweck and his colleagues (Dweck, 1986; Dweck & Leggett, 1988). Goal orientations have also been labelled as mastery versus ability focussed by Ames (1992); and as mastery versus performance by Elliot and Church (1997). All in all, the conceptual relationship is similar for task, learning, and mastery as it is for ego, performance, and ability; therefore, a convergence is acceptable. In this study, goal orientations are hereafter identified as mastery and performance goal orientation (dichotomy) based on research from Elliot and Church (1997).

According to Ames (1992), Elliot (1999), Dweck (1986), and Dweck and Leggett (1988), mastery goal orientation focuses on seeking challenges, improving or enhancing competence, achieving self-set standards and the development of new skills. Students with mastery goals believe that intelligence is malleable, situations are controllable and therefore, seek challenges which yield positive outcomes such as deep learning and persistence when faced with severe cognitive abilities. Urdan and Mestas (2006) agreed by stating that a student referred to as mastery oriented is one who strives for improvement, to develop competency through the acquisition of new knowledge and skills and personal satisfaction. That is, the student demonstrates a task-

oriented focus. Research from Anderman and Anderman (1999), which studied the decline of student motivation with goal achievement in both elementary and middle school, indicated that when a student is aware of the task, students adopt a mastery goal orientation. It is in accordance with previous findings from Ames and Archer (1988) who supported and stated that mastery goal achievement concerns acquiring new skills and the process of learning is valued. Besides, as indicated by Ames (1992), Elliot (1999) and Urdan and Mestas (2006), mastery orientation correlates with positive beliefs about one's competence, effort, schoolwork and overall purpose of school.

Performance orientation, on the other hand, is a goal that focuses on one's ability and competency with others (Urdan & Mestas, 2006). Thus, performance orientation is associated with appearing able when compared to others. According to Ames and Archer (1988), a performance goal orientation reflects one's value in one's ability with normative learning outcomes and tends to attribute fear of failure to lack of skill and work that is too difficult. Based on Elliot's (1999) review as well as Dweck and Leggett's (1988) analysis, performance goals are commonly found in surface learners that do not put effort into their learning and believe that intelligence is fixed. Performance goals are a maladaptive antecedent that is supported by Anderman and Anderman's study (1999) and Meece and Holt's (1993) cluster analysis study. Furthermore, Elliot (1999) highlights studies whose findings reveal that harmful consequences, such as surface learning and low motivation, occur as outcomes to performance goals when perceived competence is low; however, he also affirms studies, including his own, that do not support this hypothesis. As a final look, qualitative research by Urdan and Mestas (2006) claimed that students pursue performance goals to look smarter, to outperform to become a role model, to please parents and by the same token, to avoid appearing incompetent, yet their level of competency is unclear.

Nonetheless, researchers, such as Elliot and his colleagues debated that performance is not always associated with normative learning results and can vary depending on goal valence (see Elliot, 1999, Elliot & Church, 1997; Elliot & Harackiewicz, 1996; Elliot & McGregor, 2001). Middleton and Midgley (1997) also agreed that not all performance goals predict less adaptive or adverse outcomes; therefore, performance should be separated into goal definition and goal valence (i.e., approach and avoidance). Elliot and Church (1997) proposed a framework that has become a theoretical approach in contemporary literature concerning achievement motivation.

This framework classifies achievement goals by goal definition and goal valence to distinguish their different outcomes. The research considers that the achievement goal selected by a student is a direct predictor of achievement outcome. Thus, it is essential to study, in depth, each goal with its different consequences and analyze the relationships between antecedent variables and goal orientations pursued by students.

3.1.2 Goal Valence Dimensions

Goal valence dimensions are the conceptualization of goal orientations regarding approach and avoidance components proposed by Elliot and his colleagues (Elliot & Church, 1997; Elliot & Harackiewicz, 1996). The distinction between approach and avoidance within motivation has been studied for centuries (see Elliot, 1999, for a review). These dimensions, in an educational context, create an academic environment where students can deal with apathetic tendencies adaptively, either towards a future goal that one feels competent to approach or desire to avoid. An approach orientation is the desire to appear competent and receive favourable competency judgment from others, whereas avoidance orientation is the desire to avoid negative consequences (Elliot, 1997).

Anderman and Anderman's (1999) study stated that a student who aims to outperform others, focuses on approach goal orientations, whereas as a student who wants to avoid appearing incompetent or undermines exams, is indicative of avoidance goal orientation. Therefore, when merging mastery and performance with approach and avoidance, the outcome is different. Elliot and McGregor (2001) combined goal orientation and goal valence to produce a 2 X 2 framework (see *Figure 1*). It is a dichotomous framework between mastery goal orientation and performance goal orientation in a normative grid.

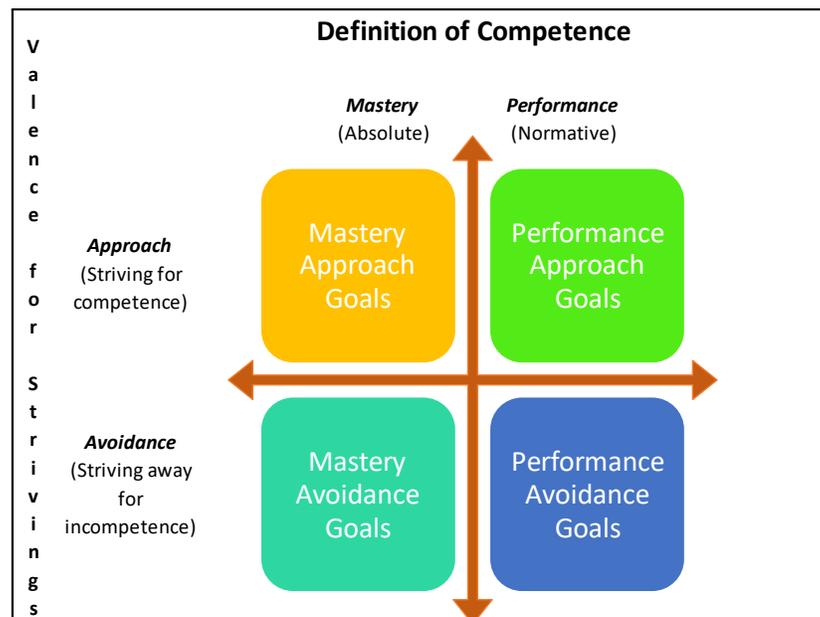


FIGURE 1. THE DICHOTOMOUS ACHIEVEMENT GOAL ORIENTATION FRAMEWORK

However, since the cornerstone of multiple goal orientations revolves around performance-approach and performance-avoidance goals, functional differences, the goal theory framework was revised. Elliot and his colleagues established a trichotomous achievement goal framework (see Figure 2) whereby mastery goals remain intact, and the approach-avoidance goal valence is applied merely to performance goals (Elliot, 1999; Elliot & Church, 1997; Elliot & Harackiewicz, 1996).

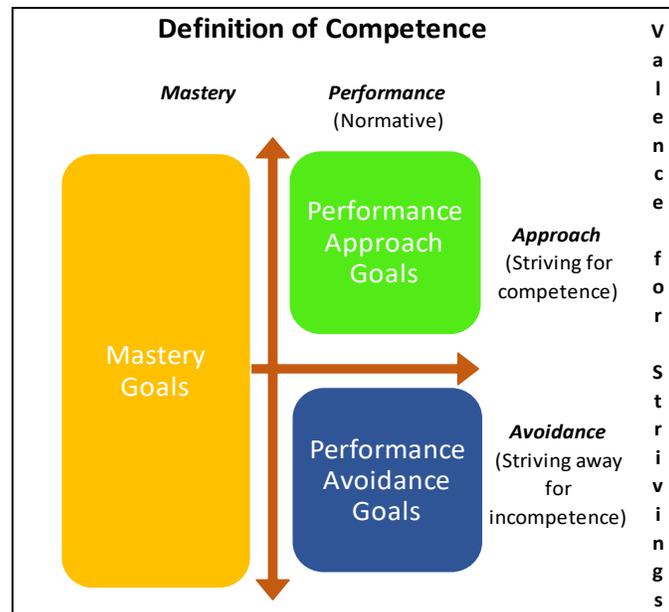


FIGURE 2. THE TRICHOTOMOUS ACHIEVEMENT GOAL FRAMEWORK

Evidence has accumulated to support the use of the trichotomous framework to measure all three independent achievement goals: *mastery goal*, *performance-approach goal* and *performance-avoidance goal* (Church et al., 2001; Elliot & Church, 1997; Elliot & Harackiewicz, 1996; Elliot & McGregor, 1999; Janke, Nitsche, Praetorius, Benning, Frasching, Dresel & Dichausser, 2016; Middleton & Midgley, 1997; see Elliot, 1999, for a review).

As previously stated, mastery goal orientation is concerned with competency improvement and the acquisition of new skills. Dweck (1986) affirmed that a student with a mastery goal orientation (referred by him as a learning goal) values the ability to be developed and selects challenging tasks whether he/she believes he/she can accomplish it. Elliot's (1999) analysis of the trichotomous achievement goal framework supported Dweck's (1986) ideas by stating that a mastery goal produces positive outcomes such as absorption of classroom content, self-regulated

learning, long-term retention, persistence and intrinsic motivation. As for performance-approach and performance-avoidance, they may seem similar, but their objectives and outcomes differ.

The studies carried out by Church et al. (2001) state that performance-approach and performance-avoidance lead to different outcomes and emerge from a distinct pattern of antecedents. A performance-approach goal focuses on obtaining regular competence, and a performance-avoidance goal focuses on avoiding incompetence. In agreement with this view are Elliot and colleagues (Elliot, 1999; Elliot & Harackiewicz, 1996; Elliot & McGregor, 2001), Middleton and Midgley (1997), and Pintrich (2000a). Their research supported that performance-approach goals are linked to both adaptive and less adaptive outcomes. For example, performance-approach is associated with a positive normative result similar to mastery goals such as persistence, effort to study, overcoming a fear of failure and may lead to intrinsic motivation. However, performance-approach is also linked to adverse outcomes like test anxiety and unwillingness to seek help concerning school assessments (see individual and collaborative experimental research by Elliot & Church, 1997; Elliot & Harackiewicz, 1996; Elliot & McGregor, 2001; Middleton & Midgley, 1997; Pintrich, 2000a). According to Pintrich's (2000a) longitudinal study, performance goal orientation leads to maladaptive outcomes of motivation and commitment over time when students have little or no focus on any issue associated with mastery goals. Pintrich's findings are supported by Janke et al.'s study (1999), which demonstrated that perceived competency had a positive relationship on performance-approach and a negative connection on avoidance. As a result, students that are not concerned with learning but rather merely concerned with doing good in comparison to others will follow a maladaptive pathway towards performance-avoidance.

A performance-avoidance orientation strives to avoid negative normative consequences such as unfavourable judgments; procrastination; disorganized study habits; effort withdrawal; and low retention of information, leading to low-grade performance and the use of academic self-handicapping strategies (Church et al., 2001; Elliot, 1999; Schwinge et al., 2014; Urdan, Midgley & Anderman, 1998). Moreover, according to studies by Church et al. (2001), Elliot and McGregor (1999), Janke et al. (2016), and Meece and Holt (1993), performance-avoidance is positively related to anxiety and negatively associated to intrinsic motivation and interest. In essence, it undermines intrinsic motivation, and for learning activities, it demands lower levels of cognitive engagement. Urdan and Mestas (2006) findings supported the existing literature and added to it by demonstrating that some students pursue performance-avoidance goals to appear competent or

avoid looking incompetent, while at the same time not standing out in the class. Urduan and Mestas' study, also referred to as performance approach-avoidance as appearance-competition. The authors claimed that there is no clear distinction (blurry) between a student's desire to be better than others (approach) and not wanting to do worse (avoidance). Janke et al. (1999) and other researchers affirmed that performance-avoidance hurts student's learning and motivation and thus, should be avoided or decreased through supportive competence strategies.

It is evident that goal orientations affect students' commitment and motivation, which, in turn, affects the completion of a course, or in this case, a technical program. Additionally, existing longitudinal research, such as Pintrich's (2000a), affirms that a student's goal orientation and thus performance varies based on various factors, such as secondary level, classroom setting, and self-efficacy. It is important to identify students' goals by adequately analyzing the different antecedent variables that directly and indirectly affect them. It is essential to define, measure and analyze specific antecedent variables, termed "enablers" that positively or negatively influence students' goal orientation within a trichotomous achievement goal framework, with emphasis on performance-avoidance goals.

3.1.3 Antecedent Variables – “Enablers”

Given that these three different goal orientations lead to meaningful outcomes for students in an academic setting, research on the issues or antecedent variables that influence a student to adopt one of these specific goal orientations is essential. A complete understanding as to why students pursue a particular achievement goal is impossible. However, a selection of specific antecedent variables revolving around competence perception and achievement motives can be more objective indicators of student's competency beliefs, commitment, and motivation. To date, empirical research by Elliot and Church (1997), and Elliot and McGregor (1999) focused specifically on competence expectations, implicit theories and self-attributed motives as variables that affect the goal orientation adopted. In the present study, the research on antecedent variables, also referred to as distal predictors, would be extended to include a student's self-efficacy, the perception of classroom goal structure and use of academic self-handicapping strategies. These antecedent variables investigated are both personal characteristics (stable) as well as functions of contextual factors (more malleable) (Pintrich, 2000b) and can be viewed as driving factors or enablers that move a person towards a positive object identified as an approach or away from a harmful purpose recognized as avoidance.

