A Study On The Factors Affecting Student Motivation In Physical Learning Among UTAR Students

ANGELINE CHEAM CHING IE
CHIA KHAI XIN
LEE KER XIN
LEE MIN YEE

BACHELOR OF BUSINESS ADMINISTRATION (HONS)

UNIVERSITI TUNKU ABDUL RAHMAN

FACULTY OF BUSINESS AND FINANCE
DEPARTMENT OF BUSINESS AND PUBLIC
ADMINISTRATION

SEPTEMBER 2023

A STUDY ON THE FACTORS AFFECTING STUDENT MOTIVATION IN PHYSICAL LEARNING AMONG UTAR STUDENTS

BY

ANGELINE CHEAM CHING IE

CHIA KHAI XIN

LEE KER XIN

LEE MIN YEE

A final year project submitted in partial fulfillment of the

requirement for the degree of

BACHELOR OF BUSINESS ADMINISTRATION (HONS)

UNIVERSITI TUNKU ABDUL RAHMAN

FACULTY OF BUSINESS AND FINANCE

DEPARTMENT OF BUSINESS AND PUBLIC ADMINISTRATION

SEPTEMBER 2023

DECLARATION

We hereby declare that:

(1) This undergraduate FYP is the end result of our own work, and that due acknowledgement has been given in the references to ALL sources of information be they printed, electronic, or personal.

(2) No portion of this FYP has been submitted in support of any application for any other degree or qualification of this or any other university, or other institutes of learning.

(3) Equal contribution has been made by each group member in completing the FYP.

(4) The word count of this research report is 15116 words.

Name of Student:	Student ID:	Signature:
1. Angeline Cheam Ching Ie	20ABB01468	cheam
2. Chia Khai Xin	20ABB03138	
3. Lee Ker Xin	21ABB02952	
4. Lee Min Yee	21ABB02986	

Date: 19 April 2024

ACKNOWLEDGEMENTS

DEDICATION

Firstly, we would like to express our deepest gratitude to our research project supervisor, Ms. Lim Yong Hooi for her valuable supports and efforts in guiding us throughout the completion of this research. We really appreciate her valuable guidance, advice, and motivation when we were facing difficulties during this research project.

Apart from that, we would like to dedicate this research project to our family members for the appreciation of their encouragement. Furthermore, this research project is dedicated to all our group members who have contributed their time, effort, knowledge, and cooperation thorough this research project journey. Due to the collaboration, understanding and enthusiasm toward this research project, it had led to the completion of this research project.

Table of Contents

List of Table

List of Figure

List of Abbreviations

α   Cronbach's Alpha

SPSS   Statistical Package for the Social Sciences

List of Appendix

Preface

The current final year project is conducted to fulfill the requirements for the Bachelor of Business Administration (Honours) degree. This research methods project is completed and provided with reference to other research results.

The title of the current research project is A Study on The Factors Affecting Student Motivation in Physical Learning Among UTAR Students. There have been numerous previous empirical studies examining The Influences of Student Motivation in Online Learning Among Malaysia University Students. However, studies examining the Factors Affecting Student Motivation in Physical Learning Among Malaysia University Students are insufficient. As a result, we were motivated to conduct this study. The Factors Affecting Student Motivation in Physical Learning Among UTAR Students was newly highlighted by this study.

Abstract

Effective physical education instructors play a vital role in motivating students. This study investigates the factors influencing student motivation in physical learning within the context of Universiti Tunku Abdul Rahman (UTAR). With the introduction student motivation in physical learning, it has far-reaching implications for university management. Consequently, the primary purpose of this study is to investigate and comprehend factors affecting student motivation in physical learning among UTAR students. This investigation explores strategies and initiatives that university management can implement to enhance student motivation.

The study aimed to accomplish the following objectives in particular: To examine the significant impact of family motivational climate on student motivation in physical learning and to examine the significant impact of classroom environment on student motivation in physical learning. Accomplishing these objectives can serve as a valuable resource to university management which can provide valuable insights into the specific factors that drive or hinder student motivation in physical learning. The study investigates aspects like the impact of family motivational climate and classroom environment. These aspects are crucial in figuring out targeted strategies for the university management to improve student motivation.

377 UTAR students who are studying in Kampar and Sungai Long campuses are responders in this study. A questionnaire was used as the research method for this investigation. The Statistical Package for Social Science (SPSS) is used to assess the data that has been gathered.

CHAPTER 1: INTRODUCTION

1.0   Introduction

Chapter 1 outline purpose for research project. This research focuses on research background which is about the student motivation in physical learning among UTAR students and the factors influencing the student motivation. Next, problem statement, research objectives, research questions, and hypothesis will show out. Finally, significance of the research will be briefly explained and the chapter layout with summary of Chapter 1.

1.1 Research Background

Student motivation to physical learning is very important since it may have a big influence on their academic, social, and personal growth in a lot of ways. In educational research settings, the value of physical locations like buildings, seminar rooms, and lecture halls has been widely acknowledged (Vercellotti, 2018). Motivated students who are participating actively in physical learning activities can stronger their knowledge and retention in course material. In physical education classes and related areas, this may lead to better academic success. Therefore, it is believed that physical exercise is a crucial component that might significantly affect academic achievement (Redondo-Flórez et al., 2022). Understanding student motivation can assist instructors to ensure students have healthier also meaningful learning experience by emphasizing and fostering student motivation in physical education programs.

Based on Wardani (2020), in general learning motivation is essentially a part of motivation. This is why looking at it from the perspective of the whole motivation will make it more evident. Human behavior can be caused, directed, and organized by a drive or urge known as motivation. This has to do with trying to satisfy felt

both physical and spiritual needs. When it comes to learning activities, learning motivation refers to the general force that propels students to create, ensure, and give direction for learning activities to meet the desired learning objectives. Students that are motivated to learn experience intensity and consistency in the process of learning.

The specific importance and impact of student motivation in physical learning are multifaceted. In Gopal (2018), students at universities need to be motivated because it creates a lively learning atmosphere. Students become more engaged in the material being taught; they pay closer attention and show a desire to repeat an activity. It even increases students' energy levels, which helps them exert more effort. According to educational psychologists, motivation improves students' learning outcomes by increasing their attention span and memory for the material. Students who are motivated in this way not only create an exciting learning environment for themselves, but their excitement also fosters a good attitude towards teachers, who give their all in the classroom. Besides, motivation is not only extremely significant for learning and success (Krapp, 2003 as cited in Anna et al., 2022) but serves as a crucial foundation for the willingness to pursue lifelong learning (OECD, 2019 as cited in Anna et al., 2022). Thus, motivating students is one of education's key objectives (Aktionsrat Bildung, 2015 as cited in Anna et al., 2022). Through fostering student motivation in physical education, instructors may provide students with the necessary skills to lead active and satisfying lives.

Typically, universities are part of the "Education" industry. Provide education is the main objective of these institutions. These organizations may be for-profit, non-profit, or public. These consist of community colleges, universities, secondary schools, primary schools, and education ministries or departments. Malaysia's distinctive, well-structured higher education system, with over 30 years of expertise in foreign education, Malaysia provides competitive prices for pursuing international qualifications. There are about over 100 public and private institutions in Malaysia. However, UTAR was formally established on 13th August 2002, as a private, non-profit institution offering high-quality education at a reasonable cost. Enrolled under the Malaysian Private Higher Educational Institutions Act 1996, it is governed by the UTAR Education Foundation. There are over 20,000 students

enrolled in UTAR, the great majority of whom are undergraduates. UTAR has two campuses, one is Kampar, Perak and another is Sungai Long, Selangor.

Since it affects many facets of a student's growth and academic experience, the problem of student motivation in physical learning is important. Lack of motivation create poor academic performance among students is one issue preventing the seamless realization of education's goal of preparing students to serve society and themselves intellectually (Mauliya et al., 2020). Student motivation to improve academic performance is largely influenced by instructors as well as the home environment and the students themselves. In addition to being an important factor in determining learning, student motivation is also a worthwhile educational objective (Schiepe-Tiska, 2019 stated in Anna et al., 2022). It stands for a crucial prerequisite for engaging in society and lifelong learning (OECD, 2019 as cited in Anna et al., 2022). Student motivation vary greatly in a physical classroom setting.

While examining the issue of student motivation in physical learning, there are numerous important implications and issues from the standpoint of university management. Perie et al. (2005) as stated in Mazuin et al. (2020) concurred that students' minimal participation in academic activities would be a factor in their discontent, bad experiences, and eventual dropout. Poor participation in high-stakes test situations puts students at risk for unneeded stress (Supramaniam & Nazer, 2016 as stated in Mazuin et al., 2020) and dropping out of university (Arumugam & Supramaniam, 2016 as stated in Mazuin et al., 2020). Xerri et al. (2018) as stated in Mazuin et al. (2020) said that one of the main causes of students' overall performance in higher education institutions is their participation in academic activities. They went on to say that instructors are still unaware of the variables affecting students' participation in class activities. Management can improve student motivation by placing a high priority on physical education and establishing conducive learning environments.

Despite its significance, our research gap will explore regarding the factors affecting student motivation in physical learning among UTAR students. While some factors influencing student motivation in physical learning have been well-researched, there may be other factors that have not received sufficient attention. Factors like Family Motivational Climate and Classroom Environment warrants

further exploration. The respondents' home environment was the source of their lack of motivation. The family environment (parenting style) plays a crucial part in determining how a student views and approaches learning (Great School, 2014 as stated in Mauliya et al., 2020). On the other hand, in Cayubit (2021), a supportive learning environment at university is crucial for guaranteeing student achievement, but it may also be a hurdle that lowers students' motivation and performance, especially if it is seen negatively and as frightening.

For our topic, it will be seen what factors influence student motivation. Learning motivation is referred to the willingness and involvement of students in the course to learn and they have the power to determine the final focus and direction of the learning process. Any level of effort at any point in the learning process might be considered a single learning activity. Given that students' self-cognitive necessary knowledge reserve might affect their academic achievement and forecast shifts in learning engagement (Cole et al., 2004; Jurik et al., 2014; Trenshaw et al., 2016 as cited in Li et al., 2020). When it comes to physical education, student motivation is defined as the desire, zeal, and readiness of the students to participate fully in the learning opportunities and activities. It includes the drive to engage in physical activity, pick up new abilities, and accomplish academic and personal objectives when enrolled in physical education courses or programs.

From the standpoint of university management, our research aim is best approached by concentrating on the ways in which instructors at UTAR can comprehend and solve the elements that impact student motivation in physical learning. This study is to determine the best approaches and tactics for encouraging student motivation in physical learning from the standpoint of university management. Give university management evidence-based suggestions on how to improve student motivation for UTAR students. These suggestions must be realistic, doable, and in line with the objectives, resources, and mission of the organization. Examine the ways in which adjustments to organizational culture, professional development, resource distribution, and policy might enhance student motivation in physical education.

For the major significance and contribution of the study to a particular discipline, understanding the factors that impact student motivation in physical learning can lead to the development of strategies to improve student engagement and retention

within the educational system. This knowledge can help educators create more stimulating and supportive learning environments, leading to higher levels of student participation and achievement. Thus, our study can provide practical recommendations for UTAR management to enhance student motivation in physical learning. These recommendations are grounded in empirical evidence and tailored to the specific context of UTAR, making them valuable resources for improving the quality and effectiveness of physical education programs.

1.2 Problem Statement

In Malaysia, a major issue influencing university students' physical learning is a lack of motivation (Ali & Darshini, 2020). Students today face challenging situations in both academic and non-academic settings, which can result in various problems including difficulties with attention and concentration (Mauliya et al., 2020). Sasson (2019) stated in Mauliya et al. (2020) who explains that not having enthusiasm and interest in a task is what defines a lack of motivation. Moreover, Shore (2017) as stated in Mauliya et al. (2020) mentions that an indifferent attitude towards one's responsibilities might be construed as a lack of motivation. Everyone, including students, has experienced low motivation, which is the state in which a student does not want to study because they are having trouble keeping up with the lesson (Japari School, 2018 as cited in Mauliya et al., 2020). Students become demotivated when they cannot comprehend what they are studying in class (Barse, 2015 as stated in Mauliya et al., 2020). Other than that, Greate School (2014) as stated in Mauliya et al. (2020) claims that low self-esteem, unmet expectations in the classroom, feeling unloved or ignored by the family, and a lot of pressure lead to low motivation for learning, which has a negative impact on academic achievement. Thus, there is a perception that students' drive to improve their academic performance stems from inside, and that the learning environment and even the home environment have a significant impact (Mauliya et al., 2020).

Since motivation is described as a person's endeavor to complete a task, devoting the required effort, and maintaining it (Celikoz, 2009 as stated in Norsuhaily et al., 2022), university management plays a crucial role in understanding and addressing the problem of lack of motivation among students. Hadre et al. (2007) as stated in Filgona et al. (2020) educationists are very concerned with inspiring students to learn in the classroom, and one of the biggest obstacles in education is inspiring students to achieve in the classroom. Moreover, a key component of a high-quality education is student motivation. Motivation plays a crucial role in deciding if a student will be successful or unsuccessful in university. In Mauliya et al. (2020), reasons why students perform poorly academically include student do not receive care from their parents, a lack of effective teaching strategies, a shortage of learning resources, and a host of other issues.

In the context of Malaysia, the problem of learners having poor motivation towards learning is something that cannot be easily resolved. Other studies in the Malaysian context have revealed that this is a common phenomenon among Malaysian university students (Ainol Madziah & Isarji, 2009; Samsiah et al., 2009; Thang, 2009; Thang & Azarina 2007; Umadevi; 2001 as stated in Hamzah et al., 2022). As stated in Mauliya et al. (2020), given that any youngster may perform poorly academically, the issue is quite serious. Several factors, including students' general knowledge, educational style, cultural background, history, and place of residence, contribute to subpar academic performance. Students should feel motivated and eager to study, and this should be communicated to both the instructor and the surroundings. For example, students experience tension, anxiety, excitement, and sadness when they are enrolled in an educational setting.

In the context of Malaysia, motivation issues resulting from long history of academic failure and ineffective application of techniques (Licht, 1983 as cited in Borkowski et al., 1988), these intricate issues can be handled with proper solutions on how to apply study techniques appropriately. Hence, it focuses on whether their surroundings allow for the realization of an ideal learning environment, or if they have the necessary resources to support them in enhancing their motivation to learn from a social perspective (Mauliya et al., 2020). Students' families, environments, and social lives become new focal points instead of classes.

However, it is asserted that Malaysian university students are lack of motivation to engage in Physical Education (PE) activities. The degree of student motivation in physical education among Malaysian university students remains remarkably low.

A significant component of the educational system are universities. Currently, higher education is experiencing numerous changes. The approach to and value of education are changing. It is possible to say that the value of education has changed over the past fifty years or more. In an intelligence-driven society, universities have a crucial role in providing education. They offer students the opportunity to gain and improve numerous skills, knowledge, and talents. Since education is an endeavor to enhance one's own quality, knowledge, and potential, it is essential for any social creature that feels inadequate. These days, education and life are inextricably linked. Knight (2006) as stated in Mauliya et al. (2020) asserts that education is a lifelong learning process that can occur in a variety of endless life contexts. Hence, education can be widely understood to include all types of individual contact with the environment, whether formal or informal, as well as the process of learning anything in life.

Encouraging student motivation is a crucial objective in education. A university is a great venue to teach sustainable development principles that help raise public awareness of how to incorporate sustainability into everyday living.

Technology development has been the main emphasis of physical learning, but application of technology has frequently been overlooked. Students lost interest in studying because of feeling that physical education lessons were boring, which had an impact on the quality of their learning. In traditional education, skill development is often achieved through repeated exercises that emphasize skill description and demonstration. These instructional strategies could not satisfy students' demands and adequately cover the idea of physical literacy. The focus of future growth should be on how well instruction fits with competition or community activities, according to pedagogical theory.

While there are few empirical studies on student motivation in physical learning, numerous studies highlight the lack of motivation in online learning among university students. Online learning is a topic that university students are very interested in. Chengjun & Mustakim (2022) have conducted a study on

"Relationship Between Motivation and Learning Outcomes in E-learning among University Students in Malaysia". Brenda et al. (2021) focused their study on "Challenges and Experiences Faced by Malaysian Undergraduates in Coping with Low Academic Motivation During the COVID-19 Pandemic". Besides that, Ellen (2020) also conducted a study about "Online Learning Readiness Among University Students in Malaysia Amidst Covid-19". However, physical learning has limited studies to focus on.

Although student motivation in physical learning in Malaysia receives limited attention compared to the online learning, physical learning's cannot be overlooked because physical education is an important subject in the curriculum of formal education in the education system in Malaysia.

The objective of this project is examining full-time undergraduate students' motivation in Universiti Tunku Abdul Rahman (UTAR), given that it was listed in the Times Higher Education (THE) Asia University Rankings 2018 and within top 100 universities. As a UTAR student, we can access to data and information from UTAR may be readily available or easier to obtain compared to other universities. It includes existing research, surveys, or institutional data that can inform the understanding of motivation issues among students. This study mainly focused on full time students because majority of students take full time studies.

Moreover, Descals-Tomás et al. (2021), Wahyuni et al. (2022) and Kurniawan et al. (2018) found a significant relationship between Family Motivational Climate and Student Motivation. The family motivational climate is significant to students' motivation. The students are motivated to learn if they have the family's support throughout educational activities. However, Usman & Fadilah (2019) and Yang et al. (2018) indicated that there is negative relationship between them because the accomplishment of reading literacy is not influenced by parental engagement in the learning process. On the other hand, Cayubit; (2021), Noor et al. (2021) and Hafizoglu & Yerdelen (2019) argued that Classroom Environment has a positive relationship with Student Motivation. Classroom is the location that happens between interaction of lecturers and students and the usage of resources to facilitate knowledge. But Khan et al. (2019) and Cooper & Fry (2020) found that there is

negative relationship between them as the classroom environment may not be the sole determinant of student motivation.

With all these studies on Student Motivation providing mixed results with significant, no significant, positive, or negative relationships, a clear picture on the relationship between student motivation and the factors cannot be established. This is thus the gap to be filled up in the present study. Thus, a study on Family Motivational Climate and Classroom Environment factors on Student Motivation. However, studies on these factors from the students' perspective have received less attention in the past for physical learning. Most of these studies focus only on the university student's motivation in online learning. This is thus the gap to be filled up in the present study. Therefore, the present study aims at examining Family Motivational Climate and Classroom Environment factors that affecting Student Motivation in physical learning among UTAR students.

1.3 Research Objectives

1.3.1 General Objectives

The general objective of this research is to determine the factors affecting students' motivation in physical learning in UTAR.

1.3.2 Specific Objectives

These are specific objectives from stated general objectives are as follow:

1. To determine the significant effect of family motivational climate and students' motivation in physical learning in UTAR.

2. To determine the significant effect of classroom environment and students' motivation in physical learning in UTAR.

1.4 Research Questions

1.4.1 General Question

1. What are the factors that affect students' motivation in physical learning in UTAR?

1.4.2 Specific Question

1. Is there a significant effect of family motivational climate on students' motivation in physical learning in UTAR?

2. Is there a significant effect of the classroom environment on students' motivation in physical learning in UTAR?

1.5 Hypothesis of the Study

H_1: Family motivational climate have a significant effect on students' motivation in physical learning in UTAR.

H_2: Classroom environment has a significant effect on students' motivation in physical learning in UTAR.

1.6 Significance of the Study

In current learning environments, increasing student motivation is seen as a critical component in supporting successful learning outcomes. The common elements this study looked at were reward sensitivity and the classroom atmosphere. To fully understand the combined effects of reward sensitivity and a classroom environment that work well together, substantial empirical research is required in this understudied field.

Filling this research void will have a big impact on UTAR. Discoveries from our study can inform educational modules and program advancement activities at UTAR. Administration can utilize this data to plan physical learning educational modules that are adjusted with student motivation components, driving more engaging and effective learning encounters for students. Besides that, understanding the relationship between family, classroom, and student motivation can direct the improvement of bolster administrations custom-made to meet the wants of UTAR students. Administration can execute focused on mediations such as counselling administrations, mentorship programs, or family engagement activities to cultivate a steady environment conducive to student motivation and. In addition, by tending to variables that impact student motivation, UTAR administration can upgrade student retention rates and satisfaction levels. Students who feel motivated and engaged are more likely to persist in their studies and report higher fulfilment with their instructive involvement, eventually contributing to UTAR's reputation and success.

It has significant effects on how government policies and procedures are formulated about education. The overall effectiveness of the educational system can be improved by using this knowledge to inform the creation of educational policies that are sensitive to the various motivating demands of pupils. Moreover, our study's findings can help government organizations in charge of education make wise resource allocation decisions. For instance, policymakers can set aside funds to support family engagement initiatives or interventions meant to promote a supportive home environment if it is discovered that elements of the family motivational climate have a major impact on students' motivation. Additionally, this research can help develop tactics that support students' intrinsic drive, which helps

produce a generation of people who are more prepared to contribute to innovation, economic growth, and global competitiveness.

As a result, our study aims to both advance the scholarly conversation on student motivation and have a real influence on educational policies that align with governments' more general objectives of developing a healthy and progressive society.

1.7 Chapter Layout

Chapter 1 Introduction

The study's outline and the research problem are both explained in Chapter 1, which is the introduction. In addition, it states the goals for the study, including the topic to be investigated for hypotheses and the objectives to be met. Besides that, Chapter 1 discusses the importance of the study, stating its significance and including an introduction and conclusion.

Chapter 2 Literature Review

In Chapter 2, the introduction describes the chapter's goals and organizational scheme. A study of the literature that interprets the independent variables and dependent variables in the research that is found from secondary sources. In addition, it includes a discussion of relevant theoretical models that serve as the conceptual framework's foundation, and it clearly explores the relationships between the variables. It continues to build theories and comes to a conclusion.

Chapter 3 Research Methodology

The summary of the research technique and research design in Chapter 3 explains whether the study is qualitative or quantitative and explains why the particular research design was chosen. The technique of gathering primary and secondary data

that will be utilized to address the study questions and hypotheses is outlined in the next section. It also includes sample location, frame, elements, and methodologies as well as size, design, and techniques of the sampling. The selection of what measuring instrument, a research instrument, will be used to gather data will be followed by the measurement of the constructs, data processing, data analysis, and the conclusion.

Chapter 4 Research Result

The research's implications, conclusion, and discussion are all included in this chapter. Lastly, this chapter also contained a conclusion to this study.

Chapter 5 Discussion and Conclusion

In this chapter is comprised of the discussion, conclusion and implication of the research. Finally, a conclusion to this study was also included in this chapter.

1.8 Chapter Summary

To put it briefly, Chapter 1 states an overview of problem statement and research background concerning the elements that affect students' motivation to learn in UTAR. We discussed the background and the issue of study, obtained results, and concluded a discussion. In this instance, the reader keeps learning more and is gaining a comprehensive comprehension of the entire subject. A literature review can then be conducted by linking to the journal and the publications in that summary, therefore it should be moved to the following topic. The investigation, discussion, and test of the hypothesis are built upon it in following Chapter.

CHAPTER 2: LITERATURE REVIEW

2.0 Introduction

In chapter 2, we analyze previous studies that relevant to our topic. The information and data that we conducted in this research study is secondary source. This chapter explains the topic's fundamentals. This chapter evaluates relevant journal articles. Initially, we would address literature the review. Then, we study relevant theoretical frameworks by laying out our hypothesis and formulating theories. Journal articles linked the theory's dependent and independent variables. By this means, we will have a clearer understanding of their interconnection and be prepared for what we may expect in our chapters that follow. This chapter overview concludes.

2.1 Underlying theories

Self Determination Theory

Based on the idea of self-determination (SDT), people are proactive and driven by their own motivation (Ryan & Deci, 2017 as stated in Guay, 2022). Students' motivation in a variety of academic areas as well as at university in general has been studied using the self-determination theory (SDT). Ryan & Deci (2017) as stated in Bureau et al. (2021), it is a thorough motivational framework that has been utilized to explain why people succeed in various areas of life. SDT provides insights into comprehending and resolving student motivational issues, such as acquired helplessness or disengagement. Within SDT, motivation for students is described along a continuum of motivational qualities that provide different degrees of self-determination like being the source of one's behavior (Ryan & Deci, 2017 as stated in Bureau et al., 2021). It is crucial on how well in their learning experience (Pintrich & De Groot, 2003 as stated in Bureau et al., 2021).

Hence, Taylor et al. (2023) stated Physical Education (PE) lessons offer a chance to address student's low levels of physical activity and even encourage active lives

outside of university and throughout life. Encouraging motivation in physical classrooms is often considered a crucial first step towards accomplishing these goals. It follows that the widespread application of SDT to the study of motivational dynamics, behavior, and student outcomes in physical education is expected.

In Edward et al. (1991), intention is central to most contemporary theories of motivation, for example, Lewin (1951). They are interested in things that help individuals comprehend behavior-outcome instrumentalities and use effective behaviors to achieve those outcomes, as well as those that hinder them from doing so. There are several ways to conceptualize this difference between motivated and amotivated behavior, or between deliberate and nonintentional behavior.

Besides that, Edward et al. (1991) mentioned some of the recent studies, motivation has been associated with a range of educational outcomes for students at different stages of their education, from early elementary school to university. There are several studies like Daoust et al. (1988); Vallerand (1991); Vallerand & Bissonnette (in press), have demonstrated that students were more likely to remain in university than their less self-determined counterparts when it came to their desire for completing their coursework.

The conceptual comprehension and individual adjustment are determined to be the most crucial educational outcomes (Edward et al., 1991). The relationship between motivation and these results has been the subject of several recent studies. Researchers Grolnick and Ryan (1987) and Grolnick et al. (in press) discovered that students in elementary school exhibited superior conceptual learning and memory compared to those who reported less motivation for completing coursework. Similar outcomes with university students were found in an experiment conducted by Benware and Deci (1984). When learning text material for application, students demonstrated higher conceptual understanding and reported higher levels of intrinsic desire for learning than when learning the content for assessment. Similarly, Grolnick and Ryan (1987) discovered although testing led to short-term gains in memorization that faded after a week, elementary students showed less interest and poorer understanding when asked to learn material specifically for a test compared to learning without test mention.

As stated in Müller & Louw (2004), in comparison to other learners, motivated learners demonstrate longer-term retention of the material they have acquired, are more satisfied with their learning processes, gain information in a more differentiated and cohesive way, and use their knowledge more frequently. Also, students who are naturally driven and engaged may handle the responsibilities of the classroom more easily. They exhibit better academic performance, particularly in the long run, and believe they are more capable (Deci & Ryan, 1994; Deci, Vallerand, Pelletier & Ryan, 1991; Grassmann, Schultheiss & Brunstein, 1998; Reeve, 2002; Schiefele, 1996; Schiefele, Krapp & Winteler, 1992; Vallerand, Fortier & Guay, 1997; Williams & Deci, 1998 as stated in Müller & Louw, 2004).

Other than that, theories predict certain relationships between educational processes' efficacy and their results, like engaging and motivating designs for education. Research employing the Self-Determination Theory (SDT) has demonstrated that the fulfilment of fundamental psychological needs is a crucial need for the establishment and sustenance of personal interests as well as self-determined motivation (Deci, Ryan & Koestner, 1999; Lewalter, 2002; Lewalter, Wild & Krapp, 2001; Williams & Deci, 1998 as stated in Müller & Louw, 2004). The following pertinent circumstances are included in instructional designs that encourage motivation and interest such as students have choices and some flexibility in the learning process, which enables autonomous learning (for the "support of autonomy"); students receive insightful feedback on their learning processes and achievements (for the "support of competence"); and instructors accept their students, thereby fostering a welcoming and easygoing learning environment where are treated with loyalty and respect and where cooperation is encouraged (for "social relatedness").

In addition, SDT offers a comprehensive theoretical framework for comprehending how human motivation, ideal growth, personal development, and well-being are interconnected (Deci & Ryan, 1985; Ryan & Deci, 2017 as stated in Shin & Johnson, 2021). Also, because of their self-determination, experts have shown that genuinely driven students learn more and succeed academically (Guay et al., 2008; Taylor et al., 2014 as stated in Shin & Johnson, 2021). Therefore, the most productive learning environment in a classroom is one that encourages intrinsic

incentive for learning as opposed to more externally regulated motives (Taylor et al., 2014 as stated in Shin & Johnson, 2021).

SDT claimed that the relationship between parental variables (family motivational climate) and students' academic motivation and involvement is made clear and concise as both theories emphasize how the social environment affects motivation, growth, and well-being (Deci & Ryan, 2000; Ryan & Deci, 2000 as stated in Mansour & Andrew, 2009). This factor is essential to students' accomplishment motivation in the academic setting and the current study aims to investigate how the home and parental circumstances influence students' academic development, specifically about the third component, connectivity. SDT suggests that different parenting styles can influence the family motivational climate and subsequently affect student's motivation and development. "Constellation of attitudes towards the child that are communicated to the child and that, taken together, create an emotional climate in which the parent's behaviors are expressed" is the definition of parenting style (Darling & Steinberg, 1993, p. 488 as stated in Mansour & Andrew, 2009). The degree to which parenting style impacts success motivation in the current study is interesting when compared to other home characteristics including resources at home, parental participation in the university, and concrete assistance provided both inside and outside the home.

In Ennis (2003) as stated in Sun et al. (2017), the relationship between SDT and the classroom environment is significant, as it provides insights into how the learning environment can be structured to support students' physical learning motivation. SDT contends that human motivation, behavior, and well-being are based on the interplay between the person and the social environment (Deci & Ryan, 2000 as stated in Sun et al., 2017), makes it a suitable theoretical foundation for comprehending the PE classroom and students' learning. The social or learning context can be classified as autonomous, supporting, or controlling based on SDT (Deci & Ryan, 1985, 2002 as stated in Sun et al., 2017). Reeve, Deci, and Ryan (2004) as stated in Sun et al. (2017) maintained that instructors could not grant students a sense of autonomy; they could only support it. Even when instructors provide their students options and choices, they cannot feel autonomous. Rather, Reeve, Deci, and Ryan as stated in Sun et al. (2017) recommended that instructors provide students the chance to relate what they are learning in the classroom to their

basic needs, offer classroom supports for their perceived competence, autonomy, and relatedness, encourage student engagement.

While the impact of autonomy-supportive learning environments on students' needs satisfaction, self-determined motivation, and learning outcomes has been studied in many of the previously presented studies, the impact of instructors' controlling behaviors on students' perceptions of a controlling environment and self-determined motivation has received less attention (Sun et al., 2017). It is important to comprehend how students the perceive regulating behaviors of instructors and the controlling environment in physical education, as students are typically required to physically complete assigned tasks. A special chance to meet students' competency needs arise from the autonomy-supportive atmosphere and the unit subject focus.

Self-determination theory (Deci & Ryan, 1985, 1991; Ryan & Deci, 2000a, 2002 as stated in Standage et al., 2005) is the organismic-dialectic theory of motivation that people actively seek out the best challenges and novel experiences to learn and assimilate (Deci & Ryan, 1991 as stated in Standage et al., 2005). Standage et al. (2003) as stated in Standage et al. (2005) used a tool developed by deCharms (1976) to investigate the effects of perceptions of an origin atmosphere (autonomy-supportive) on the perceptions of autonomy, competence, and relatedness among PE students. The origin climate was shown to be slightly predictive of relatedness and competence satisfaction and somewhat predictive of autonomy satisfaction. However, Ryan and Deci (2000b) as stated in Standage et al. (2005) assert that "classroom conditions that allow satisfaction of these three basic human needs that support the innate needs to feel connected, effective, and agentic as one is exposed to new ideas and exercises new skills which are necessary for the facilitation of more self-determined learning in university".

Moreover, because the idea of self-determination maintains that fulfilling all three needs is necessary for the best possible psychological functioning (Deci & Ryan, 2000 as stated in Standage et al., 2005), overall need it was anticipated that satisfaction would play a significant role as a mediator between the many motivational laws examined in this study and a need-supporting environment. Standage et al. (2003) as mentioned in Standage et al. (2005) noted that regulation and expected positive connections exist between need satisfaction and intrinsic

motivation. Alternatively, Standage et al. (2003) as cited in Standage et al. (2005) proposed that amotivation and external regulation would be inversely related to the fulfillment of needs. An examination was conducted on a prediction that deviated greatly from the core principles of self-determination theory. Considering that prior studies using PE have demonstrated feelings of relatedness and autonomy, and introjected regulation is favorably correlated with judgements of relatedness and competence (Ntoumanis, 2001 as stated in Standage et al., 2005).

Finally, based on the principle of self-determination theory (Deci & Ryan, 1985, 1991; Ryan & Deci, 2000a, 2002 as stated in Standage et al., 2005), previous PE research like Standage et al. (2003) has frequently focused on just one motivating goal. In line with the hypothesis put forward by self-determination theory (Deci & Ryan, 1985, 1991; Ryan & Deci, 2000a, 2002 as stated in Standage et al., 2005), to test the hypothesis that autonomous motivational regulations, rather than regulating ones, are the source of positive emotional, cognitive, and behavioral indices, four result indices were investigated. These were the students' self-reported behavioral result (behavioral outcome), cognitive outcome (degree of focus), and emotional outcome (experience of positive and negative affect). Besides, in line with earlier PE-based research and self-determination theory (Ntoumanis, 2001; Standage et al., 2003 as stated in Standage et al., 2005), it proposed that recognized regulation and intrinsic motivation would negatively predict negative affect and positively predict focus, positive affect, and preference for difficult activities. On the other hand, the hypothesis was that amotivation and external control would negatively predict good affect, and positively predict negative affect, focus, and the desire for difficult activities. Notably, it looked at the "usual" motivation of the PE students for their lesson in the current study.

2.2 Review of the Literature

2.2.1 Dependent Variable – Student Motivation

Wijsman et al. (2018), Guay (2021) and Firdous & Riaz (2021) concur that autonomous regulation influence on students' motivation is one of the most important. The study of Wijsman et al. (2018) found that favourably affected subjects exhibited a significantly higher level of autonomous motivation than unfavourably affected subjects. Higher levels of autonomous motivation were correlated with higher average report card grades. Besides that, Guay (2021) notes that students' academic performance improves, their level of satisfaction increases, they learn more effectively, and they experience more positive emotions at school the more autonomously motivated they are. According to empirical research on motivation and academic outcomes, autonomous motivation is linked to high academic achievement (Firdous & Riaz, 2021). I agree that autonomous motivation can improve student motivation. This is because when a person is passionate about something, he or she will take the initiative to learn and continue to work hard without the supervision of others.

