

# Student Achievement Motivation at CMU-Q:

Investigating the Types of Academic Achievement Goals, Reasons for Goal Pursuit, and Goal-Reason Combinations that Relate to Academic Achievement Behavior for Undergraduate University Students in Qatar's Branch Campus of CMU. Alnood AlThani, Advisor: Cecile le Roux

## “What motivation do CMU-Q students demonstrate for achieving their academic goals?”

### Study 1

#### Literature Review

Achievement goals

The aim, outcome, or end state that guides an individual's behavior

Two types of goals exist: **mastery goals** and **performance goals**

Motivational reasons

The willingness to perform or the desire to achieve is referred to as **motivation** (Kongoske et al., 2018), which is studied in terms of the **why** (i.e., the reason behind pursuing a goal). Two types of reasons exist: **autonomous reasons** and **controlled reasons** (Ryan & Deci, 2000).

Demographic/Control Variables  
Major, Gender, Age, Socio-economic status, Class standing, Future aspiration, Employment history

#### Method

Independent Variables

**Mastery goals**  
“My goal is to learn as much as possible”

**Autonomous reasons**  
“In my classes, I pursue goals because I find them highly stimulating and challenging”

**Controlled reasons**  
“My aim is to completely master the material presented in my classes because others will reward me only if I achieve this goal”

**Performance goals**  
“My aim is to perform better than others during free time”

**Controlled performance goal**  
“My aim is to perform better than others during free time”

**Autonomous performance goal**  
“My goal is to perform better than others during free time”

**Controlled performance goal**  
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“My aim is to perform better than others during free time”

#### Design: Mixed Methods

Quantitative

Aim: Descriptive and Infer relationships

Recruitment of CMU-Q students

• Emails  
• Flyers  
• Posters on bulletin boards  
• Posters on screens

Data collection: Survey research

• Demographic questionnaire  
• “Achievement Motivation Questionnaire” (Sommet & Elliot, 2017)

Data analysis:

• Descriptive statistics  
• Inferential statistical analysis: Correlational  
• Multivariate Multiple Linear Regression

#### Design: Mixed Methods

Qualitative

Aim: Describe a lived experience

Interpretative phenomenological analysis (IPA) (Smith, Flowers & Larkin, 2016)

Selecting participants

• Who consented  
• Who had student employment experience

Data collection: Semi-structured Interviews

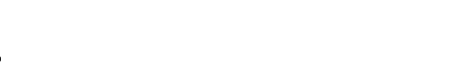
The interviews were confidential, audio recorded, conducted on campus and lasted 45 minutes

Data analysis: Thematic analysis (IPA):

• Familiarization  
• Coding  
• Generating themes  
• Interpreting

#### Findings

Figure 4. Themes Describing the CMU-Q Lived Experience of Student Achievement Motivation



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#### Results

Hypothesis

1a: Mastery goals are positive predictors of achievement-related behavior.

1b: Autonomous reasons are positive predictors of achievement-related behavior.

2a: The autonomous performance goal complex was a positive predictor of grade aspiration.

2b: The autonomous performance goal complex was a positive predictor of surface learning.

Controlled reasons are positive predictors of one achievement-related behavior: surface learning.

Figure 1. Goals and Deep Learning



Figure 2. Controlled Reasons and Persistence



Figure 3. Controlled Reasons and Surface Learning



Carnegie Mellon University Qatar

Students at CMU-Q have **mastery goals**, which predict achievement-related behaviors.

Students predominantly have **autonomous reasons**, which predict achievement-related behaviors.

These findings support previous research on student achievement motivation (Sommet & Elliot, 2017).

It demonstrates Self Determination Theory (Ryan & Deci, 2000) and achievement goal theories (Elliot, 2009).

Students also have **controlled reasons** and this correlated with and predicted surface learning.

This could be due to the educational context, cultural context, or developmental age.

#### Future Research

1. Conduct longitudinal research on student achievement motivation.
2. Research student achievement motivation across a larger population, such as multiple universities in Qatar.
3. Explore achievement motivation in graduate hires in an established workforce.