Academic Self-Efficacy

Self-efficacy is an antecedent variable within a social-cognitive theoretical framework that is often confused with self-concept and self-esteem. Albert Bandura (1997) defined self-efficacy as the belief “in one's capabilities to organize and execute the courses of action required to produce given attainments” (p. 3). Many researchers, specifically Bandura (2000), initially focused on self-efficacy as an expected outcome rather than as a predictor of behaviour. According to Zimmerman (2000), self-efficacy, with regard to social-cognitive theory focuses on performance abilities and not on personal qualities

For example, students evaluate their certainty of completing their assignment based on their capabilities, and their vicarious experiences (observation of other students completing a specific task, increases their perception of success), and not in comparison to others (Bandura, 2000). This follows Bandura's (2000) statement that "unless people believe they can produce desired effects by their actions and forestall undesired ones by their actions, they have little incentive to act" (p. 120). Hence, it is a belief concerning one's ability, thus forming the foundation for motivated actions. According to studies by Anderman and Young (1994), Schunk (1996), and Wolters, Yu and Pintrich (1996), academic self-efficacy is positively related to mastery orientation and negatively to performance-approach. This links with previous findings of Bandura (1997), who stated that students with high self-efficacy (also referred to as a self-efficacious student), tend to try more and persevere, and thus are strongly associated with mastery goal orientation. The inverse can also be true: low self-efficacy (or an inefficacious student), show less effort and quickly give up and hence, can be associated with performance goal orientation (Bandura, 1997). Middleton and Midgley's (1997) study of middle school students, used the trichotomous achievement goal framework and found that low self-efficacy was associated with performance-avoidance but had no relation to performance-approach.

Concerning the results of self-efficacy beliefs, Bandura's (1997) research and analysis affirmed that favourable views of one's self-efficacy reduce stress, anxiety, and depression. Pintrich (2000a) longitudinal study also confirmed that a decrease in self-efficacy and actual performance would lead to an increase in the use of self-handicapping strategies (maladaptive outcomes) over time. If a student has low confidence, they will move towards a 'helpless' state and thus blame failure on a lack of effort rather than on a lack of intelligence. Another study that supported these ideas is Dweck's (1986) where he stated that students who have a low assessment

of their ability would more often choose tasks they can accomplish or a challenging task where ones' knowledge is not questioned, suggesting a form of self-sabotaging behaviour and resulting in the use of academic self-handicapping strategies.

In summary, decades of research confirmed that self-efficacy is a predictor of students' commitment, motivation, and learning, so self-efficacy is an essential antecedent variable for this study.

Perception of Classroom Goals Structures

The perceived environment of a classroom or the relationship in that environment consists of incentives for students to stay and apply their abilities or barriers which force them to leave. The perceived classroom environment can be analyzed through various lenses, or what Ames (1992) referred to as "structures" (p. 268). It is supported, to a certain extent, by Anderman and Young's (1994) study that found that students' perceptions of the classroom goal structure predict' the achievement goal orientation adopted.

For example, research by Church et al. (2001) examined the role of specific perceived classroom goal structure variables (i.e., lecture engagement, evaluation focus, harsh evaluation and competency evaluation) to the trichotomous achievement goal framework. Their findings demonstrated evaluation focus as a positive predictor of performance-approach and avoidance and a negative predictor of mastery, whereas competence evaluation had positive associations to all three goals (Church et al., 2001). Ames's (1992) qualitative study analyzed the formalities of significant structures in a perceived classroom environment: tasks, evaluation and recognition, and authority with a mastery orientation. Furthermore, a longitudinal study by Anderman and Anderman (1999) focused on the purpose and meaning of academic tasks as a variable to the perception of the classroom structure with goal orientation. Ames and Archer's (1988) research focused on student's social reality of the classroom as a variable. Both Ames and Archer (1988) and Anderman and Anderman (1999) concluded that students who perceive their classroom environment as mastery goal focused would prefer challenging tasks and practical strategies to learn, whereas a perceived performance goal environment causes students to attribute failure to lack of ability.

Moreover, current findings from experimental studies by Bandura (1997) and Schunk (1996) suggested that students adopt a mastery or performance goal orientation in a classroom when they believe in the efficacy of that effort. Therefore, a classroom environment that promotes

mastery goals is one that encourages autonomy, understanding, improvement of skills and aids students in making the connection between effort and success (see Meece, Anderman & Anderman, 2006, for a review).

On the other hand, a classroom goal structure that emphasizes high ability in relation to others promotes competition and diminishes motivation, leading to performance-avoidance goal orientation and the use of self-handicapping strategies by students (Meece et al., 2006; Urdan, Midgley & Anderman, 1998). This is supported by Midgley and Urdan (2001) multivariate research which demonstrated that a classroom goal environment is a predictor of handicapping strategies. To a certain degree, their studies showed that classroom climate has a significant effect on how a student approaches the task and engages in their learning, thus affecting the goal orientation adopted. It is not reality, but rather a perception that governs motivational beliefs.

The present research, like Anderman and Anderman (1999) and Church et al., (2001) will examine the relationship between goal orientation and the students' classroom perception revolving around engagement to acquire competence in academic work. This characteristic within a perceived classroom goal structure concerns the degree to which students believe that the classroom emphasis is on performance evaluation, grades, or understanding.

Academic Self-Handicapping Strategies

Individuals use academic self-handicapping strategies in the circumstances to appear to be victims of a situation rather than unable individuals. According to theorists, such as Berglas and Jones (1978), an individual whose self-esteem is threatened by fear of failure will construct strategies as reasons to justify their performance while protecting one's perceived competence. For instance, in the event of failure, the existence of specific factors enables an individual to blame poor performance on a handicap rather than on low ability. This is supported, in an academic setting, by research from Urdan and his colleagues (Urdan et al., 1998; Urdan & Midgley, 2001), Midgley and Urdan (1995; 2001) and Schwinger, Wirthwein, Lemmer, and Steinmayr (2014). Urdan and Midgley (1995) defined self-handicapping as "a prior strategy that precedes success or failure" (p. 390) in an attempt to influence other's perception and should not be confused with attributions which follow attainment or disappointment. Additionally, Urdan et al. (1998) affirmed that the perception of academic competence is a predictor of self-handicapping strategies.

Self-handicapping strategies include procrastination, effort, and claiming test anxiety that stems from an individual's competency belief and is used once an individual understands the

relationship between ability and energy (Urduan & Midgley, 1995). For instance, when a student purposefully allows others to occupy his/her time or deliberately does not try to complete a task, they are using procrastination as a self-handicapping strategy. Supporting research by Meece and Holt (1993) demonstrated that reducing effort is thus a strategy that students can use to avoid negative judgments of ability if they expect to perform poorly. Hence, there is a link between self-handicapping and a student's perceived belief of lack of expectancy of success and task value. According to Urduan and Midgley (1995), these strategies lead to maladaptive outcomes concerning academic performance and are influenced by low self-efficacy and a perceived classroom goal structure where one's ability is evaluated regarding effort, improvement, and skill obtained relative to others. Urduan et al. (1998) supported these findings as well as self-efficacy research by insisting that students who doubt their academic competence are at risk of pursuing self-handicapping strategies. Therefore, if low self-efficacy is associated with performance-avoidance, it is possible to assume that self-handicapping is also strongly linked to performance-avoidance. Additionally, Schwinger et al.'s (2014) meta-analysis found an essential correlation between self-handicapping and achievement. To understand the relationship between self-handicapping and achievement, the most commonly used questionnaire is the Academic Self-Handicapping Scale (Midgley & Urduan, 1995; Urduan et al., 1998).

The Academic Self-Handicapping Scale encompasses three features: handicapping behaviour (e.g., effort withdrawal); the reason for this behaviour (e.g., use of low effort as excuse); and *a priori* timing of the strategy (e.g., little effort established as the excuse prior to failure occurring) (Schwinger et al., 2014; Urduan & Midgley, 2001). As reported by Schwinger et al. (2014), this questionnaire assumes a negative correlation between self-handicapping and achievement, but it is unclear which achievement goal is negatively related. Findings on the relation to self-handicapping and achievement goals vary. However, current research demonstrated that self-handicapping hurts education outcomes such as motivation and achievement (Elliot & Church, 1997; Midgley & Urduan, 1995; 2001; Schwinger et al., 2014; Urduan et al., 1998; Urduan & Midgley, 2001).

Schwinger et al.'s (2014) study found mastery goal-oriented students are much less inclined to use self-handicapping strategies, whereas performance-oriented students would handicap to hide their growing fear of failure and perceived belief of low intelligence. Moreover, fostering mastery goals in an academic setting reduces the amount of self-handicapping, thus reducing

negative impacts on academic motivation and achievement (Schwinger et al., 2014). Elliot and Church (1997), as well as Midgley and Urdan (2001), found a positive correlation between self-handicapping strategies and performance-avoidance goals and a negative relationship between mastery goals and self-handicapping. For example, a student is more inclined to use a self-handicapping approach in a classroom goal structure that promotes competition and rewards high abilities. On the contrary, a student who is mastery goal-oriented, or in a classroom that is mastery goal structure is concerned with competency improvement and thus, has no need for self-handicapping strategy. Additionally, students pursuing performance goal orientations, stress on their ability and are more inclined to use self-handicapping strategies (Urden & Midgley, 2001). This is in accordance with Pintrich's (2000) findings that showed low use of self-handicapping strategies for all goal orientations in the first wave of data collection. Therefore, low levels at the start of the semester, but higher levels, as the students' progress through their secondary level. This affirms that a study that compares students at different stages in a technical program and compares students at different waves within a semester (set time frame) would provide more substantial data. Due to time constraints, a longitudinal study is not possible. Finally, Schwinger et al. (2014) insist that academic self-handicapping can better predict achievement in a domain-specific setting; however, this study will revolve around a course-specific setting.

3.1.4 Summary

No matter the evidence, how students approach a task may be related to their own perceived ability as well as their perceived classroom goal structure with the student's goal orientation, and therefore an examination of the relative contributions of these three variables would be central. The objective of this research is to see how specific enablers predict the achievement goal orientation selected by students, which, in turn, predicts a learning outcome/result. The study will be conducted within the framework of existing achievement goal theory and space limitations preclude proper consideration of all variables. *Figure 3* and *Figure 4* displays the conceptual framework of the study and the effects of these variables: self-efficacy, perceived classroom goal structure, and academic self-handicapping strategies are hypothesized to run through all goal orientations in a manner that is either positive, negative or both. Ultimately, motivation and achievement become predictable, given the goal orientation adopted.

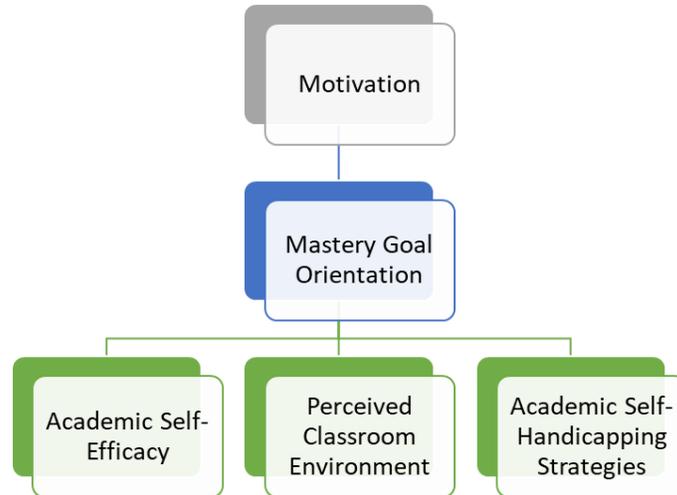


FIGURE 3. CONCEPTUAL FRAMEWORK OF MASTERY GOAL ORIENTATIONS AND RELATIONS TO THE INDEPENDENT VARIABLES

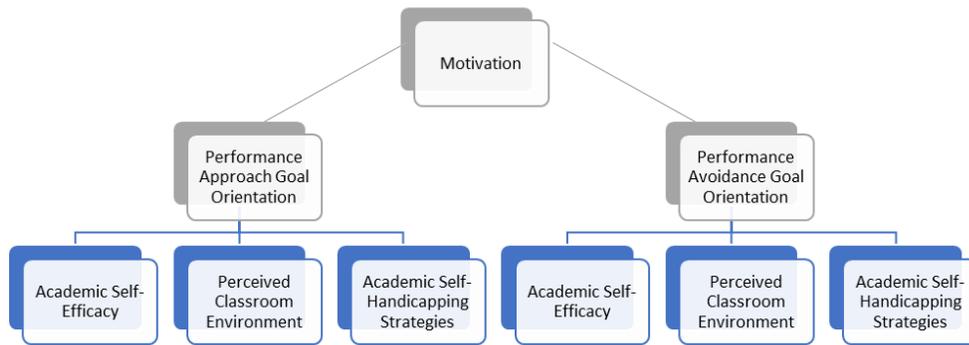


FIGURE 4. CONCEPTUAL FRAMEWORK OF PERFORMANCE-APPROACH AND PERFORMANCE-AVOIDANCE GOAL ORIENTATIONS AND RELATIONS TO THE INDEPENDENT VARIABLES

3.2 Research Questions

The goal of the study is to support specific hypotheses based on four primary research questions concerning the effect of antecedent variables on tourism management students' goal orientation. The research questions and hypotheses are:

RQ1. How do the various antecedent variables correlate with the achievement goal orientations?

H₁ Self-efficacy is related to achievement goal orientation.

H₂ The perceived classroom goal structure is related to achievement goal orientation.

H₃ Academic self-handicapping strategies are related to achievement goal orientation.