Furthermore, the results of Wijsman et al. (2018) and Firdous and Riaz (2021) show an impact between controlled regulation and student motivation. As indicated by Wijsman et al. (2018), in subjects that were not fortunate, controlled motivation was found to be a poor predictor of performance. In this case, the person feels compelled to work on the subject even though they dislike it, either because of external pressure or internal pressure. Firdous and Riaz (2021) discovered that students who exhibited high levels of controlled motivation also tended to use unhealthy stress-reduction techniques more frequently. Nonetheless, in Taiwan, higher levels of controlled motivation were linked to students' superior academic performance. With this knowledge, educators could effectively address student motivation and take significant actions to support student's academic success at the university level. These results demonstrate that as students advance in their university studies, controlled motivation becomes more significant and autonomous motivation decreases. On the other hand, the more students have pleasure or value learning activities (autonomous regulation), the more they experience positive outcomes at school. Using contingent rewards or punishment as a motivational source

(controlled regulation) appears useless in helping students (Guay, 2021). I also agree that controlling regulation can affect student motivation, especially when the rewards after completing the goals are attractive enough. Of course, in addition to rewards, students will also work hard to avoid punishment. But in my opinion, these external factors cannot continue to motivate students.

2.2.2 1ˢᵗ Independent Variable - Family Motivational Climate

The concept of family motivational climate is meant to supplement, not replace, parental participation. The items from the family motivational climate questionnaire were added, even though only after their positive or negative relationship to motivation was examined from the perspective of these theories. The "family" refers to the context in which patterns of action arise. Then, "motivational" refers to the potential for such patterns to support learning or performance-oriented goals. Besides, "climate" refers to the "interaction" between patterns of action and students' motivational orientation (Prado Morales et al., 2020).

According to this study, one of the things that encourages students to pursue higher education is the influence of their families (Abdulhameed & Khalid, 2021). In addition, a person is more influenced by their family than by other institutions. Hence, family is a major factor in determining student's motivation. Consequently, this study is to investigate the problems and relationships exist between college students and their families. This was accomplished by looking at the individual histories of the students as well as their family backgrounds and their educational environments (Perera, 2012).

Besides, the findings show that the academic self-efficiency and the impression of progress toward academic goals indicate that the family does affect academic success. Interventions targeted at strengthening family support, which might function as a filter against harmful environmental effects (Silva et al., 2021). Moreover, family functioning has significant impact on university students' lives and development. The findings indicate a link between how well family functioning and the problems that college students may experience (Little, 2004). Additionally,

students have a deep connection with their families when they start college, and the majority of them want to have a close, ongoing relationship with them that involves honest communication, encouragement, and validation from their parents (Mediaplanet, 2020).

The definition of messages is the statements say by parents such as emphasize the benefits of knowledge over knowledge acquisition, self-improvement over competitiveness, and learning and process above grades. The first dimensions of the family motivational climate that are used for this research is messages. Several researchers found that there have significant relationship between messages and family motivational climate. Parental messaging can help to define communication strategies that emphasize learning over grades and self-improvement over competitiveness (Tapia et al., 2013). Parental communications to university student describe communication methods that provide the messages prioritize learning over competitiveness and place an emphasis on the process of learning rather than grades (Prado Morales et al., 2020). Parents transmit to university student by focusing more on the benefits of learning and personal development than on academics (del Prado Morales et al., 2021).

The meaning of structure is the level and type of supervision over students' behavior. For example, ensure that assignments are completed, manage free time, provide clear guidelines, and allow for some degree of freedom. The second dimensions of the family motivational climate is structure. Structure is a family support factor linked with educational motivation. It also takes into consideration limitations or constraints in the family environment and positively links them to student involvement in the classroom. This study used rules at home, affective support, and intellectual support to symbolize and provided to university students (Descals-Tomás et al., 2021). As long as structure is viewed as supportive of competence and autonomy rather than as a means of control, it may be helped toward learning (Tapia et al., 2013). Besides that, there has a big impact of parents' structure on universities students' coursework that can affect the motivating atmosphere in the house (del Prado Morales et al., 2021). However, it was shown that there was no statistically significant correlation between students' academic motivation and indulgent parenting (Mihret et al., 2019).

The definition of help/modelling is the quantity and degree of parental guidance and support. For instance, spend time assisting university student, being understanding of their difficulties, demonstrating an interest in culture and reading. The last dimensions of the family motivational climate is help/modelling. Some researchers found that there is strong correlation between help/modelling and family motivational climate. Furthermore, the importance of academic support is particularly clear, but the evaluation of it is influenced by gender as well. Girls place a high value on parents' patience (Tapia et al., 2013). In this study, the positive relationships between motivation and parental participation observed in involvement literature are consistent with the favorable relationships established. (Prado Morales et al., 2020). In addition, the family motivational climate additionally values the dimension "help." It shows in the amount of time and patience parents devote to raising the student as well as in their enthusiasm for education, culture, and reading (del Prado Morales et al., 2021).

In Descals-Tomás et al. (2021), dimension of structure is significant to the family motivational climate, but it did not mention about these two dimensions of messages and help/modelling. Therefore, we consider the messages and help/modelling are not significant between them.

The dimension of relationship with teachers will not be used. This is due to university students always have their own thinking and action, their parents will not intervene. In addition, the students have grown-up, and they can solve problem on their own. In addition, the question of this dimension is related to the relationship between parents and teachers not suitable for the university students.

2.2.3 2nd Independent Variable - Classroom Environment

The dimensions of the classroom environment that are used for this research are collaborativeness. In addition, there is significant evidence that setting up classrooms in accordance with the cooperative-learning model may enhance students' learning in a variety of physically learning settings (Premo et al., 2018). In this article mentioned that how the classrooms improve student collaborativeness and interaction while also improving the learning environment and making it more appealing for students to engage in active physical learning (Arafa Hassan & Abd Elrazek Baraka, 2021).

The second dimension of the classroom environment is order and student involvement. On the other hand, it was shown that the university's facilities and the classroom atmosphere were important predictors of both involvement and performance in the classroom (Hanaysha et al., 2023). There is no significance between these variables, indicating that the physical learning environment is probably not to blame for the little variation in the number of students who dropped or finished the course (Cooper & Fry, 2020). Moreover, there have a low significant relationship of individual assets, which means that enhancing school climate will improve well-being experience and indirectly improve school engagement regardless of learning abilities and personality traits. Hence, it encourages working in/with schools to adopt productive education programs that help and maintain a productive school culture and school-community wellbeing culture (Lombardi et al., 2019).

The third dimension of the classroom environment is teacher involvement. A physical learning environment may be thought of as a community, and the values that exist there have an impact on how its members behave. Lecturers and students can influence one another in ways that either encourage or inhibit innovation (Richardson & Mishra, 2018). Inside the classroom, teachers have a big impact on the lives of their pupils. In addition to teaching, their role includes establishing a positive physical learning environment in the classrooms. Success for students is not merely determined by grades received, but also by how those marks were obtained, whether the students showed interest in the material or simply learned it

for its own sake. Therefore, the psychological benefit of being in a relaxed setting with others is just as important in the classroom (Inayat & Ali, 2020).

The last dimension of the classroom environment is teacher support. Lecturers are playing important role in this situation because the activities they utilize in the classroom and the environment they foster may have an impact on students' task orientations, cohesion, and teacher support (Khajavy, 2018). Moreover, student achievement is significantly impacted by teacher support. It serve as a safe base, where student may conduct physical learning activities and explore the school environment (Yu & Singh, 2018).

According to Hanaysha (2023), it mentioned that order and student involvement is significant to the family motivational climate. However, in this journal article did not stated that collaborativeness, teacher involvement and teacher support. As a result, we consider the three of the dimensions are not significant between them.

2.3 Proposed Conceptual Framework

Independent Variables (IV)   **Dependent Variable (DV)**
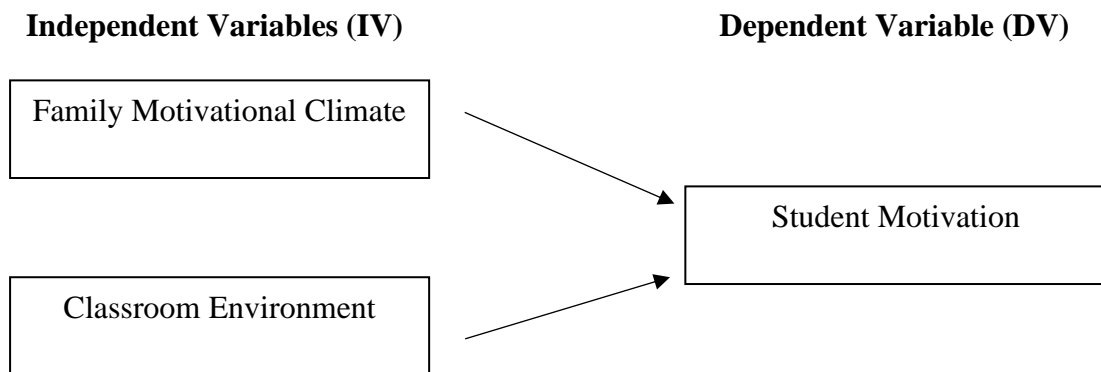
Figure 2.1 **Proposed Conceptual Framework**

The literature review served as the foundation for the development and construction of the proposed conceptual framework. The figure indicates the independent and dependent variables are the two main variables in this research study. Figure 2.1 above illustrates the relationship between family motivational climate (IV), classroom environment (IV), and student motivation (DV) among students in physical learning in UTAR.

In this framework, one of the factors of student motivation among UTAR students is the classroom environment. According to self-determination theory, the classroom environment is related to student motivation. Self-determination theory (SDT) is a theoretical framework that clarifies how human motivation, personal growth, and well-being are interconnected. Shin and Johnson (2021) investigate how peer interactions in the classroom, particularly student-to-student affirmation, can affect pupils' drive to act independently. The results of the study show that student-to-student confirmation has a beneficial impact on students' sense of relatedness and competence, which subtly raises their intrinsic motivation to learn. The act of recognizing, admitting, and approving another person's experience and feelings as accurate and legitimate is known as confirmation (Shin & Johnson, 2021).

On the one hand, according to Deci and Ryan (2016), students' motivation is better when it is self-directed and when teachers foster physical learning environments that fulfil their fundamental psychological needs for relatedness, competence, and autonomy. Then, to improve their students' self-motivation and engagement, teachers should give them options and opportunities to choose their physical learning activities. In addition, encouraging student autonomy and learning can be done by removing barriers to their exploration and experimentation and by acknowledging that learning naturally entails mistakes and experiments. While evaluative feedback might be perceived as controlling and weakening intrinsic motivation, specific and explicit positive feedback about what pupils have done well tends to boost autonomous motivation.

Self-determination theory also links family motivational climate to student motivation. Many authors agree that the emotional bond between parents and university students, the expectations parents have for the student's academic success, and the value parents place on learning because it satisfies student's four basic needs which are competence, autonomy, relatedness, and purposefulness. There are the three most significant factors influencing parental practices related to student's physical learning process.

The quality of an emotional relationship between a parent and student can be seen in the bonds that are forged, the tone of voice used, the active listening that occurs when problems arise, and the emotional support and feedback that is given. In other words, a strong emotional bond makes students feel valued, capable, engaged, and independent, all of which motivates them to learn and succeed. Besides, one of the things that has the biggest impact on parents' expectations for student's academic performance is the latter's drive for achievement (Del Prado-Morales et al., 2020). The opinions of their parents shape how competent they believe themselves to be. When students hear this view expressed in the form of disparaging remarks about their accomplishments and shortcomings, it eventually affects their drive and drive to succeed. Parents may tell students, for instance, that "you can achieve it" or "you'll never achieve it (Tapia et al., 2013)."

According to Del Prado-Morales et al. (2020), parental practices are also influenced by the value that parents place on university student's physical education. If parents

believe that education has intrinsic value, they will probably take many steps to ensure that students have comfortable physical learning environments. Tapia et al. (2013) found that when parents assist students with their homework, for example, especially if students understand that this type of assistance increases their competence and independence, they are demonstrating this value. When parents place a high value on education, they can serve as positive role models for students by, among other things, demonstrating to them how to read with empathy, to value culture, and to look for informal learning and general knowledge opportunities (Del Prado-Morales et al., 2020).

2.4 Hypothesis Development

2.4.1 There is a significant impact of family motivational climate on students' motivation

Researchers have studied the family motivational climate because they believe it to be a crucial factor in affecting learning of students. **The family motivational climate is significant to students' motivation.** The student will be more motivated to learn if they have the family's support throughout educational activities. Moreover, studies have demonstrated a strong correlation between physical learning motivation and social support from the family (Wahyuni et al., 2022). In addition, parents play a significant role on students' physical learning success. The degree of parental participation in education and the familiarity of parents with university student have an impact on students' physical learning success (Kurniawan et al., 2018). On the other hand, a meta-analysis on the connections between a variety of student characteristics, including academic motivation, parental support, and teacher support (Korpershoek et al., 2020). One of the major factors influencing the student's motivation and success is family. In this study mentioned that the student's motivation and accomplishment are influenced by several factors such as the living arrangements and possibilities their parents provide, whether they live together or apart (Engin, 2020). Support for family is the

subcategory. Parental support, negative parental influence, parental monitoring, parental help, parental control, and parental assistance with academic assignments were all found to be positively correlated with motivation (Isik et al., 2018).

According to Yang et al. (2018), **family motivational climate is insignificant with student motivation.** This is due to the accomplishment of reading literacy is not influenced by parental engagement in the physical learning process.

We want to study the impact of family motivational climate on the students' motivation in the educational industry because some of the researchers have found that family motivational climate has a significant effect on students' motivation while others found family motivational climate has a non-significant effect on students' motivation.

H_0: Family motivational climate have no significant effect on students' motivation in physical learning in UTAR.

H_1: Family motivational climate have a significant effect on students' motivation in physical learning in UTAR.

2.4.2 There is a significant impact of classroom environment on students' motivation

Researchers have studied the classroom environment because they believe it to be a crucial factor in affecting physical learning of students. Classroom environment is the location that happens between interaction of lecturers and students and the usage of resources to facilitate knowledge. A conducive classroom environment has a significant impact on the academic performance of students and their attitudes. Besides, there are several studies showing that there is a relationship between the expectation of students about their classroom environment and the variety of mental and emotional learning outcomes, including motivation, accomplishments, self-control and others. In other words, the students will become more motivated if the classroom environment hits their expectations. Studies in the field of scientific

education have typically demonstrated the strong correlation between the classroom environment and student motivation (Hafizoglu & Yerdelen, 2019).

The classroom environment is significant to students' motivation. In the journal of Noor et al. (2021) has mentioned that the job of research and orientation is a psychosocial component that has a large and favorable impact on the students' motivation and physical learning in the classroom environment (as cited in Maison, 2019). Moreover, the results of this study imply that students' motivation to perform well in university is influenced by how they learn in the classroom. The model of classroom has an impact on the motivation of the students there. In other words, the type of physical learning environment encouraged students to do well in the classroom. People began to get engaged about education as a result of their improved situation (Noor et al., 2021).

The study found no significant correlation between classroom environment and student attrition in undergraduate courses at a higher education institution. After being systematically examined, student feedback did reveal themes about the advantages of learning studios, including improved student feeling of belonging, a laid-back room arrangement, active engagement and cooperation, and connection with the teacher. However, it was shown that **students' self-controlled motivation not impacted by the physical learning environment** (Cooper & Fry, 2020).

We want to study the impact of classroom environment on the students' motivation in the educational industry because some of the researchers have found that classroom environment has a significant effect on students' motivation while others found classroom environment has a not significant effect on students' motivation.

H_0: Classroom environment has no significant impact on students' motivation in physical learning in UTAR.

H_1: Classroom environment has a significant impact on students' motivation in physical learning in UTAR.

2.5 Chapter Summary

In summary, the research on two independent variables—the classroom environment and the motivational climate of the family—and one dependent variable—student motivation—was reviewed in Chapter 2. Chapter 2 also involves conceptual framework and hypothesis development which discussed in the literature review. The research methods that were used are described for chapter 3 and are included in this chapter.

CHAPTER 3: RESEARCH METHODOLOGY

3.0 Introduction

Main objective of Chapter 3 is to analyze research methods that we used for our study and to describe the factors that influence student motivation in physical learning in UTAR. To generate data to support research questions and hypotheses, this chapter discusses how to structure the research process. The methodology of our study, data collection techniques, sample size requirements to support the reliability of our findings, and data analysis procedures are all broadly summarized in this chapter. Each of these elements—the research design, data collecting methods, sample plan, operational definitions of constructs, measurement scales, and data analysis methods—will be covered in detail in the sections that follow.

3.1 Research Design

The primary goal of the research design is to give the researcher a technical framework, which is another way of describing a blueprint for the study. The most crucial component of research design is selecting the procedures to use to collect the variables needed for the study (Jansen, 2023). Qualitative and quantitative research are the two categories into which it may be separated. A study that conducts analysis using words, images, and observations as opposed to figures or facts is known as qualitative research. The focus of quantitative research, in contrast, is on objectively quantifiable metrics and the statistical, mathematical, or numerical interpretation of data acquired through survey and questionnaire responses (Sileyew, 2020). Surveys are the most typical source of quantitative data. The quantitative research was performed to analyze the reasons that affect student motivation in UTAR in this research. This is because we applied SPSS software to run the data we collected and analyze the statistics in pie charts and histograms. On the one hand, we distribute questionnaires to our target population to get the data.

The research can be divided into three categories for classification purposes which are exploratory research, descriptive research, and causal research. The study of a cause-and-effect relationship in which one thing has an impact on another is known as causal research. The best method for determining the link between the independent and dependent variables, we discovered, is casual research (Semwal, 2023). In this research, causal research is implemented because the purpose is to examine the factors that influence student motivation in UTAR.

3.2 Data Collection Methods

The first and most significant phase in the data collecting study is to gather relevant data to measure and analyze insights. The trustworthiness of the data is critical for producing reliable study results. Data is collected using two methods: primary data and secondary data. Since it was gathered to answer a specific study issue, primary data is frequently trustworthy, real, and unbiased (Simplilearn, 2023). This study relied on first-hand data from a questionnaire survey because they make it simple to analyse and assess the information (Taherdoost, 2021). The justification for adopting a questionnaire survey is that it is quick and inexpensive to collect, has a wide range of collection options, and is simple to evaluate (Duggal, 2023). The questionnaire contained several questions, which were prepared using Google Forms and distributed to student in UTAR through WhatsApp, e-mail or MsTeam.

3.3 Sampling Design

3.3.1 Target Population

The target population is the particular conceptually limited set of possible participants that defines the characteristics of the population of interest (Casteel & Bridier, 2021). Our target population in this project is UTAR students. This is because we are UTAR student so that can easily to collect the data from them. The

number of UTAR students is around 20000 which include the students of Sungai Long and Kampar campus (Collegedunia, 2023). In addition, 20000 of UTAR student we get the number of students from the website.

3.3.2 Sampling Frame and Sampling Location

The population of interest's members are listed in a sample frame from the chosen probability sample. However, it cannot represent the whole population of interest (Casteel & Bridier, 2021). Since we cannot get the students' list, we do not have a sampling frame. Moreover, the students' list is the privacy and security and cannot easily to disclosure. Furthermore, the place from where an environmental sample was taken is known as the sample location. In addition, sample locations should be secure and convenient (StudySmarter, n.d.). The location of the sampling is in UTAR Kampar and UTAR Sungai Long.

3.3.3 Sampling Elements

UTAR students had taken part in this survey as the main target respondents for our research. Hence, everyone who studies full time in UTAR can become our respondents. In addition, by using their personal experiences, respondents will truthfully and properly describe their motivation and the elements that influence it.

3.3.4 Sampling Technique

The majority of sampling techniques may be divided into two categories: probability sampling and non-probability sampling. Since non-probability sampling

is independent of randomness and have used in this project. This method is more dependent on the researcher's talent for choosing components throughout a sample (Shona, 2019). Therefore, the quota sampling is appropriate for our purpose instead of convenient, reduce bias, and calculate percentage. This is a result of UTAR students is in different subgroups then can estimate the percentage.

3.3.5 Sampling Size

The number of individuals or data included in research is referred to as the sample size. The accuracy of our estimations and the study's ability to draw conclusions are two statistical qualities that are influenced by sample size (Andrade, 2020). From the population of UTAR students and 377 UTAR students will be chosen to become the sample size of this project refer to the Krejcie and Morgan table (Appendix 1). Furthermore, a pilot test will be conducted to pre-test the questionnaires by choosing 50 UTAR students.

3.4 Research Instrument

The data needed for this project gathered through questionnaires. The ease of use and time savings in data collection are the main factors in adopting this instrument. The survey questions have preset alternatives, and respondents only have a few options and only can choose one answer. There are four sections in the questionnaires. In Section A which is demographic profile, asks questions on respondents' gender, age, race, faculty, and other characteristics. Section B then discusses family motivational climate. There are 11 questions on the family motivational climate component in total. Besides, 28 questions in section C are also pertinent to the classroom environment. Finally, 19 questions in section D are concerned with the students' motivation, it serves as the project's dependent variable.

Table 3.1

Questionnaires

Section B: Family Motivational Climate

Q1	When I fail an exam, my parents told me to look for failure reasons, instead of paying attention to grades.	Positive
Q2	My parents often told me that I have to get better grades than my peers.	Positive
Q3	If I do not study or do my homework, my parents do not insist too much that I do it.	Negative
Q4	My parents do not allow me to watch TV, play or access to Internet unless I have finished my homework.	Positive
Q5	My parents sometimes tell me to study and sometimes not: there are no fixed rules.	Positive
Q6	If I have difficulties with a task, my parents do not do it themselves: They teach me to carry it out by myself.	Positive
Q7	My parents try not to let anyone bother me while I am studying.	Positive
Q8	Although my parents do not have time to help me, if I need help, they manage to take time.	Positive
Q9	I ask for help from my parents when I need it, because they (at least one of them) have enough patience to teach me.	Positive
Q10	My parents like to visit places like museums, expositions, etc., where they can learn.	Positive
Q11	My parents read books very often.	Positive

Section C: Classroom Environment

Q1	Classmates help each other in learning.	Positive
Q2	After class, classmates can find others to discuss homework.	Positive
Q3	If a student has difficulty in learning, he/she can find classmates for help.	Positive
Q4	If a student does not understand the instructor's instruction, he/she can ask classmates.	Positive
Q5	In class, student can usually keep quiet.	Positive
Q6	During lesson, students are working hard to do their assignment.	Positive
Q7	The classroom is usually very noisy.	Negative
Q8	In class, students are working very hard to study.	Positive
Q9	When the instructor teaches, students will normally behave themselves.	Positive
Q10	Students are often disturbed by other classmates in class.	Negative
Q11	Student don't pay attention to classroom discipline.	Negative
Q12	In class, some students speak loudly some read other books and some talk with each other.	Negative
Q13	Instructor is always willing to answer student's questions.	Positive
Q14	Instructor is patient in teaching students.	Positive
Q15	Instructor often draws attention to examinations.	Positive
Q16	If a student requests, instructor will explain and answer patiently.	Positive

Q17	Instructor is serious in teaching students.	Positive
Q18	Instructor arranges adequate time for teaching every lesson.	Positive
Q19	Before class, instructor has enough preparation.	Positive
Q20	Instructor explains teaching contents in detail.	Positive
Q21	Instructor helps students to revise before test and examinations.	Positive
Q22	Instructor often rewards students for progress in academic achievements.	Positive
Q23	Instructor often helps students to set learning targets.	Positive
Q24	Instructor often encourages students to see whether their own study method is helpful for learning.	Positive
Q25	Instructor gives advice on students' learning progress.	Positive
Q26	Instructor praises students' performance in learning.	Positive
Q27	Instructor often designs some class assignments so as to allow students to apply knowledge in daily lives.	Positive
Q28	Instructor often provides some strategies for improving learning to every student.	Positive

Section D: Students' Motivation

Q1	I participate actively in my class because I feel like it's a good way to improve my skills and my understanding of the material.	Positive
Q2	I participate actively in my class because learning is important to my intellectual growth.	Positive
Q3	I am likely to follow my instructor's suggestions because I believe my instructor's suggestions will help improve my skill and understanding.	Positive

Q4	I will work to expand my knowledge throughout my degree because it's exciting and interesting to learn new things.	Positive
Q5	I will work to expand my knowledge throughout my degree because it's a challenge to really understand course material.	Positive
Q6	I participate actively in my class because others would think badly of me if I didn't.	Positive
Q7	I participate actively in my class because I feel proud when I do well.	Positive
Q8	I am likely to follow my instructor's suggestions because I would get a bad grade if I didn't do what they suggest.	Positive
Q9	I am likely to follow my instructor's suggestions because I would feel guilty if I didn't comply with my lecturer's suggestions.	Positive
Q10	I am likely to follow my instructor's suggestions because it's easier to do what I'm told than to think about it.	Positive
Q11	I will work to expand my knowledge throughout my degree because a good GPA will look positive on my record.	Positive
Q12	I will work to expand my knowledge throughout my degree because I want others to think that I am intelligent.	Positive

Table 3.2

Pilot Study

Pilot Study

Day 1	Distributed 10 online surveys to targeted respondents by Whatsapps.
Day 2	Distributed 12 online surveys to targeted respondents by Whatsapps and reminding the targeted respondents to complete Google Form.
Day 3	Distributed12 online surveys to targeted respondents by scanning QR code and reminding the targeted respondents to complete Google Form.

Day 4	Distributed15 online surveys to targeted respondents by Whatsapps and remind again the targeted respondents to complete Google Form.
Day 5	Distributed 15 online surveys to targeted respondents by scanning QR and reminding the targeted respondents to complete Google Form.
Day 6	Remind again the targeted respondents to complete Google Form.

Table 3.3

Full Study

Full Study
Day 1	Distributed 30 online surveys to targeted respondents by Whatsapps.
Day 2	Distributed 32 online surveys to targeted respondents by Whatsapps and reminding the targeted respondents to complete Google Form.
Day 3	Distributed 35 online surveys to targeted respondents by scanning QR code and reminding the targeted respondents to complete Google Form.
Day 4	Distributed 30 online surveys to targeted respondents by Whatsapps and remind again the targeted respondents to complete Google Form.
Day 5	Distributed 40 online surveys to targeted respondents by scanning QR and reminding the targeted respondents to complete Google Form.
Day 6	Distributed 45 online surveys to targeted respondents by Whatsapps and reminding the targeted respondents to complete Google Form.
Day 7	Distributed 30 online surveys to targeted respondents by scanning QR and reminding the targeted respondents to complete Google Form.
Day 8	Distributed 35 online surveys to targeted respondents by Whatsapps and reminding the targeted respondents to complete Google Form.

Day 9   Distributed 30 online surveys to targeted respondents by Whatsapps
         and reminding the targeted respondents to complete Google Form.

Day 10   Remind again the targeted respondents to complete Google Form.

3.5 Constructs Measurement

Nominal Scale

Based on the Demographic Profile (Section A) in our questionnaire, question 1, 3, 5, 6, 7, and 8 are nominal scales. Gender university locality, race and others cannot be compared because it has no distances. Based on a characteristic, it assigns figures from nominal scales to a measurable number of different groups. Although we may identify the categories, there is no inherent hierarchy. Nominal data, such as the test circumstances of both control and treatment groups, might in certain situations establish categories for the results which we want to compare (Frost, 2023).

Ordinal Scale

Based on the Demographic Profile (Section A) in our questionnaire, question 2 and 4 is ordinal scale. The ordinal scale can be categorized and ranked in an order, however the gaps between the ranks are indeterminate (Bhandari, 2023).

Interval Scale

Based on the Family Motivational Climate (Section B), Classroom Environment (Section C) and Students' Motivation (Section D) in our questionnaire, there are interval scales for every question. The interval scale is a type of metric scale and explains quantitative values. It involves the nominal and ordinal scales in terms of levels of measurement (Statista, n.d.).

Table 3.4

Demographic Profile

Section A: Demographic Profile	
Questionnaire	**Source**
1. Are you full time student in UTAR?	-
2. Gender University Locality	(Breytenbach et al., 2013)
3. Age (Years)	
4. Years of Study	
5. Campus	
6. Race	
7. Faculty	

Table 3.5

Student Motivation

Dependent Variable: Student Motivation		
Dimension	**Questions**	**Source**
Autonomous Regulation	1. I participate actively in my class because I feel like it's a good way to improve my skills and my understanding of the material.	Adopted from (Chamberlin et al., 2018)

2. I participate actively in my class because learning is important to my intellectual growth.

3. I am likely to follow my instructor's suggestions because I believe my instructor's suggestions will help improve my skill and understanding.

4. I will work to expand my knowledge throughout my degree because it's exciting and interesting to learn new things.

5. I will work to expand my knowledge throughout my degree because it's a challenge to really understand course material.

Controlled Regulation

6. I participate actively in my class because others would think badly of me if I didn't.

7. I participate actively in my class because I feel proud when I do well.

8. I am likely to follow my instructor's suggestions because I would get a bad grade if I didn't do what they suggest.

9. I am likely to follow my instructor's suggestions because I would feel guilty

if I didn't comply with my instructor's suggestions.

10. I am likely to follow my instructor's suggestions because it's easier to do what I'm told than to think about it.

11. The reason that I will work to expand my knowledge of my study is, because a good grade in my study will look positive on my record.

12. I will work to expand my knowledge throughout my degree because I want others to think that I am intelligent.

The Learning Self-Regulation Questionnaire (SRQ-L) was used to gather information indicating students' motivation to learn (Self-Regulation Questionnaires (SRQ) – selfdeterminationtheory.org, n.d.). Ryan and Connell (1989) established the format for these questionnaires, and Black and Deci (2000) and Williams and Deci (1996) validated it earlier. To make the questionnaire more broadly applicable to undergraduate students' learning motivations, the research of Chamberlin et al. (2018) was adopted. The wording of it was slightly modified from Black and Deci (2000) and Williams and Deci (1996) studies conducted in the fields of chemistry and medicine. The revised questionnaire is displayed in the above table. The sentence "I will participate actively in medical interviewing because..." was replaced, for instance, with "I will participate actively in learning because..."

Table 3.6

Family Motivational Climate

Independent Variable: Family Motivational Climate

Dimension	Questions	Source
Messages	1. When I fail an exam, my parents told me to look for failure reasons, instead of paying attention to grades.	Adapted from (Tapia et al., 2013)
	2. My parents often told me that I have to get better grades than my peers.	
Structure	3. If I do not study or do my homework, my parents do not insist too much that I do it.	
	4. My parents do not allow me to watch TV, play or access to Internet unless I have finished my homework.	
	5. My parents sometimes tell me to study and sometimes not: there are no fixed rules.	
	6. If I have difficulties with a task, my parents do not do it themselves: They teach me to carry it out by myself.	
	7. My parents try not to let anyone bother me while I am studying.	

Help/ Modelling	8. Although my parents do not have time to help me, if I need help, they manage to take time.
	9. I ask for help from my parents when I need it, because they (at least one of them) have enough patience to teach me.
	10. My parents like to visit places like museums, expositions, etc., where they can learn.
	11. My parents read books very often.

Table 3.7

Classroom Environment

Independent Variable: Classroom Environment

Dimension	Questions	Source
Collaborativeness	1. Classmates help each other in learning.	Adapted from (John et al., 2003)
	2. After class, classmates can find others to discuss homework.	
	3. If a student has difficulty in learning, he/she can find classmates for help.	

4. If a student does not understand the instructor's instruction, he/she can ask classmates.

Order and Student Involvement	5. In class, student can usually keep quiet.

6. During lesson, students are working hard to do their assignment.

7. The classroom is usually very noisy.

8. In class, students are working very hard to study.

9. When the instructor teaches, students will normally behave themselves.

10. Students are often disturbed by other classmates in class.

11. Student don't pay attention to classroom discipline.

	12. In class, some students speak loudly some read other books and some talk with each other.
Teacher Involvement	13. Instructor is always willing to answer student's questions.
	14. Instructor is patient in teaching students.
	15. Instructor often draws attention to examinations.
	16. If a student requests, instructor will explain and answer patiently.
	17. Instructor is serious in teaching students.
	18. Instructor arranges adequate time for teaching every lesson.
	19. Before class, instructor has enough preparation.
	20. Instructor explains teaching contents in detail.

	21. Instructor helps students to revise before test and examinations.
Teacher Support	22. Instructor often rewards students for progress in academic achievements.
	23. Instructor often helps students to set learning targets.
	24. Instructor often encourages students to see whether their own study method is helpful for learning.
	25. Instructor gives advice on students' learning progress.
	26. Instructor praises students' performance in learning.
	27. Instructor often designs some class assignments so as to allow students to apply knowledge in daily lives.
	28. Instructor often provides some strategies for improving learning to every student.

The questionnaire's phrasing was slightly altered from research done by (Chamberlin et al., 2018) on university students to make it more broadly applicable to undergraduate students' learning motivations. The table shown that the updated questionnaire. For example, the word "teacher" was swapped out for the word "instructor." This is because "instructor" frequently refers a higher standard of professionalism connected to the educational environment. While "instructor" has implications of skill and specific knowledge fit for the university level. Besides that, "teacher" can be perceived as more casual and is typically used in basic and secondary school.

3.6 Data Processing

Data Checking

Check for mistakes and missing data in the questionnaires had received from the respondents. It will guarantee that the data obtained are correct and will enable to check that the questionnaires are completed and have no error.

Data Editing

Data checking and editing procedure on the questionnaires that had mistaken or missing information before sending them out to the respondents. In addition, can replace any incorrect or illogical responses with ones that are accurate and straightforward. This is to make sure that the respondents can provide with accurate information.

Data Coding

As part of the data coding process, every option for an answer to a question is assigned a number. This will make it easier for the researchers to obtain the data

and enter it into the database. Each option for an answer to a question in Section A is coded as follows:

Table 3.8

Section A

Q1	Are you full time student in UTAR?	1 = Yes
		2 = No
Q2	Gender	1 = Male
		2 = Female
Q3	Age (Years)	1 = 18 – 20
		2 = 21 – 23
		3 = 24 and above
Q4	Years of Study	1 = First
		2 = Second
		3 = Third
		4 = Fourth
		5 = Others
Q5	Campus	1 = UTAR Kampar
		2 = UTAR Sg Long

Q6	Race	1 = Malay
		2 = Chinese
		3 = Indian
		4 = Others
Q7	Faculty	1 = Faculty of Engineering and Green Technology
		2 = Faculty of Information and Communication Technology
		3 = Faculty of Science
		4 = Faculty of Accountancy and Management (Sg Long)
		5 = Faculty of Business and Finance (Kampar)
		6 = Faculty of Arts and Social Science (Kampar)
		7 = Faculty of Creative Industries
		8 = Institute of Chinese Studies
		9 = M. Kandiah Faculty of Medicine and Health Sciences (Sg Long)
		10 = Lee Kong Chian Faculty of Engineering and Science
		11 = Others

Next, the response of each question in Section B (Family motivational climate factor), Section C (Classroom environment factor), and Section D (Students' motivation) are coded as:

1= Strongly disagree

2= Disagree

3= Neutral

4= Agree

 5= Strongly agree

3.7 Data Analysis

According to Eteng (2023), data analysis is an essential part of research since a poorly done analysis will provide an inaccurate report, which will unavoidably result in poor and wrong decision-making. Consequently, it is critical to select an appropriate data analysis method that will ensure you obtain reliable and practical insights from data. The analyses included include descriptive, reliability, and inferential ones. To get descriptive statistics, reliability, and inference for this study, data will continue to be analyzed using IBM SPSS Statistic 28.0.