RQ2. Are there significant correlations between self-efficacy, perceived classroom goal structure, and academic self-handicapping strategies?

H₄: Significant correlations exist between self-efficacy, perceived classroom goal structure, and academic self-handicapping strategies.

RQ3. Does the specific goal orientation relate to competence, motivation and commitment as expressed in the literature?

H₅: Each goal orientation is associated with competence, commitment and motivation at different levels.

RQ4. Is there a variation in students' goal orientations between different years of the Tourism Management program?

H₆: The specific goal orientations vary between 1st, 2nd and 3rd-year students.

Chapter 4: Methodology

4.1 Target Population (Sample/Participants)

The participants were all Tourism Management program students at Champlain College St. Lambert; therefore, a non-random, non-probability, purposive, convenient and specific sample of 68 students. The distribution of students in the technical program was the 1st year (31 students), 2nd year (18 students), 3rd year (17 students) and 4th year students (2 students off profile) and participation was voluntary. Approximately 81% participated (15 males and 40 females), and the mean (\bar{x}) age of participants was around 19 years old (ranging from 17 to ≥ 30). About 96% of the sample attend school full-time, of which 75% work (53% work ≤ 20 and 22% work from 21 ≥ 40 hours a week). The data simply identifies the characteristics of the distribution of students in this study. For the purpose of the study, it is not considered or acknowledged as an impact on student's goal orientation.

4.2 Type of Research

The methodology was a quantitative modelling to justify the statistical relationship and correlation between two or more variables (Veal, 2011). Given the defined research questions, hypotheses and the objective to investigate relationships and links between variables, groups of samples, and data at different intervals, a quantitative study, consisting of numbers and statistics, was best suited. Lastly, much existing research on goal orientations selected a quantitative methodology.

The quantitative method was questionnaire-based with a respondent-completion format since the participants read the questions and answered on the questionnaire, without the use of an interviewer but with the presence of the research assistant (Veal, 2011).

4.3 Research Design (Procedures)

The survey was administered to three groups, 1st, 2nd and 3rd-year students. The data was collected in two waves for each of the three groups during the Fall 2018 semester to test for consistency or change. However, to limit the number of research objectives, assessing why changes, if any, took place was not undertaken. Wave 1 was during week two of the semester before any grades were posted, and Wave 2 was during week twelve, at the end of the semester before final exams were in process. At both intervals, the questionnaire was administered during class time by a research assistant and participants received a chocolate bar, at the researcher's expense, for the completion of the survey. Students were given a self-report questionnaire based on pre-existing

hierarchy of measurement scales, from the revised Patterns of Adaptive Learning Scales (PALS), created by Midgley and associates (Midgley et al., 2000). Participants were in a self-contained classroom, with the research assistant, and asked to respond to each item in the questionnaire concerning one particular class to assess a student's course-specific goal and perception. All data was analyzed during the Winter 2019 semester.

Table 1 Study Schedule

Fall 2018	Winter 2019
1 st Questionnaire administered to 1 st , 2 nd and 3 rd -year students during week 2 of the semester	Completed self-reported questionnaires given to researcher by research assistant after December 28, 2018 (final grades submitted)
2 nd Same questionnaire administered to 1 st , 2 nd and 3 rd -year students during week 12 of the semester	Data analyzed, reported and discussed between January and April 2019. A research study completed

4.4 Instruments

Pre-existing hierarchy of measurement scales assessed the operationalization of achievement goal orientations, academic self-efficacy, perceived classroom goal structure and self-handicapping strategies. PALS was developed to examine the relationship between the learning environment and students' motivation, affect, and behaviour through the goal orientation theory (Midgley et al., 2000); therefore, it was a vital tool for this study. Moreover, PALS has justifiable reliability and validity because the scales have been subject to considerable testing and used by existing research (see research by Anderman & Anderman, 1999; Anderman & Young, 1994; Middleton & Midgley, 1997; Midgley & Urda, 1995; Urda, Midgley & Anderman, 1998). Additionally, Midgley and associates report a Cronbach's α in PALS for each scale (Midgley et al., 2000; Midgley & Urda, 2001; Urda et al., 1998); consequently, an inferential analysis is not necessary to measure the coefficient of reliability.

The three separate pre-existing hierarchy of measurement scales were the personal achievement goal orientations category, the perception of classroom goal structure category and the academic-related perceptions, beliefs, and strategies category, each with two or three sub-categories, for a total of thirty-nine items (Midgley et al., 2000). Personal achievement goal

orientation category measured a student's purpose for engagement within a trichotomous model and is divided into three sections: mastery goal orientation, performance-approach goal orientation and performance-avoidance goal orientation, with a total of fourteen items. Perception of classroom goal structure category, on the other hand, focused on the students' development or demonstration of competency through engagement that is based on their perception of the purpose of academic work in that specific classroom (Midgley et al., 2000). The scale was divided into three sections: classroom mastery goal structure, classroom performance-approach goal structure and classroom performance-avoid goal structure (Midgley et al., 2000). Lastly, the academic-related perceptions, beliefs and strategies category measured various elements that focused on a student's competency and performance. The two aspects of interest are academic efficacy and academic self-handicapping strategies. Academic efficacy focused on a student's perceived belief in the ability to complete work, whereas academic self-handicapping strategies concerned the use of specific approaches to justify poor performance on a task that is not related to ability. Except for demographic data, such as age and gender, all items in the survey were formatted using an interval scale of measurement: a 5-point Likert scale, ranging from 1= not at all true through 5= very true.

4.4.1 Personal Achievement Goal

Mastery goal orientation, performance-approach goal orientation and performance-avoidance goal orientation was assessed using PALS (Midgley et al., 2000). Mastery Goal Orientation Scale contained five-items, such as 'it is important to me that I improve my skills this year' and states an alpha level of .85 (Midgley et al., 2000). Performance-Approach Goal Orientation Scale had five-items, such as 'it is important to me that I look smart compared to others in my class' and a Cronbach's α of .89 (Midgley et al., 2000). Performance-Avoidance Goal Orientation Scale, with an alpha level of .74, consisted of four-items, such as 'it is important to me that I do not look stupid in class' (Midgley et al., 2000).

4.4.2 Perception of Classroom Goal Structure

Classroom Mastery Goal Structure Scale, which is perceived as an environment to develop competence, included six items, such as 'In our class, how much you improve is really important' and has an alpha level of .76 (Midgley et al., 2000). Classroom Performance-Approach Goal Structure Scale, whereby the classroom environment is perceived as a setting to demonstrate competence, has a Cronbach's α of .70 and included three-items, such as 'in our class, getting good

grades is the main goal' (Midgley et al., 2000). Classroom Performance-Avoid Goal Structure Scale is perceived as a setting whereby an individual must avoid demonstrating incompetence, and included five-items, such as 'in our class, it is important not to do worse than other students' with an alpha level of .83 (Midgley et al., 2000).

4.4.3 Academic Efficacy and Self-Handicapping Strategies

The five-items Academic Efficacy Scale in PALS assessed the confidence level in one's ability to accomplish a task, with a Cronbach's α of .78 (Midgley et al., 2000; Midgley & Urdan, 2001). Academic self-handicapping was assessed by the six-items Academic Self-Handicapping Strategies Scale (Midgley et al., 2000; Midgley & Urdan, 2001). As previously explained in the literature review, academic self-handicapping asks about an *a priori* strategy or rationale, that students use as a cognitive strategy to avoid effort while preserving self-esteem. For example, 'some students let their friends keep them from paying attention in class or from doing their homework. Then if they do not do well, they can say their friends kept them from working. How true is this for you?' (Midgley et al., 2000). The internal consistency reliability for this scale, using Cronbach's α , reported by Midgley and associates in PALS is .84 (Midgley et al., 2000; Midgley & Urdan, 2001; Urdan et al., 1998).

4.4.4 Social-Economic/Demographic Data

At the end of the survey, students were asked to indicate their gender, current school/work situation and program year using a nominal scale. For gender, males were assigned a code of 1, females a code of 2 and others a code of 3. Concerning a student's level in the Tourism Management program, 1st year was assigned a code of 1, the 2nd year a code of 2, the third year a code of 3 and anyone in their fourth year (off-profile students) a code of 4. As for a student's current school/work situation, the six options were coded from 1 to 6, whereby a full-time student with no regular paid work was coded as 1, and part-time student with no regular paid work was coded as 6. Students were also asked to indicate their age using an ordinal scale, whereby the data was ranked from lowest to highest. The value in collecting demographic data was to gain a better understanding of the make-up of students in each group as well as to gather information on other factors that may play a role in the goal orientation pursued by students. For example, a self-handicapping strategy may be used by a student who works full-time and thus, is limited in hours dedicated to schoolwork, leading to performance-avoidance goal orientation.

4.5 Ethical Considerations

At the start of the semester, a consent form (See Appendix A) was read aloud and administered to all future participants. The consent form explained the purpose of the research project, the volunteer participation, the option for withdrawing and the importance of confidentiality. Moreover, the consent form provided permission to the researcher and school administrators, and ethical confirmation of participation in the study. Consent was given voluntarily by the participants and/or guardians of participants and could have been withdrawn at any time. No prejudice or coercion occurred based on the participant's decision. The code-numbers identified the participants in the quantitative survey. For the research assistant, however, the list of names with code-numbers was kept separate from the questionnaires and destroyed at the end of data collection. The code number protected confidentiality and aided in the removal of data in the case of withdrawal. The researcher identified participants by code-number. Data collected was confidential, stored with code-numbers, and used solely for the research project. However, the participants were not given the same code at the end of the semester, as in the beginning; therefore, the change specific to each participant could not be analyzed. No one in school or home saw the responses except the head researcher (Emily Gervasi). Participants, as initially explained in the information form, were told aloud that the questionnaire was anonymous and not a test; thus, there was no right or wrong answer.

Participants were reminded that responses referred to a specific course. Finally, a sample question was included at the top of the survey to introduce the use of the Likert scale and an explanation was given for similar sounding items. Participants were entitled to decline participation at any time and ask questions for clarifications. To minimize any conflict of interest between the researcher and the student, data collected was analyzed once grades had been submitted. This also reduced bias and participants were advised. Lastly, each item in the questionnaire concerned one course; therefore, teachers, whose class was selected were notified of the study and provided consent.

4.6 Adjustments for Data Analysis

The configuration of the questionnaire was previously explained to demonstrate that each dependent variable or independent variable was measured through several items. For example, mastery goal orientation contained five items measured with a 5-point Likert scale. This is an ordinal level of measurement that cannot be used to calculate the mean (\bar{x}), therefore, using the

Statistical Package for the Social Sciences (SPSS) software, the \bar{x} of all five questions was combined to create a new dependent variable as a ratio scale. This adjustment was made for all dependent (DV) (i.e. mastery, performance-approach, and performance-avoidance goal orientation) and independent (IV) variables (i.e. classroom mastery goal structure, classroom performance-approach goal structure, classroom performance-avoidance goal structure, academic self-efficacy, and academic self-handicapping strategies).

To determine the mean (\bar{x}) and standard deviation (SD) of all variables (DV & IV), descriptive analysis was employed and then used to determine the type of goal orientation adopted by the students. The findings are found in Table 2 and will be discussed in the results section. In addition, a test of significant differences was used to explore whether goal orientation differs significantly among participant's years in the program. Furthermore, in order to account for a change between the questionnaire completed at the start of the semester (Wave 1) and the questionnaire completed at the end of the semester (Wave 2), a new variable, labeled "time difference" was created, and coded 1 for the start of the semester and coded 2 for the second period of semester.

Once these adjustments were made, hypothesis testing for relationships between variables to compare the groups through descriptive and inferential statistics was carried out.

Chapter 5: Analysis of Data & Discussion

5.1 Results

To analyze the level of response from the participants, the means (\bar{x}) and standard deviations (SD) were determined through descriptive analysis. Recall that a Five-point Likert scale was used as the measurement scale in the present study, therefore, the results or level of score, are best interpreted if scores of less than 2 are high (i.e. strongly associated with an orientation), 2.01 – 3.75 are moderate (agree or neutral) and more than 3.76 are low (i.e. disagree with their association to that orientation); 5 being the lowest level (strongly disagree).

5.1.1. Descriptive Statistics

The \bar{x} and SD used to determine the type of goal orientation, mastery goal orientation (M), performance-approach goal orientation (P) and performance-avoidance goal orientation (PA) adopted by the students is displayed in Table 2.

Table 2 Descriptive Table of Goal Orientations for All Groups

Goal Measure	1st Year						2nd Year						3rd Year						4th Year					
	Wave 1			Wave 2			Wave 1			Wave 2			Wave 1			Wave 2			Wave 1			Wave 2		
	N	M	SD	N	M	SD	N	M	SD	N	M	SD	N	M	SD	N	M	SD	N	M	SD	N	M	SD
Mastery Goal Orientation	23	1.47	0.42	23	1.42*	0.46	13	1.71	0.47	14	1.71	0.80	17	1.40*	0.39	15	1.57	0.44	2	2.60	0.85	2	1.60	0.85
Performance-Approach Goal Orientation	22	3.33	0.64	23	3.33	0.70	13	3.12*	0.95	14	3.27	1.15	17	3.31	1.03	16	3.17*	0.97	2	4.50	0.14	2	4.00	0.57
Performance-Avoidance Goal Orientation	23	3.00	0.73	23	3.33	0.60	13	2.71*	0.95	14	3.05*	1.18	17	3.00	0.92	16	3.12	0.94	2	4.37	0.53	2	4.00	1.06

When reviewing Table 2 and comparing year 1 (\bar{x}_{y1}), year 2 (\bar{x}_{y2}), year 3 (\bar{x}_{y3}) and year 4 (\bar{x}_{y4}), it is important to focus on results closest to 1 (strongly agree) to identify which goal orientation participants relate the most to. Put simply, the closer to 1, the stronger the characteristics of that specific goal orientation fits with the participants beliefs concerning motivation, commitment and learning. It is clear that, among the three goal orientations, mastery goal orientation recorded the highest \bar{x} , both at Wave 1 ($\bar{x}_{y3} = 1.40$, $SD = 0.39$) and Wave 2 ($\bar{x}_{y1} = 1.42$, $SD = .46$), whereas the performance-approach goal orientation registered the lowest mean W1 ($\bar{x}_{y2} = 3.12$, $SD = 0.95$) and W2 ($\bar{x}_{y3} = 3.17$, $SD = 0.97$). The mean of performance-avoidance goal orientation was slightly higher than performance-approach goal orientation at W1 ($\bar{x}_{y2} = 2.71$, $SD = 0.95$) and W2 ($\bar{x}_{y2} = 3.05$, $SD = 1.18$). The values of standard deviation are small ($SD = 0.393$ to 1.18), indicating that the distance of all values is not far from the \bar{x} and the group of participants are considered similar. Additionally, the frequency of means is visually demonstrated in *Figure 5*, whereby, at the start of the semester, more than 94% of 3rd year students are mastery goal oriented,

followed by 90% of 1st year students and then 69% of 2nd year students. Students who are in their 4th year should be ignored, since $N = 2$.

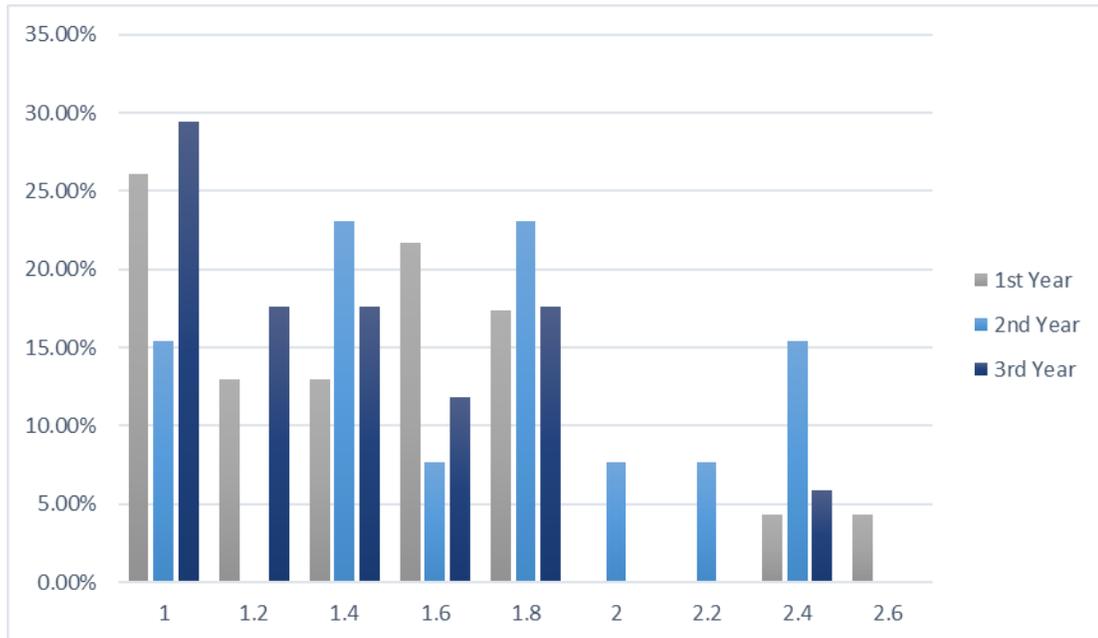


FIGURE 5. FREQUENCY OF MEANS FOR ALL THREE GROUPS AT THE START OF THE SEMESTER (W1)

At the end of the semester, *Figure 6*, the results decrease for all three years to reflect more than 82.6% of 1st year students are mastery goal oriented, followed by 66.7% of 3rd year students and 57.1% of 2nd year students.

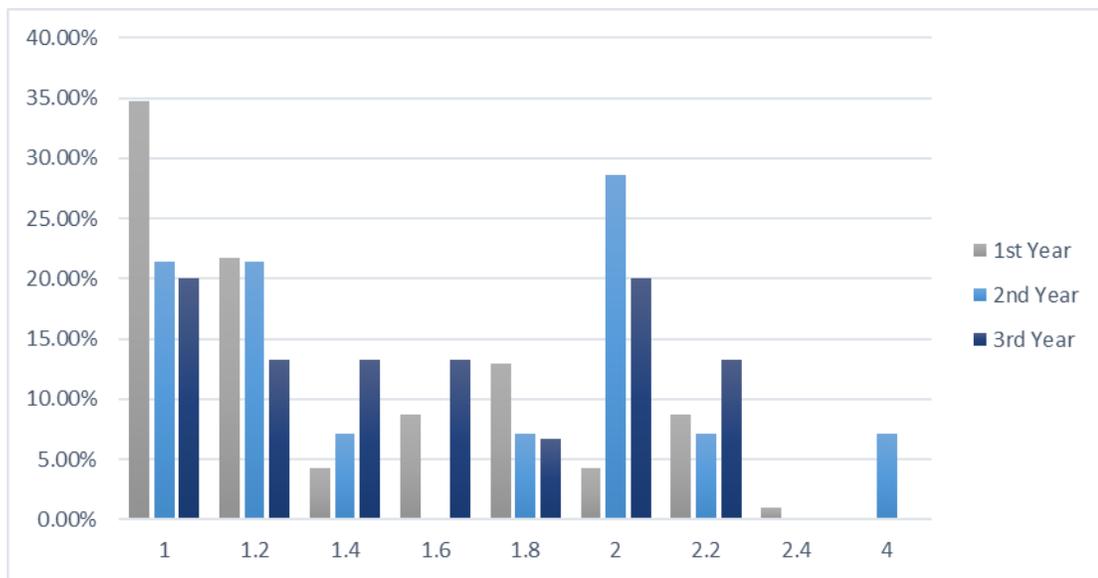


FIGURE 6. FREQUENCY OF MEANS FOR ALL THREE GROUPS AT THE END OF THE SEMESTER (W2)

Additionally, the findings denote that all three groups aim at adopting mastery goal orientation in their learning, in comparison with the other two goal orientations, even though there is a decline during the semester. The results also explain that the students are unlikely to engage with or adopt performance-avoidance oriented goals. The mean values closest to 1 is ($\bar{x}_{y2} = 2.71$, $SD = 0.95$) for performance-avoidance, of the three items of the three groups in Table 2 were relatively low compared to mastery goal orientation.

Furthermore, Tables 3-5 displays the \bar{x} and SD for each item of each goal orientation used to measure the overall ratio scale found in Table 2. The findings aid in analyzing how each goal orientation is associated with competence, commitment and motivation, as well as to further explain the patterns of response from the three groups of students overall (Wave 1 & 2 combined).

Table 3 Descriptive Statistics for Mastery Goal Orientation Items

Mastery Goal Orientation		Overall		
		N	M	SD
M1	It's important to me that I learn a lot of new concepts this year.	110	1.55	0.672
M2	One of my goals in class is to learn as much as I can.	109	1.50	0.702
M3	It's important to me that I thoroughly understand my class work.	110	1.56	0.643
M4	It's important to me that I improve my skills this year	110	1.44	0.628
M5	One of my goals is to master a lot of new skills this year	110	1.71	0.794

Table 4 Descriptive Statistics for Performance-Approach Goal Orientation Items

Performance-approach Goal Orientation		Wave 1		
		N	M	SD
P1	It's important to me that other students in my class think I am good at my class work.	110	2.91	1.14
P2	One of my goals is to show others that class work is easy for me.	110	3.67	0.90
P3	It's important to me that I look smart compared to others in my class.	110	3.45	1.20
P4	One of my goals is to show others that I'm good at my class work.	109	3.15	1.11
P5	One of my goals is to look smart in comparison to the other students in my class.	110	3.35	1.15

Table 5 Descriptive Statistics for Performance-Avoidance Goal Orientation Items

Performance-avoidance Goal Orientation		Wave 1		
			M	SD
PA1	It's important to me that I don't look stupid in class.	110	2.65	1.246
PA2	One of my goals is to keep others from thinking I'm not smart in class.	110	3.39	1.142
PA3	It's important to me that my teacher doesn't think that I know less than others in class.	110	3.04	1.125
PA4	One of my goals in class is to avoid looking like I have trouble doing the work.	110	3.35	1.104

Concerning mastery goal orientations, there were five items in this dimension, and the findings are revealed in Table 3. Among the items, the highest mean recorded is from M4 ($\bar{x} = 1.44$, $SD = 0.628$). Thus, the students responded in such a way that it was important for them to improve existing knowledge/skills during the year. Moreover, the responses for the remaining four items are consistent with students having mastery goals. This indicates that they view their learning as important, whether its acquiring new knowledge, mastering new skills, or understanding class work. Their learning behaviour is consistent with Pintrich's (2000a) study that mastery goal-oriented students are characterized by satisfaction upon greater persistence in learning.

The findings in Table 4 depict the \bar{x} and SD for the five items related to performance-approach goal orientation. Concerning performance-approach goal orientations, the results reveal the highest \bar{x} recorded is from P1 ($\bar{x} = 2.91$, $SD = 1.138$), whereby students tend to focus on appearing competent to their classmates. The \bar{x} and SD of the remaining items are < 3 , indicating the students do not generally focus or aim at attaining competency relative to others, demonstrating that one is more capable than others or that acquiring the class material comes effortlessly to them.

In contrast with mastery and performance-approach goal orientation, performance-avoidance oriented students are associated to negative emotions; contrarian to learning. The \bar{x} and SD for the four items related to performance-avoidance goal orientation is illustrated in Table 5. The items represent the avoidance behaviour that aims at protecting ones' self-worth and minimizing effort in avoiding unfavourable judgment. Essential, performance-avoidance goal-oriented students interpret academic achievement as threats and try to avoid facing it. Table 5 denotes that all the performance-avoidance were rated low (average $\bar{x} < 3$) by the students, and the values of standard deviation were small. Thus, they are unlikely to use surface learning strategies in their study. The highest \bar{x} recorded is PA2 ($\bar{x} = 3.39$, $SD = 1.142$), whereby the students aim at convincing others that they are smarter than they actually appear because they are worried of being disproved in one's competence. Furthermore, the remaining items indicate that the students do not generally focus on appearing incompetent, or have difficulty completing the work or finally, that their abilities are viewed, by the teacher, in a positive light when compared to others. Quite the opposite, they are willing to excel and invest efforts in understanding the course.

5.1.2. ANOVA

A one-way ANOVA was conducted to test for significant differences between three or more \bar{x} . The \bar{x} and SD used to test if the mean scores of specific goal orientations between years in the program (year 1 (\bar{x}_{y1}), year 2 (\bar{x}_{y2}), year 3 (\bar{x}_{y3}) and year 4 (\bar{x}_{y4})) were significantly different is displayed by time of the semester, in Table 6 (Wave 1) and Table 7 (Wave 2). The F statistic is used to determine the significance. The .05 (p) level of significance is used throughout this report. The effects of gender on the dependent variable was not measured due to the low ratio of male to female.

Table 6 ANOVA Table for Wave 1

Wave 1	1st Year			2nd Year			3rd Year			4th Year					
Goal Measure	N	M	SD	N	M	SD	N	M	SD	N	M	SD	df	F	Sig.
Mastery Goal Orientation	23	1.47	0.42	13	1.71	0.47	17	1.40*	0.39	2	2.60	0.85	3	5.361	0.003*
Performance-Approach Goal Orientation	22	3.33	0.64	13	3.12*	0.95	17	3.31	1.03	2	4.50	0.14	3	1.508	0.224
Performance-Avoidance Goal Orientation	23	3.00	0.73	13	2.71*	0.95	17	3.00	0.92	2	4.37	0.53	3	2.248	0.094

Note: *: significance < 0.05

Table 7 ANOVA Table for Wave 2

Wave 2	1st Year			2nd Year			3rd Year			4th Year					
Goal Measure	N	M	SD	N	M	SD	N	M	SD	N	M	SD	df	F	Sig.
Mastery Goal Orientation	23	1.42*	0.46	14	1.71	0.80	15	1.57	0.44	2	1.60	0.85	3	0.76	0.522
Performance-Approach Goal Orientation	23	3.33	0.70	14	3.27	1.15	16	3.17*	0.97	2	4.00	0.57	3	0.52	0.67
Performance-Avoidance Goal Orientation	23	3.33	0.60	14	3.05*	1.18	16	3.12	0.94	2	4.00	1.06	3	0.871	0.462

Note. *: significance < 0.05

The results only demonstrate statistically significant difference between groups, for mastery goal orientation, at W_1 , as determined by the one-way ANOVA ($F(3) = 5.361, p = 0.003$). Moreover, the post hoc test also revealed that $\bar{x}_{y1} = 1.46$ with $p = 0.006$ is moving towards a trend when compared to 2nd year $\bar{x}_{y2} = 1.70$. However, there were no statistically significant differences between groups ($\bar{x}_{y1} = \bar{x}_{y2} = \bar{x}_{y3} = \bar{x}_{y4}$), for performance-approach goal orientation, at W_1 ($3.12 \pm 4.50, p = 0.224$) or W_2 ($3.17 \pm 4.00, p = 0.67$). Additionally, there were no statistically significant differences between groups, ($\bar{x}_{y1} = \bar{x}_{y2} = \bar{x}_{y3} = \bar{x}_{y4}$), for performance-avoidance goal orientation, at W_1 ($2.71 \pm 4.37, p = 0.094$) or W_2 ($3.05 \pm 4.00, p = 0.462$). In summary, it can be concluded that there were no significant group differences in the \bar{x} scores for mastery goal orientation among years of experience of the respondents, but a trend appears to be occurring.