3.7.1 Descriptive Analysis

Branch of statistics called "descriptive statistics" is concerned with organizing, summarizing, and presenting data in an easy-to-use and straightforward manner. It focuses on identifying and examining a dataset's essential characteristics rather than making any inferences or generalizations about a larger population. The demographics of the respondents, including age, year of study, gender, campus, race, and faculty, were examined in this study using descriptive statistics. The data are displayed in Section A of the questionnaire using pie charts, bar graphs, or

histograms. Bar graphs separate data into discrete bars that allow for tracking of the data through time or the display of relationships between several independent pieces of data or a succession of independent data. Pie graphs categorize data to display the relationship between a whole and its pieces (Indeed, 2023). They aid in the visualization of lesser percentages that sum up to 100% and form a whole.

3.7.2 Reliability Analysis

In IBM (2021), Reliability Analysis is about the characteristics for measuring scales and items which make up the scales. The level of dependability is calculated using the formula (α), with Alpha over 0.70 indicating that the item is dependable. Due to the questionnaire's usage of the Likert scale, (α) was utilized in this study to assess internal consistency or reliability. The range of (α) is shown in table below.

Table 3.9

Cronbach's Alpha Range

Cronbach's Alpha	Internal Consistency
$\alpha \geq 0.9$	Excellent
$0.9 \geq \alpha \geq 0.8$	Good
$0.8 \geq \alpha \geq 0.7$	Acceptable
$0.7 \geq \alpha \geq 0.6$	Questionable
$0.6 \geq \alpha \geq 0.5$	Poor
$0.5 \geq \alpha$	Unacceptable

Table 3.10

Cronbach's Alpha Range Result

	Variables	No. Items	Cronbach's Alpha Value (α)	Reliability
Independent variable	Family Motivational Climate	11	0.700	Acceptable
	Classroom Environment	28	0.942	Excellent
Dependent variable	Students' Motivation	12	0.916	Excellent

50 respondents participated in the data collecting for this pilot study, SPSS analytic tools are used to do a reliability analysis on the study. The reliability of the scale assessment in our study was assessed using Cronbach's alpha (Goforth, 2015). Both the independent and dependent variables' alpha values have above 0.60, indicating that the variables are appropriate and have good internal consistency. Furthermore, as the questionnaire contains no incorrect items with a low alpha value, no item was deleted for reliability findings.

With a family motivational climate score of 0.700, which falls between 0.7 and 0.8, it can be concluded that the measurement of this factor is considered acceptable. Furthermore, students' motivation has a value of 0.916 and the classroom environment has a value of 0.942. When the Cronbach's alpha value falls between 0.9 and α, it means that the assessment of students' motivation and the classroom environment is considered excellent.

3.7.3 Inferential Analysis

The conclusions drawn from the sample data are supported by inferential analysis. Results reveal a connection between independent and dependent variables. The findings show degree of correlation between independent and dependent variables.

3.7.3.1 Pearson Correlation Coefficient

Table 3.11

Pearson Correlation Coefficient

Pearson Correlation Coefficient Value **Correlation Coefficient Range**	Correlation
0.00 to 0.10	Negligible
0.10 to 0.39	Weak
0.40 to 0.69	Moderate
0.70 to 0.89	Strong
0.90 to 1.00	Very Strong

3.7.3.2 Multiple Linear Regression Analysis

Multiple Regression Analysis must be two IV and at least one DV. This technique is utilized to find the interaction between a maximum of two IV and a DV. Regression analysis is a collection of statistical techniques used to estimate connections between a dependent variable and one or more independent variables (Taylor, 2020). As an inference analysis method to assess the hypothesis, multiple regression analysis was performed. This research involves two independent variables such as Family Motivational Climate and Classroom Environment, while the dependent variable was Student Motivation. Likert items were included in the ordinal scale used to measure the independent variables. The dependent and

independent variables must be related linearly, whether there are positive or negative correlations. Researchers can use SPSS software to check this assumption.

3.8 Chapter Summary

In conclusion, we use causal research and quantitative research for our research design. We used a questionnaire method to obtain the primary data from the population fixed by us for our study. We explained the sampling information used throughout our study. In questionnaire, we identified the scale of measurement used for each variable and described the process of preparing data to proceed for data analysis. Then, we explained how the reliability test run by SPSS functions to complete data analysis. Lastly, we described and summarized our descriptive, reliability, also inferential analysis. After that, we will analyze the research results in Chapter 4.

CHAPTER 4: RESEARCH RESULTS

4.0 Introduction

This Chapter examine result of questionnaire after gathering data from respondents. We have collected the data from 377 UTAR student respondents who are studying in Kampar and Sungai Long. We construct the Google Survey Form to approach the students who are studying in Perak and Sungai Long. After received all the respondents' data, we used to run Statistical Package for the Social Sciences (SPSS) in this research project. Chapter 4 is in-depth discussions and explanations of scale measurement, inferential analysis, also descriptive analysis.

4.1 Descriptive Analysis

Descriptive analysis is measuring and evaluating data that has already been gathered. The demographic profile of the respondent consists of 6 questions. It was used to quantify and summarize the variable of respondents in term of gender, age, years of study, campus, race and faculty required in Section A.

4.1.1 Respondent Demographic Profile

4.1.1.1 Gender

Table 4.1

Descriptive analysis for Gender

Gender

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Female	214	56.8	56.8	56.8
	Male	163	43.2	43.2	100.0
	Total	377	100.0	100.0	
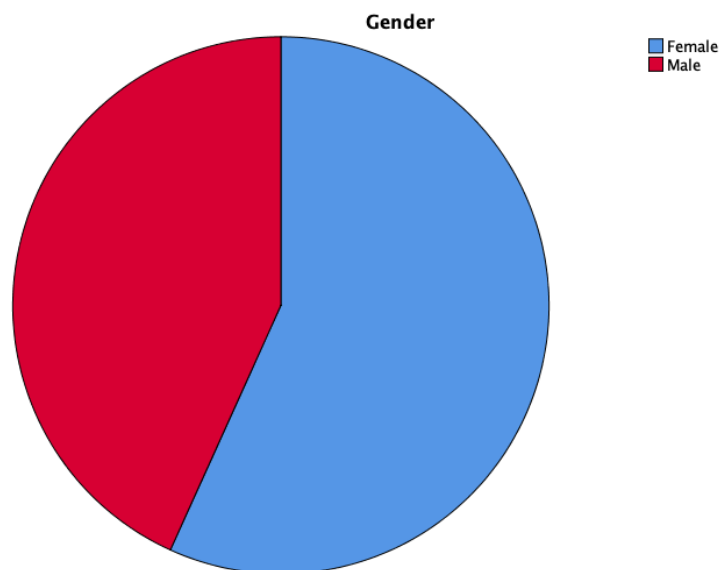
Figure 4.1 Descriptive analysis for Gender (Frequency)

Source: Developed for the research

There are 214 respondents (56.8%) of female and 163 respondents (43.2%) of male among the respondents.

4.1.1.2 Age

Table 4.2

Descriptive analysis for Age

Age

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	18 – 20	90	23.9	23.9	23.9
	21 – 23	260	69.0	69.0	92.8
	24 and above	27	7.2	7.2	100.0
	Total	377	100.0	100.0	
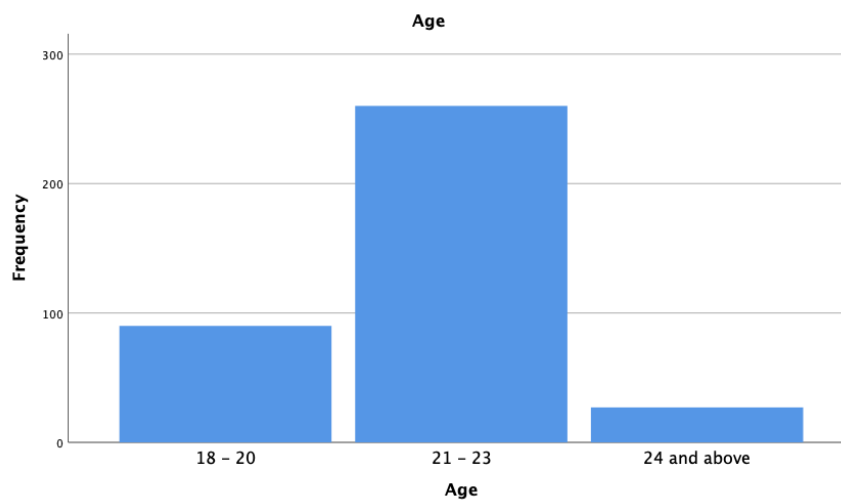
Figure 4.2 Descriptive analysis for Age (Frequency)

Source: Developed for the research

The age group with the largest number of responders, with 260 individuals (69%), is 21 to 23 years old. The age group of 18 to 20 years old came next, with 90 responders (23.9%). The age group of 24 years and older had the fewest replies (7.2%), with 27 people (out of all the age groups).

61

4.1.1.3 Years of study

Table 4.3

Descriptive analysis for Years of study

Years

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	First	79	21.0	21.0	21.0
	Second	103	27.3	27.3	48.3
	Third	177	46.9	46.9	95.2
	Fourth	18	4.8	4.8	100.0
	Total	377	100.0	100.0	
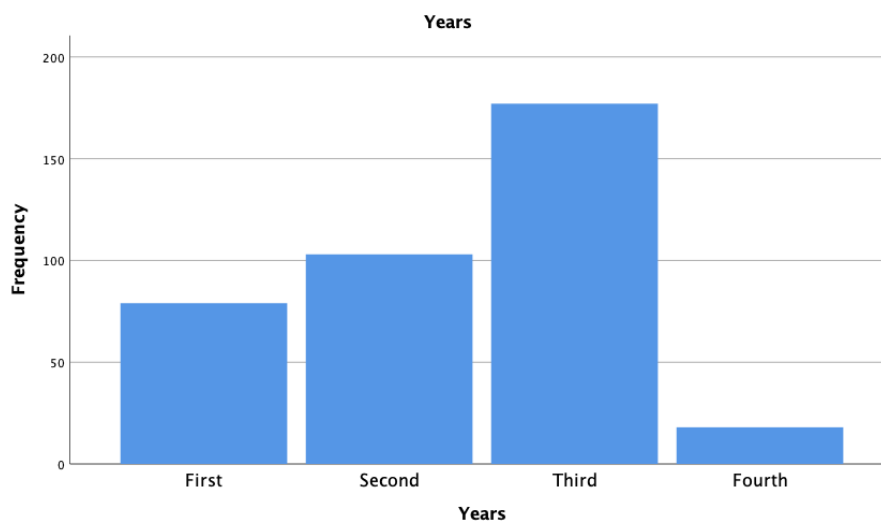
Figure 4.3 Descriptive analysis for Years of study (Frequency)

Source: Developed for the research

The highest number of years of study is third year students which comprises of 177 respondents (46.9%). The second highest number is second year students which is 103 respondents (27.3%). Followed by years of study first year students with 79 respondents (21%). The fourth years students comprise of amount of 18 respondents (4.8%) which is the lowest number among all the years of study.

4.1.1.4 Campus

Table 4.4

Descriptive analysis for Campus

Campus

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Campus Kampar	303	80.4	80.4	80.4
	Campus Sungai Long	74	19.6	19.6	100.0
	Total	377	100.0	100.0	
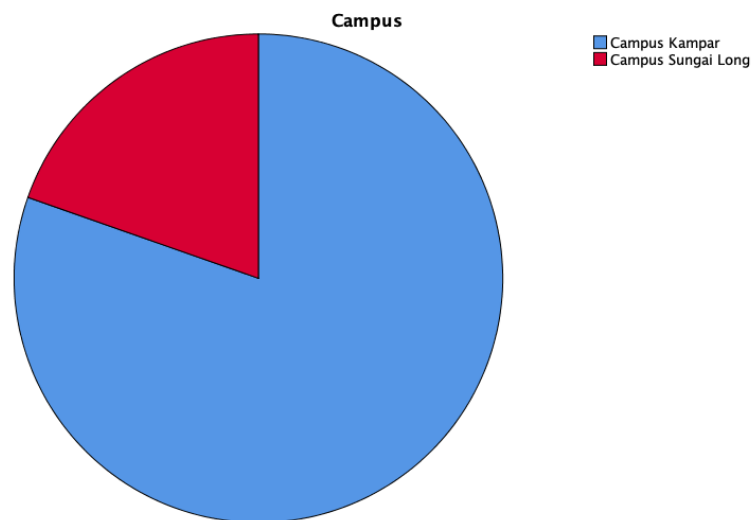
Figure 4.4 Descriptive analysis for Campus (Frequency)

Source: Developed for the research

There are 303 respondents (80.4%) of come from Campus Kampar and 74 respondents (19.6%) of come from Campus Sungai Long.

4.1.1.5 Race

Table 4.5

Descriptive analysis for Race

Race

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Chineses	357	94.7	94.7	94.7
	Malay	5	1.3	1.3	96.0
	Indian	15	4.0	4.0	100.0
	Total	377	100.0	100.0	
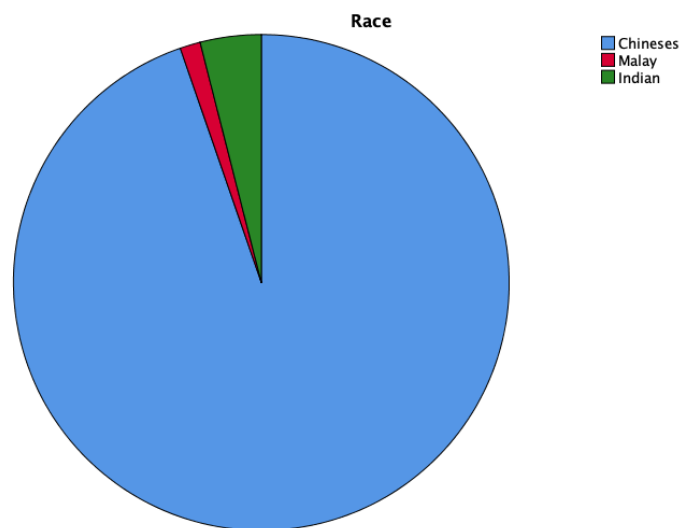
Figure 4.5 Descriptive analysis for Race (Frequency)

Source: Developed for the research

The percentage of respondents of various races that participated in the survey is shown in Table 4.5 and Figure 4.5. Based of the total number of respondents (N = 377), 357 respondents (94.70%) are Chinese, 5 respondents (1.3%) are Malay, and 15 respondents (4%) are Indian.

4.1.1.6 Faculty

Table 4.6

Descriptive analysis for Faculty

Faculty

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Faculty of Engineering and Green Technology	25	6.6	6.6	6.6
	Faculty of Information and Communication Technology	33	8.8	8.8	15.4
	Faculty of Science	24	6.4	6.4	21.8
	Faculty of Accountancy and Management (Sg Long)	36	9.5	9.5	31.3
	Faculty of Business and Finance (Kampar)	169	44.8	44.8	76.1
	Faculty of Arts and Social Science (Kampar)	28	7.4	7.4	83.6
	Faculty of Creative Industries	28	7.4	7.4	91.0
	Institute of Chinese Studies	24	6.4	6.4	97.3
	M. Kandiah Faculty of Medicine and Health Sciences (Sg Long)	5	1.3	1.3	98.7
	Lee Kong Chian Faculty of Engineering and Science	5	1.3	1.3	100.0
	Total	377	100.0	100.0	

Figure 4.6 Descriptive analysis for Faculty (Frequency)

65

Source: Developed for the research

The highest number of faculty is Business and Finance (Kampar) which comprises of 169 respondents (44.8%). The second highest number is Faculty of Accountancy and Management (Sungai Long) which is 36 respondents (9.5%). Besides that, Faculty of Information and Communications Technology is 33 respondents (8.8%). Followed by Faculty of Arts and Social Science (Kampar) and Faculty of Creative Industries, both faculties are same respondents which is 28 (7.4%). In addition, Faculty of Engineering and Green Technology is 25 respondents (6.6%). Faculty of Science and Institute of Chinese Studies are 24 respondents (6.4%). Lastly, M. Kandiah Faculty of Medicine and Health Sciences (Sg Long) and Lee Kong Chian Faculty of Engineering and Science comprise of amount of 5 respondents (1.3%) which is the lowest number among the faculty.

4.1.2 Central Tendencies Measurement of Constructs

Table 4.7

Variables	Sample Size, N	Mean	Standard Deviation
Students' Motivation	377	54.2838	3.59026
Family Motivational Climate	377	41.8621	4.70593
Classroom Environment	377	126.7347	6.39304

The table above shows that classroom environment has the highest mean score at 126.7347 followed by students' motivation with mean of 54.2838, and lastly the family motivational climate with mean of 41.8621. This is due to it shows the mean variance of the data in this study, the standard deviation is significant in research. The classroom environment with a high standard deviation which is 6.39304 and

the standard deviation of students' motivation and family motivational climate is 3.59026 and 4.70593 respectively.

4.2 Scale Measurement

Table 4.8

Reliability Analysis for each variable

	Variables	No. Items	Cronbach's Alpha Value (α)
Independent variable	Family Motivational Climate	11	0.636
	Classroom Environment	28	0.807
Dependent variable	Students' Motivation	12	0.757

Based on the table above, the classroom environment has the highest Cronbach value is 0.807 of all the factors. Besides that, the second-highest Cronbach value, which is 0.757 and is related to students' motivation. Consequently, the Cronbach value for the family motivational climate is 0.636. Based on the findings, all variables show outstanding and robust levels of dependability overall, indicating a goal towards a moderate degree of reliability.

4.3 Inferential Analysis

4.3.1 Pearson Coefficient Correlation

Goal for Pearson correlation analysis, as stated in Pearson Product-Moment Correlation (2020), is to assess the strength and significance of a linear relationship between two variables. The findings of the Pearson correlation coefficient vary

from -1 to +1. Perfect negative association between the two variables is shown by a correlation value of -1, whereas perfect positive link between the two variables is indicated by a correlation coefficient of +1. A correlation coefficient of zero indicates that there is no linear relationship between the two variables.

Scale of correlation coefficient	Value
$0 < r \leq 0.19$	Very Low Correlation
$0.2 \leq r \leq 0.39$	Low Correlation
$0.4 \leq r \leq 0.59$	Moderate Correlation
$0.6 \leq r \leq 0.79$	High Correlation
$0.8 \leq r \leq 1.0$	Very High Correlation

Source: Selvanathan, M., Jayabalan, N., Saini, G. K., Supramaniam, M., & Hussain, N. (2020). Employee Productivity in Malaysian Private Higher Educational Institutions. PalArch s Journal of Archaeology of Egypt / Egyptology, 17(8), 66-79. 10.48080/jae.v17i3.50

Table 4.9

Correlations between Family Motivational Climate and Students' Motivation

		Family Motivational Climate	Students' Motivation
Family	Pearson Correlation	1	0.273[**]
Motivational	Sig. (2-tailed)		0.000
Climate	N	377	377
Students'	Pearson Correlation	0.273[**]	1
Motivation	Sig. (2-tailed)	0.000	
	N	377	377

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

<u>Direction</u>

From the results, there is positive relationship between family motivational climate and students' motivation because of the positive value for correlation coefficient. The family motivational climate has a 0.273** correlation with the students' motivation variable. Thus, when family motivational climate is high, students' motivation is also high.

<u>Strength</u>

The value of this correlation coefficient 0.273** is fall under coefficient range from ±0.20 to ±0.39. Therefore, the relationship between family motivational climate and students' motivation is low correlation.

<u>Significance</u>

A p-value less than alpha value (0.01) is statistically significant which it indicates strong evidence against the null hypothesis. This is due to there is less than a 1% probability the null is correct, and the results are random; thus, we reject the null hypothesis, and accept the alternative hypothesis. The relationship between family motivational climate and students' motivation is significant as the p-value < 0.001 is less than alpha value 0.01.

Table 4.10

Correlations between Classroom Environment and Students' Motivation

		Classroom Environment	Students' Motivation
Classroom Environment	Pearson Correlation	1	0.847**
	Sig. (2-tailed)		0.000
	N	377	377
Students' Motivation	Pearson Correlation	0.847**	1
	Sig. (2-tailed)	0.000	
	N	377	377

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

<u>Direction</u>

From the results, there is positive relationship between classroom environment and students' motivation because of the positive value for correlation coefficient. The classroom environment has a 0.847** correlation with the students' motivation variable. Thus, when classroom environment is high, students' motivation is also high.

<u>Strength</u>

The value of this correlation coefficient 0.847** is fall under coefficient range from ±0.80 to ±1.00. Therefore, the relationship between classroom environment and students' motivation is very high correlation.

<u>Significance</u>

A p-value less than alpha value (0.01) is statistically significant which it indicates strong evidence against the null hypothesis. This is because there is less than a 1% probability the null is correct and the results are random; thus, we reject the null hypothesis, and accept the alternative hypothesis. The relationship between classroom environment and students' motivation is significant. It is because the p-value < 0.001 is less than alpha value 0.01.

4.3.2 Multiple Linear Regression Analysis

Table 4.11

Model Summary[b]

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	0.852 [a]	0.727	0.725	0.15685

a. Predictors: (Constant), Classroom Environment and Family Motivational Climate

b. Dependent Variable: Students' Motivation

In order to comprehend the variance in the dependent variable, multiple linear regression analysis is utilized to ascertain the influence between two or more independent variables. multiple linear regression factors pointed towards the dependent variable and their combined outcome (Kenton, 2020).

R value

The R value is the correlation coefficient between the dependent variable and the independent variables taken together. The value of correlation (R value) for this study is 0.852. Based on table 4.11 the direction from the results, there is positive relationship between independent variables (family motivational climate and classroom environment) and dependent variable (students' motivational) due to the positive value for correlation coefficient. The independent variables (family motivational climate and classroom environment) has a 0.852 correlation with the dependent variable (students' motivational). Thus, when independent variables (family motivational climate and classroom environment) high, dependent variable (students' motivational) is also high.

The correlation coefficient of 0.852 is between the range of ±0.80 to ±1.0, depending on the strength. As a result, there is a strong and positive association between the dependent variable (students' motivation) and the independent factors (family motivating atmosphere and classroom environment).

R square

The R square indicates the extent or percentage the independent variables can explain the variations in the dependent variable. According to table 4.11, in this study, independent variables (family motivational climate and classroom environment) can explain 72.7% of the variations in dependent variable (students' motivational). However, it is still leaving 27.3% (100% - 72.7%) unexplained in this study. In other words, this study has considered about other additional variables that are necessary in encouraging student learning.

Table 4.12

ANOVAᵃ

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	24.456	2	12.228	497.037	0.000ᵇ
	Residual	9.201	374	0.025		
	Total	33.657	376			

a. Dependent Variable: Students' Motivation

b. Predictors: (Constant), Classroom Environment and Family Motivational Climate

H_1: The two independent variables (classroom environment and family motivational climate) are significant explain the variance in students' motivation.

A P-value lower than the alpha threshold (0.01) is deemed statistically significant, signifying robust evidence against the null hypothesis. This is because there is less than a 1% chance that the null hypothesis is true and that the results are merely random. Consequently, we reject the null hypothesis and embrace the alternative hypothesis. According to Table 4.12 (ANOVA), the p-value (Sig. 0.001) falls below the alpha threshold of 0.01, indicating statistical significance. The F-statistic also attains significance. Hence, the model employed in this study effectively captures the relationship between the dependent and predictor variables. However, the independent variables (family motivational climate and classroom environment) significantly account for the variation in students' motivation. The data support the alternative hypothesis.

Table 4.13

Coefficients[a]

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	-0.634	0.165		-3.842	0.000
	Family Motivational Climate	0.067	0.019	0.096	3.451	0.001
	Classroom Environment	1.083	0.036	0.827	29.867	0.000
a. Dependent Variable: Students' motivation						

H_1: Family motivational climate (predictor variable) has a significant impact on predict dependent variable (students' motivation).

Family motivational climate is significant in predicting the dependent variable (students' motivation) for this project. This is due to the P-value for family motivational climate is 0.001, which is less than the alpha value of 0.01.

H_2: Classroom environment (predictor variable) has a significant impact on predict dependent variable (students' motivation).

Classroom environment is significant in predicting the dependent variable (students' motivation) for this project. This is due to the p-value for classroom environment is 0.000, which is less than the alpha value of 0.01.

Regression equation

$y = a + b_1 (x_1) + b_2 (x_2)$

x_1 = Independent variable 1 (Family motivational climate)

x_2 = Independent variable 2 (Classroom environment)

Students' motivation= -0.634 + 0.067 (Family motivational climate) + 1.0834 (Classroom environment).

Highest contribution

Based on Table 4.13, classroom environment is the predictor variables that contribute the highest to the variation of the dependent variable (students' motivation) because the Beta value (under standardized coefficients) for this predictor variable is the largest (0.827) if compared to another predictor variable (family motivational climate). This indicates that, after accounting for the variance described by all other predictor variables in the model, the classroom environment factor contributes most uniquely to explaining the variation in the dependent variable (students' motivation).

Lowest contribution

Based on Table 4.13, family motivational climate is the predictor variables that contribute the lowest to the variation of the dependent variable (students' motivation) because the Beta value (under standardized coefficients) for this predictor variable is the smallest (0.096) if compared to another predictor variable (classroom environment). This means that personal factors make the least contribution to explaining the variation in the dependent variable (students' motivation) when the variance explained by all other predictor variables in the model is controlled for.

4.4 Conclusion

All throughout this part, all information was evaluated, and conclusions were generated by using the SPSS system. After that, descriptive study was conducted to categorize the respondents' demographic characteristics. Next, each dependent and independent variable's accuracy is tested using the metric system's reliability analysis. According to SPSS, every independent variable has significant correlation with dependent variable. Then, we will discuss the results and conclude the research in Chapter 5.

CHAPTER 5: DISCUSSION AND CONCLUSION

5.0 Introduction

Extensive summary for key findings was stated in this Chapter, and purpose of Chapter 5 is to give a clearer comparison between the study's actual outcome and the predictions of earlier research. The practical and theoretical implications will be set out in this chapter, followed by some limitations and recommendations of the research. Finally, a conclusion to this study was also included in Chapter 5.

5.1 Summary of Statistical Analyses

5.1.1 Descriptive Analysis

This study was able to effectively perform descriptive analyses with the full study's data. To guarantee the accuracy of the data, we created all the tables and charts using the SPSS software. We decided to create all the questionnaire questions using pie charts and histograms based on the demographic profile that was completed. It is noteworthy that the majority of participants in the entire study, which serves as the primary data source, were identified as being 21–23 years old, which is also the age range that our study is focused on. The proportion of FBF students in our response list is higher because the Faculty of Business and Finance (FBF) is the largest. Various faculty members will lead to distinct campuses, and age will also influence the years of study. Consequently, respondents with varying demographic profiles may be impacted by various factors that shape their motivations.

5.1.2 Summary of Scale Measurement

Reliability and consistency were assessed through a reliability test on dependent and independent variables. Cronbach's alpha reliability is used to minimize the error of individual variables, thus ensuring the study's results are consistent. The more the Cronbach alpha value increases, the greater the reliability level becomes. According to the findings of our study, the classroom environment has the highest Cronbach value of variables at 0.807, student motivation comes next with a Cronbach value of 0.757, and then the family motivational climate with a Cronbach value of 0.636. Hence, all variables exhibit strong reliability.

5.1.3 Summary of Inferential Analysis

Multiple Regression Analysis indicates a strong and positive correlation between independent variables (family motivational climate and classroom environment) and dependent variables (student motivation). Moreover, it suggests that family motivational climate and classroom environment as independent variables account for 72.7% of the differences in student motivation as the dependent variable. Hence, there is still 27.3% of this research that is not accounted for. Additionally, with p-values for the independent variables (classroom environment and family motivational climate) (Sig.), an ANOVA shows that the independent variable significantly accounts for the variation in the dependent variable. The study's dependent variable, student motivation, is significantly predicted by the independent variables, classroom environment and family motivational climate, as indicated by the p-value (0.000), it is below alpha level (0.01). Moreover, family motivational climate played a minimal role as predictor variables and had the lowest impact on the dependent variable change (0.096), whereas the classroom environment had the largest impact (0.827) on the dependent variable change.

5.2 Discussions of Major Findings

5.2.1 Family Motivational Climate and Student Motivation

Based on the findings in Chapter 4, since the P-value (0.001) is less than alpha value (0.01), our study's findings indicate a positive and significant relationship between students' motivation in physical learning and their family's motivational climate. It demonstrates the beneficial relationship between students' motivation and the motivating environment in their families. It also means that when the family motivational climate becomes better, the students' motivation also becomes higher.

Boon's (2007) study examined the students' aspirations for achievement and their parenting methods. Using structural equation modelling, it was determined that self-efficacy was a key mediator of the effects of parental style on achievement. Achieving mastery goals centered on growth and learning was positively correlated with success. Moreover, low achievement and the impression of careless parenting were significantly correlated. The Leal-Soto et al. (2013) study investigates how parenting practices affect students' motivation for their academic work. According to the study, parental style has a big impact on university student' academic motivation and achievement goals. Three main family factors were found in the study: warmth and affection, structure and control, and support for autonomy. The study also found that students' achievement goals such as mastery, performance approach, and performance-avoidance play a crucial role in shaping their motivation. The study also discovered that students' motivation is significantly shaped by their achievement goals, which include mastery, performance approach, and performance avoidance.

Achoui (2015) asserts that family structure, roles, values, and other psychological aspects like self-confidence all have an impact on university students' motivation. Parents and the home environment play a significant role in students' motivation, serving as a major influence in shaping the initial constellation of attitudes that students develop towards physical learning. According to the article, university students "will be more apt to accept the risks inherent in physical learning when they are raised in a home that nurtures a sense of self-worth, competence, autonomy,

and self-efficacy." As a result, it was necessary to train parents in motivational techniques like praising perseverance, hard work, subject-matter expertise, curiosity, and discovery.

There is, in fact, a considerable impact of the family climate on goal orientations and motivation that supports physical learning. In this context, it is easier to see how family cohesion fosters positive outcomes when expressiveness is present, and how conflict undermines that cohesion. Furthermore, the student's objectives and academic motivation are greatly impacted by the motivational environment they perceive in their family. Higher levels of task goals, performance goals, and student motivation were predicted by the task-oriented goals' perceived emphasis on parents (Leal-Soto et al., 2013). According to Boon (2007), family factors may have a direct effect on motivation or may be mediated by their influence on the goals.

The study's positive findings, however, are consistent with the involvement literature's findings regarding the positive relationship between parental involvement and motivation. It is crucial that their parents support them to be autonomous, make sure their study environments are suitable for completing schoolwork, and serve as role models by demonstrating an interest in reading. According to some writers, parental control and autonomy have opposing effects on students' motivation to learn. This perspective holds that parental control may be seen as an imposition to satisfy parental demands, which may have a negative effect on physical learning motivation, whereas autonomy has a positive influence on physical learning motivation by boosting self-confidence and encouraging students to follow their initiative (Del Prado-Morales et al., 2020).

According to Ryan and Deci (2000), studies have shown that extrinsic motivation is reduced by external negative effects like threats, deadlines, instructions, forced assessments, and mandated goals. Thus, for example, the same researchers have reported on studies demonstrating that students of autonomy-supportive parents have higher levels of intrinsic motivation than students of controlling parents.

5.2.2 Classroom Environment and Student Motivation

According to the findings in Chapter 4, the results of the study indicated a positive relationship between classroom environment and student motivation in learning among UTAR students. Because the P-value is 0.000, which is less than the alpha value of 0.01, the correlation between classroom environment and student motivation is significant. According to Cayubit (2021), it stated that classroom environment has a significant impact on student motivation. The real classroom environment can also be compared to the ideal or desired one (Fraser & Fisher, 1983; Fraser & Treagust, 1986; Raviv et al., 1990 as cited in Cayubit, 2021). While the preferred or ideal environment focuses on what instructors and students would like to see inside the classroom in terms of goals and value orientations that need to be achieved or realized, preferred methodology, classroom activities and practices, the actual classroom learning environment deals with everything that is happening inside the classroom as reported by students and instructors. The current analysis is justified because, despite the apparent significance of the relationship between the classroom learning environment and university students' performance, this field of study seems to be in its infancy. While a supportive learning environment in the classroom is crucial to student achievement, it may also act as a learning barrier that lowers motivation and performance (Freiberg, 1998 as cited in Cayubit, 2021), particularly if it is seen as unfavorable and frightening.

5.3 Implication of the Study

This study focuses on factors affecting students' motivation in physical learning in UTAR. This study can help the management team of UTAR to properly understand the factors that affect students' satisfaction with physical learning in UTAR. This is due to a better family motivational climate and classroom environment will lead to higher students' motivation, which will further increase efficiency and effectiveness of higher satisfaction towards their objectives and the goals. By understanding this, the management of the organization can effectively implement a policy that will

increase students' satisfaction to improve the family's motivational climate and classroom environment.

5.3.1 Managerial Implications

According to our discovery, ANOVA indicates the classroom environment contributed the most (0.827) to the change in the dependent variable, while family motivational climate contributed the least to the change in the dependent variable (0.096).

The second hypothesis of this study indicates that there is a strong correlation between students' motivation and the classroom environment. Therefore, the organization of the college has to deliver the best need to set up great physical learning situations. This involves making investments in modern teaching innovation and giving workforce individuals with openings for proficient advancement may increase teachers' involvement which can increase student motivation. Imaginative instructing strategies approaches to classroom administration, and methodologies for cultivating a comprehensive physical learning environment can all be secured in workshops and training sessions. With more positive connections between instructors and students as well as peer collaboration, UTAR can ensure that students are drenched in engaging and encouraging physical learning environments.

In terms of increasing teacher support to increase the motivation of students, UTAR can develop a fully anonymous regular feedback mechanism, such as a suggestion box or online link, which can help UTAR management screen and address students' motivational issues over time. UTAR can find zones for enhancement and get imperative experiences into the effectiveness of current support systems by requesting student input directly. This proactive approach advances a culture of persistent improvement inside the academic community and appears a commitment to the well-being of students.

The data of this study also bolsters the first hypothesis, which holds that there is significant relationship between students' motivation to learn in UTAR and

motivational climate in their families. Chapter 2 mentioned that messages, structure, help or model, and the relationship with the teacher are the dimensions of the family motivational climate. By identifying and resolving the dimensions, the motivation might increase. The study emphasizes how pivotal it is to include families in student's instructive ventures. To assist parents, and create a motivating and empowering environment at home, UTAR administration can work with the counselling or student affairs departments to have online workshops. These programs can give parents methods like objective setting, valuable feedback, and emotional support to assist them bolster student's scholastic endeavors which are considered as the messages.

A structure like a persistent discussion almost students' improvement and motivational needs can be encouraged by the university and parents setting up effective communication channels. Parents can be informed about educational desires, prospective occasions, and resources that can help with student inspiration through online portals. UTAR can build up a bound together-back framework that envelops both the domestic and school situations by advancing openness and participation.