5.1.3. Correlation Coefficient

To measure the strength and direction of a relationship between various antecedent variables, or enablers and the achievement goal orientations, a Pearson correlation, also known as a parametric descriptive statistic, was run for each group at Wave 1 (W₁) and Wave 2 (W₂) within the semester. According to Cunningham and Aldrich (2012), a correlation coefficient (*r*) measures the strength and direction of a linear relationship between two variables, and the closer to +1.00 or -1.00, results in a strong relationship. Furthermore, to clearly interpret the correlation values, in comparison to a linear relationship, the correlation *r* closest exactly -1 is a perfect downhill negative linear relationship; -0.70 is a strong downhill negative linear relationship; -0.50 is a moderate downhill negative relationship; -0.30 is a weak downhill negative linear relationship; 0 No linear relationship; +0.30 is a weak uphill positive linear relationship; +0.50 is a moderate uphill positive relationship; +0.70 is a strong uphill positive linear relationship and the exactly +1 is a perfect uphill (positive) linear relationship. Additionally, the coefficient of determination represents the portion of the variance in one variable that is statistically explained by the other and calculated as the square of correlation coefficient (R^2) and represented as a percentage (%). In terms of percentage of variance explained, 1% is small, 9% > is medium and 25% > is large. Concerning, the level of statistical significance, the *p*-value (*p*) is significant at < 0.05 level, and marked with one asterisk (*), a <0.01 significance level with two asterisks (**) and a <0.001 significance level with three asterisks (***). Lastly, recall, that the three-goal orientations are the dependent variables to be explained or predicted, while academic self-efficacy, academic self-handicapping strategies and the various classroom goal structures are the explanatory variables.

Results for the correlation between the three-goal orientations are displayed in Table 8 for 1st year students (*r*₁), Table 9 for 2nd year students (*r*₂) and Table 10 for 3rd years students (*r*₃). Sample of 4th year students was not included, as the *N* = 2.

Table 8 Correlation Coefficient Table Among Goal Orientations 1st Year Students

1st Year Students		W1	W2	W1	W2	W1	W2
Goal Orientations		Mastery Goal	Performance-Approach	Performance-Avoidance			
	<i>N</i>	<i>r</i>	<i>r</i>	<i>r</i>	<i>r</i>	<i>r</i>	<i>r</i>
Mastery Goal Orientation	20-23	-	-				
Performance-Approach Goal Orientation	20-23	-0.049	-0.232	-	-		
Performance-Avoidance Goal Orientation	20-23	0.34	-0.232	0.657**	.449*	-	-

* Correlation is significant at the <0.05 level; ** Correlation is significant at the <0.01 level

Table 9 Correlation Coefficient Table Among Goal Orientations 2nd Year Students

2nd Year Students			W1	W2	W1	W2	W1	W2
Goal Orientations			Mastery Goal	Performance-Approach	Performance-Avoidance			
		N	r	r	r	r	r	r
Mastery Goal Orientation		14	-	-				
Performance-Approach Goal Orientation		14	-0.383	-0.016	-	-		
Performance-Avoidance Goal Orientation		14	-0.365	0.108	0.771**	.897**	-	-

* Correlation is significant at the < 0.05 level; ** Correlation is significant at the < 0.01 level

Table 10 Correlation Coefficient Table Among Goal Orientations 3rd Year Students

3rd Year Students			W1	W2	W1	W2	W1	W2
Goal Orientations			Mastery Goal	Performance-Approach	Performance-Avoidance			
		N	r	r	r	r	r	r
Mastery Goal Orientation		15 - 17	-	-				
Performance-Approach Goal Orientation		15 - 17	-0.518*	-0.111	-	-		
Performance-Avoidance Goal Orientation		15 - 17	-0.163	-0.126	.825**	.849**	-	-

* Correlation is significant at the < 0.05 level; ** Correlation is significant at the < 0.01 level

To measure the statistical relationship among the goal orientations and the three antecedent variables, a Pearson correlation, was run for each group at both waves. The results can be seen in Table 11 to Table 13. Again, the data of 4th year students was not included, as the n = 2. Data for mastery goal orientation is displayed in Table 11. Data for performance-approach goal orientation is presented in Table 12. Data for performance-avoidance goal orientation is shown in Table 13. To reiterate, the closer to +1.00 or -1.00, the stronger the relationship.

Table 11 Correlation Coefficient Table – Mastery Goal with Independent Variables

Mastery Goal Orientations						
Enablers	W1	W2	W1	W2	W1	W2
	1st Year		2nd Year		3rd Year	
Academic Self-Efficacy	0.260	0.639***	0.532	0.434	0.669**	0.671**
Classroom Mastery Goal Structure	.728**	0.631***	0.724**	0.951**	0.482	0.761**
Classroom Performance-Approach Goal Structure	-0.018	0.553**	0.111	-0.123	0.191	0.258
Classroom Performance-Avoidance Goal Structure	0.191	0.008	-0.426	0.007	-0.452	-0.183
Academic Self-Handicapping Strategies	-0.072	-0.232	0.056	0.089	-0.229	-0.269

Note. *: significance < 0.05; **: significance < 0.01; ***: significance < 0.001

Table 12 Correlation Coefficient Table – Performance-Approach Goal with Independent Variables

Performance-Approach Goal Orientations						
Enablers	W1	W2	W1	W2	W1	W2
	1st Year		2nd Year		3rd Year	
Academic Self-Efficacy	0.463*	-0.205	0.160	0.215	-0.039	-0.312
Classroom Mastery Goal Structure	-0.097	-0.538	-0.119	-0.062	-0.130	0.095
Classroom Performance-Approach Goal Structure	0.313	0.297	0.555*	0.555*	0.192	0.632**
Classroom Performance-Avoidance Goal Structure	0.840**	0.504**	0.894***	0.894***	0.831***	0.933***
Academic Self-Handicapping Strategies	0.387	0.201	0.467	0.662**	0.124	0.124

Note. *: significance < 0.05; **: significance < 0.01; ***: significance < 0.001

Table 13 Correlation Coefficient Table – Performance-Avoidance Goal with Independent Variables

Performance-Avoidance Goal Orientations						
Enablers	W1	W2	W1	W2	W1	W2
	1st Year		2nd Year		3rd Year	
Academic Self-Efficacy	0.215	-0.327	-0.003	0.319	0.058	-0.316
Classroom Mastery Goal Structure	-0.150	-0.109	-0.133	0.123	0.139	-0.054
Classroom Performance-Approach Goal Structure	0.364	0.153	0.369	0.428	0.216	0.796***
Classroom Performance-Avoidance Goal Structure	0.763***	0.702***	0.754**	0.896***	0.654**	0.910***
Academic Self-Handicapping Strategies	0.533**	0.034	0.043	0.616*	0.037	0.174

Note. *: significance < 0.05; **: significance < 0.01; ***: significance < 0.001

Mastery Goal Orientations

To recall, mastery goal orientations focuses on the development of competency by learning and self-improvement; therefore, a student who is mastery goal orientation strives to master a task and is motivated to learn through improvement. Based on the results, mastery goal orientation has a strong positive linear correlation with self-efficacy: W₁ ($r_3 = .669$, $n = 17$, $p = 0.003$ with $R^2 = 44.8\%$), W₂ ($r_3 = .671$, $n = 15$, $p = 0.006$ with $R^2 = 45\%$), and W₂ ($r_1 = .639$, $n = 21$, $p = 0.001$ with $R^2 = 40.8\%$). Thus, 41% to 45% of the variability of mastery goal orientation can be predicted from the relationship with a student's self-efficacy, and the magnitude of association is approximately strong ($.6 < |r| < .7$).

Additionally, a strong correlation in a positive direction between mastery goal orientation and classroom mastery goal structure is visible at W₁ ($r_1 = .728$, $n = 23$, $p = 0.001$ with $R^2 = 53\%$), and ($r_2 = .724$, $n = 13$, $p = 0.005$ with $R^2 = 52.4\%$); and at W₂ ($r_1 = .631$, $n = 23$, $p = 0.001$ with $R^2 =$

= 39.8%), ($r_2 = .951$, $n = 14$, $p = 0.001$ with $R^2 = 90.4\%$), and ($r_3 = .761$, $n = 15$, $p = 0.001$ with $R^2 = 57.9\%$). Therefore, the strength, of association is approximately strong ($.6 < |r| < .95$) and the classroom mastery goal structure explains 40% to 90% of the variation in mastery goal orientation.

Moreover, a moderately strong association between classroom performance-approach structure and mastery goal orientations is demonstrated, $r_1 = .553$, $n = 23$, $p = 0.001$ with classroom performance-approach goal structure explaining 30.5% of the variation in mastery goal orientation. All p-values are less than 0.05, indicating that the results are not due to chance.

Performance-Approach Goal Orientations

Performance-approach goal orientations concerns one's ability to do better in comparison to others. An individual who has these sets of goals does not necessarily care about mastering the task at hand, but rather focuses on demonstrating competency in relation to others and are generally extrinsically motivated. The results demonstrate a moderately strong association, with little variation, between performance-approach goal orientation and classroom performance-approach goal structure at W_1 ($r_2 = .555$, $n = 13$, $p = 0.05$ with $R^2 = 30.8\%$), and W_2 ($r_2 = .555$, $n = 14$, $p = .05$ with $R^2 = 30.8\%$) and ($r_3 = .632$, $n = 16$, $p = 0.009$ with $R^2 = 39.9\%$). Hence, the strength of association is approximately strong ($.5 < |r| < .6$) and 31% to 40% of the variability of performance-approach goal orientation can be predicted from the relationship with a classroom performance-approach goal structure.

Likewise, performance-approach goal orientation is moderately correlated in a positive direction with self-efficacy ($r_1 = .463$, $n = 23$, $p = 0.04$), as well as with self-handicapping strategies, ($r_2 = .662$, $n = 14$, $p = 0.01$), with self-efficacy explaining 21.4% of the variation in performance-approach goals, and self-handicapping accounting for 43.8% of that variation. However, the essential data to take note of is the strong positive linear correlations that exists between performance-approach goal orientation and classroom performance-avoidance goal structure: W_1 ($r_1 = .840$, $n = 22$, $p = 0.001$ with $R^2 = 70.6\%$); ($r_2 = .894$, $n = 13$, $p = 0.001$ with $R^2 = 79.9\%$); ($r_3 = .831$, $n = 16$, $p = 0.001$ with $R^2 = 69\%$); and W_2 ($r_1 = .504$, $n = 22$, $p = 0.01$ with $R^2 = 25.4\%$); ($r_2 = .894$, $n = 13$, $p = 0.001$ with $R^2 = 79.9\%$); and ($r_3 = .933$, $n = 16$, $p = 0.001$ with $R^2 = 87\%$). So, the magnitude, or strength, of the association is approximately strong ($.5 < |r| < .93$), and classroom performance-avoidance goal structure explains 25.4% to 87% of the variation in performance-approach goal orientation. All strong and moderately linear associations have p-

values < 0.05 , thus, interpretation is that there is a very small probability that the observed correlations coefficient was due to chance.

Performance-Avoidance Goal Orientations

Performance-avoidance goal orientations is associated with avoiding failures in the presence of others, avoiding challenges and driven by fear of poor performance. The results affirm a strong correlation in a positive direction between performance-avoidance goal orientation and classroom performance-avoidance goal structure that is evident and persistent with all group: W_1 ($r_1 = .763$, $n = 22$, $p = 0.001$ with $R^2 = 58.2\%$), ($r_2 = .754$, $n = 13$, $p = 0.003$ with $R^2 = 56.9\%$), and ($r_3 = .654$, $n = 16$, $p = 0.006$ with $R^2 = 42.8\%$); and at W_2 ($r_1 = .702$, $n = 23$, $p = 0.001$ with $R^2 = 49.2\%$), ($r_2 = .896$, $n = 13$, $p = 0.001$ with $R^2 = 80.3\%$), and ($r_3 = .910$, $n = 16$, $p = 0.001$ with $R^2 = 82.8\%$). That is, 43% to 83% of the variability of performance-avoidance goal orientation can be explained by a classroom performance-avoidance goal structure. And, the associated strength between them is strong ($.6 < |r| < .91$).

Furthermore, the relationship between performance-avoidance goal orientation and the use of self-handicapping strategies is moderately strong with a positive linear correlation ($r_1 = .533$, $n = 23$, $p = 0.009$) and ($r_2 = .616$, $n = 14$, $p = 0.02$) with self-handicapping strategies explaining 28.4% to 37.4% of the variability in performance-avoidance goal orientation. This is also between performance-avoidance goal orientation and classroom performance-approach goal structure where ($r_3 = .796$, $n = 16$, $p = 0.001$) and with classroom performance-approach goal structure explains 63.4% of the variation in performance-avoidance goal orientation. As previously stated for 1st and 2nd year students, all strong and moderately linear associations have p-values < 0.05 , indicating that the results are not due to chance.