Understanding that each student contains a family style, UTAR organization can give bolster frameworks to suit a run of family circumstances. Families with low income, for case, might benefit from budgetary help assets, and foreign families might require help exploring the instructive framework. Through proactive recognizable issues and determination of deterrents to parental involvement, UTAR can ensure that each family is ready to cultivate a positive and spurring environment within their home.

5.4 Limitations of the Study

The limitation was adverted when doing the investigation in this study. This study has discovered a substantial association between the independent variables, such as family motivational climate and classroom environment towards the student motivation in learning among UTAR students.

Firstly, we faced limited scope in our study as we only focus student motivation in UTAR. When there is a limited scope, the findings might provide an incomplete understanding of the topic under investigation. This make us struggle to establish causal relationships between variables, as we are not adequately account for confounding factors or alternative explanations. This can undermine the internal validity of the research and weaken the strength of the conclusions. Also, we might miss opportunities to uncover new insights or relationships that could emerge from a more comprehensive investigation. This can limit the advancement of knowledge in the field and hinder the development of effective interventions or policies.

Furthermore, data collection methods can be a limitation of a study. Our chosen data collection method, Google Form may lack validity and reliability, leading to inaccurate or inconsistent results. It is because this data collection method may not adequately capture a representative sample of the population of interest. The survey's large number of questions discouraged respondents from participating in the study. The questionnaire has 58 questions for 4 Sections and takes respondents a lot of time to complete. Respondents lost interest in completing the survey and provided incorrect responses. This will impact the validity of the questionnaire.

Finally, time can be a significant limitation. It alludes to limitations on the project's beginning and ending dates. Academic researchers must be in advance of the deadline for submitting research manuscripts to journals, much like students must be before the deadline for submitting class papers. Writing up research findings for publication in academic journals or reports takes time and effort. Therefore, the duration of the "task" sets a limit on research activities and time measured throughout time. Time was the biggest issue we ran into during the research period because we had so many assignments this semester. As a result, we do not have enough time to develop the research strategy and are ready to make work on it.

5.5 Recommendations for Future Research

Even though limitations have encountered in our project, some recommendations for future researchers to help them get beyond the obstacles. These recommendations may help to avoid the constraints on the future researchers' studies so that advancements can be realized.

Firstly, we can extend population to many private universities. Since the current study focused on a specific population, such as UTAR students, future research could extend the scope to include other private universities. This can help determine if the findings are generalizable across different groups. Compare the student motivation across different private universities by identifying similarities, differences, and underlying mechanisms. This comparison method might offer a deeper comprehension of the topic.

Furthermore, to improve data collection method for future research, we need to make sure our questions are clear and concise to reduce confusion and improve respondents' understanding when design the questionnaire. To enhance the accuracy of the data, we can perform a trial run of the questionnaire with a small sample of participants to identify any possible problems with question clarity or survey progression prior to releasing the official survey. Collecting feedback from trial participants is vital to address any concerns or suggestions to improvement.

Finally, we need to be realistic about the amount of time that spend studying by realizing that academic work takes a lot of time for doing homework, research, taking notes, and producing reports. Clearly define the research objectives and prioritize tasks based on their importance and feasibility within the available time frame. Focus on addressing key research questions and objectives that are most critical to achieving the study's goals. As a result, we must take more time to consider, evaluate, and comprehend your work, but not be a perfectionist. Be truthful about how much time we will need for each task. Effective time management will help to improve the accuracy and dependability of the study's results by allowing the researchers to continuously monitor and identify changes and developments in the study.

5.6 Conclusion

In short, this study advances our knowledge of the connection between the family motivational climate and classroom environment with student motivation in learning among UTAR full time students. There are variables that influence a study on student motivation among UTAR students in this research project. Furthermore, this research reaches its general and specific objectives by identifying the factors and relationships. In addition, the study's implications and limitations has been discussed. Finally, recommendations are provided for researchers in the future to overcome restriction also raise standard of their future research.

References

Abdulhameed, K. O., & Khalid, M. (2021). The impact of future economic stability and family influence on students' motivation for higher education: A study on IIUM students. *IIUM Journal of Educational Studies*, *9*(4), 20-36.

Abello, D. M., Tapia, J. A., & Calderón, E. P. (2020). Development and validation of the teaching styles inventory for higher education (TSIH). *Anales De psicología/annals of Psychology, 36*(1), 143-154.

Achoui, M. (2015). Family Impact on Students' Motivation. *Researchgate*. https://www.researchgate.net/publication/272982798_family_impact_on_students_motivation

Afzal, H., Ali, I., Aslam Khan, M., & Hamid, K. (2010). A study of university students' motivation and its relationship with their academic performance. *International Journal of Business and Management, 5*(4).

Ainol Madziah, Z., & Isarji, S. (2009). Motivation to learn a foreign language in Malaysia. *GEMA Online Journal of Language Studies*, *9* (2), 73-87.

Aktionsrat Bildung (2015). *Bildung. Mehr Als Fachlichkeit. Gutachten*. Münster: Waxmann.

Ali, S. A. & Darshini, T. (2020). Motivation in Second Language Acquisition among Learners in Malaysia, *Studies in English Language and Education*, *7*(2), 323-333.

Alkhasawneh, I. M., Mrayyan, M. T., Docherty, C., Alashram, S., & Yousef, H. Y. (2008). Problem-based learning (PBL): Assessing students' learning preferences using VARK. *Nurse Education Today, 28*(5), 572-579.

Ames, R., & Ames, C. (1990). Motivation and effective teaching. In B. F. Jones, & L. Idol (Eds.). Dimensions of thinking and cognitive instruction. Hillsdale, N.J: ErIbaum. Ashworth, S. (1998). Defining and implementing a teaching style. *In The Meeting of the AIESEP World Sport Science Congress on Education for Life*.

Anna, H., Anja, S. T., Frank, R., Jörg, H. H., Doris, H. (2022). Supporting student motivation in class: The motivational potential of tasks. *Z Erziehungswiss*, *25*, 453–470. https://doi.org/10.1007/s11618-022-01090-3

Andrade, C. (2020). Sample size and its importance in research. *Indian Journal of Psychological Medicine, 42*(1), 102-103.

Arafa Hassan, E., & Abd Elrazek Baraka, A. (2021). Effect of virtual classroom on critical care and emergency nursing students' achievement and learning satisfaction. *Egyptian Journal of Health Care*, *12*(2), 545-554.

Arumugam, Nalini & Supramaniam, Kaarthiyainy. (2016). Student training in attitude and responsibility intervention programme in helping academically at-risk students in a high stake examination context. *Journal of Institutional Research South East Asia*, *14*, 37-47.

Ballotpedia (2019). *Academic performance*. https://ballotpedia.org/Academic_performance

Bany, M. A., & Johnson, L. V. (1975). *Educational social psychology*. New York: Macmilla.

Barse, M. (2015, August 16). Schools to blame for unmotivated students. https://sciencenordic.com/children-and-adolescents-denmark-learning/schools-to-blame-for-unmotivated-students/142111

Baumeister, R. F., & Leary, M. R. (1995). The need to belong: Desire for interpersonal attachments as a fundamental human motivation. *Psychological Bulletin, 117*(3), 497–529.

Bhandari, P. (2023). *Levels of measurement | nominal, ordinal, interval and ratio*. Scribbr. https://www.scribbr.com/statistics/levels-ofmeasurement/#:~:text= Nominal%3A%20the%20data%20can%20only%20be%20categorized.,and %20has%20a%20natural%20zero

Black, A. E., & Deci, E. L. (2000). The effects of instructors' autonomy support and students' autonomous motivation on learning organic chemistry: A self-determination theory perspective. *Science Education*, *84*(6), 740–756.

Bodagh, N., Bloomfield, J., Birch, P., & Ricketts, W. (2017). Problem-based learning: a review. *British Journal of Hospital Medicine, 78*(11), C167-C170.

Bomia, L., Beluzo, L., Demeester, D., Elander, K., Johnson, M., & Sheldon, B. (1997). The impact of teaching strategies on intrinsic motivation.

Boon, H. (2007). Low- and high-achieving Australian secondary school students: Their parenting, motivations and academic achievement. *Australian Psychologist*, *42*(3), 212–225.

Borah, M. (2021). Motivation in learning. *Journal of Critical Reviews, 8*(02).

Borkowski, J. G., Weyhing, R. S. & Carr, M. (1988). Effects of Attributional Retraining on Strategy-Based Reading Comprehension in Learning-Disabled Students, *Journal of Educational Psychology*, *80*(1),46-53.

Brenda, A. S. Y. et al. (2021). Challenges and Experiences Faced by Malaysian Undergraduates in Coping with Low Academic Motivation During the COVID-19 Pandemic, *Jurnal Psikologi Malaysia*, 35(3).

Brown, H. D. (2016). Teaching by principles: An interactive approach to language pedagogy.

Bureau, J. S., Howard, J. L., Jane X. Y. Chong & Guay, F. (2022). Pathways to student motivation: A meta-analysis of antecedents of autonomous and controlled motivations. *Review of Educational Research. 92*, 46-72.

Carnegie Mellon University. (2019, November 30). *Students lack interest or motivation*.
https://www.cmu.edu/teaching/solveproblem/strat-lackmotivation/index.html.

Castaneda, L., & Varela, D. G. (2022). Understanding and achieving the purpose of professional development for teacher: A literature review. *National Forum of Educational Administration and Supervision Journal, 40*(4), 1-13.

Casteel, A., & Bridier, N. L. (2021). Describing populations and samples in doctoral student research. *International Journal of Doctoral Studies, 16*(1).

Cayubit, R. F. O. (2021). Why learning environment matters? An analysis on how the learning environment influences the academic motivation, learning strategies and engagement of college students. *Learning Environments Research.*

Çeliköz, N. (2009). Basic factors that affect general academic motivation levels of candidate preschool teachers. *Procedia - Social and Behavioral Sciences*, *1*(1), 1357–1365.

Chamberlin, K., Yasué, M., & Chiang, I. A. (2018). The impact of grades on student motivation. *Active Learning in Higher Education*, *24*(2), 109–124.

Chen, B., Vansteenkiste, M., Beyers, W., Boone, L., Deci, E. L., Van der Kaap-
Deeder, J., Duriez, B., Lens, W., Matos, L., Mouratidis, A., Ryan, R. M.,
Sheldon, K. M., Soenens, B., Van Petegem, S., & Verstuyf, J. (2015). Basic
psychological need satisfaction, need frustration, and need strength across
four cultures. *Motivation and Emotion, 39*(3), 216–236.

Cheng-Bo, Y., & Dong, M. (2017). A study of the correlation between teachers'
teaching styles and students' participation motivation in the physical
education. *Journal of Baltic Science Education, 16*(2), 199–206.

Chengjun, M., & Mustakim, S. S. (2022). Relationship Between Motivation and
Learning Outcomes in E-learning among University Students in Malaysia.
*International Journal of Academic Research in Progressive Education and
Development*, *11*(2), 666–676.

Cheon, S. H., Reeve, J., Lee, Y., Ntoumanis, N., Gillet, N., Kim, B. R., & Song, Y.
G. (2019). Expanding autonomy psychological need states from two
(satisfaction, frustration) to three (dissatisfaction): A classroom-based
intervention study. *Journal of Educational Psychology, 111*(4), 685–702.

Cheon, S. H., Reeve, J., & Vansteenkiste, M. (2020). When teachers learn how to
provide classroom structure in an autonomy-supportive way: Benefits to
teachers and their students. *Teaching and Teacher Education, 90*, 103004.

Chirkov, V. I., & Ryan, R. M. (2001). Parent and teacher autonomy-support in
Russian and U.S. adolescents. *Journal of Cross-Cultural Psychology, 32*(5),
618–635.

Cole, M. S., Feild, H. S., and Harris, S. G. (2004). Student learning motivation
and psychological hardiness: interactive effects on students' reactions to a
management class. *Acad. Manag. Learn. Educ*. 3, 64–85.
10.5465/amle.2004.12436819

Collegedunia. (2023). Universiti Tunku Abdul Rahman [UTAR] Malaysia, Entry
requirements & admission deadlines 2023.
https://collegedunia.com/malaysia/university/739-universiti-tunku-abdul-
rahman-utar-kampar/admission

Cooper, L., & Fry, K. F. (2020). The relationship between classroom environment
and student course attrition and perceptions of engagement. *Journal of
Learning Spaces, 9*(2), 93-102.

David, N. M. (2014). *Determinants of poor academic performance of secondary school students in Sumbawanga District, Tanzania* (Master thesis, Sokoine University of Agriculture, Morogoro, Tanzania). http://hdl.handle.net/123456789/622.

Deci, E. L., Ryan, R. M., & Williams, G. C. (1996). Need satisfaction and the self-regulation of learning. *Learning and Individual Differences, 8*(3), 165–183.

Deci, E.L., & Ryan, R.M. (2000). The "what" and "why" of goal pursuits: Human needs and the self-determination of behavior. *Psychological Inquiry, 11*, 227–268.

Deci, E.L., & Ryan, R.M. (2002). *Handbook of self-determination research.* University Rochester Press.

Deci, E. L., & Ryan, R. M. (2016). Optimizing Students' motivation in the Era of testing and Pressure: A Self-Determination Theory Perspective. *In Springer eBooks,* 9–29.

del Prado Morales, M., Alonso-Tapia, J., & Rueda, C. S. (2021). Parental involvement and family motivational climate from the parents' perception: cross-cultural validation of the CMF-P questionnaire. *Anales de Psicología*, *37*(2), 323.

Del Prado-Morales, M., Simón-Rueda, C., Aguirre-Camacho, A., & Alonso-Tapia, J. (2020). Parental involvement and family motivational climate as perceived by children: a Cross-cultural study. *Psicología Educativa: Revista De Los Psicólogos De La Educación*, *26*(2), 121–128.

Descals-Tomás, A., Rocabert-Beut, E., Abellán-Roselló, L., Gómez-Artiga, A., & Doménech- Betoret, F. (2021). Influence of teacher and family support on university student motivation and engagement. *International journal of environmental research and public health*, *18*(5), 2606.

Duggal, N. (2023, May 4). *Effective Data Collection Methods: techniques and use cases explained*. Simplilearn.com. https://www.simplilearn.com/data-collection-methods-article

Edward L. Deci , Robert J. Vallerand , Luc G. Pelletier & Richard M. Ryan (1991) Motivation and Education: The Self-Determination Perspective, *Educational Psychologist*, *26*(3&4), 325-346, 10.1080/00461520.1991.9653137

Education World. (2017). *The Unmotivated Student.*
https://www.educationworld.com/a_curr/shore/shore060.shtml

Ellen, C, Geetha, S. & Laura, C. D. (2020). Online Learning Readiness Among University Students in Malaysia Amidst Covid-19, *Asian Journal of University Education (AJUE)*, 16(2).

Engin, G. (2020). An Examination of Primary School Students' Academic Achievements and Motivation In Terms of Parents' Attitudes, Teacher Motivation, Teacher Self-efficacy and Leadership Approach. *International journal of progressive education*, *16*(1), 257-276.

Ennis, C.D. (2003). Using curriculum to enhance student learning. In S.J. Silverman. & C.D Ennis (Eds.), *Student learning in physical education,* 147–163. Champaign, IL: Human Kinetics.

Eteng, O. (2023). *Quantitative Data: What It Is, Types and Examples.*
https://hevodata.com/learn/quantitative-data-analysis/

Fang, Z., Chang, B., & Dang, J. (2022). Growth mindset matters: Influences of socioeconomic status on Chinese secondary vocational students' learning engagement. *Journal of Pacific Rim Psychology,* 16, 1-12.

Felder, R. M. (1993). Reaching the second tier. *Journal of College Science Teaching, 23*(5), 286-290.

Filgona, J. et al. (2020). Motivation in Learning, *Asian Journal of Education and Social Studies*, *10*(4), 16-37.

Firdous, M., & Riaz, R. (2021). AUTONOMOUS & CONTROLLED MOTIVATION AND ACADEMIC OUTCOMES AMONG UNIVERSITY STUDENTS. *PJER*, *4*(3).

Freiberg, H. J. (1998). Measuring school climate: Let me count the ways. *Educational Leadership, 56*(1), 22–26.

Fries, C. H. (2012). *Teaching style preferences and educational philosophy of teacher education faculty at a state university.* Oklahoma State University.

Frost, J. (2023). *Nominal, ordinal, interval, and ratio scales.* Statistics by Jim. https://statisticsbyjim.com/basics/nominal-ordinal-interval-ratio-scales/#:~:text=Examples%20of%20nominal%20scales%20include,indicat or%20variable s%20 and%20dichotomous%20data.

Ghanney, R. A., & Aniagyei, D. F. (2014). An investigation into the poor academic performance of students. *Research on Humanities and Social Sciences, 4*(9), 8-18.

Goforth, C. (2015, November 16). *Using and Interpreting Cronbach's Alpha | University of Virginia Library Research Data Services + Sciences*. University of Virginia Library.   Retrieved September 7, 2022, from https://data.library.virginia.edu/using-and-   interpreting-cronbachs-alpha/

Gopal, S. (2018). Importance of Motivation in Education. *International Journal of Science and Research (IJSR)*, *9*(3), 91-93.

Gopalan, V., Bakar, J. A. A., Zulkifli, A. N., Alwi, A., & Mat, R. C. (2017). A review of the motivation theories in learning. *The 2nd International Science Conference on Applied and Technology 2, 1891*(1), 020043.

Great School. (2014, September 10). *Motivating the unmotivated student.* https://www.greatschools.org/gk/articles/motivating-the-unmotivated-student/

Great School. (2022). *Motivating the unmotivated student.* https://www.greatschools.org/gk/articles/motivating-the-unmotivated-student/

Guay, F. (2022). Applying Self-Determination Theory to Education: regulations types, psychological needs, and autonomy supporting Behaviors. *Canadian Journal of School Psychology*, *37*(1), 75–92.

Hadre P. Crowson H, Debacker T, White D. (2007). Predicting the academic motivation of rural high school students. *Journal of Experimental Education. 75*, 247-269.

Hafizoglu, A., & Yerdelen, S. (2019). The role of students' motivation in the relationship   between perceived learning environment and achievement in Science: A Mediation Analysis. *Science Education International, 30*(4), 251-260.

Hagger, M. S., & Chatzisarantis, N. L. D. (2016). The trans-contextual model of autonomous motivation in education: Conceptual and empirical issues and meta-analysis. *Review of Educational Research, 86*(2), 360–407.

Hamzah, L. M. et al. (2022). Motivation in Learning: A Case Study of Young Adult Learners in Kuala Selangor, Malaysia, *Asian Journal of University Education (AJUE)*, *18*(2).

Hanaysha, J. R., Shriedeh, F. B., & In'airat, M. (2023). Impact of classroom
environment, teacher competency, information and communication
technology resources, and university facilities on student engagement
and academic performance. *International Journal of Information
Management Data Insights, 3*(2), 100188.

Hang, B. T. T., Kaur, A., & Patil, A. (2015). Impacts of school administration
autonomy support on students' learning motivation and intentions to drop
out of vocational school. *International Journal of Quality Assurance in
Engineering and Technology Education, 4*(2), 1–12. Hayati, N., Surat, S., &
Noer, M. A. (2021). Relationship of teaching style towards
to elementary school achievement of students. *International Journal of
Academic Research in Progressive Education and Development, 10*(2),
89-99.

Huang, B., & Hew, K. F. (2016). Measuring learners' motivation level in massive
open online courses. *International Journal of Information and Education
Technology, 6*(10), 759–764.

Huitt, W. (2005). Reasons for lack of motivation. *Educational Psychology
Interactive*, 1.

IBM. (2021). *Reliability Analysis.*
https://www.ibm.com/docs/en/spss-statistics/25.0.0?topic=features-
reliability-analysis

Idhaufi, N. L. M., & Ashari, Z. M. (2017). Relationship between motivation and
teachers' teaching style among secondary school students' in Kulai. *Man in
India, 97*(12), 299-307.

Inayat, A., & Ali, A. Z. (2020). Influence of teaching style on students' engagement,
curiosity and exploration in the classroom. *Journal of Education and
Educational Development, 7*(1).

Indeed. (2023). *Presenting and arranging data: How to explain a graph.*
https://www.indeed.com/career-advice/career-development/how-to-
explain-a-graph

Isik, U., Tahir, O. E., Meeter, M., Heymans, M. W., Jansma, E. P., Croiset, G., &
Kusurkar, R. A. (2018). Factors influencing academic motivation of
ethnic minority students: A review. *SageOpen, 8*(2), 2158244018785412.

Jaeger, M., & Adair, D. (2017). Investigating Students' Perception of Autonomy, Competence and Relatedness and the Relationship to Learning Motivation. *ResearchGate*. https://www.researchgate.net/publication/316472720_Investigating_Students'_Perception_of_Autonomy_Competence_and_Relatedness_and_the_Relationship_to_Learning_Motivation

Jansen, D. (2023, October 26). *Research Design 101: Qualitative & Quantitative*. Grad Coach. https://gradcoach.com/research-design/

John, L. C. K., Frances, L. L. M., & Hin-wah, W. (2003). Development of a classroom environment scale in Hong Kong. *Educational Research and Evaluation, 9*(4), 317-344.

Jurik, V., Gröschner, A., and Seidel, T. (2014). Predicting students' cognitive learning activity and intrinsic learning motivation: how powerful are teacher statements, student profiles, and gender? *Learn. Individ. Differ*. 32, 132–139.10.1016/j.lindif.2014.01.005

Keerthigha, C., & Singh, S. (2023). The effect of teaching style and academic motivation on student evaluation of teaching: Insights from social cognition. *Frontiers in Psychology, 13,* 1107375.

Kenton, W. (2020, July 16). How Multiple Linear Regression Works. Retrieved September 09, 2020, from https://www.investopedia.com/terms/m/mlr.asp

Pearson Product-Moment Correlation. (2020). Retrieved September 09, 2020, from https://statistics.laerd.com/statistical-guides/pearson-correlationcoefficient statistical-guide.php

Khajavy, G. H., MacIntyre, P. D., & Barabadi, E. (2018). Role of the emotions and classroom environment in willingness to communicate: Applying doubly latent multilevel analysis in second language acquisition research. *Studies in Second Language Acquisition*, *40*(3), 605-624.

Khan, S. Sadia, R., Hayat, S. Z. & Tahir, S. (2019). Relationship between Academic Boredom, Learning Climate and Academic Motivation Among University Students, *Pakistan Journal of Psychological Research*, *34*(3), 621-638.

Korpershoek, H., Canrinus, E. T., Fokkens-Bruinsma, M., & de Boer, H. (2020). The relationships between school belonging and students' motivational, social-emotional, behavioural, and academic outcomes in secondary education: A meta-analytic review. *Research papers in education*, *35*(6), 641-680.

Krapp, A. (2003). Die Bedeutung der Lernmotivation für die Optimierung des schulischen Bildungssystems. *Politische Studien*, *54*(3), 91–105.

Kurniawan, J., Effendi, Z. M., & Dwita, S. (2018, July). The Effect of school environment, family environment and learning motivation on students' learning performance. In *First Padang International Conference On Economics Education, Economics, Business and Management, Accounting*

Leal-Soto, F., Onate, C. B., Ulloa, P. S., & Maluenda, J. T. (2013). FAMILY FACTORS, ACHIEVEMENT GOALS AND ACADEMIC MOTIVATION IN LATIN AMERICAN STUDENTS. *European Scientific Journal, ESJ*, *9*(19). http://eujournal.org/index.php/esj/article/viewFile/1345/1354

Li H, Peng MY-P, Yang, M. & Chen C-C. (2020). Exploringthe Influence of Learning Motivationand Socioeconomic Status onCollege Students' Learning OutcomesUsing Self-Determination Theory. *Frontiers in Psychology*. 10.3389/fpsyg.2020.00849

Licht, B. G. (1983). Cognitive-motivational factors that contribute to the achievement of learning disabled children. *Journal of Learning Disabilities*, *16*, 483-490.

Little, J. (2004). The Collision: College Students, Family Problems and University Life. *The Vermont Connection*, *25*(1), 7.

Lombardi, E., Traficante, D., Bettoni, R., Offredi, I., Giorgetti, M., & Vernice, M. (2019). The impact of school climate on well-being experience and school engagement: A study with high-school students. *Frontiers in Psychology, 10*, 2482.

Lumsden, L. (1994). Student motivation to learn, *ERIC Digest*, 92, 4358. http://www.kidsource.com/kidsource/content2/Student_Motivatation.html #credits

Mageau, G. A., Ranger, F., Koestner, R., & Moreau, E. (2015). Construction and validation of the perceived parental autonomy support scale (P-PASS). *Canadian Journal of Behavioural Science, 47*(3), 251–262.

Mauliya, I., Relianisa, R. Z., & Rokhyati, U. (2020). Lack of motivation factors creating poor academics performance in the context of graduate English department students. *Journal Of Linguistics and Language Teaching, 6*(2), 73-85.

Mazuin, M. H. et al. (2020). Moderating Effects of Student Motivation on the Relationship between Learning Styles and Student Engagement, *Asian Journal of University Education (AJUE)*, 16(2), 95-103.

Mediaplanet. (2020). *The impact of family involvement at the college level- Education and career news*. Education and Career News. https: //www.educationandcareernews.com/college-preparedness/the-impact-of-family-involvement-at-the-college-level-2/

Mihret, A. M., Dilgasa, G. S., & Mamo, T. H. (2019). Parenting style as correlates of adolescents' academic achievement motivation of bate secondary school, Haramaya, Ethiopia. *International Journal of Education and Literacy Studies*, *7*(2), 172-176.

Muller, F. H. & Louw, J. (2004). Learning environment, motivation and interest: Perspectives on self-determination theory, *South African Journal of Psychology*, *34*(2), pp. 169--190

Muharam, L. O., Ihjon, I., Hijrah, W. O., & Samiruddin, T. (2019). The effect of teaching style on students' motivation and academic achievement: Empirical evidence from public senior high school in konawe selatan regency. *International Journal of Scientific and Technology Research, 8*(9), 1934-1938.

Nishimura, T. (2014). Effective professional development of teachers: A guide to actualizing inclusive schooling. *International Journal of Whole Schooling, 10*(1), 19-42.

Noor, Q., Basit, A., Muhammad, I., Scholar, & Scholar, M. P. (2021). Effect of classroom learning environment on students' achievement motivation at university effect of classroom learning environment on students' achievement motivation at university level Noor-ul-ain Khalid. *Turkish Online Journal of Qualitative Inquiry, 12*(10), 1-15.

Norsuhaily Abu Bakar et al. (2022). Influence of Students' Motivation on Academic Achievement Among Undergraduate Students in Malaysia. *Journal of Positive School Psychology*, *6*(2), 3443 – 3450.

OECD (2019). *OECD future of education and skills 2030. OECD learning compass 2030*. Paris: OECD Publishing.

Oroujlou, N., & Vahedi, M. (2011). Motivation, attitude, and language learning. *Procedia-Social and Behavioral Sciences, 29*, 994-1000.

Pai, P. G., Menezes, V., Srikanth, S., & A. M., & Shenoy, J. P. (2014). Medical students' perception of their educational environment. *Journal of Clinical and Diagnostic Research, 8*(1), 103–107.

Pearson Product-Moment Correlation. (2020). Retrieved September 09, 2020, from https://statistics.laerd.com/statistical-guides/pearson-correlation-coefficient-statistical- guide.php

Perera, M. R. (2012). Family Relations and the Problems of University Students. In *Proceedings of International Conference on Humanities and Social Sciences* (Vol. 1).

Perie, M., Rebecca, M. & Anthony, D. L. (2005). NAEP 2004 trends in academic progress: *Three decades of student performance in reading and mathematics*. (NCES 2005-464).

Piccolo, R. F., Bono, J. E., Heinitz, K., Rowold, J., Duehr, E., & Judge, T. A. (2012). The relative impact of complementary leader behaviors: Which matter most? *The Leadership Quarterly, 23*(3), 567-581.

Prado Morales, M. D., Simón Rueda, C., Aguirre Camacho, A., & Alonso Tapia, J. (2020). Parental involvement and family motivational climate as perceived by children: A cross- cultural study. *Psicología educativa: revista de los psicólogos de la educación*.

Premo, J., Cavagnetto, A., & Davis, W. B. (2018). Promoting collaborative classrooms: The impacts of interdependent cooperative learning on undergraduate interactions and achievement. *CBE—Life Sciences Education, 17*(2), ar32.

Rapiudin, A. U. (2019). Students' perception on their motivation in learning english (the analysis students'motivation based on Maslow's concept). *Biormatika: Jurnal ilmiah fakultas keguruan dan ilmu pendidikan, 5*(2), 155-160.

Redondo-Flórez, L.; Ramos-Campo, D.J.; Clemente-Suárez, V.J. (2022). Relationship between Physical Fitness and Academic Performance in University Students. *Int. J. Environ. Res. Public Health*, 19, 14750. https://doi.org/10.3390/ijerph192214750

Reeve, J., Deci, E.L., & Ryan, R.M. (2004). Self-determination theory: A dialectical framework for understanding sociocultural influences on student motivation. In D.M. McInerny & S. Van Etten (Eds.), *Big theories revisited* (pp. 31–60). Greenwich, CT: Information Age Press.

Reeve, J., & Cheon, S. H. (2021). Autonomy-supportive teaching: Its malleability, benefits, and potential to improve educational practice. *Educational Psychologist, 56*(1), 54–77.

Reeve, J., Cheon, S. H., & Yu, T. H. (2020). An autonomy-supportive intervention to develop students' resilience by boosting agentic engagement. *International Journal of Behavioral Development, 44*(4), 325–338.

Richardson, C., & Mishra, P. (2018). Learning environments that support student creativity: Developing the SCALE. Thinking Skills and Creativity, 27, 45-54. *Thinking Skills and Creativity 27 45*, *54*.

Rosanti, R. (2017, February 7). Why a motivated teacher is key to the classroom? https://www.impactteachers.com/motivated-teacher-key-classroom/teacher-tips.

Ryan, R. M., & Connell, J. H. (1989). Perceived locus of causality and internalization: Examining reasons for acting in two domains. *Journal of Personality and Social Psychology*, *57*(5), 749–761.

Ryan, R. M., & Deci, E. L. (2000). Self-determination theory and the facilitation of intrinsic motivation, social development, and well-being. *American Psychologist, 55*(1), 68–78.

Ryan, R. M., & Deci, E. L. (2017). *Self-determination theory: Basic psychological needs in motivation, development, and wellness.* Gilford Press.

Ryan, R. M., & Deci, E. L. (2020). Intrinsic and extrinsic motivation from a self-determination theory perspective: Definitions, theory, practices, and future directions. *Contemporary Educational Psychology*, *61*, 101860.

Samsiah Bidin, Kamaruzaman Jusoff, Nurazila Abdul Aziz, Musdiana Mohammad Salleh & Taniza Tajudin. (2009). Motivation and attitude in learning English among UiTM students in the northern region of Malaysia. *English Language Teaching*. *2*(2), 16- 20.

Sasson, R. (2019, November 18). *Lack of motivation and enthusiasm.* Accessed from https://www.successconsciousness.com/lack-motivation-enthusiasm.htm

Schiepe-Tiska, A. (2019). *Mehrdimensionale Bildungsziele in internationalen Large-Scale Assessments: Konzeptualisierung, Entwicklung und Entstehungsbedingungen am Beispiel der MINT-Fächer* (Habilitation). München: Technische Universität München.

Schober, P., Boer, C., & Schwarte, L. A. (2018). Correlation coefficients. *Anesthesia & Analgesia, 126*(5), 1763–1768.

School, J. (2018, January 20). *Low motivation in learners.* Accessed from https://japari.co.za/low-motivation-learners/.

Semwal, S. (2023, April 26). Exploratory, Descriptive & Causal Research: Why Are They Important. *MBA in Simple Words*. https://mbainsimplewords.com/overview-of-exploratory-descriptive-and-casual/

Shi, L., & Cristea, A. I. (2016). Motivational gamification strategies rooted in self-determination theory for social adaptive e-learning. In *Intelligent Tutoring Systems: 13th International Conference, ITS 2016, Zagreb, Croatia, June 7-10, 2016. Proceedings 13* (pp. 294-300). Springer International Publishing.

Shin, M., & Johnson, Z. D. (2021). From student-to-student confirmation to students' self-determination: an integrated peer-centered model of self-determination theory in the classroom. *Communication Education, 70*(4), 365–383.

Shona, M. (2019). *Sampling methods | types, techniques & examples.* Scribbr. https://www.scribbr.com/methodology/sampling-methods/#:~:text=The%20sample%20is%20the%20group,is%20called%20a%20sampling%20method.

Sileyew, K. J. (2020). Research design and methodology. In *IntechOpen eBooks*.

Silva, A. D., Vautero, J., & Usssene, C. (2021). The influence of family on academic performance of Mozambican university students. *International Journal of Educational Development*, *87*, 102476.

Simplilearn. (2023, September 1). *What is data collection: methods, types, tools*. Simplilearn.com. https://www.simplilearn.com/what-is-data-collection-article

Simsek, Z., Jansen, J. J., Minichilli, A., & Escriba, E. A., (2015). Strategic leadership and leaders in entrepreneurial contexts: A nexus for innovation and impact missed? *Journal of Management Studies, 52*(4), 463-478.

Self-Regulation Questionnaires (SRQ) – selfdeterminationtheory.org. (n.d.). https://selfdeterminationtheory.org/self-regulation-questionnaires/

Standage, M., Duda, J. L. & Ntoumanis, N. (2005). A test of self-determination theory in school physical education, *British Journal of Educational Psychology*, *75*, 411–433.

Statista. (n.d.). *Interval scale - Statista definition.* https://www.statista.com/statistics-glossary/definition/320/interval_scale/

Stewart, D. W., & Shamdasani, P. N. (2014). *Focus groups: Theory and practice.* Sage publications.

StudySmarter. (n.d.). *Sample location.*
https://www.studysmarter.co.uk/explanations/environmentalscience/enviro
nmental-
research/samplelocation/#:~:text=Sample%20location%20is%20the%20pl
ace,should%20be%20accessible%20and%20safe

Sugano, S. G. C., & Mamolo, L. A. (2021). The Effects of teaching methodologies
on students' attitude and motivation: A meta-analysis. *International Journal
of Instruction, 14*(3), 827-846.

Supramaniam, K., & Nazer, A. (2016). *Two rabbits in a hat: Comparison of SPM
English language and IGCSE English as second language high-stakes test.*
In the National *Conference of Research on Language Education.*

Sun, H., Li, W., Shen, B. (2017). Learning in physical education: A self-
determination theory perspective. *Journal of Teaching in Physical
Education, 36*, 277-291.

Taherdoost, H. (2021). Data Collection Methods and Tools for Research; A Step-
by-Step Guide to Choose Data Collection Technique for Academic and
Business Research Projects. *International Journal of Academic Research in
Management (IJARM), 10.*

Takase, M., Niitani, M., Imai, T., & Okada, M. (2019). Students' perceptions of
teaching factors that demotivate their learning in lectures and laboratory-
based skills practice. *International Journal of Nursing Sciences, 6*(4), 414-
420.

Tapia, J. A., Rueda, C. S., & Fuentes, C. A. (2013). Development and validation of
the Family Motivational Climate Questionnaire (FMC-Q). *PubMed, 25*(2),
266–274.

Taylor, S. (2020). Regression Analysis.
https://corporatefinanceinstitute.com/resources/data-science/regression-
analysis/

Tsai, H. T., Wu, T. J., & Yeh, S. P. (2013). Chinese paternalistic leadership and
leadership effectiveness in textile industry. *Autex Research Journal, 13*(3),
82-88.

Umadevi, S. (2001). The silence in classroom and what it means. *Language
Reporter.* 13-34.

Usman, O. & Fadilah, R. N. (2019). The Effect of Family Environment, Environmental Campus, Motivation and Learning To Learn Student Behavior. https://dx.doi.org/10.2139/ssrn.3510669

Vallerand, R. J., Pelletier, L. G., Blais, M. R., Briere, N. M., Senecal, C., & Vallieres, E. F. (1992). The academic motivation scale: A measure of intrinsic, extrinsic, and amotivation in education. *Educational and Psychological Measurement, 52*(4), 1003–1017.

Valtonen, Teemu; LeppÃ¤nen, Ulla; HyypiÃ¤, Mareena; Kokko, Anna; Manninen, Jyri; Vartiainen, Henriikka; Sointu, Erkko; Hirsto, Laura (2020). Learning environments preferred by university students: a shift toward informal and flexible learning environments. *Learning Environments Research*, doi:10.1007/s10984-020-09339-6

Vasconcellos, D., Parker, P. D., Hilland, T., Cinelli, R., Owen, K. B., Kapsal, N., Antczak, D., Lee, J., Ntoumanis, N., Ryan, R. M., & Lonsdale, C. (2020). Self-determination theory applied to physical education: A systematic review and meta-analysis. *Journal of Educational Psychology, 112*(7), 1444-1469.

Vasquez, A. C., Patall, E. A., Fong, C. J., Corrigan, A. S., & Pine, L. (2016). Parent autonomy support, academic achievement, and psychosocial functioning: A meta-analysis of research. *Educational Psychology Review, 28*(3), 605–644.

Wahyuni, S., Azizah, A. N. D., & Septiana, N. Z. (2022). The Effect of Family Social Support and School Climate on Students' Learning Motivation. *Edudeena: Journal of Islamic Religious Education*, *6*(2), 102-116.

Wardani, A. D., Gunawan, I., Kusumaningrum, D. E., Benty, D. D. N., Sumarsono, R. B., Nurabadi, A., Handayani, L. (2020). Student learning motivation: A conceptual paper, advances in social science. *Education and Humanities Research, 487*, 275-278.

Whitaker, D. (2012). Neighborhood & family effects on learning motivation among urban African American middle school youth. *HHS Public Access*, 131–138.

Williams, E. (2018, June 29). *What is the meaning of academic performance?* https://work.chron.com/meaning-academic-performance-17332.html

Williams, G., & Deci, E. L. (1996). Internalization of biopsychosocial values by medical students: A test of self-determination theory. *Journal of Personality and Social Psychology*, *70*(4), 767–779.

Wijsman, L. A., Saab, N., Warrens, M. J., Van Driel, J., & Westenberg, P. M. (2018). Relations of autonomous and controlled motivation with performance in secondary school students' favoured and disfavoured subjects. *Educational Research and Evaluation*, *24*(1–2), 51–67.

Xerri, Radford, Shacklock, Kate. (2018). Student engagement In Academic

Activities: A Social Support Perspective. *Higher Education: The International Journal of Higher Education Research*, *75*(4), p589-605.

Yang, G., Badri, M., Al Rashedi, A., & Almazroui, K. (2018). The role of reading motivation, self-efficacy, and home influence in students' literacy achievement: a preliminary examination of fourth graders in Abu Dhabi. *Large-Scale Assessments in Education*, *6*, 1-19.

Yu, R., & Singh, K. (2018). Teacher support, instructional practices, student motivation, and mathematics achievement in high school. *The Journal of Educational Research*, *111*(1), 81-94.

Appendix 1

Krejcie and Morgan table

N	S	N	S	N	S
10	10	220	140	1200	291
15	14	230	144	1300	297
20	19	240	148	1400	302
25	24	250	152	1500	306
30	28	260	155	1600	310
35	32	270	159	1700	313
40	36	280	162	1800	317
45	40	290	165	1900	320
50	44	300	169	2000	322
55	48	320	175	2200	327
60	52	340	181	2400	331
65	56	360	186	2600	335
70	59	380	191	2800	338
75	63	400	196	3000	341
80	66	420	201	3500	346
85	70	440	205	4000	351
90	73	460	210	4500	354
95	76	480	214	5000	357
100	80	500	217	6000	361
110	86	550	226	7000	364
120	92	600	234	8000	367
130	97	650	242	9000	368
140	103	700	248	10000	370
150	108	750	254	15000	375
160	113	800	260	20000	377
170	118	850	265	30000	379
180	123	900	269	40000	380
190	127	950	274	50000	381
200	132	1000	278	75000	382
210	136	1100	285	1000000	384

Note.—*N* is population size.   *S* is sample size.

Source: Krejcie & Morgan, 1970

Appendix 2

Blank Questionnaire

UBMZ3016 RESEARCH PROJECT

Dear respondents,

We are the final year undergraduate students who are currently pursuing Bachelor of Business Administration (HONS) from Universiti Tunku Abdul Rahman (UTAR). The purpose of this study is to investigate factors affecting student motivation in learning among UTAR students.

There are Four (4) sections in this questionnaire. Section A is about the Demographic Profile. Sections B, C and D cover all of the variables in this study. Please read the instructions carefully before answering the questions. ALL questions are compulsory to answer.

The information collected from you will be kept strictly private and confidential. All responses and findings will be used solely for academic purposes.

Your assistance in completing this questionnaire is very much appreciated. Thank you for your participation. If you have any questions regarding this questionnaire, you may contact us :

Angeline Cheam - angelinecci2164@1utar.my
Chia Khai Xin - khaixinchia@1utar.my
Lee Ker Xin - lkx2509@1utar.my
Lee Min Yee - minyee1220@1utar.my

PERSONAL DATA PROTECTION STATEMENT
Please be informed that in accordance with Personal Data Protection Act 2010 ("PDPA") which came into force on 15 November 2013, Universiti Tunku Abdul Rahman ("UTAR") is hereby bound to make notice and require consent in relation to collection, recording, storage, usage and retention of personal information.

Notice:
1. The purposes for which your personal data may be used are inclusive but not limited to:-
• For assessment of any application to UTAR For processing any benefits and services
• For communication purposes
• For advertorial and news
• For general administration and record purposes
• For enhancing the value of education
• For educational and related purposes consequential to UTAR
• For the purpose of our corporate governance
• For consideration as a guarantor for UTAR staff/ student applying for his/her scholarship/study loaned

2. Your personal data may be transferred and/or disclosed to third party and/or UTAR collaborative partners including but not limited to the respective and appointed outsourcing agents for purpose of fulfilling our obligations to you in respect of the purposes and all such other purposes that are related to the purposes and also in providing integrated services, maintaining and storing records. Your data may be shared when required by laws and when disclosure is necessary to comply with applicable laws.

3. Any personal information retained by UTAR shall be destroyed and/or deleted in accordance with our retention policy applicable for us in the event such information is no longer required.

4. UTAR is committed in ensuring the confidentiality, protection, security and accuracy of your personal information made available to us and it has been our ongoing strict policy to ensure that your personal information is accurate, complete, not misleading and updated. UTAR would also ensure that your personal data shall not be used for political and commercial purposes.

Consent:

1. By submitting this form you hereby authorise and consent to us processing (including disclosing)your personal data and any updates of your information, for the purposes and/or for any other purposes related to the purpose.

2. If you do not consent or subsequently withdraw your consent to the processing and disclosure of your personal data, UTAR will not be able to fulfill our obligations or to contact you or to assist you in respect of the purposes and/or for any other purposes related to the purpose.

3. You may access and update your personal data by writing to us at :

Angeline Cheam - angelinecci2164@1utar.my
Lee Min Yee - minyee1220@1utar.my
Lee Ker Xin - lkx2509@1utar.my
Chia Khai Xin - khaixinchia@1utar.my

Acknowledgement of Notice *

○ I have been notified by you and that I hereby understood, consented and agreed per UTAR above notice.

○ I disagree, my personal data will not be processed.

In this section, there are 7 questions required to answer.

1. Are you full time student in UTAR? (If no, then this questionnaire is not relevant *
to you, thank you for your time.)

○ Yes

○ No

2. Gender *

○ Male

○ Female

3. Age(Years) *

○ 18 - 20

○ 21 - 23

○ 24 and above

4. Years of Study *

○ First

○ Second

○ Third

○ Fourth

○ Other: _____

5. Campus *

○ UTAR Kampar

○ UTAR Sg Long

6. Race *

○ Malay

○ Chinese

○ Indian

○ Other: _____

7. Faculty *

○ Faculty of Engineering and Green Technology

○ Faculty of Information and Communication Technology

○ Faculty of Science

○ Faculty of Accountancy and Management (Sg Long)

○ Faculty of Business and Finance (Kampar)

○ Faculty of Arts and Social Science (Kampar)

○ Faculty of Creative Industries

○ Institute of Chinese Studies

○ M. Kandiah Faculty of Medicine and Health Sciences (Sg Long)

○ Lee Kong Chian Faculty of Engineering and Science

○ Other: _____

105

Based on your learning motivation experience as a student, please choose the most appropriate option that best indicate your agreement level about the following statements.

Level of agreement
1 - Strongly Disagree;
2 - Disagree;
3 - Neutral;
4 - Agree;
5 - Strongly Agree

8. When I fail an exam, my parents told me to look for failure reasons, instead of paying attention to grades. *

	1	2	3	4	5	
Strongly Disagree	○	○	○	○	○	Strongly Agree

9. My parents often told me that I have to get better grades than my peers. *

	1	2	3	4	5	
Strongly Disagree	○	○	○	○	○	Strongly Agree

10. If I do not study or do my homework, my parents do not insist too much that I do it. *

	1	2	3	4	5	
Strongly Disagree	○	○	○	○	○	Strongly Agree

11. My parents do not allow me to watch TV, play or access to Internet unless I have finished my homework. *

	1	2	3	4	5	
Strongly Disagree	○	○	○	○	○	Strongly Agree

12. My parents sometimes tell me to study and sometimes not: there are no fixed rules. *

	1	2	3	4	5	
Strongly Disagree	○	○	○	○	○	Strongly Agree

13. If I have difficulties with a task, my parents do not do it themselves: They teach me to carry it out by myself. *

	1	2	3	4	5	
Strongly Disagree	○	○	○	○	○	Strongly Agree

14. My parents try not to let anyone bother me while I am studying. *

	1	2	3	4	5	
Strongly Disagree	○	○	○	○	○	Strongly Agree

15. Although my parents do not have time to help me, if I need help, they manage to take time. *

	1	2	3	4	5	
Strongly Disagree	○	○	○	○	○	Strongly Agree

16. I ask for help from my parents when I need it, because they (at least one of them) have enough patience to teach me. *

	1	2	3	4	5	
Strongly Disagree	○	○	○	○	○	Strongly Agree

17. My parents like to visit places like museums, expositions, etc., where they can learn. *

	1	2	3	4	5	
Strongly Disagree	○	○	○	○	○	Strongly Agree

18. My parents read books very often. *

	1	2	3	4	5	
Strongly Disagree	○	○	○	○	○	Strongly Agree

Based on your learning motivation experience as a student, please choose the most appropriate option that best indicate your agreement level about the following statements.

Level of agreement
1 - Strongly Disagree;
2 - Disagree;
3 - Neutral;
4 - Agree;
5 - Strongly Agree

19. Classmates help each other in learning. *

	1	2	3	4	5	
Strongly Disagree	○	○	○	○	○	Strongly Agree

20. After class, classmates can find others to discuss homework. *

	1	2	3	4	5	
Strongly Disagree	○	○	○	○	○	Strongly Agree

21. If a student has difficulty in learning, he/she can find classmates for help. *

	1	2	3	4	5	
Strongly Disagree	○	○	○	○	○	Strongly Agree

22. If a student does not understand the instructor's instruction, he/she can ask classmates. *

	1	2	3	4	5	
Strongly Disagree	○	○	○	○	○	Strongly Agree

23. In class, student can usually keep quiet. *

	1	2	3	4	5	
Strongly Disagree	○	○	○	○	○	Strongly Agree

24. During lesson, students are working hard to do their assignment. *

	1	2	3	4	5	
Strongly Disagree	○	○	○	○	○	Strongly Agree

25. The classroom is usually very noisy. *

	1	2	3	4	5	
Strongly Disagree	○	○	○	○	○	Strongly Agree

26. In class, students are working very hard to study. *

	1	2	3	4	5	
Strongly Disagree	○	○	○	○	○	Strongly Agree

27. When the instructor teaches, students will normally behave themselves. *

	1	2	3	4	5	
Strongly Disagree	○	○	○	○	○	Strongly Agree

28. Students are often disturbed by other classmates in class. *

	1	2	3	4	5	
Strongly Disagree	○	○	○	○	○	Strongly Agree

29. Student don't pay attention to classroom discipline. *

	1	2	3	4	5	
Strongly Disagree	○	○	○	○	○	Strongly Agree

30. In class, some students speak loudly some read other books and some talk with each other. *

	1	2	3	4	5	
Strongly Disagree	○	○	○	○	○	Strongly Agree

31. Instructor is always willing to answer student's questions. *

	1	2	3	4	5	
Strongly Disagree	○	○	○	○	○	Strongly Agree

32. Instructor is patient in teaching students. *

	1	2	3	4	5	
Strongly Disagree	○	○	○	○	○	Strongly Agree

33. Instructor often draws attention to examinations. *

	1	2	3	4	5	
Strongly Disagree	○	○	○	○	○	Strongly Agree

34. If a student requests, instructor will explain and answer patiently. *

	1	2	3	4	5	
Strongly Disagree	○	○	○	○	○	Strongly Agree

35. Instructor is serious in teaching students. *

	1	2	3	4	5	
Strongly Disagree	○	○	○	○	○	Strongly Agree

36. Instructor arranges adequate time for teaching every lesson. *

	1	2	3	4	5	
Strongly Disagree	○	○	○	○	○	Strongly Agree

37. Before class, instructor has enough preparation. *

	1	2	3	4	5	
Strongly Disagree	○	○	○	○	○	Strongly Agree

38. Instructor explains teaching contents in detail. *

	1	2	3	4	5	
Strongly Disagree	○	○	○	○	○	Strongly Agree

39. Instructor helps students to revise before test and examinations. *

	1	2	3	4	5	
Strongly Disagree	○	○	○	○	○	Strongly Agree

40. Instructor often rewards students for progress in academic achievements. *

	1	2	3	4	5	
Strongly Disagree	○	○	○	○	○	Strongly Agree

41. Instructor often helps students to set learning targets. *

	1	2	3	4	5	
Strongly Disagree	○	○	○	○	○	Strongly Agree

42. Instructor often encourages students to see whether their own study method * is helpful for learning.

	1	2	3	4	5	
Strongly Disagree	○	○	○	○	○	Strongly Agree

43. Instructor gives advice on students' learning progress. *

	1	2	3	4	5	
Strongly Disagree	○	○	○	○	○	Strongly Agree

44. Instructor praises students' performance in learning. *

	1	2	3	4	5	
Strongly Disagree	○	○	○	○	○	Strongly Agree

45. Instructor often designs some class assignments so as to allow students to * apply knowledge in daily lives.

	1	2	3	4	5	
Strongly Disagree	○	○	○	○	○	Strongly Agree

46. Instructor often provides some strategies for improving learning to every * student.

	1	2	3	4	5	
Strongly Disagree	○	○	○	○	○	Strongly Agree

Based on your learning motivation experience as a student, please choose the most appropriate option that best indicate your agreement level about the following statements.

Level of agreement
1 - Strongly Disagree;
2 - Disagree;
3 - Neutral;
4 - Agree;
5 - Strongly Agree

47. I participate actively in my class because I feel like it's a good way to improve * my skills and my understanding of the material.

	1	2	3	4	5	
Strongly Disagree	○	○	○	○	○	Strongly Agree

48. I participate actively in my class because learning is important to my intellectual growth. *

	1	2	3	4	5	
Strongly Disagree	○	○	○	○	○	Strongly Agree

49. I am likely to follow my instructor's suggestions because I believe * my instructor's suggestions will help improve my skill and understanding.

	1	2	3	4	5	
Strongly Disagree	○	○	○	○	○	Strongly Agree

50. I will work to expand my knowledge throughout my degree because it's exciting and interesting to learn new things.

	1	2	3	4	5	
Strongly Disagree	○	○	○	○	○	Strongly Agree

51. I will work to expand my knowledge throughout my degree because it's a challenge to really understand course material.

	1	2	3	4	5	
Strongly Disagree	○	○	○	○	○	Strongly Agree

52. I participate actively in my class because others would think badly of me if I didn't. *

	1	2	3	4	5	
Strongly Disagree	○	○	○	○	○	Strongly Agree

53. I participate actively in my class because I feel proud when I do well. *

	1	2	3	4	5	
Strongly Disagree	○	○	○	○	○	Strongly Agree

54. I am likely to follow my instructor's suggestions because I would get a bad * grade if I didn't do what they suggest.

	1	2	3	4	5	
Strongly Disagree	○	○	○	○	○	Strongly Agree

55. I am likely to follow my instructor's suggestions because I would feel guilty if I didn't comply with my instructor's suggestions.

	1	2	3	4	5	
Strongly Disagree	○	○	○	○	○	Strongly Agree

56. I am likely to follow my instructor's suggestions because it's easier to do what I'm told than to think about it.

	1	2	3	4	5	
Strongly Disagree	○	○	○	○	○	Strongly Agree

57. I will work to expand my knowledge throughout my degree because a good GPA will look positive on my record.

	1	2	3	4	5	
Strongly Disagree	○	○	○	○	○	Strongly Agree

58. I will work to expand my knowledge throughout my degree because I want others to think that I am intelligent.

	1	2	3	4	5	
Strongly Disagree	○	○	○	○	○	Strongly Agree

Appendix 3:

Variable View

	Name	Type	Width	Decimals	Label	Values	Missing	Columns	Align	Measure	Role
54	SM9	Numeric	8	2	Feel guilty	{1.00, Stron...	None	8	Right	Scale	Input
55	SM10	Numeric	8	2	Easier	{1.00, Stron...	None	8	Right	Scale	Input
56	SM11	Numeric	8	2	Good GPA	{1.00, Stron...	None	8	Right	Scale	Input
57	SM12	Numeric	8	2	Intelligent	{1.00, Stron...	None	8	Right	Scale	Input
58	FM3R	Numeric	8	2	Do not insist	{1.00, Stron...	None	8	Right	Scale	Input
59	CE7R	Numeric	8	2	Noisy	{1.00, Stron...	None	8	Right	Scale	Input
60	CE10R	Numeric	8	2	Disturbed	{1.00, Stron...	None	8	Right	Scale	Input
61	CE11R	Numeric	8	2	Attention	{1.00, Stron...	None	8	Right	Scale	Input
62	CE12R	Numeric	8	2	Speak	{1.00, Stron...	None	8	Right	Scale	Input
63	FMave	Numeric	8	2	Family	{1.00, Stron...	None	8	Right	Scale	Input
64	CEave	Numeric	8	2	Classroom Environ...	{1.00, Stron...	None	8	Right	Scale	Input
65	SMave	Numeric	8	2	Students' Motivation	{1.00, Stron...	None	8	Right	Scale	Input
66											
67											
68											
69											
70											
71											
72											
73											
74											
75											
76											
77											
78											
79											
80											

Data View   Variable View

IBM SPSS Statistics Processor is ready   Unicode:ON

111

Appendix 4:

Data View

Visible: 65 of 65 Variables

	Gender	Age	Years	Campus	Race	Faculty	FM1	FM2	FM3	FM4	FM5	FM6	FM7	FM8	FM9	FM10	FM11	CE1	CE2	CE
51	2.00	3.00	3.00	1.00	1.00	1.00	5.00	1.00	2.00	4.00	1.00	4.00	4.00	5.00	5.00	4.00	4.00	5.00	4.00	5
52	1.00	2.00	2.00	1.00	1.00	1.00	5.00	2.00	1.00	1.00	5.00	2.00	4.00	5.00	4.00	4.00	2.00	5.00	4.00	5
53	2.00	1.00	1.00	1.00	1.00	1.00	4.00	1.00	1.00	1.00	4.00	4.00	4.00	4.00	5.00	4.00	4.00	5.00	4.00	4
54	1.00	2.00	3.00	1.00	1.00	2.00	5.00	1.00	2.00	2.00	4.00	4.00	2.00	4.00	4.00	2.00	4.00	4.00	4.00	4
55	1.00	2.00	2.00	1.00	1.00	2.00	5.00	1.00	1.00	4.00	1.00	4.00	4.00	4.00	5.00	4.00	4.00	5.00	4.00	5
56	2.00	1.00	1.00	1.00	1.00	2.00	5.00	1.00	2.00	1.00	1.00	4.00	2.00	4.00	2.00	2.00	4.00	5.00	4.00	5
57	1.00	2.00	3.00	1.00	1.00	2.00	5.00	1.00	1.00	4.00	1.00	5.00	5.00	5.00	5.00	4.00	4.00	5.00	4.00	5
58	1.00	2.00	3.00	1.00	1.00	2.00	5.00	1.00	2.00	4.00	1.00	2.00	4.00	4.00	4.00	2.00	2.00	5.00	5.00	4
59	1.00	2.00	3.00	1.00	1.00	7.00	5.00	1.00	1.00	4.00	1.00	4.00	4.00	4.00	4.00	1.00	1.00	5.00	4.00	5
60	2.00	2.00	2.00	1.00	1.00	3.00	5.00	1.00	2.00	4.00	2.00	4.00	4.00	4.00	4.00	5.00	4.00	5.00	4.00	5
61	2.00	2.00	3.00	1.00	1.00	3.00	5.00	1.00	2.00	4.00	2.00	4.00	4.00	4.00	4.00	5.00	4.00	5.00	4.00	5
62	1.00	2.00	2.00	1.00	1.00	3.00	5.00	1.00	1.00	4.00	1.00	5.00	4.00	5.00	4.00	4.00	5.00	5.00	4.00	5
63	1.00	1.00	1.00	1.00	1.00	3.00	4.00	1.00	1.00	5.00	1.00	4.00	4.00	4.00	4.00	4.00	4.00	5.00	5.00	4
64	1.00	1.00	1.00	2.00	1.00	4.00	4.00	1.00	1.00	4.00	1.00	4.00	5.00	4.00	5.00	4.00	5.00	5.00	4.00	5
65	1.00	2.00	3.00	2.00	1.00	4.00	5.00	1.00	2.00	5.00	1.00	4.00	4.00	5.00	5.00	5.00	5.00	4.00	5.00	5
66	1.00	2.00	2.00	2.00	1.00	4.00	5.00	1.00	2.00	5.00	1.00	5.00	4.00	5.00	5.00	4.00	5.00	4.00	4.00	4
67	1.00	1.00	1.00	2.00	1.00	4.00	5.00	2.00	2.00	4.00	2.00	5.00	5.00	4.00	5.00	4.00	5.00	4.00	5.00	5
68	2.00	2.00	2.00	2.00	1.00	4.00	5.00	1.00	2.00	5.00	1.00	4.00	4.00	5.00	4.00	5.00	4.00	5.00	4.00	5
69	1.00	1.00	1.00	1.00	1.00	6.00	5.00	1.00	1.00	4.00	1.00	4.00	4.00	4.00	4.00	4.00	5.00	5.00	4.00	5
70	2.00	2.00	2.00	1.00	1.00	6.00	5.00	1.00	2.00	2.00	5.00	4.00	4.00	5.00	5.00	4.00	4.00	5.00	4.00	5
71	2.00	3.00	4.00	1.00	1.00	6.00	4.00	1.00	2.00	4.00	2.00	4.00	4.00	5.00	5.00	4.00	5.00	5.00	5.00	4
72	1.00	2.00	3.00	1.00	3.00	6.00	5.00	1.00	2.00	5.00	1.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00	4.00	5
73	2.00	2.00	2.00	1.00	1.00	6.00	5.00	1.00	2.00	5.00	1.00	5.00	5.00	5.00	4.00	5.00	5.00	5.00	4.00	5
74	1.00	1.00	1.00	1.00	1.00	7.00	5.00	1.00	2.00	5.00	1.00	5.00	5.00	4.00	4.00	5.00	4.00	5.00	5.00	4
75	2.00	2.00	3.00	1.00	1.00	7.00	5.00	1.00	1.00	4.00	2.00	4.00	5.00	5.00	4.00	5.00	4.00	5.00	4.00	5

Data View   Variable View

IBM SPSS Statistics Processor is ready   Unicode:ON

Visible: 65 of 65 Variables

	Gender	Age	Years	Campus	Race	Faculty	FM1	FM2	FM3	FM4	FM5	FM6	FM7	FM8	FM9	FM10	FM11	CE1	CE2	CE
76	1.00	2.00	3.00	1.00	1.00	7.00	4.00	2.00	1.00	4.00	2.00	2.00	2.00	2.00	3.00	1.00	2.00	5.00	4.00	4
77	1.00	2.00	2.00	1.00	1.00	7.00	5.00	2.00	2.00	5.00	1.00	5.00	5.00	4.00	4.00	5.00	4.00	5.00	4.00	5
78	1.00	2.00	3.00	1.00	1.00	7.00	5.00	2.00	2.00	2.00	1.00	3.00	3.00	4.00	3.00	3.00	2.00	5.00	4.00	5
79	1.00	2.00	3.00	1.00	1.00	8.00	5.00	1.00	2.00	5.00	1.00	5.00	5.00	5.00	4.00	4.00	5.00	5.00	4.00	5
80	1.00	2.00	3.00	1.00	1.00	8.00	5.00	1.00	2.00	4.00	1.00	5.00	4.00	4.00	4.00	5.00	4.00	5.00	4.00	4
81	2.00	2.00	3.00	1.00	1.00	8.00	5.00	1.00	1.00	2.00	1.00	3.00	3.00	4.00	4.00	2.00	3.00	5.00	5.00	4
82	1.00	2.00	2.00	1.00	1.00	8.00	4.00	1.00	2.00	2.00	1.00	3.00	4.00	4.00	4.00	3.00	3.00	5.00	4.00	5
83	1.00	2.00	3.00	1.00	1.00	8.00	5.00	2.00	1.00	5.00	2.00	5.00	4.00	4.00	5.00	5.00	4.00	5.00	4.00	5
84	1.00	1.00	1.00	2.00	1.00	9.00	5.00	1.00	2.00	5.00	1.00	5.00	4.00	4.00	5.00	5.00	4.00	5.00	4.00	5
85	2.00	2.00	3.00	2.00	1.00	9.00	5.00	1.00	2.00	5.00	2.00	5.00	4.00	4.00	5.00	4.00	4.00	4.00	4.00	5
86	2.00	2.00	2.00	2.00	1.00	9.00	5.00	1.00	2.00	5.00	1.00	5.00	4.00	5.00	5.00	4.00	5.00	5.00	5.00	4
87	2.00	2.00	3.00	2.00	1.00	9.00	5.00	1.00	2.00	4.00	2.00	4.00	5.00	4.00	4.00	5.00	5.00	5.00	5.00	4
88	1.00	2.00	2.00	2.00	1.00	9.00	5.00	1.00	2.00	5.00	1.00	5.00	4.00	4.00	5.00	4.00	5.00	4.00	4.00	4
89	2.00	2.00	2.00	1.00	1.00	9.00	5.00	1.00	2.00	4.00	1.00	5.00	4.00	5.00	5.00	4.00	4.00	5.00	4.00	4
90	2.00	2.00	3.00	1.00	1.00	9.00	4.00	1.00	2.00	3.00	1.00	4.00	4.00	5.00	5.00	3.00	3.00	5.00	4.00	5
91	2.00	2.00	2.00	1.00	1.00	9.00	5.00	1.00	1.00	1.00	1.00	4.00	4.00	4.00	4.00	3.00	4.00	5.00	4.00	4
92	2.00	2.00	2.00	1.00	1.00	9.00	5.00	2.00	1.00	5.00	2.00	5.00	4.00	4.00	5.00	5.00	4.00	5.00	4.00	5
93	2.00	2.00	3.00	1.00	1.00	9.00	5.00	1.00	2.00	5.00	2.00	5.00	4.00	5.00	4.00	5.00	5.00	4.00	5.00	4
94	1.00	2.00	3.00	1.00	1.00	5.00	5.00	2.00	1.00	5.00	2.00	5.00	4.00	5.00	4.00	5.00	4.00	4.00	5.00	4
95	2.00	2.00	2.00	1.00	3.00	5.00	5.00	2.00	2.00	5.00	1.00	5.00	4.00	5.00	5.00	4.00	5.00	4.00	5.00	4
96	2.00	2.00	2.00	1.00	1.00	5.00	4.00	2.00	1.00	5.00	1.00	5.00	5.00	5.00	5.00	4.00	4.00	4.00	4.00	5
97	1.00	2.00	3.00	1.00	1.00	5.00	4.00	2.00	1.00	5.00	1.00	5.00	4.00	4.00	4.00	4.00	5.00	5.00	5.00	5
98	2.00	2.00	3.00	1.00	1.00	5.00	4.00	1.00	2.00	5.00	1.00	5.00	5.00	5.00	5.00	4.00	4.00	5.00	5.00	4
99	1.00	2.00	3.00	1.00	1.00	5.00	4.00	2.00	2.00	5.00	2.00	5.00	4.00	5.00	5.00	4.00	5.00	5.00	4.00	4
100	1.00	2.00	3.00	1.00	1.00	5.00	5.00	2.00	2.00	4.00	1.00	4.00	4.00	5.00	5.00	4.00	4.00	5.00	4.00	5

Data View   Variable View

IBM SPSS Statistics Processor is ready   Unicode:ON

	Gender	Age	Years	Campus	Race	Faculty	FM1	FM2	FM3	FM4	FM5	FM6	FM7	FM8	FM9	FM10	FM11	CE1	CE2	CE3
101	2.00	2.00	3.00	1.00	1.00	5.00	4.00	2.00	1.00	1.00	5.00	2.00	4.00	5.00	4.00	4.00	2.00	5.00	4.00	5
102	2.00	2.00	3.00	1.00	1.00	5.00	4.00	2.00	2.00	1.00	4.00	4.00	4.00	4.00	5.00	4.00	4.00	5.00	4.00	5
103	2.00	2.00	3.00	1.00	1.00	5.00	4.00	1.00	2.00	2.00	4.00	4.00	2.00	4.00	4.00	2.00	4.00	5.00	4.00	5
104	1.00	2.00	2.00	1.00	1.00	6.00	4.00	2.00	2.00	4.00	1.00	4.00	4.00	4.00	5.00	4.00	4.00	4.00	4.00	4
105	1.00	2.00	3.00	1.00	1.00	5.00	4.00	1.00	2.00	1.00	1.00	4.00	2.00	4.00	2.00	2.00	4.00	4.00	5.00	4
106	1.00	2.00	3.00	1.00	1.00	5.00	5.00	1.00	2.00	4.00	1.00	5.00	5.00	5.00	5.00	4.00	4.00	5.00	4.00	5
107	2.00	2.00	3.00	1.00	1.00	5.00	5.00	1.00	2.00	4.00	1.00	2.00	4.00	4.00	4.00	2.00	2.00	5.00	5.00	4
108	2.00	2.00	3.00	1.00	1.00	5.00	5.00	1.00	2.00	4.00	1.00	4.00	4.00	4.00	4.00	1.00	1.00	5.00	5.00	4
109	2.00	2.00	3.00	1.00	1.00	5.00	5.00	1.00	2.00	4.00	2.00	4.00	4.00	4.00	4.00	5.00	4.00	5.00	5.00	4
110	1.00	2.00	3.00	1.00	1.00	5.00	5.00	1.00	2.00	4.00	2.00	4.00	4.00	4.00	4.00	5.00	4.00	5.00	5.00	4
111	2.00	2.00	3.00	1.00	1.00	5.00	5.00	1.00	2.00	4.00	1.00	5.00	4.00	5.00	4.00	4.00	5.00	5.00	5.00	4
112	1.00	2.00	3.00	1.00	1.00	5.00	5.00	1.00	2.00	5.00	1.00	4.00	4.00	4.00	4.00	4.00	4.00	5.00	4.00	5
113	1.00	2.00	3.00	1.00	1.00	5.00	4.00	1.00	2.00	4.00	1.00	4.00	5.00	4.00	5.00	4.00	5.00	5.00	4.00	4
114	1.00	2.00	3.00	1.00	1.00	5.00	5.00	1.00	2.00	5.00	1.00	4.00	4.00	5.00	5.00	5.00	5.00	5.00	4.00	5
115	1.00	2.00	3.00	1.00	1.00	5.00	4.00	1.00	2.00	5.00	1.00	5.00	4.00	4.00	5.00	5.00	4.00	5.00	4.00	5
116	2.00	2.00	3.00	1.00	1.00	5.00	5.00	1.00	2.00	4.00	2.00	5.00	5.00	4.00	5.00	5.00	4.00	5.00	4.00	5
117	1.00	2.00	3.00	1.00	1.00	6.00	5.00	1.00	2.00	5.00	1.00	4.00	4.00	5.00	4.00	5.00	4.00	5.00	5.00	4
118	2.00	2.00	3.00	1.00	1.00	6.00	5.00	1.00	2.00	4.00	1.00	4.00	4.00	4.00	4.00	4.00	5.00	4.00	5.00	5
119	1.00	2.00	3.00	1.00	1.00	6.00	4.00	1.00	2.00	2.00	5.00	4.00	4.00	5.00	4.00	4.00	4.00	5.00	5.00	4
120	2.00	2.00	3.00	1.00	1.00	6.00	5.00	1.00	2.00	4.00	2.00	4.00	4.00	5.00	5.00	4.00	5.00	5.00	4.00	5
121	2.00	2.00	3.00	1.00	1.00	6.00	4.00	1.00	1.00	5.00	1.00	5.00	5.00	5.00	5.00	5.00	5.00	4.00	5.00	4
122	1.00	2.00	3.00	1.00	1.00	1.00	4.00	1.00	1.00	5.00	1.00	5.00	5.00	5.00	5.00	4.00	5.00	5.00	5.00	4
123	2.00	2.00	3.00	1.00	1.00	1.00	4.00	1.00	2.00	5.00	1.00	5.00	5.00	4.00	4.00	5.00	4.00	5.00	4.00	5
124	2.00	2.00	3.00	1.00	1.00	1.00	5.00	1.00	2.00	4.00	2.00	4.00	5.00	5.00	4.00	5.00	4.00	5.00	5.00	4
125	1.00	2.00	3.00	1.00	1.00	1.00	5.00	1.00	2.00	4.00	2.00	2.00	2.00	2.00	3.00	1.00	2.00	5.00	4.00	5