Concerning the correlations among the three goal orientations, the findings demonstrate that mastery goal orientation has a negative linear correlation with both performance goal orientations, but only one group identified a statistical significance; $r_3 = -0.518$, $n = 17$, $p = 0.033$ with $R^2 = 26.8\%$ between mastery and performance-approach goal orientations. Due to the lack of statistical significance, the results show that the negative magnitude of the association between mastery and both performance goal orientation is a possible trend. The important data to take note of is the strong positive linear correlations that exists between performance-approach and performance-avoidance goal orientation: W_1 ($r_1 = .657$, $n = 23$, $p = 0.002$ with $R^2 = 43.2\%$); ($r_2 = .771$, $n = 14$, $p = 0.003$ with $R^2 = 59.4\%$); ($r_3 = .825$, $n = 15$, $p = 0.001$ with $R^2 = 68.1\%$); and W_2

($r_1 = .449$, $n = 20$, $p = 0.031$ with $R^2 = 20.2\%$); ($r_2 = .897$, $n = 14$, $p = 0.001$ with $R^2 = 80.5\%$); and ($r_3 = .849$, $n = 17$, $p = 0.001$ with $R^2 = 72.1\%$). Therefore, the strength of the association is approximately strong ($.6 < |r| < .9$), and they explain 20% to 80% of the variation among them. Almost all linear associations have p -values < 0.01 , thus, there is a very small probability that the observed correlations coefficient was due to chance.

Antecedent Variables/Enablers

To measure the statistical relationship among the three antecedent variables, self-efficacy, classroom goal structure and use of self-handicapping strategies, a Pearson correlation was run for each group at both waves. The results were combined to determine a correlation coefficient (r) (the strength and direction) between three variables. The results are displayed in Table 14.

Table 14 Correlations Coefficient Table for Independent Variables “Enablers”

Enablers		1	2	3	4	5
	N	r	r	r	r	r
1. Academic Self-Efficacy	104-106	-				
2. Classroom Mastery Goal Structure	106-109	.269*	-			
3. Classroom Performance-Approach Goal Structure	106-109	0.156	0.114	-		
4. Classroom Performance-Avoidance Goal Structure	106-107	-0.037	-0.069	.519**	-	
5. Academic Self-Handicapping Strategies	106-109	0.014	-0.013	0.064	.366**	-
* Correlation is significant at the < 0.01 level		** Correlation is significant at the < 0.001 level				

Based on the results, there is a weak to moderate correlation in a positive direction between self-efficacy and classroom mastery goal structure with $r = .269$, $p = 0.002$; and between classroom performance-approach goal structure and classroom performance-approach goal structure $r = .519$, $p = 0.001$; and between classroom performance-avoidance goal structure and academic self-handicapping strategies. Although, there is little significant correlations, the few that are visible, support existing research on these antecedent variables.

Given all these results, are the various hypotheses supported and did the study support existing literature on achievement goal orientations and the antecedent variables selected? Acquiring this data for each group at each wave allowed for the assessment of self-efficacy, the three various classroom goal structures and self-handicapping strategies in creating an effect on the achievement outcomes (mastery, performance-approach and performance-avoidance) through their influence of adoption.

5.2 Discussion

In the present study, research was conducted to examine the relationship between tourism students' academic self-efficacy, their perception of the classroom structure, and use of academic self-handicapping strategies when adopting an achievement goal orientation. The scale adopted has proven to demonstrate concurrent, construct and discriminant validity with internal consistency. It helped in assessing personal achievement goals separate from the perception of the goal structure in the learning environment, as recommended by Midgley et al. (1998). Furthermore, the established survey allowed for the identification of social comparison goals (performance-approach and performance-avoidance) and their differences. The data collected permitted for various analysis and generated some significance of relevance for the research questions and the multiple hypotheses.

5.2.1 Research Question #1

How do the various antecedent variables correlate with the achievement goal orientations?

The formulated hypotheses for the research question are as follows:

H₁ Self-efficacy is related to achievement goal orientation.

As previously stated, academic self-efficacy is an individual's beliefs concerning their abilities to organize and implement a plan needed to obtain a specific outcome (Bandura, 1997). According to current research previously analyzed, it is often positively associated with an individual who is mastery goal oriented. Based on the overall results of the three groups, mastery goal orientation has a strong positive linear correlation with self-efficacy, whereby, 41% to 45% of the variability of mastery goal orientation can be predicted from a student's level of self-efficacy. There is also a clear demonstration that students who pursue mastery goals are also a self-efficacious student and may attribute ongoing failure to other factors. These findings support studies by Anderman and Young (1994), Bandura (1997), Schunk (1996), and Wolters, Yu and Pintrich (1996). Moreover, although the data for each item on the academic self-efficacy scale was not demonstrated in the results section, as it is beyond the objective of the study, the \bar{x} for all items, such as 'even if the word is hard, I can learn it' or 'I can do even the hardest work in this class if I try' range from 1.63 to 2.15. Therefore, the findings support previous research by affirming that students with high self-efficacy, tend to try more and persevere (Anderman & Young, 1994; Bandura, 1997; Middleton & Midgley, 1997; Schunk, 1996; Zimmerman, 2000).

Furthermore, although the findings of one group showed real statistical significance between self-efficacy and performance-approach goal orientation, the remaining data generally demonstrated a weak positive correlation and, at times, a negative correlation, thus supporting current research (Bandura, 1997), that academic self-efficacy is negatively related to performance-approach goal orientations. Such an interpretation is consistent with other research (Anderman & Young, 1994; Bandura, 1997; Schunk, 1996; Wolters, Yu & Pintrich, 1996) that has shown that the impact of learner's self-efficacy on achievement behaviour is severe. One should keep in mind that the statistical significance may be due to misinterpretations or the small sample sizes. Also, while the findings show that both mastery and performance-approach share a positive association with self-efficacy, both diverged in their associations to classroom goal structures and self-handicapping.

H₂ The perceived classroom goal structure is related to achievement goal orientation.

When looking at perceived classroom environment and its relationship to achievement goal variables, it is clear that one influences the other. To reiterate, a perceived classroom environment or structure is assumed to create an indirect effect on the achievement outcomes through their influence of adoption. Thus, it was hypothesized that a specific perceived classroom environment, when conceptualized, can exert influence on the achievement goal orientation selected by students. It should be noted that a different professor taught the course chosen for each group. In testing each classroom goal structure variable as a possible predictor of mastery, the findings revealed a significant positive relationship for mastery goal orientation with mastery goal classroom structure; a 40% to 90% of the variation in mastery goal orientation. Again, although the analysis of data for each item on the three classroom goal structures was not demonstrated in the results section, the highest \bar{x} ranged from 1.50 to 1.70 and were associated with a classroom that was mastery goal structured, thus affirming that all three groups perceived the classroom's academic objective as engaging to develop competence. Therefore, the findings show that students view their classroom structure as one that encourages autonomy, understanding, and improvement of skills because it promotes mastery goals. The findings also demonstrated a moderately strong association between classroom performance-approach structure and all three goal orientations with a variation ranging from 30% to 63%. The same can not be said for a classroom that is performance-avoidance structured in relation to both performance goal orientations (approach and avoidance). The magnitude of the association is highest with classroom performance-avoidance goal structure explaining up to 87% of the variation in performance-approach goal orientation and

83% of the variation in performance-avoidance goal orientation. Hence, a classroom goal structure that emphasizes high ability and promotes competition, would likely diminish motivation and lead to one of the performance goal orientations. The \bar{x} for the two types of performance classrooms range from 2.34 to 3.65, meaning that students do not truly view their classrooms as performance goal oriented, whether approach or avoidance, but the opposite is also true. The neutral numbers may be due to the inability of students to distinguish between perception or reality.

Ultimately, mastery and performance-avoidance goal orientation are related to the classroom inversely (Anderman & Anderman, 1999) and that the perceived classroom structure influences the goal orientation adopted (Anderman & Anderman, 1999; Anderman & Young, 1994). However, what occurs in the classroom has not been controlled in the study or monitored to be able to directly affirm that these variables compel students to adopt a specific goal orientation.

H₃ Academic self-handicapping strategies are related to achievement goal orientation.

As previously stated, academic self-handicapping strategies are constructed strategies used by students as reasons to justify their performance while protecting one's perceived competence. Although the results of the correlation between self-handicapping and mastery goal orientation were not statistically significant, the correlation coefficient was negative and low, and constant among all three groups, thus demonstrating a trend. The findings thus support several current studies (Elliot & Church, 1997; Midgley & Urdan, 2001; Schwingers, 2014), whereby self-handicapping strategies and highly mastery-oriented students are not positively related; most mastery-oriented learners will judge negative feedback more positively and will attribute failure to controllable factors such as low efforts (Ames, 1992). Also, based on the connotation assigned to performance-avoidance and self-handicapping strategies, it was assumed that an avoidance goal valence positively predicts the use of self-handicapping strategies. The results of two groups, at different intervals of the semester, demonstrated statistical significance, therefore partially supporting the connotation and existing research (e.g. Elliot & Church, 1997; Schwingers, 2014), that have found positive links between self-handicapping strategies and performance-avoidance goal-oriented students. This implies that some students who are performance-avoidance goal-oriented exhibit handicapping behaviour, which thus interferes with deep and successful learning (Schwingers, 2014).

Correlation coefficient results with statistical significance also showed a positive relationship between performance-approach goal orientation and the use of academic self-

handicapping strategies. So, in the end, the findings indicate a relationship between performance goals, whether approach or avoidance valence and the use of self-handicapping strategy, which is a harmful consequence to students learning. The findings support research by Elliot and Church (1997), as well as Midgley and Urdan (2001), concerning the positive correlation between self-handicapping strategies and performance-avoidance goals and a negative relationship between mastery goals and self-handicapping. Lastly, although the \bar{x} for all items from the Academic Self-Handicapping Scale (Midgley & Urdan, 1995; Urdan et al., 1998) were not demonstrated in the results sections, for reasons previously stated, the \bar{x} ranges from 3.06-3.44; whereby the item closest to the truth concerns the students' disposition to procrastinate which later accounts for their low grades. This signifies that students may be unclear on whether they apply specific strategies to justify their lack of achievement. It is important to recall that self handicapping behaviour is a prior timing, therefore it is strategic and the behaviour is reasoned and procrastination is only one small part of it.

Overall, increases in mastery goal orientations were correlated with increases in self-efficacy, classroom mastery goal structure and classroom performance-approach goal structure as shown by data in one or more groups. This implies that the direction of the relationship is positive (i.e., mastery goal orientation and self-efficacy are positively correlated) and that these variables tend to increase together (i.e., mastery goal orientation is associated with higher self-efficacy). Additionally, increases in both performance goal orientations were correlated with increases in self-handicapping strategies and classes that are performance-avoidance goal structured. Consequently, the student who perceives their classroom environment as competitive or judgmental, will use self-handicapping strategies to protect their image, and thus lead them to adopt a type of performance goal orientation. The outcome of these positive and negative relationships on student motivation and learning can be beneficial or detrimental and will be discussed in research question #3.

5.2.2 Research Question #2

Are there significant correlations between self-efficacy, perceived classroom goal structure, and academic self-handicapping strategies?

To help answer the question, one hypothesis was proposed and discussed below.

H₄: Significant correlations exist between self-efficacy, perceived classroom goal structure, and academic self-handicapping strategies.

The results of the study demonstrate a correlation between self-efficacy, perceived classroom goal structure, and academic self-handicapping strategies. Academic self-efficacy has a positive statistical significance with a classroom that is mastery-oriented because mistakes are accepted; understanding the class work and learning new ideas is the objective and trying hard is encouraged. Moreover, the data, although not statistically significant, revealed a low positive relationship between self-handicapping strategies and self-efficacy which is aligned with Schwinger (2014) who states that a positive self-view of oneself is “associated with less of a need to handicap” (pg. 748). It also supports Pintrich (2000a) longitudinal study that a decrease in self-efficacy could lead to performance-avoidance and thus an increase in the use of self-handicapping strategies (maladaptive outcomes) over time. Furthermore, the findings demonstrated a positive statistical significance between both performance goal structured classrooms and the use of self-handicapping strategies. So, a perceived classroom structure, whereby errors are negatively viewed, and competition is encouraged, as such in a performance-avoidance classroom structure, can lead to the reduced effort, which in turn can be used as a self-handicapping strategy, if the student expects poor performance. These findings agree with Schwinger (2014), whereby the impact self-handicapping on academic achievement is highly essential and should be continuously researched.

Overall, the analysis of the findings of the independent variables, indicate that students have high self-efficacy and view their classrooms as a mastery goal structure. Therefore, if they are committed and motivated students, this should translate into a positive learning environment, with a high retention rate and low negative emotions towards the program. However, this is not the case. There is a problem in this group of students based on percentage of retention and an overall class morale, why? Possible explanations could be other antecedent variables not considered, or that student's achievement goal is aimed as pursuing a result, such as passing the course, and not as a deep need or motivation, as suggested by Elliot (1999).

5.2.3 Research Question #3

Does the specific goal orientation relate to competence, motivation and commitment as expressed in the literature?

The formulated hypotheses for the research question was as follows:

H₅: Each goal orientation is associated with competence, commitment and motivation at different levels.

Given these findings and discussions, each of the three achievement goal orientations in the trichotomous framework demonstrates a distinct profile: whereby mastery goal is highly associated with academic self-efficacy and a classroom that is mastery goal structured. On the other hand, performance-approach goal adoption is highly related to a classroom goal that is performance-avoidance structured and slightly related to self-efficacy, and performance-avoidance goal adoption is profoundly linked to the use of self-handicapping strategies and a classroom that is performance-avoidance goal structured.