Data View   Variable View

IBM SPSS Statistics Processor is ready   Unicode:ON

	Gender	Age	Years	Campus	Race	Faculty	FM1	FM2	FM3	FM4	FM5	FM6	FM7	FM8	FM9	FM10	FM11	CE1	CE2	CE3
126	1.00	2.00	3.00	1.00	1.00	1.00	4.00	1.00	2.00	5.00	1.00	5.00	5.00	4.00	4.00	5.00	4.00	5.00	5.00	4
127	2.00	2.00	3.00	1.00	1.00	1.00	4.00	1.00	2.00	2.00	1.00	3.00	3.00	4.00	3.00	3.00	2.00	5.00	4.00	5
128	2.00	2.00	3.00	1.00	1.00	2.00	4.00	1.00	2.00	5.00	1.00	5.00	5.00	5.00	4.00	4.00	5.00	5.00	5.00	4
129	1.00	2.00	3.00	1.00	1.00	2.00	5.00	1.00	2.00	4.00	1.00	5.00	4.00	4.00	4.00	5.00	4.00	5.00	5.00	4
130	2.00	2.00	3.00	1.00	1.00	2.00	4.00	1.00	2.00	2.00	1.00	3.00	3.00	4.00	4.00	2.00	3.00	5.00	4.00	5
131	1.00	2.00	3.00	1.00	1.00	2.00	5.00	1.00	2.00	2.00	1.00	3.00	4.00	4.00	4.00	3.00	3.00	5.00	4.00	5
132	2.00	2.00	2.00	1.00	1.00	2.00	4.00	1.00	2.00	5.00	2.00	5.00	4.00	4.00	5.00	5.00	4.00	5.00	5.00	4
133	1.00	2.00	3.00	1.00	1.00	3.00	5.00	1.00	2.00	5.00	1.00	5.00	4.00	4.00	5.00	5.00	4.00	5.00	4.00	5
134	2.00	2.00	2.00	1.00	1.00	3.00	5.00	1.00	2.00	5.00	2.00	5.00	4.00	4.00	5.00	4.00	4.00	4.00	5.00	5
135	2.00	2.00	2.00	1.00	1.00	3.00	5.00	1.00	2.00	5.00	1.00	5.00	4.00	5.00	5.00	4.00	5.00	5.00	5.00	5
136	2.00	2.00	2.00	1.00	1.00	3.00	5.00	1.00	2.00	4.00	2.00	4.00	5.00	4.00	4.00	5.00	5.00	5.00	4.00	4
137	1.00	2.00	2.00	1.00	1.00	3.00	5.00	1.00	2.00	5.00	1.00	5.00	4.00	4.00	5.00	4.00	5.00	5.00	4.00	5
138	2.00	2.00	3.00	2.00	1.00	4.00	5.00	1.00	2.00	4.00	1.00	5.00	4.00	5.00	5.00	4.00	4.00	5.00	5.00	4
139	2.00	2.00	3.00	2.00	1.00	4.00	5.00	1.00	2.00	3.00	1.00	4.00	4.00	5.00	5.00	3.00	3.00	5.00	4.00	5
140	1.00	2.00	2.00	2.00	1.00	4.00	5.00	1.00	2.00	1.00	1.00	4.00	4.00	4.00	4.00	3.00	4.00	5.00	4.00	4
141	1.00	2.00	3.00	2.00	1.00	4.00	5.00	1.00	2.00	5.00	2.00	5.00	4.00	4.00	5.00	5.00	4.00	5.00	5.00	5
142	1.00	2.00	3.00	2.00	1.00	4.00	4.00	1.00	2.00	5.00	2.00	5.00	4.00	5.00	4.00	5.00	5.00	5.00	4.00	5
143	1.00	2.00	2.00	2.00	1.00	7.00	5.00	1.00	2.00	5.00	2.00	5.00	4.00	5.00	4.00	5.00	4.00	5.00	4.00	5
144	1.00	2.00	2.00	2.00	1.00	7.00	5.00	1.00	2.00	5.00	1.00	5.00	4.00	5.00	5.00	4.00	5.00	5.00	5.00	4
145	1.00	2.00	3.00	1.00	1.00	7.00	5.00	1.00	2.00	5.00	1.00	5.00	5.00	5.00	5.00	5.00	4.00	5.00	5.00	4
146	1.00	2.00	3.00	2.00	1.00	7.00	5.00	1.00	2.00	5.00	1.00	5.00	4.00	4.00	4.00	4.00	5.00	5.00	4.00	5
147	2.00	2.00	3.00	2.00	1.00	7.00	5.00	1.00	2.00	5.00	1.00	5.00	5.00	5.00	5.00	5.00	4.00	5.00	4.00	5
148	1.00	2.00	3.00	1.00	1.00	8.00	5.00	1.00	2.00	5.00	2.00	5.00	4.00	5.00	5.00	4.00	5.00	5.00	4.00	5
149	2.00	2.00	3.00	1.00	1.00	8.00	5.00	1.00	2.00	5.00	1.00	5.00	4.00	4.00	5.00	5.00	5.00	5.00	4.00	5
150	1.00	2.00	3.00	1.00	1.00	8.00	5.00	4.00	2.00	4.00	1.00	4.00	4.00	5.00	5.00	4.00	4.00	5.00	4.00	5

Data View   Variable View

IBM SPSS Statistics Processor is ready   Unicode:ON

Visible: 65 of 65 Variables

	Gender	Age	Years	Campus	Race	Faculty	FM1	FM2	FM3	FM4	FM5	FM6	FM7	FM8	FM9	FM10	FM11	CE1	CE2	CE3
151	1.00	2.00	3.00	1.00	1.00	8.00	5.00	5.00	2.00	1.00	5.00	2.00	4.00	5.00	4.00	4.00	2.00	5.00	4.00	5
152	1.00	2.00	3.00	1.00	1.00	8.00	5.00	5.00	2.00	1.00	4.00	4.00	4.00	5.00	4.00	4.00	4.00	5.00	4.00	5
153	2.00	2.00	2.00	1.00	1.00	2.00	5.00	5.00	2.00	2.00	4.00	4.00	2.00	4.00	4.00	2.00	4.00	5.00	4.00	5
154	1.00	2.00	2.00	1.00	1.00	2.00	5.00	5.00	2.00	4.00	1.00	4.00	4.00	4.00	5.00	4.00	4.00	5.00	4.00	5
155	1.00	2.00	3.00	1.00	1.00	2.00	5.00	5.00	2.00	1.00	1.00	4.00	2.00	4.00	2.00	2.00	4.00	5.00	4.00	5
156	2.00	1.00	2.00	1.00	1.00	2.00	5.00	5.00	2.00	4.00	1.00	5.00	5.00	5.00	5.00	4.00	4.00	5.00	5.00	4
157	2.00	1.00	2.00	1.00	1.00	2.00	5.00	5.00	1.00	4.00	1.00	2.00	4.00	4.00	4.00	2.00	2.00	5.00	4.00	5
158	2.00	2.00	3.00	1.00	1.00	5.00	5.00	5.00	2.00	4.00	1.00	4.00	4.00	4.00	4.00	1.00	1.00	5.00	4.00	5
159	1.00	2.00	3.00	1.00	1.00	5.00	5.00	4.00	2.00	4.00	2.00	4.00	4.00	4.00	4.00	5.00	4.00	5.00	4.00	5
160	1.00	2.00	3.00	1.00	1.00	6.00	5.00	4.00	2.00	4.00	2.00	4.00	4.00	4.00	4.00	5.00	4.00	5.00	4.00	5
161	1.00	2.00	3.00	1.00	1.00	5.00	5.00	4.00	2.00	4.00	1.00	5.00	4.00	5.00	4.00	4.00	5.00	5.00	4.00	5
162	1.00	2.00	2.00	1.00	1.00	5.00	5.00	4.00	2.00	5.00	1.00	4.00	4.00	4.00	4.00	4.00	4.00	5.00	4.00	5
163	1.00	2.00	3.00	1.00	1.00	5.00	5.00	4.00	1.00	4.00	1.00	4.00	5.00	4.00	5.00	4.00	5.00	5.00	4.00	5
164	1.00	2.00	3.00	1.00	1.00	5.00	4.00	4.00	2.00	5.00	1.00	4.00	4.00	5.00	5.00	5.00	4.00	5.00	4.00	4
165	2.00	2.00	3.00	1.00	1.00	5.00	5.00	4.00	2.00	5.00	1.00	5.00	4.00	4.00	5.00	4.00	4.00	5.00	4.00	5
166	1.00	2.00	3.00	1.00	1.00	5.00	5.00	4.00	2.00	4.00	2.00	5.00	5.00	4.00	5.00	5.00	4.00	5.00	5.00	4
167	1.00	1.00	1.00	1.00	1.00	5.00	4.00	4.00	2.00	5.00	1.00	4.00	4.00	5.00	4.00	5.00	4.00	4.00	4.00	4
168	1.00	2.00	2.00	1.00	1.00	6.00	4.00	5.00	2.00	4.00	1.00	4.00	4.00	4.00	4.00	4.00	5.00	4.00	5.00	4
169	1.00	2.00	3.00	1.00	1.00	5.00	4.00	4.00	1.00	2.00	5.00	4.00	4.00	5.00	4.00	4.00	4.00	5.00	5.00	5
170	1.00	1.00	1.00	1.00	1.00	5.00	5.00	4.00	1.00	4.00	2.00	4.00	4.00	5.00	4.00	4.00	5.00	5.00	5.00	4
171	1.00	1.00	1.00	1.00	1.00	5.00	5.00	4.00	1.00	5.00	1.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00	4.00	4
172	2.00	1.00	1.00	1.00	1.00	5.00	4.00	4.00	1.00	5.00	1.00	5.00	5.00	5.00	4.00	5.00	5.00	5.00	5.00	5
173	2.00	2.00	3.00	1.00	1.00	5.00	5.00	4.00	2.00	5.00	1.00	5.00	5.00	4.00	4.00	5.00	4.00	5.00	4.00	4
174	2.00	2.00	3.00	1.00	1.00	5.00	4.00	4.00	2.00	4.00	2.00	4.00	5.00	5.00	4.00	5.00	4.00	5.00	5.00	4
175	1.00	2.00	2.00	1.00	1.00	5.00	5.00	5.00	1.00	4.00	2.00	2.00	2.00	2.00	3.00	1.00	2.00	5.00	5.00	5

Data View   Variable View

IBM SPSS Statistics Processor is ready   Unicode:ON

Visible: 65 of 65 Variables

	Gender	Age	Years	Campus	Race	Faculty	FM1	FM2	FM3	FM4	FM5	FM6	FM7	FM8	FM9	FM10	FM11	CE1	CE2	CE3
176	1.00	1.00	1.00	1.00	1.00	1.00	4.00	5.00	2.00	5.00	1.00	5.00	5.00	4.00	4.00	5.00	4.00	5.00	5.00	4
177	1.00	1.00	1.00	1.00	1.00	2.00	4.00	5.00	2.00	2.00	1.00	3.00	3.00	4.00	3.00	3.00	2.00	5.00	4.00	4
178	1.00	1.00	1.00	1.00	1.00	3.00	5.00	4.00	2.00	5.00	1.00	5.00	5.00	5.00	4.00	4.00	5.00	5.00	4.00	5
179	1.00	1.00	1.00	1.00	1.00	2.00	4.00	5.00	2.00	4.00	1.00	5.00	4.00	4.00	4.00	5.00	4.00	4.00	4.00	5
180	1.00	2.00	2.00	1.00	1.00	5.00	4.00	5.00	2.00	2.00	1.00	3.00	3.00	4.00	4.00	2.00	3.00	4.00	4.00	4
181	1.00	2.00	3.00	1.00	1.00	5.00	5.00	5.00	2.00	2.00	1.00	3.00	4.00	4.00	4.00	3.00	3.00	5.00	4.00	5
182	1.00	2.00	3.00	1.00	1.00	5.00	4.00	4.00	2.00	5.00	2.00	5.00	4.00	4.00	5.00	5.00	4.00	4.00	5.00	5
183	1.00	2.00	3.00	1.00	1.00	5.00	4.00	4.00	2.00	5.00	1.00	5.00	4.00	4.00	5.00	5.00	4.00	5.00	4.00	5
184	1.00	2.00	2.00	1.00	1.00	6.00	4.00	5.00	2.00	5.00	2.00	5.00	4.00	4.00	5.00	4.00	4.00	5.00	4.00	5
185	1.00	2.00	2.00	1.00	1.00	6.00	4.00	4.00	2.00	5.00	1.00	5.00	4.00	5.00	5.00	4.00	5.00	5.00	5.00	4
186	1.00	2.00	2.00	1.00	1.00	6.00	4.00	5.00	2.00	4.00	2.00	4.00	5.00	4.00	4.00	5.00	5.00	4.00	5.00	5
187	1.00	2.00	3.00	1.00	1.00	1.00	4.00	4.00	1.00	5.00	1.00	5.00	4.00	4.00	5.00	4.00	5.00	5.00	5.00	4
188	2.00	3.00	4.00	1.00	1.00	1.00	5.00	4.00	2.00	4.00	1.00	5.00	4.00	5.00	5.00	4.00	4.00	5.00	5.00	4
189	1.00	3.00	4.00	1.00	1.00	5.00	5.00	4.00	2.00	3.00	1.00	4.00	4.00	5.00	5.00	3.00	3.00	5.00	4.00	4
190	2.00	2.00	2.00	1.00	1.00	2.00	4.00	5.00	2.00	1.00	1.00	4.00	4.00	4.00	4.00	3.00	4.00	4.00	5.00	5
191	1.00	1.00	1.00	1.00	1.00	8.00	4.00	5.00	2.00	5.00	2.00	5.00	4.00	4.00	5.00	5.00	4.00	4.00	5.00	5
192	1.00	1.00	1.00	1.00	1.00	1.00	4.00	5.00	2.00	5.00	2.00	5.00	4.00	5.00	5.00	5.00	4.00	4.00	5.00	5
193	1.00	2.00	2.00	1.00	1.00	3.00	4.00	5.00	1.00	5.00	2.00	5.00	4.00	5.00	4.00	5.00	4.00	5.00	4.00	5
194	1.00	1.00	1.00	1.00	1.00	8.00	5.00	4.00	2.00	5.00	1.00	5.00	4.00	5.00	5.00	4.00	5.00	5.00	4.00	5
195	1.00	2.00	2.00	1.00	1.00	3.00	5.00	4.00	2.00	5.00	1.00	5.00	5.00	5.00	5.00	4.00	5.00	4.00	4.00	5
196	1.00	1.00	1.00	1.00	1.00	6.00	4.00	5.00	2.00	5.00	1.00	5.00	4.00	4.00	4.00	4.00	5.00	4.00	4.00	4
197	1.00	2.00	3.00	1.00	1.00	3.00	4.00	5.00	2.00	5.00	1.00	5.00	5.00	5.00	5.00	4.00	4.00	5.00	4.00	5
198	1.00	3.00	4.00	1.00	1.00	1.00	5.00	5.00	2.00	5.00	2.00	5.00	4.00	5.00	5.00	4.00	5.00	5.00	4.00	5
199	2.00	1.00	1.00	1.00	1.00	8.00	4.00	5.00	2.00	5.00	1.00	5.00	4.00	4.00	5.00	5.00	5.00	5.00	5.00	5
200	1.00	1.00	1.00	1.00	1.00	7.00	4.00	5.00	2.00	4.00	1.00	4.00	4.00	5.00	4.00	4.00	4.00	5.00	4.00	5

Data View   Variable View

IBM SPSS Statistics Processor is ready   Unicode:ON

115

	Gender	Age	Years	Campus	Race	Faculty	FM1	FM2	FM3	FM4	FM5	FM6	FM7	FM8	FM9	FM10	FM11	CE1	CE2	CE:
201	1.00	2.00	2.00	1.00	1.00	6.00	4.00	5.00	2.00	1.00	5.00	2.00	4.00	5.00	4.00	4.00	2.00	5.00	5.00	4
202	1.00	1.00	2.00	1.00	1.00	3.00	4.00	4.00	1.00	1.00	4.00	4.00	4.00	5.00	4.00	4.00	4.00	4.00	4.00	4
203	1.00	2.00	2.00	1.00	1.00	5.00	4.00	5.00	2.00	2.00	4.00	4.00	2.00	4.00	4.00	2.00	4.00	5.00	5.00	4
204	2.00	2.00	2.00	1.00	1.00	2.00	4.00	5.00	2.00	4.00	1.00	4.00	4.00	4.00	5.00	4.00	4.00	5.00	5.00	4
205	1.00	2.00	3.00	1.00	1.00	6.00	5.00	5.00	2.00	1.00	1.00	4.00	2.00	4.00	2.00	2.00	4.00	4.00	4.00	5
206	2.00	1.00	1.00	1.00	1.00	6.00	4.00	5.00	2.00	4.00	1.00	5.00	5.00	5.00	5.00	4.00	4.00	5.00	4.00	5
207	2.00	1.00	1.00	1.00	1.00	5.00	4.00	5.00	2.00	4.00	1.00	2.00	4.00	4.00	4.00	2.00	2.00	4.00	5.00	4
208	2.00	1.00	1.00	1.00	1.00	8.00	5.00	4.00	2.00	4.00	1.00	4.00	4.00	4.00	4.00	1.00	1.00	4.00	5.00	5
209	2.00	2.00	2.00	1.00	1.00	5.00	4.00	4.00	2.00	4.00	2.00	4.00	4.00	4.00	4.00	5.00	4.00	4.00	5.00	4
210	2.00	2.00	3.00	1.00	1.00	6.00	5.00	5.00	2.00	4.00	2.00	4.00	4.00	4.00	4.00	5.00	4.00	4.00	5.00	5
211	2.00	2.00	2.00	1.00	1.00	3.00	5.00	5.00	2.00	4.00	1.00	5.00	4.00	5.00	4.00	4.00	5.00	4.00	5.00	5
212	2.00	2.00	2.00	1.00	1.00	5.00	5.00	5.00	2.00	5.00	1.00	4.00	4.00	4.00	4.00	4.00	4.00	5.00	4.00	5
213	2.00	2.00	3.00	1.00	1.00	2.00	5.00	5.00	2.00	4.00	1.00	4.00	5.00	4.00	5.00	4.00	5.00	5.00	5.00	4
214	2.00	3.00	3.00	1.00	1.00	5.00	4.00	5.00	2.00	5.00	1.00	4.00	4.00	5.00	5.00	5.00	5.00	5.00	4.00	5
215	2.00	3.00	4.00	1.00	1.00	5.00	5.00	5.00	2.00	5.00	1.00	5.00	4.00	4.00	5.00	5.00	4.00	5.00	4.00	5
216	2.00	2.00	2.00	1.00	1.00	6.00	4.00	5.00	2.00	4.00	2.00	5.00	5.00	4.00	5.00	5.00	4.00	4.00	4.00	5
217	2.00	2.00	2.00	1.00	1.00	8.00	4.00	4.00	2.00	5.00	1.00	4.00	4.00	5.00	4.00	5.00	4.00	4.00	5.00	5
218	2.00	1.00	1.00	1.00	1.00	5.00	4.00	4.00	2.00	4.00	1.00	4.00	4.00	4.00	4.00	4.00	5.00	4.00	5.00	4
219	2.00	3.00	4.00	1.00	2.00	1.00	5.00	5.00	2.00	2.00	5.00	4.00	4.00	5.00	4.00	4.00	4.00	5.00	5.00	4
220	2.00	2.00	2.00	1.00	1.00	2.00	5.00	4.00	1.00	4.00	2.00	4.00	4.00	5.00	4.00	5.00	5.00	5.00	5.00	5
221	1.00	2.00	2.00	1.00	1.00	3.00	4.00	5.00	2.00	5.00	1.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00	4.00	4
222	2.00	3.00	3.00	1.00	1.00	5.00	5.00	5.00	2.00	5.00	1.00	5.00	5.00	5.00	4.00	5.00	4.00	4.00	4.00	5
223	2.00	1.00	1.00	1.00	1.00	6.00	4.00	5.00	1.00	5.00	1.00	5.00	5.00	4.00	4.00	5.00	4.00	4.00	4.00	4
224	2.00	1.00	1.00	1.00	1.00	5.00	4.00	5.00	2.00	4.00	2.00	4.00	5.00	5.00	4.00	5.00	4.00	5.00	4.00	5
225	2.00	1.00	1.00	1.00	1.00	3.00	4.00	5.00	2.00	4.00	2.00	2.00	2.00	2.00	3.00	1.00	2.00	4.00	5.00	5

	Gender	Age	Years	Campus	Race	Faculty	FM1	FM2	FM3	FM4	FM5	FM6	FM7	FM8	FM9	FM10	FM11	CE1	CE2	CE:
226	1.00	2.00	2.00	1.00	1.00	1.00	4.00	5.00	1.00	5.00	1.00	5.00	5.00	4.00	4.00	5.00	4.00	5.00	4.00	4
227	2.00	1.00	1.00	1.00	1.00	2.00	5.00	4.00	2.00	2.00	1.00	3.00	3.00	4.00	3.00	3.00	2.00	4.00	5.00	5
228	1.00	2.00	3.00	1.00	1.00	6.00	4.00	5.00	2.00	5.00	1.00	5.00	5.00	5.00	4.00	4.00	5.00	4.00	4.00	4
229	2.00	1.00	1.00	1.00	1.00	3.00	4.00	5.00	2.00	4.00	1.00	5.00	4.00	4.00	4.00	5.00	4.00	4.00	5.00	4
230	1.00	2.00	2.00	1.00	1.00	2.00	4.00	4.00	2.00	2.00	1.00	3.00	3.00	4.00	4.00	2.00	3.00	5.00	5.00	4
231	2.00	1.00	1.00	1.00	1.00	5.00	5.00	5.00	2.00	2.00	1.00	3.00	4.00	4.00	4.00	3.00	3.00	5.00	5.00	5
232	2.00	1.00	1.00	1.00	1.00	7.00	5.00	4.00	2.00	5.00	2.00	5.00	4.00	4.00	5.00	5.00	4.00	5.00	4.00	5
233	2.00	2.00	2.00	1.00	1.00	8.00	4.00	4.00	2.00	5.00	1.00	5.00	4.00	4.00	5.00	5.00	4.00	5.00	4.00	5
234	1.00	2.00	3.00	1.00	1.00	3.00	5.00	4.00	1.00	5.00	2.00	5.00	4.00	4.00	5.00	4.00	4.00	5.00	4.00	5
235	2.00	2.00	2.00	1.00	1.00	8.00	4.00	5.00	2.00	5.00	1.00	5.00	4.00	5.00	5.00	4.00	5.00	4.00	5.00	5
236	2.00	2.00	3.00	1.00	1.00	2.00	4.00	4.00	2.00	4.00	2.00	4.00	5.00	4.00	4.00	5.00	4.00	4.00	5.00	4
237	1.00	2.00	2.00	1.00	1.00	7.00	4.00	4.00	2.00	5.00	1.00	5.00	4.00	4.00	5.00	4.00	5.00	4.00	4.00	5
238	2.00	2.00	2.00	2.00	1.00	7.00	4.00	4.00	2.00	4.00	1.00	5.00	4.00	5.00	5.00	4.00	4.00	5.00	4.00	5
239	1.00	2.00	3.00	2.00	1.00	7.00	4.00	5.00	2.00	3.00	1.00	4.00	4.00	5.00	5.00	3.00	3.00	5.00	5.00	4
240	1.00	2.00	3.00	1.00	1.00	8.00	5.00	4.00	1.00	1.00	1.00	4.00	4.00	4.00	4.00	3.00	4.00	5.00	5.00	5
241	2.00	2.00	3.00	1.00	1.00	3.00	5.00	4.00	1.00	5.00	2.00	5.00	4.00	4.00	5.00	5.00	4.00	5.00	5.00	5
242	2.00	1.00	1.00	1.00	1.00	2.00	5.00	4.00	1.00	5.00	2.00	5.00	4.00	5.00	4.00	5.00	5.00	5.00	5.00	5
243	1.00	2.00	3.00	2.00	1.00	4.00	4.00	4.00	2.00	5.00	2.00	5.00	4.00	5.00	4.00	5.00	4.00	5.00	5.00	4
244	1.00	1.00	1.00	2.00	1.00	4.00	4.00	5.00	2.00	5.00	1.00	5.00	4.00	5.00	4.00	5.00	5.00	5.00	4.00	4
245	2.00	1.00	1.00	1.00	1.00	6.00	5.00	4.00	1.00	5.00	1.00	5.00	5.00	5.00	5.00	5.00	4.00	5.00	5.00	5
246	1.00	2.00	3.00	1.00	3.00	5.00	4.00	5.00	2.00	5.00	1.00	5.00	4.00	4.00	4.00	4.00	5.00	5.00	4.00	5
247	1.00	1.00	1.00	1.00	1.00	5.00	4.00	4.00	1.00	5.00	1.00	5.00	5.00	5.00	5.00	5.00	4.00	5.00	5.00	4
248	1.00	2.00	3.00	1.00	3.00	6.00	4.00	5.00	2.00	5.00	2.00	5.00	4.00	5.00	5.00	4.00	5.00	5.00	5.00	5
249	2.00	1.00	2.00	1.00	3.00	2.00	5.00	4.00	1.00	5.00	1.00	5.00	4.00	4.00	5.00	5.00	5.00	4.00	4.00	4
250	2.00	2.00	3.00	1.00	1.00	2.00	5.00	5.00	2.00	4.00	5.00	5.00	5.00	4.00	4.00	5.00	5.00	5.00	4.00	4

	Gender	Age	Years	Campus	Race	Faculty	FM1	FM2	FM3	FM4	FM5	FM6	FM7	FM8	FM9	FM10	FM11	CE1	CE2	CE:
251	2.00	2.00	2.00	1.00	1.00	2.00	4.00	2.00	2.00	2.00	5.00	2.00	5.00	5.00	4.00	4.00	5.00	5.00	5.00	5
252	1.00	2.00	3.00	1.00	1.00	5.00	5.00	2.00	2.00	4.00	2.00	5.00	5.00	5.00	4.00	5.00	5.00	5.00	5.00	5
253	2.00	2.00	2.00	1.00	3.00	1.00	5.00	2.00	2.00	5.00	2.00	4.00	5.00	5.00	4.00	5.00	5.00	5.00	5.00	4
254	1.00	3.00	4.00	1.00	1.00	5.00	5.00	2.00	2.00	5.00	1.00	5.00	4.00	5.00	4.00	5.00	5.00	4.00	5.00	5
255	1.00	2.00	3.00	1.00	1.00	5.00	2.00	2.00	2.00	5.00	2.00	5.00	4.00	5.00	4.00	5.00	5.00	5.00	4.00	4
256	1.00	2.00	3.00	1.00	3.00	5.00	5.00	2.00	2.00	4.00	1.00	4.00	5.00	5.00	4.00	4.00	5.00	5.00	5.00	5
257	1.00	2.00	3.00	1.00	1.00	2.00	5.00	2.00	2.00	1.00	5.00	2.00	4.00	5.00	4.00	4.00	2.00	5.00	5.00	5
258	2.00	1.00	2.00	2.00	1.00	4.00	2.00	2.00	2.00	1.00	4.00	4.00	4.00	4.00	5.00	4.00	4.00	4.00	4.00	4
259	2.00	1.00	1.00	1.00	3.00	4.00	2.00	2.00	2.00	2.00	4.00	4.00	2.00	4.00	4.00	2.00	4.00	5.00	5.00	5
260	1.00	1.00	2.00	1.00	1.00	5.00	4.00	2.00	1.00	4.00	1.00	4.00	4.00	4.00	5.00	4.00	4.00	4.00	5.00	5
261	1.00	2.00	3.00	1.00	1.00	5.00	5.00	2.00	2.00	1.00	1.00	4.00	2.00	4.00	2.00	2.00	4.00	5.00	4.00	5
262	2.00	1.00	1.00	1.00	1.00	5.00	5.00	2.00	1.00	4.00	1.00	5.00	5.00	5.00	4.00	4.00	5.00	4.00	5.00	5
263	1.00	1.00	1.00	1.00	1.00	5.00	4.00	2.00	2.00	4.00	1.00	2.00	4.00	4.00	4.00	2.00	2.00	4.00	4.00	4
264	2.00	2.00	4.00	1.00	1.00	5.00	4.00	2.00	2.00	4.00	1.00	4.00	4.00	4.00	4.00	1.00	1.00	5.00	4.00	5
265	1.00	1.00	2.00	2.00	1.00	4.00	5.00	2.00	2.00	4.00	2.00	4.00	4.00	4.00	4.00	5.00	4.00	5.00	5.00	5
266	2.00	2.00	3.00	1.00	3.00	2.00	4.00	2.00	2.00	4.00	2.00	4.00	4.00	4.00	4.00	5.00	4.00	5.00	5.00	4
267	1.00	2.00	2.00	1.00	1.00	2.00	4.00	2.00	2.00	4.00	1.00	5.00	4.00	5.00	4.00	4.00	5.00	4.00	4.00	4
268	1.00	2.00	3.00	1.00	3.00	1.00	4.00	2.00	2.00	5.00	1.00	4.00	4.00	4.00	4.00	4.00	4.00	5.00	5.00	4
269	2.00	1.00	1.00	1.00	1.00	5.00	4.00	2.00	2.00	4.00	1.00	4.00	5.00	4.00	4.00	5.00	4.00	5.00	5.00	5
270	1.00	2.00	3.00	1.00	1.00	5.00	5.00	2.00	2.00	5.00	1.00	4.00	4.00	5.00	5.00	5.00	5.00	5.00	5.00	4
271	1.00	1.00	1.00	2.00	1.00	4.00	4.00	2.00	1.00	5.00	1.00	5.00	4.00	4.00	5.00	4.00	4.00	5.00	4.00	4
272	2.00	2.00	2.00	1.00	1.00	5.00	4.00	2.00	2.00	4.00	2.00	5.00	5.00	4.00	5.00	5.00	4.00	5.00	5.00	4
273	1.00	2.00	2.00	1.00	1.00	5.00	4.00	2.00	2.00	5.00	1.00	4.00	4.00	5.00	4.00	5.00	4.00	5.00	4.00	4
274	1.00	2.00	3.00	1.00	1.00	5.00	4.00	2.00	4.00	4.00	1.00	4.00	4.00	4.00	5.00	4.00	4.00	5.00	5.00	4
275	1.00	2.00	3.00	1.00	1.00	5.00	4.00	2.00	1.00	2.00	5.00	4.00	4.00	5.00	5.00	4.00	4.00	5.00	4.00	4

116

SPSS 1.sav [DataSet1] - IBM SPSS Statistics Data Editor

	Gender	Age	Years	Campus	Race	Faculty	FM1	FM2	FM3	FM4	FM5	FM6	FM7	FM8	FM9	FM10	FM11	CE1	CE2	CE:
276	1.00	2.00	3.00	1.00	1.00	5.00	5.00	2.00	1.00	4.00	2.00	4.00	4.00	5.00	5.00	4.00	5.00	5.00	4.00	4
277	1.00	2.00	3.00	1.00	1.00	5.00	4.00	2.00	2.00	5.00	1.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00	5
278	2.00	1.00	1.00	1.00	1.00	3.00	4.00	2.00	1.00	5.00	1.00	5.00	5.00	5.00	5.00	4.00	5.00	5.00	5.00	4
279	2.00	2.00	2.00	1.00	1.00	5.00	4.00	2.00	2.00	5.00	1.00	5.00	5.00	4.00	4.00	5.00	4.00	4.00	4.00	5
280	1.00	2.00	3.00	1.00	1.00	5.00	5.00	2.00	2.00	4.00	2.00	4.00	5.00	5.00	4.00	5.00	4.00	4.00	5.00	5
281	2.00	1.00	2.00	1.00	1.00	5.00	4.00	2.00	1.00	4.00	2.00	2.00	2.00	2.00	3.00	1.00	2.00	5.00	4.00	4
282	2.00	2.00	2.00	1.00	1.00	5.00	5.00	2.00	2.00	5.00	1.00	5.00	5.00	4.00	4.00	5.00	4.00	5.00	4.00	5
283	1.00	1.00	1.00	1.00	1.00	5.00	4.00	2.00	2.00	2.00	1.00	3.00	3.00	4.00	3.00	3.00	2.00	5.00	5.00	4
284	1.00	1.00	2.00	1.00	1.00	5.00	4.00	2.00	1.00	5.00	1.00	5.00	5.00	4.00	4.00	5.00	5.00	4.00	4.00	4
285	1.00	2.00	3.00	1.00	1.00	5.00	2.00	2.00	1.00	4.00	1.00	5.00	4.00	4.00	4.00	5.00	4.00	5.00	4.00	5
286	1.00	1.00	2.00	1.00	1.00	5.00	4.00	2.00	1.00	2.00	1.00	3.00	3.00	4.00	4.00	2.00	3.00	5.00	5.00	4
287	1.00	2.00	3.00	1.00	1.00	5.00	4.00	2.00	2.00	2.00	1.00	3.00	4.00	4.00	4.00	3.00	3.00	5.00	5.00	5
288	1.00	2.00	2.00	1.00	1.00	5.00	4.00	2.00	1.00	5.00	2.00	5.00	4.00	4.00	5.00	5.00	4.00	5.00	4.00	5
289	2.00	1.00	2.00	1.00	1.00	5.00	4.00	2.00	2.00	5.00	1.00	5.00	4.00	4.00	5.00	5.00	4.00	5.00	4.00	5
290	1.00	2.00	3.00	1.00	1.00	6.00	4.00	2.00	2.00	5.00	2.00	5.00	4.00	4.00	5.00	4.00	4.00	4.00	4.00	4
291	2.00	1.00	1.00	2.00	1.00	4.00	4.00	2.00	2.00	5.00	1.00	5.00	4.00	5.00	5.00	4.00	5.00	5.00	4.00	5
292	2.00	1.00	1.00	2.00	1.00	4.00	5.00	2.00	2.00	4.00	2.00	4.00	5.00	4.00	4.00	5.00	5.00	5.00	4.00	4
293	2.00	2.00	2.00	2.00	1.00	4.00	5.00	2.00	2.00	5.00	1.00	5.00	4.00	4.00	5.00	4.00	5.00	4.00	5.00	5
294	2.00	2.00	2.00	2.00	1.00	4.00	4.00	2.00	2.00	4.00	1.00	5.00	4.00	4.00	5.00	4.00	4.00	4.00	5.00	5
295	2.00	2.00	2.00	2.00	1.00	7.00	5.00	2.00	2.00	3.00	1.00	4.00	4.00	5.00	5.00	3.00	3.00	4.00	5.00	4
296	2.00	3.00	3.00	2.00	1.00	4.00	4.00	2.00	2.00	1.00	1.00	4.00	4.00	4.00	4.00	3.00	4.00	4.00	5.00	4
297	2.00	3.00	3.00	2.00	1.00	4.00	5.00	2.00	2.00	5.00	2.00	5.00	4.00	4.00	5.00	5.00	4.00	5.00	4.00	4
298	2.00	1.00	1.00	2.00	1.00	8.00	4.00	2.00	2.00	5.00	2.00	5.00	4.00	5.00	4.00	5.00	5.00	5.00	4.00	5
299	2.00	1.00	1.00	2.00	1.00	8.00	4.00	2.00	2.00	5.00	2.00	5.00	4.00	5.00	4.00	5.00	5.00	5.00	4.00	5
300	2.00	2.00	3.00	2.00	1.00	7.00	4.00	2.00	2.00	5.00	1.00	5.00	4.00	5.00	5.00	4.00	5.00	5.00	4.00	4

Data View   Variable View

IBM SPSS Statistics Processor is ready   Unicode:ON

SPSS 1.sav [DataSet1] - IBM SPSS Statistics Data Editor

	Gender	Age	Years	Campus	Race	Faculty	FM1	FM2	FM3	FM4	FM5	FM6	FM7	FM8	FM9	FM10	FM11	CE1	CE2	CE:
301	2.00	2.00	3.00	2.00	1.00	4.00	5.00	2.00	2.00	5.00	1.00	5.00	5.00	5.00	5.00	5.00	4.00	5.00	4.00	5
302	2.00	3.00	4.00	2.00	1.00	4.00	4.00	2.00	2.00	4.00	1.00	4.00	4.00	5.00	5.00	4.00	4.00	5.00	4.00	4
303	2.00	3.00	4.00	2.00	1.00	4.00	4.00	2.00	2.00	1.00	5.00	2.00	4.00	5.00	4.00	4.00	2.00	5.00	4.00	4
304	2.00	1.00	1.00	2.00	1.00	7.00	5.00	2.00	2.00	5.00	1.00	4.00	4.00	4.00	5.00	4.00	4.00	4.00	5.00	4
305	2.00	1.00	1.00	2.00	1.00	7.00	5.00	2.00	2.00	2.00	4.00	4.00	2.00	4.00	4.00	2.00	4.00	5.00	4.00	5
306	2.00	1.00	1.00	2.00	1.00	7.00	4.00	2.00	2.00	4.00	1.00	4.00	4.00	4.00	5.00	4.00	4.00	5.00	5.00	4
307	2.00	2.00	2.00	2.00	1.00	8.00	4.00	2.00	2.00	1.00	1.00	4.00	2.00	4.00	2.00	2.00	4.00	5.00	4.00	5
308	2.00	2.00	3.00	2.00	1.00	8.00	5.00	2.00	2.00	4.00	1.00	5.00	5.00	5.00	4.00	4.00	5.00	5.00	4.00	5
309	2.00	2.00	3.00	2.00	1.00	4.00	4.00	2.00	2.00	4.00	1.00	2.00	4.00	4.00	4.00	2.00	2.00	5.00	4.00	4
310	1.00	1.00	1.00	2.00	1.00	4.00	5.00	2.00	2.00	4.00	1.00	4.00	4.00	4.00	4.00	1.00	1.00	5.00	4.00	5
311	1.00	2.00	2.00	2.00	1.00	4.00	4.00	2.00	2.00	4.00	2.00	4.00	4.00	4.00	4.00	5.00	4.00	5.00	4.00	5
312	1.00	2.00	2.00	2.00	1.00	7.00	4.00	2.00	2.00	4.00	2.00	4.00	4.00	4.00	4.00	5.00	4.00	5.00	5.00	4
313	1.00	3.00	3.00	2.00	1.00	4.00	4.00	2.00	2.00	4.00	1.00	5.00	4.00	5.00	4.00	4.00	5.00	4.00	5.00	4
314	1.00	1.00	1.00	2.00	1.00	7.00	5.00	2.00	2.00	5.00	1.00	4.00	4.00	4.00	4.00	4.00	4.00	5.00	4.00	4
315	1.00	1.00	1.00	2.00	1.00	7.00	4.00	2.00	2.00	4.00	1.00	4.00	5.00	4.00	5.00	4.00	5.00	5.00	4.00	4
316	1.00	1.00	1.00	2.00	1.00	7.00	5.00	2.00	2.00	5.00	1.00	4.00	4.00	5.00	5.00	5.00	5.00	5.00	4.00	4
317	1.00	2.00	2.00	2.00	1.00	4.00	4.00	2.00	2.00	5.00	1.00	5.00	4.00	4.00	5.00	5.00	4.00	4.00	5.00	4
318	1.00	2.00	3.00	2.00	1.00	4.00	5.00	2.00	2.00	4.00	2.00	5.00	5.00	4.00	5.00	5.00	4.00	5.00	4.00	4
319	1.00	2.00	3.00	2.00	1.00	7.00	4.00	2.00	2.00	5.00	1.00	4.00	4.00	5.00	4.00	4.00	5.00	4.00	5.00	5
320	1.00	3.00	4.00	2.00	1.00	4.00	5.00	2.00	2.00	4.00	1.00	4.00	4.00	4.00	4.00	5.00	5.00	5.00	4.00	5
321	1.00	1.00	1.00	2.00	1.00	7.00	5.00	2.00	2.00	2.00	5.00	4.00	4.00	5.00	5.00	4.00	4.00	5.00	4.00	5
322	1.00	1.00	1.00	2.00	1.00	7.00	4.00	2.00	2.00	4.00	2.00	4.00	4.00	5.00	5.00	4.00	5.00	5.00	4.00	4
323	1.00	2.00	2.00	2.00	1.00	4.00	5.00	2.00	2.00	5.00	1.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00	4.00	5
324	1.00	2.00	3.00	2.00	1.00	4.00	4.00	2.00	2.00	5.00	1.00	5.00	5.00	5.00	5.00	4.00	5.00	5.00	4.00	4
325	1.00	3.00	4.00	2.00	1.00	4.00	5.00	2.00	2.00	5.00	1.00	5.00	5.00	4.00	4.00	5.00	4.00	5.00	4.00	5

Data View   Variable View

IBM SPSS Statistics Processor is ready   Unicode:ON

SPSS 1.sav [DataSet1] - IBM SPSS Statistics Data Editor

	Gender	Age	Years	Campus	Race	Faculty	FM1	FM2	FM3	FM4	FM5	FM6	FM7	FM8	FM9	FM10	FM11	CE1	CE2	CE:
326	1.00	1.00	1.00	2.00	1.00	8.00	5.00	2.00	2.00	4.00	2.00	4.00	5.00	5.00	4.00	5.00	4.00	4.00	5.00	4
327	1.00	2.00	3.00	2.00	1.00	8.00	5.00	2.00	2.00	4.00	2.00	4.00	2.00	2.00	3.00	1.00	2.00	5.00	4.00	5
328	1.00	3.00	3.00	2.00	1.00	4.00	5.00	2.00	2.00	5.00	1.00	5.00	5.00	4.00	4.00	5.00	4.00	5.00	4.00	5
329	1.00	2.00	3.00	1.00	1.00	5.00	4.00	2.00	2.00	2.00	1.00	3.00	3.00	4.00	3.00	3.00	2.00	5.00	4.00	4
330	2.00	2.00	3.00	1.00	1.00	5.00	5.00	2.00	2.00	5.00	1.00	5.00	5.00	5.00	4.00	4.00	5.00	5.00	5.00	4
331	1.00	2.00	2.00	1.00	1.00	5.00	4.00	2.00	2.00	4.00	1.00	5.00	4.00	4.00	4.00	5.00	4.00	4.00	5.00	5
332	1.00	1.00	2.00	1.00	1.00	5.00	4.00	2.00	2.00	4.00	1.00	3.00	3.00	4.00	4.00	2.00	3.00	5.00	5.00	5
333	2.00	2.00	3.00	1.00	1.00	5.00	5.00	2.00	1.00	2.00	1.00	3.00	4.00	4.00	4.00	3.00	3.00	5.00	5.00	4
334	1.00	2.00	2.00	1.00	1.00	5.00	5.00	2.00	1.00	5.00	2.00	5.00	4.00	4.00	5.00	5.00	4.00	5.00	4.00	5
335	2.00	2.00	3.00	1.00	1.00	5.00	5.00	2.00	2.00	5.00	1.00	5.00	4.00	4.00	5.00	5.00	4.00	5.00	4.00	5
336	1.00	1.00	1.00	1.00	1.00	5.00	5.00	2.00	2.00	5.00	2.00	5.00	4.00	4.00	5.00	4.00	4.00	5.00	4.00	5
337	1.00	2.00	3.00	1.00	1.00	5.00	5.00	2.00	2.00	5.00	1.00	5.00	4.00	5.00	5.00	4.00	5.00	5.00	4.00	4
338	1.00	1.00	1.00	1.00	1.00	5.00	5.00	2.00	2.00	4.00	2.00	4.00	5.00	4.00	4.00	5.00	5.00	5.00	4.00	4
339	2.00	2.00	3.00	1.00	1.00	5.00	5.00	2.00	2.00	5.00	1.00	5.00	4.00	4.00	5.00	4.00	4.00	5.00	5.00	4
340	1.00	1.00	1.00	1.00	1.00	5.00	4.00	2.00	2.00	4.00	1.00	5.00	4.00	5.00	5.00	4.00	4.00	5.00	4.00	5
341	1.00	1.00	1.00	1.00	1.00	5.00	4.00	2.00	1.00	3.00	1.00	4.00	4.00	5.00	5.00	3.00	3.00	4.00	5.00	5
342	2.00	2.00	3.00	1.00	1.00	5.00	5.00	2.00	2.00	1.00	1.00	4.00	4.00	4.00	4.00	3.00	4.00	4.00	5.00	5
343	1.00	2.00	2.00	1.00	1.00	5.00	5.00	2.00	2.00	5.00	2.00	5.00	4.00	4.00	5.00	4.00	5.00	4.00	4.00	5
344	1.00	2.00	2.00	1.00	1.00	5.00	5.00	2.00	2.00	5.00	2.00	5.00	4.00	5.00	5.00	4.00	5.00	5.00	4.00	5
345	1.00	2.00	3.00	1.00	1.00	5.00	5.00	2.00	2.00	5.00	2.00	5.00	4.00	5.00	4.00	5.00	5.00	4.00	5.00	4
346	2.00	1.00	1.00	1.00	1.00	5.00	4.00	2.00	1.00	5.00	1.00	5.00	4.00	5.00	5.00	4.00	5.00	5.00	5.00	5
347	2.00	2.00	3.00	1.00	1.00	5.00	5.00	2.00	1.00	5.00	1.00	5.00	5.00	5.00	5.00	4.00	5.00	4.00	4.00	5
348	1.00	2.00	3.00	1.00	1.00	5.00	4.00	2.00	2.00	5.00	1.00	5.00	4.00	4.00	4.00	4.00	5.00	5.00	4.00	5
349	1.00	2.00	3.00	1.00	1.00	5.00	5.00	2.00	2.00	5.00	1.00	5.00	5.00	5.00	5.00	4.00	4.00	5.00	4.00	4
350	1.00	3.00	3.00	1.00	1.00	5.00	5.00	2.00	2.00	4.00	1.00	4.00	4.00	5.00	5.00	4.00	5.00	5.00	4.00	5

Data View   Variable View

IBM SPSS Statistics Processor is ready   Unicode:ON

SPSS 1.sav [DataSet1] - IBM SPSS Statistics Data Editor

	Gender	Age	Years	Campus	Race	Faculty	FM1	FM2	FM3	FM4	FM5	FM6	FM7	FM8	FM9	FM10	FM11	CE1	CE2	CE:
351	2.00	1.00	1.00	1.00	1.00	5.00	5.00	2.00	2.00	1.00	5.00	2.00	4.00	5.00	4.00	4.00	2.00	5.00	4.00	5
352	2.00	2.00	3.00	1.00	1.00	5.00	5.00	2.00	2.00	1.00	4.00	4.00	4.00	5.00	4.00	4.00	4.00	5.00	4.00	4
353	2.00	1.00	1.00	1.00	1.00	5.00	5.00	2.00	2.00	2.00	4.00	4.00	2.00	4.00	4.00	2.00	4.00	5.00	4.00	5
354	2.00	1.00	1.00	1.00	1.00	5.00	5.00	2.00	2.00	4.00	1.00	4.00	4.00	4.00	5.00	4.00	4.00	5.00	4.00	5
355	1.00	1.00	1.00	1.00	1.00	3.00	4.00	1.00	1.00	1.00	1.00	4.00	2.00	4.00	2.00	2.00	4.00	5.00	5.00	4
356	1.00	1.00	1.00	2.00	1.00	4.00	4.00	1.00	1.00	4.00	1.00	5.00	5.00	5.00	5.00	4.00	4.00	5.00	4.00	5
357	1.00	2.00	3.00	2.00	1.00	4.00	5.00	1.00	2.00	4.00	1.00	2.00	4.00	4.00	4.00	2.00	2.00	5.00	5.00	5
358	1.00	2.00	2.00	2.00	1.00	4.00	5.00	1.00	2.00	4.00	1.00	4.00	4.00	4.00	4.00	1.00	1.00	5.00	4.00	4
359	1.00	1.00	1.00	2.00	1.00	4.00	5.00	2.00	2.00	4.00	2.00	4.00	4.00	4.00	4.00	5.00	4.00	5.00	4.00	5
360	2.00	2.00	2.00	2.00	1.00	4.00	5.00	1.00	2.00	4.00	2.00	4.00	4.00	4.00	4.00	5.00	4.00	5.00	4.00	5
361	1.00	1.00	1.00	1.00	1.00	6.00	5.00	1.00	1.00	4.00	1.00	5.00	4.00	5.00	4.00	4.00	5.00	5.00	4.00	5
362	2.00	2.00	2.00	1.00	1.00	6.00	5.00	1.00	2.00	5.00	1.00	4.00	4.00	4.00	4.00	4.00	5.00	5.00	4.00	5
363	2.00	3.00	4.00	1.00	1.00	6.00	4.00	1.00	2.00	4.00	1.00	4.00	5.00	4.00	5.00	4.00	5.00	5.00	5.00	4
364	1.00	2.00	3.00	1.00	3.00	6.00	5.00	1.00	2.00	5.00	1.00	4.00	4.00	5.00	5.00	5.00	5.00	5.00	4.00	5
365	2.00	2.00	2.00	1.00	1.00	6.00	5.00	1.00	2.00	5.00	1.00	5.00	4.00	4.00	5.00	5.00	4.00	5.00	4.00	5
366	1.00	1.00	1.00	1.00	1.00	7.00	5.00	1.00	2.00	4.00	2.00	5.00	5.00	4.00	5.00	5.00	4.00	5.00	5.00	4
367	2.00	2.00	3.00	1.00	1.00	7.00	5.00	1.00	1.00	5.00	1.00	4.00	4.00	5.00	4.00	5.00	4.00	5.00	4.00	5
368	1.00	2.00	3.00	1.00	1.00	7.00	4.00	2.00	1.00	4.00	1.00	4.00	4.00	4.00	4.00	4.00	5.00	5.00	4.00	4
369	1.00	2.00	2.00	1.00	1.00	7.00	5.00	2.00	2.00	2.00	5.00	4.00	4.00	5.00	5.00	4.00	4.00	5.00	4.00	5
370	1.00	2.00	3.00	1.00	1.00	7.00	5.00	2.00	2.00	4.00	2.00	4.00	4.00	5.00	4.00	5.00	5.00	5.00	4.00	5
371	1.00	2.00	3.00	1.00	1.00	8.00	5.00	1.00	2.00	5.00	1.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00	4.00	5
372	1.00	2.00	3.00	1.00	1.00	8.00	5.00	1.00	2.00	5.00	1.00	5.00	5.00	5.00	5.00	4.00	5.00	5.00	4.00	4
373	2.00	2.00	3.00	1.00	1.00	8.00	5.00	1.00	1.00	5.00	1.00	5.00	5.00	4.00	4.00	5.00	4.00	5.00	5.00	4
374	1.00	2.00	2.00	1.00	1.00	8.00	4.00	1.00	2.00	4.00	2.00	4.00	5.00	5.00	4.00	5.00	4.00	5.00	4.00	5
375	1.00	2.00	3.00	1.00	1.00	8.00	5.00	2.00	1.00	4.00	2.00	2.00	2.00	3.00	1.00	2.00	5.00	5.00	4.00	5

Data View   Variable View

IBM SPSS Statistics Processor is ready   Unicode:ON

SPSS 1.sav [DataSet1] - IBM SPSS Statistics Data Editor

	Gender	Age	Years	Campus	Race	Faculty	FM1	FM2	FM3	FM4	FM5	FM6	FM7	FM8	FM9	FM10	FM11	CE1	CE2	CE:
376	1.00	1.00	1.00	2.00	1.00	9.00	5.00	1.00	2.00	5.00	1.00	5.00	5.00	4.00	4.00	5.00	4.00	5.00	4.00	5
377	2.00	2.00	3.00	2.00	1.00	9.00	5.00	1.00	2.00	2.00	1.00	3.00	3.00	4.00	3.00	3.00	2.00	4.00	4.00	5
378																				
379																				
380																				
381																				
382																				
383																				
384																				
385																				
386																				
387																				
388																				
389																				
390																				
391																				
392																				
393																				
394																				
395																				
396																				
397																				
398																				
399																				
400																				

Data View   Variable View

IBM SPSS Statistics Processor is ready   Unicode:ON

	CE3	CE4	CE5	CE6	CE7	CE8	CE9	CE10	CE11	CE12	CE13	CE14	CE15	CE16	CE17	CE18	CE19	CE20	CE21	CE22
1	4.00	5.00	5.00	4.00	1.00	5.00	4.00	2.00	1.00	1.00	4.00	5.00	4.00	5.00	4.00	5.00	4.00	4.00	5.00	4.00
2	5.00	5.00	4.00	4.00	1.00	4.00	4.00	2.00	1.00	1.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00
3	4.00	4.00	4.00	4.00	1.00	4.00	4.00	2.00	1.00	1.00	4.00	4.00	4.00	5.00	4.00	4.00	4.00	4.00	4.00	4.00
4	4.00	4.00	4.00	2.00	4.00	4.00	4.00	2.00	2.00	2.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00
5	4.00	5.00	4.00	5.00	1.00	4.00	5.00	2.00	1.00	1.00	4.00	5.00	4.00	4.00	5.00	4.00	4.00	5.00	4.00	4.00
6	4.00	5.00	2.00	2.00	1.00	5.00	4.00	2.00	1.00	1.00	5.00	4.00	4.00	4.00	3.00	4.00	3.00	3.00	4.00	2.00
7	5.00	5.00	5.00	4.00	1.00	5.00	4.00	2.00	1.00	1.00	5.00	5.00	5.00	4.00	5.00	5.00	4.00	5.00	5.00	5.00
8	4.00	4.00	4.00	4.00	1.00	4.00	4.00	2.00	1.00	1.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	2.00
9	1.00	4.00	4.00	4.00	1.00	4.00	4.00	2.00	1.00	1.00	4.00	4.00	4.00	3.00	3.00	4.00	4.00	4.00	4.00	4.00
10	4.00	5.00	5.00	5.00	1.00	5.00	4.00	2.00	1.00	1.00	5.00	4.00	5.00	5.00	4.00	5.00	5.00	4.00	5.00	5.00
11	5.00	4.00	5.00	4.00	1.00	4.00	4.00	2.00	1.00	1.00	5.00	5.00	4.00	4.00	5.00	4.00	5.00	5.00	5.00	5.00
12	5.00	4.00	5.00	4.00	1.00	4.00	4.00	2.00	1.00	1.00	5.00	5.00	5.00	5.00	5.00	4.00	4.00	4.00	5.00	5.00
13	4.00	5.00	4.00	4.00	1.00	4.00	4.00	1.00	2.00	2.00	4.00	4.00	5.00	5.00	5.00	4.00	4.00	4.00	4.00	5.00
14	4.00	5.00	1.00	2.00	1.00	4.00	5.00	2.00	1.00	1.00	4.00	3.00	2.00	1.00	2.00	1.00	4.00	5.00	5.00	5.00
15	4.00	5.00	4.00	4.00	1.00	4.00	5.00	2.00	1.00	1.00	5.00	4.00	5.00	5.00	5.00	5.00	5.00	5.00	4.00	4.00
16	5.00	5.00	5.00	4.00	1.00	5.00	4.00	2.00	1.00	1.00	5.00	5.00	5.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00
17	4.00	5.00	4.00	4.00	1.00	4.00	5.00	2.00	1.00	1.00	5.00	5.00	4.00	5.00	5.00	4.00	5.00	4.00	4.00	5.00
18	4.00	5.00	5.00	4.00	1.00	5.00	4.00	1.00	2.00	2.00	5.00	5.00	4.00	5.00	4.00	4.00	5.00	4.00	4.00	5.00
19	4.00	4.00	4.00	4.00	1.00	4.00	4.00	2.00	2.00	2.00	5.00	4.00	5.00	4.00	4.00	5.00	4.00	5.00	4.00	4.00
20	4.00	4.00	4.00	4.00	2.00	4.00	4.00	4.00	2.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00
21	4.00	5.00	4.00	4.00	1.00	4.00	4.00	1.00	2.00	2.00	5.00	5.00	4.00	5.00	4.00	4.00	5.00	4.00	4.00	4.00
22	4.00	4.00	5.00	5.00	1.00	4.00	4.00	2.00	1.00	1.00	5.00	5.00	5.00	4.00	5.00	5.00	4.00	5.00	5.00	4.00
23	5.00	5.00	5.00	5.00	1.00	5.00	4.00	2.00	1.00	1.00	4.00	5.00	5.00	5.00	5.00	5.00	5.00	4.00	4.00	4.00
24	5.00	5.00	4.00	4.00	1.00	5.00	4.00	2.00	1.00	1.00	5.00	5.00	4.00	5.00	4.00	4.00	5.00	4.00	5.00	4.00
25	4.00	5.00	5.00	4.00	2.00	4.00	5.00	2.00	1.00	1.00	5.00	4.00	4.00	5.00	5.00	5.00	4.00	5.00	5.00	4.00

	CE3	CE4	CE5	CE6	CE7	CE8	CE9	CE10	CE11	CE12	CE13	CE14	CE15	CE16	CE17	CE18	CE19	CE20	CE21	CE22
26	3.00	2.00	3.00	2.00	3.00	3.00	4.00	4.00	4.00	4.00	3.00	3.00	2.00	4.00	3.00	3.00	4.00	3.00	3.00	2.00
27	4.00	5.00	4.00	5.00	2.00	5.00	4.00	2.00	1.00	2.00	5.00	4.00	4.00	5.00	4.00	4.00	5.00	4.00	5.00	5.00
28	3.00	4.00	3.00	3.00	1.00	3.00	3.00	2.00	1.00	1.00	3.00	3.00	3.00	3.00	2.00	2.00	2.00	2.00	3.00	3.00
29	5.00	5.00	4.00	5.00	1.00	5.00	4.00	1.00	2.00	1.00	5.00	4.00	4.00	5.00	4.00	4.00	5.00	4.00	5.00	5.00
30	5.00	5.00	4.00	5.00	2.00	5.00	4.00	1.00	1.00	2.00	4.00	5.00	5.00	4.00	5.00	5.00	4.00	4.00	5.00	4.00
31	4.00	5.00	2.00	3.00	1.00	2.00	3.00	2.00	1.00	1.00	4.00	4.00	4.00	4.00	3.00	4.00	3.00	4.00	4.00	3.00
32	4.00	4.00	1.00	3.00	1.00	4.00	3.00	2.00	1.00	1.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	3.00
33	5.00	5.00	5.00	4.00	1.00	5.00	4.00	1.00	2.00	1.00	5.00	5.00	4.00	4.00	5.00	5.00	5.00	5.00	4.00	5.00
34	5.00	4.00	4.00	5.00	1.00	5.00	4.00	1.00	1.00	1.00	5.00	5.00	5.00	5.00	5.00	4.00	4.00	4.00	5.00	4.00
35	5.00	5.00	5.00	4.00	1.00	4.00	5.00	1.00	2.00	2.00	5.00	5.00	5.00	4.00	5.00	5.00	4.00	5.00	5.00	4.00
36	5.00	5.00	4.00	4.00	1.00	5.00	4.00	1.00	2.00	1.00	5.00	4.00	5.00	4.00	5.00	5.00	4.00	5.00	5.00	4.00
37	4.00	5.00	5.00	4.00	1.00	5.00	4.00	1.00	2.00	1.00	5.00	4.00	4.00	5.00	4.00	4.00	5.00	4.00	5.00	5.00
38	5.00	5.00	4.00	5.00	1.00	5.00	4.00	1.00	1.00	2.00	5.00	4.00	5.00	5.00	4.00	5.00	5.00	4.00	5.00	5.00
39	4.00	5.00	4.00	4.00	1.00	5.00	4.00	1.00	2.00	2.00	5.00	4.00	4.00	5.00	4.00	4.00	5.00	5.00	5.00	5.00
40	5.00	5.00	4.00	4.00	1.00	5.00	4.00	2.00	1.00	1.00	4.00	5.00	5.00	5.00	5.00	4.00	4.00	4.00	5.00	5.00
41	4.00	4.00	2.00	4.00	1.00	2.00	4.00	2.00	1.00	1.00	4.00	4.00	3.00	4.00	2.00	2.00	2.00	4.00	4.00	3.00
42	5.00	4.00	4.00	5.00	1.00	5.00	4.00	1.00	2.00	1.00	5.00	5.00	5.00	5.00	4.00	5.00	4.00	4.00	4.00	4.00
43	5.00	4.00	5.00	5.00	2.00	5.00	4.00	1.00	2.00	1.00	5.00	4.00	5.00	4.00	4.00	5.00	4.00	5.00	5.00	4.00
44	5.00	4.00	5.00	4.00	1.00	4.00	5.00	1.00	2.00	2.00	5.00	4.00	5.00	4.00	4.00	5.00	5.00	5.00	5.00	4.00
45	5.00	5.00	4.00	4.00	1.00	5.00	5.00	2.00	1.00	1.00	4.00	5.00	5.00	5.00	4.00	4.00	5.00	5.00	5.00	4.00
46	5.00	5.00	4.00	4.00	1.00	5.00	4.00	2.00	1.00	1.00	5.00	4.00	4.00	4.00	5.00	5.00	5.00	5.00	5.00	4.00
47	5.00	5.00	4.00	5.00	1.00	5.00	4.00	2.00	1.00	1.00	5.00	4.00	5.00	4.00	4.00	5.00	5.00	4.00	4.00	4.00
48	5.00	4.00	5.00	5.00	1.00	5.00	4.00	1.00	1.00	1.00	5.00	4.00	5.00	5.00	4.00	5.00	4.00	4.00	4.00	5.00
49	4.00	4.00	4.00	5.00	2.00	5.00	4.00	2.00	2.00	2.00	5.00	5.00	5.00	4.00	5.00	4.00	4.00	5.00	5.00	5.00
50	5.00	5.00	4.00	5.00	1.00	5.00	5.00	1.00	1.00	2.00	5.00	4.00	5.00	4.00	5.00	5.00	4.00	4.00	5.00	5.00

	CE3	CE4	CE5	CE6	CE7	CE8	CE9	CE10	CE11	CE12	CE13	CE14	CE15	CE16	CE17	CE18	CE19	CE20	CE21	CE22
51	5.00	5.00	4.00	4.00	1.00	5.00	4.00	1.00	2.00	1.00	5.00	4.00	4.00	5.00	4.00	5.00	4.00	5.00	5.00	5.00
52	5.00	4.00	5.00	4.00	1.00	5.00	5.00	1.00	2.00	1.00	4.00	4.00	5.00	4.00	5.00	4.00	4.00	5.00	5.00	4.00
53	4.00	5.00	5.00	5.00	1.00	5.00	5.00	1.00	2.00	2.00	5.00	5.00	4.00	5.00	4.00	5.00	4.00	5.00	5.00	4.00
54	4.00	5.00	5.00	4.00	1.00	5.00	4.00	1.00	1.00	2.00	5.00	4.00	5.00	5.00	4.00	4.00	4.00	5.00	4.00	5.00
55	5.00	4.00	5.00	5.00	1.00	4.00	5.00	2.00	2.00	1.00	5.00	5.00	4.00	5.00	4.00	5.00	5.00	5.00	5.00	4.00
56	5.00	5.00	5.00	4.00	1.00	5.00	4.00	1.00	2.00	1.00	5.00	4.00	5.00	4.00	5.00	5.00	5.00	4.00	4.00	5.00
57	5.00	4.00	4.00	5.00	1.00	5.00	5.00	1.00	1.00	2.00	5.00	4.00	5.00	4.00	5.00	5.00	5.00	4.00	4.00	5.00
58	4.00	5.00	4.00	5.00	1.00	5.00	4.00	2.00	2.00	2.00	5.00	4.00	5.00	4.00	4.00	5.00	5.00	4.00	4.00	5.00
59	5.00	5.00	4.00	4.00	1.00	5.00	5.00	1.00	2.00	2.00	5.00	5.00	4.00	5.00	4.00	5.00	5.00	5.00	5.00	5.00
60	5.00	5.00	4.00	5.00	1.00	5.00	4.00	1.00	1.00	2.00	5.00	5.00	4.00	5.00	4.00	5.00	4.00	5.00	4.00	4.00
61	5.00	5.00	4.00	4.00	1.00	5.00	5.00	1.00	1.00	1.00	5.00	5.00	4.00	5.00	4.00	5.00	5.00	5.00	4.00	4.00
62	5.00	4.00	5.00	4.00	1.00	5.00	4.00	1.00	2.00	1.00	5.00	4.00	5.00	4.00	5.00	5.00	4.00	5.00	4.00	5.00
63	4.00	5.00	4.00	5.00	1.00	5.00	4.00	1.00	2.00	2.00	5.00	4.00	5.00	4.00	5.00	4.00	5.00	4.00	5.00	5.00
64	5.00	5.00	4.00	5.00	1.00	5.00	4.00	1.00	1.00	2.00	5.00	4.00	5.00	4.00	5.00	4.00	5.00	4.00	5.00	4.00
65	5.00	4.00	5.00	5.00	1.00	5.00	5.00	1.00	2.00	1.00	5.00	5.00	4.00	5.00	4.00	5.00	5.00	5.00	4.00	5.00
66	4.00	5.00	4.00	5.00	1.00	5.00	5.00	2.00	2.00	1.00	5.00	5.00	4.00	5.00	4.00	5.00	4.00	5.00	4.00	5.00
67	5.00	4.00	5.00	5.00	1.00	5.00	4.00	2.00	2.00	1.00	5.00	5.00	4.00	5.00	4.00	5.00	4.00	5.00	4.00	4.00
68	5.00	4.00	4.00	5.00	2.00	5.00	4.00	1.00	1.00	2.00	5.00	5.00	4.00	4.00	5.00	4.00	5.00	5.00	4.00	5.00
69	5.00	5.00	4.00	4.00	2.00	5.00	4.00	1.00	2.00	1.00	5.00	4.00	4.00	5.00	5.00	4.00	5.00	4.00	5.00	4.00
70	5.00	4.00	5.00	4.00	2.00	5.00	4.00	1.00	2.00	1.00	5.00	4.00	5.00	5.00	5.00	4.00	4.00	4.00	5.00	5.00
71	4.00	5.00	4.00	5.00	2.00	5.00	4.00	1.00	2.00	1.00	5.00	4.00	5.00	5.00	5.00	4.00	4.00	5.00	5.00	4.00
72	5.00	4.00	5.00	4.00	2.00	4.00	5.00	1.00	1.00	1.00	5.00	4.00	4.00	5.00	5.00	4.00	5.00	4.00	5.00	5.00
73	5.00	5.00	4.00	5.00	1.00	5.00	4.00	2.00	1.00	1.00	5.00	4.00	5.00	4.00	5.00	4.00	5.00	5.00	4.00	5.00
74	4.00	5.00	5.00	4.00	2.00	5.00	4.00	1.00	1.00	2.00	4.00	5.00	5.00	5.00	4.00	5.00	4.00	5.00	5.00	4.00
75	5.00	5.00	5.00	4.00	1.00	5.00	4.00	1.00	2.00	2.00	5.00	5.00	4.00	5.00	4.00	5.00	5.00	5.00	4.00	4.00

Data View   Variable View

IBM SPSS Statistics Processor is ready   Unicode:ON

	CE3	CE4	CE5	CE6	CE7	CE8	CE9	CE10	CE11	CE12	CE13	CE14	CE15	CE16	CE17	CE18	CE19	CE20	CE21	CE22
76	4.00	5.00	5.00	5.00	1.00	5.00	4.00	1.00	2.00	1.00	5.00	4.00	4.00	5.00	5.00	4.00	5.00	4.00	4.00	5.00
77	5.00	5.00	4.00	5.00	1.00	4.00	5.00	1.00	2.00	1.00	5.00	4.00	5.00	4.00	5.00	4.00	5.00	4.00	5.00	4.00
78	5.00	5.00	4.00	5.00	1.00	5.00	4.00	2.00	1.00	2.00	5.00	4.00	4.00	5.00	5.00	4.00	5.00	4.00	4.00	5.00
79	5.00	4.00	4.00	5.00	1.00	5.00	4.00	1.00	2.00	1.00	5.00	4.00	5.00	4.00	5.00	4.00	5.00	5.00	4.00	5.00
80	4.00	5.00	4.00	5.00	2.00	5.00	4.00	1.00	2.00	1.00	5.00	4.00	5.00	5.00	4.00	5.00	4.00	5.00	4.00	5.00
81	4.00	5.00	5.00	4.00	2.00	5.00	4.00	2.00	1.00	1.00	5.00	4.00	5.00	4.00	4.00	5.00	4.00	5.00	5.00	4.00
82	5.00	5.00	4.00	5.00	2.00	4.00	5.00	1.00	2.00	1.00	5.00	4.00	4.00	5.00	5.00	4.00	5.00	4.00	5.00	4.00
83	5.00	5.00	4.00	5.00	1.00	5.00	4.00	1.00	1.00	2.00	4.00	5.00	5.00	5.00	4.00	4.00	5.00	4.00	4.00	5.00
84	5.00	5.00	4.00	4.00	1.00	5.00	4.00	1.00	2.00	1.00	5.00	4.00	4.00	5.00	4.00	5.00	5.00	4.00	5.00	4.00
85	5.00	5.00	4.00	5.00	1.00	5.00	5.00	1.00	2.00	1.00	5.00	4.00	5.00	5.00	4.00	5.00	4.00	4.00	5.00	4.00
86	4.00	4.00	5.00	4.00	1.00	5.00	4.00	2.00	1.00	1.00	5.00	4.00	4.00	5.00	4.00	5.00	4.00	5.00	5.00	4.00
87	4.00	4.00	4.00	4.00	2.00	5.00	4.00	1.00	1.00	1.00	5.00	4.00	5.00	4.00	4.00	5.00	5.00	5.00	4.00	4.00
88	4.00	5.00	5.00	5.00	1.00	5.00	4.00	1.00	1.00	2.00	5.00	5.00	4.00	4.00	5.00	4.00	4.00	4.00	5.00	5.00
89	4.00	5.00	4.00	5.00	1.00	5.00	4.00	1.00	2.00	1.00	5.00	5.00	4.00	5.00	4.00	4.00	5.00	5.00	5.00	4.00
90	5.00	5.00	4.00	4.00	2.00	5.00	4.00	2.00	1.00	2.00	5.00	4.00	4.00	5.00	5.00	4.00	5.00	4.00	5.00	4.00
91	4.00	5.00	4.00	4.00	1.00	5.00	4.00	1.00	2.00	1.00	5.00	4.00	5.00	4.00	5.00	4.00	5.00	5.00	5.00	5.00
92	5.00	5.00	4.00	4.00	2.00	5.00	4.00	1.00	1.00	2.00	5.00	4.00	5.00	4.00	4.00	5.00	5.00	5.00	4.00	5.00
93	4.00	5.00	5.00	4.00	1.00	5.00	4.00	1.00	1.00	2.00	4.00	5.00	5.00	5.00	4.00	4.00	5.00	4.00	4.00	5.00
94	4.00	4.00	4.00	5.00	1.00	4.00	5.00	2.00	1.00	1.00	4.00	5.00	4.00	5.00	4.00	5.00	5.00	4.00	5.00	4.00
95	4.00	5.00	5.00	4.00	1.00	4.00	5.00	2.00	1.00	1.00	4.00	5.00	4.00	5.00	5.00	4.00	4.00	5.00	5.00	4.00
96	5.00	4.00	4.00	5.00	1.00	4.00	4.00	1.00	1.00	2.00	5.00	4.00	4.00	5.00	4.00	5.00	5.00	4.00	5.00	5.00
97	5.00	4.00	4.00	5.00	1.00	4.00	5.00	2.00	1.00	1.00	4.00	5.00	5.00	4.00	5.00	4.00	4.00	4.00	5.00	5.00
98	4.00	5.00	5.00	4.00	2.00	4.00	5.00	1.00	1.00	2.00	5.00	5.00	4.00	5.00	4.00	4.00	5.00	5.00	4.00	5.00
99	4.00	5.00	5.00	4.00	1.00	4.00	5.00	2.00	1.00	1.00	5.00	5.00	4.00	5.00	4.00	5.00	4.00	5.00	5.00	4.00
100	5.00	4.00	4.00	5.00	1.00	5.00	4.00	2.00	1.00	1.00	4.00	5.00	4.00	5.00	4.00	5.00	5.00	4.00	4.00	5.00