The high findings, through the correlation coefficient between mastery goal orientation and self-efficacy and descriptive statistics \bar{x} for all items under mastery goal orientation, demonstrated a clear connection between goal orientation and competency and links to studies by Ames (1992), Elliot (1999), Dweck, Urdu and Mestas (2007). The data for each item on the mastery goal orientation scale demonstrated the \bar{x} for all items, such as 'it's important to me that I improve my skills this year' or 'one of my goals in class is to learn as much as I can' ranges from 1.44 to 1.71. Also, the high findings for class structure, separated by items, demonstrated that students who view their classroom as mastery goal focused, do so on that basis that it uses effective learning strategies, offers challenges and effort leads to success. This can lead the student to be a mastery goal oriented, and thus benefit in their learning because that classroom enhances motivation through the value of effort and commitment (Ames, 1992). It is also made evident by the findings that mastery orientation focuses on learning, understanding, progress and self-improvement, thus supports Ames and Archer's (1988) suggestion that students who are mastery goal oriented, will pursue tasks that foster increments in learning. Given this information, it's clear that mastery goal orientation relates to enhancing competency, seeking effort, motivation for school and commitment to deep learning.

On the other hand, performance-approach focuses on being better at a task in comparison to others, being the best or getting the highest grade. When analyzing the items that describe a performance approach orientation, it is clear that the performance approach is commonly found in surface learners who believe that appearing smart is much more important than being smart. The aim is to outperform others; therefore, their motivation or persistence is driven by favourable judgement, overcoming a fear of failure and appearing smart rather than learning. This does not imply that the student lacks the effort to study or that learning does not occur. It merely implies that maladaptive outcomes of motivation and commitment are sought rather than deep learning,

which supports Pintrich (2000a) study. This is a concern for most teachers since comprehension and retention is not guaranteed. However, the findings under descriptive statistics demonstrate that students are not concerned with looking smarter in comparison to others or in being viewed as intelligent.

The same can be said for performance-avoidance goal orientation. Performance-avoidance orientation is negatively associated with motivation. The objective of a performance-avoidance oriented student is to avoid looking incompetent. The \bar{x} results for each item on the performance-avoidance goal orientation scale, indicated that students are not truly concerned with whether their teachers and classmates think they are not smart in class or have trouble doing the work; thus, not oriented towards performance-avoidance. However, with \bar{x} ranging in the neutral domain from 2.65 to 3.39, a cause for concern exists; at certain instances, there exists the possibility that students are inclined to be performance-avoidance oriented, which, in turn, demands lower levels of cognitive engagement and undermines intrinsic motivation.

Lastly, the findings report a high correlation between performance-approach and performance-avoidance goals with r approaching .90 at some intervals which supports researchers, such as Elliot (1997) and Urdan and Mestas (2006) and can be due in part by fear of failure. Furthermore, because the r varies between the three groups, the correlation can also be due to the respondent's inability to distinguish between wanting to do better in comparison with others and not wanting to do worse.

5.2.4 Research Question #4

Is there a variation in students' goal orientations between different years of the Tourism Management program?

The formulated hypotheses for the research question is as follows:

H₆: The specific goal orientations vary between 1st, 2nd and 3rd-year students.

The three groups do have a rather typical motivational profile. The findings demonstrate that all three groups are mastery goal oriented; mastery-oriented \bar{x} varies from 1.44 to 1.71, whereas performance-approach has \bar{x} between 2.91 and 3.67 and performance-avoidance \bar{x} is above 2.65 to 3.39. However, sometimes, the results differ greatly from those expected by the researcher. An assumption was that a change occurred between the second and third year in the tourism program but based on \bar{x} of the main goal orientation (mastery) selected by all three years, the lowest \bar{x} is found in the second year. Therefore, a change occurs between 1st to 2nd year students

and not from 2nd to 3rd as assumed. The 3rd year students seem more motivated and more mastery oriented than 2nd year students. Inasmuch as the tourism management department suggested that the academic orientation to the learning of their students varies from mastery to performance, the data does not confirm this. What is interesting to note is that the \bar{x} closest to 2 (i.e. agree) is from performance-avoidance rather than performance-approach, meaning that students would be more inclined to be performance-avoidance oriented than performance-approach oriented if they were not mastery oriented; they orient themselves to the extremities.

Chapter 6: Conclusions and Limitations

6.1 Conclusion

Motivational orientation to learning begins with attention to students' competence beliefs. The study was conducted within the trichotomous framework of existing achievement goal theory and the effects of these variables: self-efficacy, perceived classroom goal structure, and academic self-handicapping strategies on the various goal orientations. These results allowed for the examination of the relationship of these three independent variables/enablers in achieving a goal orientation independent of the student's overall general level of ability. These findings added to the growing body of work attesting to the need to attend mastery and performance as well as approach and avoidance. This indicates that individuals with high self-efficacy are likely to adopt mastery or, at times, performance-approach goal orientation. A strong self-efficacy and favourable classroom structure were predicted for a mastery goal orientation. Such an interpretation is consistent with other research (Anderman & Young, 1994; Bandura, 1997; Schunk, 1996; Wolters, Yu & Pintrich, 1996) that has shown that the impact of learners self-efficacy on achievement behaviour is high and the relation between goal orientation in the classroom is particularly noteworthy.

Also, a decrease in self-efficacy denotes a student's tendency towards a state of helplessness and to attributing failure to lack of effort; a common self-handicapping strategy. Performance-approach and performance-avoidance not only lead to different outcomes, as demonstrated in the study and prior research, but they emerge from distinct patterns of antecedents. One should note that Dweck and Leggett (1988), state that "goals individuals are pursuing create the framework within which they interpret and react to events," however, that classroom goal structure in which they find themselves can adversely persuade them to change goal orientation. Also, when analyzing the findings concerning the classroom goal structure within each of the three groups, it is clear that each student's classroom experience differs. Why they change, can be a result of prior experiences, their initial goal orientation, the teacher's teaching and learning strategies in that specific classroom and many different other attributes. Further understanding of the student's prior experiences may be difficult, but, a more feasible undertaking would be the analysis of the teaching methods and learning strategies of each teacher within the tourism department to better understand the classroom goal structure. Given this information, an initial

step to support tourism teachers in creating a climate that fosters mastery orientation in the classroom, may be the creation of a straightforward and transparent program evaluation plan.

In the end, the findings allowed the tourism program to understand student's competency beliefs better, and their level of knowledge obtained, as well as identify the classroom environment required to increase in motivation, commitment, and learning throughout the three-year program. It is also evident that a program and classroom that promotes application, perseverance, and positive beliefs in one's ability will increase student retention within the program and encourage students to become experts in our field.

6.2 Limitations

The limitations of the research study include but are not limited to the sample size of the group. The small sample size provided some statistical significance to support existing research, as well as demonstrated a trend among years in the program, but it is not possible to say with confidence that the results are representative of all college students. Also, the study was conducted with three tourism groups in a single type of achievement context, the college classroom, therefore, the findings should not extend to the point of generalization for other kinds of students and other disciplines. There is also the possibility that participants could not distinguish between performance-approach and performance-avoidance and often responded in ways that were not consistent with the intentions of the researcher.

6.3 Implications & Suggestions for Future Research

There is a clear need to apply a multidimensional perspective concerning goal orientations then the traditional mastery and performance. It is also apparent that goals are not specific traits that one can find in a specific personality but rather an outcome based on personal views and contextual environments. The tourism program should strive at creating a vocational program that promotes perseverance, understanding and positive beliefs in one's ability in order to increase student retention, motivation, and commitment, as well as the program's long-term success.

As suggested by Elliot (1999), future research on the various variables that are beyond competency-based constructs and their effect on achievement goal should be studied to complement all motivational research. Future research should aim at analyzing one group through their program process to truly identify the change between the goal orientations at different years within the program, as well as examining the grades in comparison to the respondent's goal orientation. Further analyses on the program planner is recommended, to identify elements that

may cause a change in students goal orientation between 1st and 2nd year. It would also be beneficial to see if the students who have adopted a performance-avoidance goal orientation demonstrate low motivation or low grades, especially since current research states that once a goal has been selected, effects of the goal do not vary regardless of the reason for its adoption (Urduan & Mestas, 2006).

In addition, the results demonstrate that there is a relationship between the use of self-handicapping strategies and performance-avoidance goal orientation, so, future studies that verify if these are also low achieving students in comparison to high achieving students, as suggested by Schwinger (2014) study, is warranted. Understanding what motivates the student to adopt this style of orientation or steers them away from it is also necessary. Finally, future research should remove the option of neutral on the Likert scale to receive more accurate data.

Ultimately, motivation and commitment are ever so complex and changing but somewhat predictable, given the goal orientation adopted.

References List

- Ames, C. (1992). Classrooms: Goals, structures, and student motivation. *Journal of Educational Psychology, 84* (3), 261-271. Retrieved from PsycINFO Database.
<http://dx.doi.org.ezproxy.usherbrooke.ca/10.1037/0022-0663.84.3.261>
- 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 PsycINFO Database.
<http://dx.doi.org.ezproxy.usherbrooke.ca/10.1037/0022-0663.80.3.260>
- Anderman, L.H., & Anderman, E. M. (1999). Social predictors of changes in students' achievement goal orientations. *Contemporary Educational Psychology, 25*, 21-37. Retrieved from PsycINFO Database.
<http://dx.doi.org.ezproxy.usherbrooke.ca/10.1006/ceps.1998.0978>
- Anderman, E. M. & Young, A. J. (1994, October). Motivation and strategy use in science: Individual differences and classroom effects. *Journal of Research in Science Teaching 31*(8), 811 – 831. Retrieved from PsycINFO Database.
- Bandura, A. (1997). *Self-efficacy: The exercise of control*. New York, NY: W H Freeman/Times Books/ Henry Holt & Co.
- Bandura, A. (2000). Cultivate self-efficacy for personal and organizational effectiveness. In E.A. Locke (Ed), *Handbook of principles of organizational behavior*. (2nd Ed.) (pp.179-200). New York, NY: Wiley. Retrieved from Google Scholar
- Berglas, S., & Jones, E. E. (1978). Drug choice as a self-handicapping strategy in response to noncontingent success. *Journal of Personality and Social Psychology, 36* (4), 405-417. Retrieved from SocINDEX database.

Bouchard, L. (2018, December 13). *Tourism Management Program Monitoring Data 2017-2018 IMPAP Report* [PDF file].

Champlain Regional College. (2018, August 24). *Program Health Monitoring Data 2018* [PDF file].

Church, M. A., Elliot, A. J. & Gable, S.L. (2001). Perception of classroom environment, achievement goals, and achievement outcomes. *Journal of Educational Psychology, 93* (1), 43-54. doi:10.1037//0022-0663.93.1.43

Dweck, C. S. (1986, October). Motivational processes affecting learning. *American Psychologist, 41* (10), 1040-1048. Retrieved from PsycINFO Database.
<http://psycnet.apa.org.ezproxy.usherbrooke.ca/buy/1987-08696-001>

Dweck, C. S., & Leggett, E. L. (1988). A social-cognitive approach to motivation and personality. *Psychological Review, 95* (2), 256-273. doi:10.1037/0033-295X.95.2.256

Elliot, A. J. (1999). Approach and avoidance motivation and achievement goals. *Journal of Educational Psychologist, 34*(3), 169-189. Retrieved from Psychology and Behavioral Sciences Collection.

Elliot, A. J. & Church, M. A. (1997). A hierarchical model of approach and avoidance achievement motivation. *Journal of Personality and Social Psychology, 72* (1), 218-232. Retrieved from PsycINFO Database.
<http://dx.doi.org.ezproxy.usherbrooke.ca/10.1037/0022-3514.72.1.218>

Elliot, A. J. & Harackiewicz, J. (1996). Approach and avoidance achievement goals and intrinsic motivation: A mediational analysis. *Journal of Personality and Social Psychology, 70* (3), 461-475. Retrieved from Google Scholar.

- Elliot, A. J. & McGregor, H. A. (2001). A 2 x 2 achievement goal framework. *Journal of Personality and Social Psychology*, 80 (3), 501-519. doi:10.1037//0022-3514.80.3.501
- Elliot, A. J. & McGregor, H. A. (1999). Test anxiety and the hierarchical model of approach and avoidance achievement motivation. *Journal of Personality and Social Psychology*, 76 (4), 628-644. Retrieved from PsycINFO Database.
<http://dx.doi.org.ezproxy.usherbrooke.ca/10.1037/0022-3514.76.4.28>
- Fédération des Cégeps. (2018). Formation Technique. Retrieved from
<http://www.fedecegeps.qc.ca/cegeps/formation-techniques/>
- Janke, S., Nitsche, S., Praetorius, A. K., Benning, K., Fasching, M., Dresel, M. & Dickhauser, O. (2016). Deconstructing performance goal orientations: The merit of dimensional approach. *Learning and Individual Differences*, 50, 133-146. doi:10.1016/j.lindif.2016.08.013
- 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 Google Scholar
- Meece, J. L. & Holt, K. (1993). A pattern analysis of students' achievement goals. *Journal of Educational Psychology*, 85 (4), 582-590. Retrieved from ERIC
- Middleton, M. J. & Midgley, C. (1997). Avoiding the demonstration of lack of ability: An underexplored aspect of goal theory. *Journal of Educational Psychology*, 89 (4), 710-718.
Retrieved from PsycINFO Database.
<http://dx.doi.org.ezproxy.usherbrooke.ca/10.1037/0022-0663.89.4.710>
- Midgley, C., Kaplan, A., Middleton, M., Maehr, M. L., Urdan, T., Anderman, L.H., Anderman, E. & Roser, R. (1998). The development and validation of scales assessing students' achievement goal orientations. *Contemporary Educational Psychology*, 23 (980965), 113-

131. Retrieved from PsycINFO Database.

<http://dx.doi.org.ezproxy.usherbrooke.ca/10.1006/ceps.1998.0965>

Midgley, C. & Urdan, T. (1995). Predictors of Middle school students' use of self-handicapping strategies. *Journal of Early Adolescence*, 15 (4), 389-411. Retrieved from Google Scholar.

Midgley, C. & Urdan, T. (2001). Academic self-handicapping and achievement goals: A further examination. *Contemporary Educational Psychology*, 26, 61-75.

doi:10.1006/ceps.2000.1041

Ministère de l'Éducation, du Loisir et du Sport. (2013). *Education Indicators*. Retrieved from

http://www.education.gouv.qc.ca/fileadmin/site_web/documents/PSG/statistiques_info_decisionnelle/Indicateurs_educ_2013_webP_A.pdf

Ministère de l'Éducation, du Loisir et du Sport. (2010). Vocational and technical training in Quebec. Retrieved from

http://www.education.gouv.qc.ca/fileadmin/site_web/documents/dpse/formation_professionnelle/LaFPTAuQuebec_UnApercu_2010_a.pdf

Pintrich, P. R. (2000a). Multiple goals, multiple pathways: The role of goals orientation in learning and achievement. *Journal of Educational Psychology*, 92 (3), 544-555.

doi:10.1037//0022-0663.92.3.544

Pintrich, P. R. (2000b). An achievement goal theory perspective on issues in motivation terminology, theory, and research. *Contemporary Educational Psychology*, 25, 92-104.

doi:10.1006/ceps.1999.1017

Schwinger, M., Wirthwein, L., Lemmer, G., & Steinmayr, R. (2014). Academic self-handicapping and achievement: A meta-analysis. *Journal of Educational*

Psychology, 106 (3), 744-761. doi:10.1037/a0035832

- Schunk, D. H. (1996). Goal and self-evaluative influences during children's cognitive skill learning. *American Educational Research Journal*, 33, 359-382. Retrieved from PsycINFO Database. <http://dx.doi.org.ezproxy.usherbrooke.ca/10.2307/1163289>
- Urduan, T., & Mestas, M. (2006). The goals behind performance goals. *Journal of Educational Psychology*, 98 (2), 354-365. doi:10.1037/0022-0663.98.2.354
- Urduan, T., & Midgley, C. (2001). Academic Self-handicapping: What we know, what more there is to learn. *Educational Psychology Review*, 13 (2), 115-138. Retrieved from Psychology and Behavioral Sciences Collection.
- Urduan, T., Midgley, C. & Anderman, E. M. (1998). The role of classroom goal structure in students' use of self-handicapping strategies. *American Educational Research Journal*, 35, (1), 101-122. Retrieved from PsycINFO Database. <http://dx.doi.org.ezproxy.usherbrooke.ca/10.2307/1163453>
- Veal, A. J. (2011). *Research methods for leisure & tourism: A practical guide* (4th ed.). Harlow, England: Prentice Hall.
- Wolters, C. A., Yu, S. & Pintrich, P. R. (1996). The relation between goal orientation and student's motivational beliefs and self-regulated learning. *Learning & Individual Differences*. 8 (3) 211-238. Retrieved from PsycINFO Database. [http://dx.doi.org.ezproxy.usherbrooke.ca/10.1006/S1041-6080\(96\)90015-1](http://dx.doi.org.ezproxy.usherbrooke.ca/10.1006/S1041-6080(96)90015-1)
- Zimmerman, B. J. (2000). Self-efficacy: An essential motive to learn. *Contemporary Educational Psychology*, 25, 82-91. Retrieved from PsycINFO Database. <http://dx.doi.org.ezproxy.usherbrooke.ca/10.1006/ceps.1999.1016>



Appendix A Consent Letter

Consent to Participate in a Research Study Champlain College • Saint-Lambert, QC.

Title of Study: The role of self-efficacy, perceived classroom environment and self-handicapping strategies on students' goal orientation

Researchers:

Name: Emily Gervasi **Dept:** Tourism **Phone:** 450-672-7360

Introduction

- You are being asked to be in a research study concerning achievement goal orientation, conducted by Emily Gervasi, at Université de Sherbrooke.
- You were selected as a possible participant because you are a student in the Tourism Management technical program at Champlain College Saint-Lambert.
- We ask that you read this form and ask any questions that you may have before agreeing to be in the study.

Purpose of Study

- The purpose of the study is to analyze the effect of certain motivational constructs on tourism management students' goal orientation.

Description of the Study Procedures

- If you agree to be in this study, you will be asked to do the following things: complete a questionnaire that will take approximately 30 minutes. The completion of a questionnaire will occur both at the start of the semester and near the end. The survey questions will be about goal orientation and how each item best corresponds to your experiences.

Risks/Discomforts of Being in this Study

- There are no reasonable foreseeable (or expected) risks. There may be unknown risks.

Benefits of Being in the Study

- The benefits of participation will be a chocolate bar after completing each questionnaire.
- The overall benefit, based on results from participation, is better classroom structure and student retention, learning and motivation.

Confidentiality

- This study and your responses will be confidential, and the researcher will not have any identifying information such as your name. All data will be stored in a password protected electronic format. To maintain confidentiality, the questionnaires will not contain information that will personally identify you. The results of this study will be used for scholarly purposes only and may be shared with Université de Sherbrooke representatives.

Right to Refuse or Withdraw

- The decision to participate in this study is entirely voluntary. You may refuse to participate in the study *at any time* without affecting your relationship with the researcher of this study. Your decision will not

result in any loss or benefits to which you are otherwise entitled. You have the right not to answer any single question, as well as to withdraw entirely from the interview at any point during the process. If you decide not to participate in this study or if you withdraw from participating at any time, you will not be penalized.

Right to Ask Questions and Report Concerns

- You have the right to ask questions about this research study and to have those questions answered by us before, during or after the research. If you have any further questions about the study, at any time, feel free to contact our instructor, Emily Gervasi at egervasi@crcmail.net.
- If you have any problems or concerns that occur as a result of your participation, you can report them to Emily Gervasi at the email address stated above.
- This research was reviewed according to Champlain College's Ethics Board for research involving human subjects.

Consent

- Putting an "X" below indicates that you have decided to volunteer as a research participant for this study and that you have read and understood the information provided above.

Put an "X" in the box below if you agree to participate in this study:

Signature: _____

Date: _____

Appendix B Goal Orientation Survey

Goal Orientation Survey

_____ #

Good day student! This questionnaire is designed to help us better understand your goal orientations in an academic setting. Please help me to better understand your goal orientation by responding to the series of questions below according to your own experience. Limit your responses to your goal orientation during your XXX course. Using the scale below, please indicate to what extent each of the following items best relates to you; see example below. There is no right or wrong answer.

Example:

	Statement	Very True	True	Neutral	Not True	Not at all True
X	It's important to me that I travel every year to discover new cultures.	1	2	3	4	5

Please answer *every* question as honestly as possible. Thank you!

	Statement	Very True	True	Neutral	Not True	Not at all True
1	It's important to me that I learn a lot of new concepts this year.	1	2	3	4	5
2	It's important to me that other students in my class think I am good at my class work.	1	2	3	4	5
3	It's important to me that I don't look stupid in class.	1	2	3	4	5
4	In our class, trying hard is very important.	1	2	3	4	5
5	In our class, getting right answers is very important.	1	2	3	4	5
6	In our class, it's important not to do worse than other students.	1	2	3	4	5
7	One of my goals in class is to learn as much as I can.	1	2	3	4	5
8	In our class, how much you improve is really important.	1	2	3	4	5
9	In our class, it's important to get high scores on tests.	1	2	3	4	5
10	In our class, one of the main goals is to avoid looking like you can't do the work.	1	2	3	4	5
11	I'm certain I can master the skills taught in class this year.	1	2	3	4	5

12	Some students fool around the night before a test. Then if they don't do well, they can say that is the reason. How true is this of you?	1	2	3	4	5
13	In our class, it's important to understand the work, not just memorize it.	1	2	3	4	5
14	One of my goals is to keep others from thinking I'm not smart in class.	1	2	3	4	5
15	Some students put off doing their class work until the last minute. Then if they don't do well on their work, they can say that is the reason. How true is this of you?	1	2	3	4	5
16	One of my goals is to show others that class work is easy for me.	1	2	3	4	5
17	It's important to me that I thoroughly understand my class work.	1	2	3	4	5
18	It's important to me that my teacher doesn't think that I know less than others in the class.	1	2	3	4	5
19	In our class, really understanding the material is the main goal.	1	2	3	4	5
20	I'm certain I can figure out how to do the most difficult class work.	1	2	3	4	5
21	Some students purposely get involved in lots of activities. Then if they don't do well on their class work, they can say it is because they were involved with other things. How true is this of you?	1	2	3	4	5
22	It's important to me that I look smart compared to others in my class.	1	2	3	4	5
23	One of my goals in class is to avoid looking like I have trouble doing the work.	1	2	3	4	5
24	In our class, getting good grades is the main goal.	1	2	3	4	5
25	Even if the work is hard, I can learn it.	1	2	3	4	5
26	Some students let their friends keep them from paying attention in class or from doing their homework. Then if they don't do well, they can say their friends kept them from working. How true is this of you?	1	2	3	4	5
27	In our class, it's important that you don't make mistakes in front of everyone.	1	2	3	4	5
28	One of my goals is to show others that I'm good at my class work.	1	2	3	4	5
29	In our class, showing others that you are not bad at class work is really important.	1	2	3	4	5
30	I can do almost all the work in class if I don't give up.	1	2	3	4	5

31	It's important to me that I improve my skills this year.	1	2	3	4	5
32	One of my goals is to look smart in comparison to the other students in my class.	1	2	3	4	5
33	In our class, learning new ideas and concepts is very important.	1	2	3	4	5
34	Some students look for reasons to keep them from studying (not feeling well, having to help their parents, taking care of a brother or sister, etc.). Then if they don't do well on their class work, they can say this is the reason. How true is this of you?	1	2	3	4	5
35	One of my goals is to master a lot of new skills this year	1	2	3	4	5
36	In our class, it's OK to make mistakes as long as you are learning.	1	2	3	4	5
37	In our class, it's very important not to look dumb.	1	2	3	4	5
38	I can do even the hardest work in this class if I try.	1	2	3	4	5
39	Some students purposely don't try hard in class. Then if they don't do well, they can say it is because they didn't try. How true is this of you?	1	2	3	4	5

40. You are: Male Female Other

41. Your age last birthday was: _____ years

42. What year of the Tourism Management program are you presently in?

1st-year 2nd-year 3rd year

43. Which of the following best describes your current school/work situation?

Full-time student with no regular paid work

Full-time student with some regular paid work (5 to 20 hours/week)

Full-time student with regular paid work (21 to 40 hours/week)

Part-time student with a full-time job (21 to 40 hours/week)

Part-time student with some regular paid work (5 to 20 hours/week)

Part-time student with no regular paid work

44. Your responses are based on which Tourism Course _____

Appendix C Research Ethics Boards Approval Letter



Certificate of Ethics Approval

Principal Investigator

Name: Emily Gervasi
Campus: Lennoxville St. Lambert St. Lawrence
Sector: Regular Day Continuing Education

Research Information

Category: Master Teacher Program (MTP) M.A. Thesis M.Ed. Thesis Ph.D. Thesis
 PAREA Application SSHRC/CRSH Application NSERC/CRSNG Application

Title: *The role of self-efficacy, perceived classroom goal structure and self-handicapping strategies on students' goal orientation.*

Abstract: *The present research aims to examine the achievement goal orientation adopted by students in a college classroom that subsequently predict motivation and achievement. Furthermore, the study will analyze the correlation of a student's self-efficacy, the perception of classroom goal structure and use of self-handicapping strategies, in foretelling the changes in students' goal orientation within an academic setting. The present research includes an extensive literature review of current knowledge and methodological contributions concerning Achievement Goal Theory (AGT), and the antecedent variables mentioned above. Furthermore, the study contains quantitative method through a self-report questionnaire based on a pre-existing hierarchy of measurement scales, from the revised Patterns of Adaptive Learning Scales. The questionnaire will be administered to three groups, 1st, 2nd and 3rd-year students in the Tourism Management program of the Saint-Lambert campus of Champlain Regional College at two waves during the Fall 2018 semester and data will be analyzed in the Winter 2019 semester after final grades have been submitted. Findings could direct the technical program to understand student's competency beliefs better, and their level of knowledge obtained and thus make appropriate changes to the curriculum that will lead to an increase in motivation, commitment, and learning.*

Review

Primary Reviewer¹: Josée Bouchard, PhD
 Planning and Evaluation Analyst

Recommendation of the Director of Studies' Office

The Director of Studies' Office conducted an expedited review² of the research proposal and accompanying documents forwarded by Emily Gervasi entitled: "The role of self-efficacy, perceived classroom goal structure and self-handicapping strategies on students' goal orientation".

- It was concluded that the project will likely involve minimal risks for the participants.
- This research project meets the ethics requirements of Champlain Regional College's Institutional Policy on Research and has therefore been granted a full ethics approval by the Director of Studies.



Paul Kaeser, Director of Studies

June 21st, 2018

Date

¹ Until a Research Ethics Board (REB) is officially appointed at Champlain Regional College, the Director of Studies' Office is responsible for ethics reviews of research proposals involving human participants.

² As per the definition included in the Champlain Regional College's [Institutional Policy on Research](#) (2013).