Data View   Variable View

IBM SPSS Statistics Processor is ready   Unicode:ON

Visible: 65 of 65 Variables

	CE3	CE4	CE5	CE6	CE7	CE8	CE9	CE10	CE11	CE12	CE13	CE14	CE15	CE16	CE17	CE18	CE19	CE20	CE21	CE22
101	5.00	5.00	4.00	5.00	1.00	4.00	5.00	2.00	1.00	1.00	5.00	5.00	5.00	4.00	5.00	5.00	4.00	5.00	5.00	4.00
102	5.00	5.00	4.00	5.00	1.00	5.00	4.00	2.00	1.00	1.00	5.00	4.00	5.00	5.00	5.00	4.00	5.00	5.00	5.00	4.00
103	5.00	4.00	5.00	4.00	1.00	4.00	5.00	2.00	1.00	1.00	5.00	5.00	5.00	4.00	5.00	5.00	5.00	4.00	5.00	5.00
104	4.00	4.00	4.00	4.00	1.00	4.00	4.00	2.00	1.00	1.00	5.00	5.00	5.00	5.00	5.00	3.00	5.00	4.00	4.00	2.00
105	4.00	4.00	5.00	5.00	1.00	5.00	4.00	2.00	1.00	1.00	5.00	5.00	4.00	5.00	4.00	5.00	4.00	4.00	5.00	5.00
106	5.00	5.00	4.00	5.00	1.00	5.00	4.00	2.00	1.00	1.00	5.00	4.00	5.00	5.00	4.00	5.00	5.00	4.00	5.00	4.00
107	4.00	5.00	4.00	5.00	1.00	5.00	4.00	2.00	1.00	1.00	5.00	4.00	5.00	5.00	5.00	4.00	5.00	5.00	4.00	5.00
108	4.00	5.00	5.00	4.00	1.00	5.00	4.00	2.00	1.00	1.00	5.00	4.00	5.00	5.00	4.00	5.00	5.00	4.00	5.00	4.00
109	4.00	4.00	5.00	4.00	1.00	5.00	4.00	2.00	1.00	1.00	5.00	5.00	5.00	4.00	5.00	5.00	4.00	5.00	5.00	4.00
110	4.00	5.00	4.00	5.00	1.00	5.00	4.00	2.00	1.00	1.00	5.00	4.00	5.00	5.00	4.00	5.00	5.00	4.00	5.00	5.00
111	4.00	5.00	5.00	5.00	1.00	4.00	5.00	2.00	1.00	1.00	5.00	5.00	4.00	5.00	4.00	5.00	5.00	4.00	5.00	5.00
112	5.00	5.00	4.00	5.00	1.00	5.00	4.00	2.00	1.00	1.00	5.00	5.00	4.00	5.00	5.00	5.00	4.00	5.00	5.00	5.00
113	4.00	5.00	5.00	4.00	1.00	5.00	4.00	2.00	1.00	1.00	5.00	5.00	5.00	5.00	5.00	5.00	4.00	5.00	5.00	5.00
114	5.00	5.00	4.00	5.00	1.00	5.00	5.00	2.00	1.00	1.00	5.00	5.00	4.00	5.00	5.00	4.00	5.00	5.00	5.00	5.00
115	5.00	5.00	5.00	4.00	1.00	5.00	4.00	2.00	1.00	2.00	5.00	5.00	5.00	5.00	4.00	4.00	5.00	5.00	5.00	4.00
116	5.00	5.00	5.00	4.00	1.00	5.00	4.00	2.00	1.00	1.00	5.00	5.00	4.00	5.00	5.00	4.00	5.00	4.00	5.00	5.00
117	4.00	4.00	5.00	5.00	1.00	5.00	4.00	2.00	1.00	1.00	5.00	5.00	4.00	5.00	4.00	5.00	4.00	5.00	5.00	5.00
118	5.00	4.00	5.00	5.00	1.00	5.00	4.00	2.00	1.00	1.00	5.00	4.00	5.00	4.00	5.00	5.00	4.00	5.00	5.00	5.00
119	4.00	5.00	4.00	5.00	1.00	5.00	4.00	2.00	1.00	1.00	5.00	5.00	5.00	4.00	5.00	4.00	5.00	5.00	5.00	5.00
120	5.00	5.00	5.00	5.00	1.00	5.00	4.00	2.00	1.00	1.00	5.00	4.00	5.00	5.00	5.00	4.00	5.00	5.00	5.00	4.00
121	4.00	5.00	5.00	5.00	1.00	5.00	5.00	2.00	1.00	1.00	5.00	5.00	4.00	5.00	4.00	5.00	5.00	4.00	5.00	5.00
122	4.00	5.00	5.00	4.00	1.00	5.00	4.00	2.00	1.00	1.00	5.00	4.00	4.00	5.00	5.00	4.00	5.00	4.00	5.00	4.00
123	5.00	5.00	4.00	5.00	2.00	5.00	5.00	1.00	1.00	2.00	5.00	5.00	4.00	5.00	5.00	4.00	5.00	5.00	4.00	5.00
124	4.00	5.00	5.00	4.00	1.00	5.00	4.00	1.00	2.00	1.00	5.00	5.00	4.00	5.00	5.00	4.00	5.00	5.00	5.00	4.00
125	5.00	4.00	5.00	4.00	1.00	2.00	4.00	2.00	1.00	2.00	5.00	5.00	4.00	5.00	5.00	4.00	5.00	5.00	5.00	4.00
126	4.00	5.00	5.00	4.00	1.00	5.00	4.00	2.00	1.00	1.00	5.00	4.00	5.00	5.00	5.00	4.00	5.00	5.00		

Visible: 65 of 65 Variables

	CE3	CE4	CE5	CE6	CE7	CE8	CE9	CE10	CE11	CE12	CE13	CE14	CE15	CE16	CE17	CE18	CE19	CE20	CE21	CE22
126	4.00	5.00	5.00	4.00	1.00	5.00	4.00	2.00	1.00	1.00	5.00	4.00	5.00	5.00	5.00	4.00	5.00	5.00	5.00	4.00
127	5.00	5.00	4.00	5.00	1.00	5.00	5.00	2.00	1.00	1.00	5.00	5.00	4.00	5.00	5.00	4.00	5.00	5.00	5.00	5.00
128	4.00	5.00	5.00	4.00	1.00	5.00	5.00	2.00	1.00	1.00	5.00	5.00	4.00	5.00	5.00	5.00	5.00	4.00	5.00	5.00
129	4.00	4.00	5.00	5.00	1.00	5.00	4.00	1.00	2.00	1.00	5.00	5.00	4.00	5.00	4.00	5.00	5.00	5.00	4.00	5.00
130	5.00	4.00	5.00	5.00	1.00	4.00	5.00	2.00	1.00	2.00	5.00	5.00	4.00	5.00	5.00	5.00	5.00	4.00	5.00	5.00
131	5.00	5.00	4.00	5.00	1.00	4.00	5.00	2.00	1.00	1.00	5.00	5.00	4.00	5.00	5.00	4.00	5.00	5.00	5.00	5.00
132	4.00	5.00	4.00	5.00	1.00	5.00	5.00	2.00	1.00	1.00	5.00	4.00	5.00	5.00	4.00	5.00	5.00	4.00	5.00	5.00
133	5.00	5.00	4.00	5.00	1.00	5.00	4.00	2.00	1.00	2.00	5.00	5.00	5.00	4.00	5.00	5.00	5.00	5.00	5.00	5.00
134	5.00	5.00	4.00	5.00	1.00	5.00	5.00	2.00	1.00	1.00	5.00	5.00	4.00	5.00	5.00	4.00	5.00	5.00	5.00	4.00
135	5.00	5.00	4.00	5.00	1.00	5.00	4.00	1.00	2.00	1.00	5.00	5.00	5.00	5.00	4.00	5.00	5.00	5.00	4.00	5.00
136	4.00	5.00	5.00	4.00	1.00	5.00	5.00	1.00	2.00	1.00	5.00	5.00	4.00	5.00	5.00	5.00	4.00	5.00	5.00	4.00
137	5.00	5.00	5.00	4.00	1.00	5.00	4.00	2.00	1.00	1.00	5.00	5.00	4.00	5.00	5.00	5.00	4.00	5.00	5.00	5.00
138	4.00	5.00	5.00	4.00	1.00	5.00	4.00	1.00	2.00	1.00	5.00	5.00	4.00	5.00	5.00	4.00	5.00	5.00	4.00	5.00
139	5.00	5.00	4.00	5.00	1.00	5.00	5.00	1.00	1.00	2.00	5.00	5.00	4.00	5.00	5.00	4.00	5.00	5.00	5.00	4.00
140	4.00	5.00	5.00	5.00	1.00	4.00	5.00	2.00	1.00	1.00	5.00	5.00	4.00	5.00	4.00	5.00	5.00	5.00	5.00	4.00
141	5.00	5.00	4.00	5.00	1.00	5.00	4.00	1.00	2.00	1.00	5.00	5.00	4.00	5.00	5.00	5.00	4.00	5.00	4.00	5.00
142	5.00	4.00	5.00	5.00	1.00	5.00	5.00	1.00	2.00	1.00	5.00	5.00	5.00	4.00	5.00	5.00	5.00	4.00	5.00	5.00
143	5.00	5.00	5.00	4.00	1.00	5.00	5.00	2.00	1.00	2.00	5.00	5.00	4.00	5.00	5.00	4.00	5.00	4.00	5.00	5.00
144	4.00	5.00	5.00	4.00	1.00	5.00	4.00	1.00	2.00	1.00	5.00	5.00	4.00	5.00	5.00	4.00	5.00	5.00	4.00	5.00
145	4.00	5.00	5.00	4.00	1.00	5.00	4.00	1.00	2.00	5.00	4.00	5.00	5.00	5.00	4.00	4.00	5.00	5.00	4.00	5.00
146	5.00	4.00	5.00	4.00	1.00	5.00	4.00	1.00	2.00	5.00	5.00	5.00	5.00	4.00	5.00	5.00	4.00	5.00	5.00	5.00
147	5.00	5.00	5.00	4.00	1.00	5.00	5.00	2.00	1.00	2.00	5.00	5.00	5.00	4.00	5.00	5.00	4.00	5.00	5.00	5.00
148	5.00	5.00	4.00	5.00	1.00	5.00	5.00	2.00	1.00	2.00	5.00	5.00	4.00	5.00	5.00	4.00	5.00	5.00	4.00	5.00
149	5.00	5.00	4.00	5.00	1.00	5.00	4.00	2.00	1.00	2.00	5.00	4.00	5.00	5.00	4.00	5.00	5.00	4.00	5.00	5.00
150	5.00	5.00	4.00	5.00	1.00	5.00	5.00	2.00	1.00	2.00	5.00	5.00	5.00	5.00	4.00	5.00	5.00	4.00	5.00	5.00

Data View   Variable View

IBM SPSS Statistics Processor is ready   Unicode:ON

178 : SM12   4.00   Visible: 65 of 65 Variables

	CE22	CE23	CE24	CE25	CE26	CE27	CE28	SM1	SM2	SM3	SM4	SM5	SM6	SM7	SM8	SM9	SM10	SM11	SM12	FM3R
151	5.00	4.00	5.00	5.00	5.00	5.00	5.00	5.00	4.00	5.00	5.00	5.00	4.00	5.00	5.00	5.00	4.00	5.00	5.00	4.00
152	5.00	5.00	5.00	4.00	5.00	5.00	5.00	5.00	5.00	4.00	5.00	5.00	5.00	5.00	4.00	5.00	5.00	5.00	4.00	4.00
153	4.00	5.00	5.00	5.00	5.00	5.00	4.00	5.00	4.00	5.00	5.00	5.00	5.00	4.00	5.00	4.00	5.00	4.00	5.00	4.00
154	5.00	5.00	5.00	5.00	4.00	5.00	5.00	4.00	5.00	5.00	5.00	5.00	5.00	4.00	5.00	5.00	5.00	5.00	4.00	4.00
155	5.00	5.00	4.00	5.00	5.00	4.00	5.00	5.00	5.00	4.00	5.00	5.00	4.00	5.00	5.00	5.00	5.00	5.00	4.00	4.00
156	4.00	5.00	5.00	5.00	5.00	5.00	4.00	5.00	5.00	4.00	5.00	5.00	5.00	4.00	5.00	5.00	5.00	4.00	5.00	4.00
157	5.00	5.00	4.00	5.00	5.00	5.00	5.00	5.00	5.00	4.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00
158	5.00	5.00	4.00	5.00	5.00	5.00	5.00	5.00	4.00	5.00	5.00	5.00	5.00	4.00	5.00	5.00	4.00	5.00	5.00	4.00
159	5.00	5.00	5.00	4.00	5.00	5.00	5.00	5.00	4.00	5.00	5.00	5.00	5.00	4.00	5.00	5.00	4.00	5.00	4.00	4.00
160	5.00	5.00	5.00	5.00	5.00	5.00	4.00	5.00	5.00	4.00	5.00	5.00	5.00	4.00	5.00	5.00	5.00	5.00	5.00	4.00
161	5.00	5.00	5.00	5.00	5.00	4.00	5.00	5.00	4.00	5.00	5.00	4.00	5.00	5.00	4.00	4.00	5.00	5.00	5.00	4.00
162	4.00	5.00	5.00	4.00	5.00	5.00	4.00	5.00	4.00	5.00	5.00	5.00	5.00	4.00	5.00	5.00	4.00	5.00	4.00	4.00
163	4.00	5.00	5.00	5.00	5.00	5.00	4.00	5.00	4.00	5.00	5.00	4.00	5.00	5.00	5.00	4.00	5.00	4.00	5.00	5.00
164	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00
165	5.00	5.00	5.00	4.00	5.00	5.00	5.00	5.00	4.00	5.00	5.00	5.00	5.00	5.00	4.00	5.00	5.00	5.00	4.00	4.00
166	5.00	5.00	4.00	5.00	5.00	5.00	5.00	5.00	4.00	5.00	5.00	5.00	5.00	5.00	5.00	4.00	5.00	5.00	4.00	4.00
167	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	5.00	4.00	5.00	5.00	5.00	4.00	5.00	4.00	4.00	4.00	4.00
168	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	5.00	5.00	5.00	4.00	5.00	4.00	4.00	4.00	4.00
169	4.00	4.00	5.00	5.00	5.00	5.00	4.00	5.00	4.00	4.00	4.00	5.00	5.00	5.00	5.00	4.00	5.00	5.00	5.00	5.00
170	4.00	4.00	4.00	4.00	4.00	4.00	4.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00	4.00
171	4.00	5.00	5.00	4.00	5.00	4.00	5.00	5.00	4.00	5.00	5.00	4.00	5.00	4.00	5.00	4.00	5.00	4.00	4.00	5.00
172	4.00	5.00	4.00	5.00	4.00	4.00	4.00	4.00	5.00	5.00	5.00	4.00	5.00	4.00	5.00	4.00	5.00	4.00	5.00	5.00
173	5.00	5.00	5.00	5.00	5.00	4.00	5.00	5.00	5.00	4.00	4.00	5.00	4.00	4.00	5.00	4.00	5.00	4.00	5.00	4.00
174	5.00	4.00	5.00	5.00	4.00	4.00	5.00	5.00	5.00	5.00	5.00	5.00	4.00	4.00	5.00	4.00	4.00	4.00	5.00	4.00
175	4.00	5.00	4.00	5.00	4.00	5.00	5.00	5.00	5.00	5.00	4.00	4.00	4.00	5.00	5.00	5.00	5.00	5.00	4.00	5.00

Data View   Variable View

IBM SPSS Statistics Processor is ready   Unicode:ON

---

414 : SM12   Visible: 65 of 65 Variables

	CE23	CE24	CE25	CE26	CE27	CE28	SM1	SM2	SM3	SM4	SM5	SM6	SM7	SM8	SM9	SM10	SM11	SM12	FM3R	CE7R
176	4.00	5.00	5.00	4.00	5.00	4.00	4.00	5.00	5.00	4.00	5.00	5.00	4.00	5.00	4.00	5.00	5.00	5.00	4.00	5.00
177	5.00	4.00	5.00	4.00	5.00	4.00	5.00	4.00	4.00	5.00	5.00	4.00	5.00	4.00	5.00	4.00	5.00	4.00	4.00	5.00
178	4.00	5.00	4.00	4.00	5.00	4.00	5.00	4.00	5.00	4.00	5.00	4.00	4.00	5.00	4.00	5.00	5.00	4.00	4.00	5.00
179	4.00	5.00	5.00	4.00	4.00	5.00	5.00	4.00	4.00	5.00	4.00	5.00	5.00	4.00	5.00	4.00	4.00	5.00	4.00	5.00
180	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	2.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	5.00
181	4.00	5.00	4.00	5.00	4.00	4.00	5.00	4.00	5.00	4.00	5.00	4.00	5.00	4.00	5.00	4.00	5.00	4.00	5.00	5.00
182	5.00	4.00	4.00	5.00	4.00	5.00	5.00	5.00	5.00	4.00	5.00	4.00	5.00	4.00	5.00	4.00	5.00	4.00	4.00	5.00
183	4.00	5.00	5.00	4.00	4.00	5.00	5.00	5.00	4.00	5.00	4.00	5.00	4.00	5.00	4.00	5.00	4.00	4.00	4.00	5.00
184	5.00	5.00	4.00	5.00	5.00	4.00	5.00	4.00	5.00	4.00	5.00	5.00	4.00	4.00	4.00	5.00	4.00	5.00	4.00	5.00
185	5.00	5.00	4.00	4.00	5.00	5.00	5.00	5.00	4.00	5.00	4.00	5.00	5.00	4.00	4.00	5.00	4.00	5.00	4.00	5.00
186	5.00	4.00	4.00	5.00	5.00	4.00	5.00	4.00	5.00	5.00	4.00	4.00	5.00	4.00	4.00	5.00	5.00	4.00	4.00	5.00
187	4.00	5.00	4.00	5.00	5.00	5.00	5.00	5.00	4.00	4.00	4.00	4.00	5.00	4.00	5.00	5.00	5.00	5.00	5.00	5.00
188	5.00	4.00	4.00	5.00	4.00	5.00	5.00	5.00	4.00	4.00	5.00	4.00	5.00	4.00	5.00	4.00	5.00	4.00	4.00	5.00
189	5.00	4.00	5.00	4.00	4.00	5.00	5.00	4.00	4.00	5.00	5.00	4.00	5.00	5.00	4.00	5.00	5.00	4.00	4.00	5.00
190	5.00	4.00	5.00	5.00	5.00	4.00	4.00	4.00	5.00	4.00	5.00	4.00	5.00	4.00	5.00	4.00	5.00	4.00	4.00	5.00
191	4.00	5.00	4.00	5.00	4.00	5.00	5.00	4.00	5.00	4.00	5.00	4.00	5.00	4.00	5.00	4.00	5.00	4.00	4.00	5.00
192	5.00	4.00	5.00	4.00	5.00	4.00	4.00	5.00	4.00	5.00	4.00	4.00	5.00	5.00	4.00	5.00	4.00	5.00	4.00	5.00
193	5.00	5.00	5.00	5.00	4.00	5.00	5.00	5.00	4.00	5.00	4.00	5.00	5.00	4.00	5.00	5.00	5.00	5.00	5.00	5.00
194	5.00	4.00	5.00	4.00	5.00	4.00	5.00	4.00	5.00	4.00	5.00	5.00	4.00	4.00	5.00	4.00	5.00	5.00	4.00	5.00
195	5.00	4.00	5.00	4.00	5.00	4.00	4.00	5.00	4.00	5.00	4.00	4.00	5.00	4.00	5.00	4.00	5.00	5.00	4.00	5.00
196	5.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00	4.00	4.00
197	5.00	4.00	5.00	4.00	5.00	4.00	5.00	4.00	5.00	4.00	5.00	4.00	5.00	4.00	5.00	4.00	5.00	4.00	4.00	5.00
198	4.00	4.00	5.00	5.00	4.00	5.00	4.00	4.00	4.00	5.00	5.00	4.00	5.00	4.00	5.00	5.00	5.00	5.00	4.00	5.00
199	5.00	5.00	5.00	5.00	4.00	5.00	5.00	5.00	4.00	5.00	5.00	4.00	5.00	4.00	4.00	5.00	4.00	4.00	4.00	4.00
200	4.00	4.00	4.00	4.00	5.00	5.00	5.00	5.00	4.00	5.00	4.00	5.00	5.00	5.00	5.00	5.00	5.00	4.00	4.00	4.00

Data View   Variable View

IBM SPSS Statistics Processor is ready   Unicode:ON

122

SPSS Statistics — SPSS 1.sav [DataSet1] — IBM SPSS Statistics Data Editor

414 : SM12 — Visible: 65 of 65 Variables

	CE23	CE24	CE25	CE26	CE27	CE28	SM1	SM2	SM3	SM4	SM5	SM6	SM7	SM8	SM9	SM10	SM11	SM12	FM3R	CE7R
251	5.00	5.00	5.00	5.00	5.00	4.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00	4.00	5.00	5.00	4.00	5.00	4.00	4.00
252	5.00	5.00	5.00	5.00	5.00	4.00	5.00	5.00	5.00	5.00	4.00	5.00	5.00	4.00	4.00	5.00	5.00	5.00	4.00	4.00
253	5.00	4.00	5.00	5.00	4.00	4.00	5.00	4.00	4.00	5.00	4.00	5.00	5.00	4.00	4.00	5.00	5.00	4.00	4.00	4.00
254	4.00	4.00	4.00	4.00	5.00	4.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00	4.00	4.00	4.00	4.00
255	4.00	4.00	5.00	5.00	4.00	4.00	4.00	5.00	4.00	4.00	4.00	5.00	5.00	4.00	4.00	5.00	5.00	5.00	4.00	4.00
256	4.00	5.00	5.00	5.00	4.00	4.00	5.00	5.00	4.00	4.00	4.00	5.00	5.00	5.00	5.00	5.00	4.00	5.00	4.00	4.00
257	4.00	5.00	5.00	5.00	5.00	5.00	5.00	4.00	4.00	4.00	4.00	5.00	5.00	5.00	4.00	5.00	5.00	4.00	4.00	4.00
258	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00
259	5.00	5.00	4.00	5.00	5.00	4.00	5.00	5.00	4.00	5.00	4.00	5.00	5.00	5.00	4.00	4.00	5.00	5.00	4.00	4.00
260	5.00	4.00	5.00	4.00	5.00	5.00	5.00	5.00	5.00	4.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00	4.00	5.00	4.00
261	5.00	5.00	4.00	5.00	5.00	5.00	5.00	5.00	4.00	5.00	4.00	4.00	5.00	4.00	5.00	5.00	5.00	4.00	4.00	4.00
262	5.00	4.00	4.00	4.00	4.00	4.00	5.00	4.00	5.00	5.00	4.00	5.00	5.00	5.00	5.00	4.00	4.00	5.00	4.00	4.00
263	5.00	5.00	4.00	5.00	5.00	4.00	5.00	5.00	4.00	5.00	5.00	5.00	5.00	5.00	4.00	5.00	5.00	4.00	4.00	4.00
264	5.00	5.00	5.00	5.00	5.00	4.00	5.00	5.00	4.00	5.00	5.00	5.00	5.00	4.00	5.00	5.00	4.00	5.00	4.00	4.00
265	4.00	5.00	5.00	5.00	5.00	4.00	4.00	5.00	5.00	5.00	5.00	4.00	4.00	4.00	5.00	5.00	4.00	5.00	4.00	4.00
266	5.00	4.00	4.00	4.00	4.00	4.00	4.00	5.00	5.00	4.00	5.00	5.00	4.00	4.00	5.00	5.00	4.00	4.00	4.00	4.00
267	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00
268	4.00	5.00	4.00	5.00	4.00	5.00	5.00	5.00	5.00	4.00	4.00	5.00	5.00	5.00	4.00	5.00	4.00	4.00	4.00	5.00
269	5.00	5.00	4.00	4.00	5.00	4.00	5.00	4.00	5.00	4.00	4.00	5.00	5.00	5.00	4.00	5.00	5.00	4.00	4.00	4.00
270	4.00	5.00	5.00	5.00	5.00	4.00	5.00	5.00	5.00	5.00	5.00	5.00	4.00	5.00	4.00	4.00	4.00	5.00	4.00	5.00
271	5.00	5.00	5.00	4.00	4.00	4.00	4.00	4.00	5.00	4.00	4.00	5.00	5.00	4.00	4.00	5.00	4.00	5.00	5.00	4.00
272	5.00	4.00	4.00	5.00	5.00	5.00	5.00	4.00	4.00	4.00	4.00	4.00	5.00	5.00	4.00	5.00	5.00	4.00	4.00	4.00
273	5.00	5.00	4.00	5.00	5.00	4.00	4.00	4.00	4.00	5.00	5.00	4.00	4.00	4.00	4.00	5.00	4.00	4.00	4.00	4.00
274	4.00	5.00	4.00	4.00	4.00	4.00	5.00	4.00	5.00	4.00	5.00	4.00	4.00	5.00	5.00	4.00	4.00	5.00	4.00	4.00
275	4.00	4.00	4.00	4.00	4.00	4.00	5.00	5.00	4.00	5.00	4.00	4.00	5.00	4.00	4.00	4.00	4.00	5.00	5.00	4.00

Data View — Variable View

IBM SPSS Statistics Processor is ready — Unicode:ON

SPSS Statistics — SPSS 1.sav [DataSet1] — IBM SPSS Statistics Data Editor

414 : SM12 — Visible: 65 of 65 Variables

	CE23	CE24	CE25	CE26	CE27	CE28	SM1	SM2	SM3	SM4	SM5	SM6	SM7	SM8	SM9	SM10	SM11	SM12	FM3R	CE7R
276	5.00	4.00	5.00	5.00	5.00	4.00	4.00	5.00	4.00	5.00	4.00	4.00	5.00	5.00	4.00	4.00	4.00	5.00	5.00	4.00
277	5.00	4.00	5.00	4.00	5.00	4.00	5.00	5.00	4.00	4.00	5.00	4.00	5.00	4.00	4.00	4.00	5.00	5.00	4.00	4.00
278	4.00	5.00	5.00	4.00	5.00	4.00	5.00	4.00	4.00	5.00	5.00	4.00	4.00	5.00	5.00	4.00	4.00	4.00	5.00	4.00
279	5.00	5.00	4.00	4.00	5.00	4.00	4.00	4.00	5.00	5.00	5.00	4.00	4.00	5.00	5.00	4.00	4.00	5.00	4.00	4.00
280	5.00	5.00	5.00	5.00	5.00	4.00	5.00	5.00	4.00	5.00	5.00	4.00	5.00	5.00	5.00	4.00	4.00	4.00	4.00	4.00
281	5.00	4.00	5.00	4.00	4.00	4.00	5.00	4.00	4.00	4.00	5.00	5.00	5.00	5.00	5.00	4.00	5.00	4.00	5.00	4.00
282	4.00	4.00	4.00	4.00	4.00	5.00	5.00	4.00	5.00	5.00	4.00	4.00	5.00	4.00	4.00	4.00	5.00	4.00	4.00	4.00
283	4.00	5.00	5.00	5.00	4.00	5.00	5.00	4.00	5.00	5.00	4.00	5.00	5.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00
284	5.00	4.00	5.00	4.00	4.00	4.00	5.00	5.00	4.00	5.00	5.00	5.00	4.00	5.00	5.00	4.00	4.00	4.00	5.00	4.00
285	4.00	5.00	4.00	5.00	4.00	4.00	5.00	5.00	5.00	4.00	5.00	4.00	5.00	5.00	5.00	4.00	4.00	5.00	5.00	4.00
286	5.00	5.00	4.00	4.00	5.00	4.00	5.00	4.00	4.00	5.00	5.00	5.00	4.00	5.00	4.00	5.00	5.00	5.00	5.00	4.00
287	4.00	4.00	4.00	5.00	5.00	5.00	5.00	5.00	4.00	4.00	4.00	5.00	5.00	4.00	4.00	5.00	5.00	5.00	4.00	4.00
288	5.00	4.00	4.00	5.00	4.00	5.00	4.00	5.00	5.00	5.00	4.00	5.00	5.00	4.00	4.00	5.00	4.00	5.00	5.00	4.00
289	5.00	4.00	5.00	4.00	4.00	5.00	4.00	5.00	4.00	5.00	5.00	4.00	4.00	5.00	4.00	5.00	4.00	5.00	4.00	4.00
290	3.00	3.00	3.00	3.00	4.00	4.00	3.00	3.00	4.00	4.00	4.00	3.00	3.00	3.00	3.00	4.00	4.00	3.00	4.00	5.00
291	5.00	4.00	5.00	4.00	5.00	4.00	5.00	4.00	5.00	4.00	5.00	4.00	5.00	4.00	5.00	4.00	4.00	5.00	4.00	5.00
292	5.00	4.00	4.00	4.00	5.00	4.00	4.00	5.00	4.00	4.00	5.00	4.00	5.00	4.00	5.00	4.00	4.00	5.00	4.00	5.00
293	5.00	5.00	4.00	4.00	5.00	4.00	4.00	5.00	4.00	4.00	5.00	4.00	5.00	4.00	5.00	4.00	5.00	4.00	4.00	5.00
294	5.00	4.00	5.00	4.00	5.00	4.00	5.00	4.00	5.00	4.00	5.00	4.00	5.00	4.00	5.00	4.00	5.00	4.00	4.00	5.00
295	4.00	5.00	4.00	5.00	4.00	5.00	5.00	4.00	5.00	4.00	5.00	4.00	5.00	4.00	4.00	5.00	4.00	5.00	5.00	5.00
296	4.00	5.00	4.00	5.00	4.00	5.00	4.00	5.00	4.00	5.00	4.00	5.00	4.00	5.00	4.00	5.00	4.00	5.00	4.00	5.00
297	4.00	5.00	4.00	5.00	4.00	5.00	4.00	5.00	4.00	5.00	4.00	5.00	4.00	5.00	4.00	5.00	4.00	5.00	4.00	5.00
298	4.00	5.00	4.00	5.00	4.00	5.00	4.00	5.00	4.00	5.00	4.00	5.00	4.00	5.00	4.00	5.00	5.00	4.00	4.00	5.00
299	4.00	5.00	4.00	5.00	4.00	5.00	4.00	5.00	4.00	5.00	4.00	5.00	4.00	5.00	4.00	5.00	4.00	4.00	4.00	5.00
300	4.00	5.00	4.00	4.00	5.00	4.00	5.00	4.00	5.00	4.00	5.00	5.00	4.00	5.00	4.00	5.00	4.00	4.00	4.00	5.00

Data View — Variable View

IBM SPSS Statistics Processor is ready — Unicode:ON

	CE23	CE24	CE25	CE26	CE27	CE28	SM1	SM2	SM3	SM4	SM5	SM6	SM7	SM8	SM9	SM10	SM11	SM12	FM3R	CE7R
301	4.00	5.00	4.00	5.00	4.00	5.00	4.00	5.00	5.00	5.00	4.00	4.00	5.00	4.00	5.00	5.00	4.00	4.00	4.00	5.00
302	4.00	5.00	4.00	5.00	4.00	5.00	5.00	4.00	5.00	4.00	5.00	4.00	5.00	4.00	5.00	5.00	4.00	5.00	4.00	5.00
303	5.00	4.00	5.00	4.00	5.00	4.00	5.00	4.00	5.00	4.00	4.00	5.00	4.00	5.00	5.00	4.00	5.00	4.00	4.00	5.00
304	5.00	4.00	5.00	4.00	5.00	4.00	5.00	4.00	5.00	4.00	5.00	4.00	5.00	4.00	5.00	5.00	4.00	5.00	4.00	5.00
305	4.00	5.00	4.00	5.00	4.00	4.00	4.00	5.00	5.00	4.00	4.00	4.00	4.00	5.00	4.00	5.00	4.00	5.00	4.00	5.00
306	5.00	4.00	5.00	4.00	5.00	4.00	5.00	4.00	5.00	4.00	5.00	5.00	4.00	4.00	5.00	4.00	5.00	4.00	4.00	5.00
307	5.00	4.00	5.00	4.00	5.00	4.00	5.00	5.00	5.00	4.00	4.00	5.00	4.00	5.00	5.00	4.00	5.00	4.00	4.00	5.00
308	4.00	5.00	4.00	5.00	5.00	4.00	4.00	5.00	5.00	4.00	5.00	4.00	4.00	5.00	4.00	5.00	4.00	5.00	4.00	5.00
309	4.00	5.00	4.00	5.00	4.00	5.00	5.00	5.00	4.00	5.00	4.00	4.00	5.00	4.00	5.00	4.00	5.00	4.00	4.00	5.00
310	5.00	4.00	4.00	5.00	4.00	5.00	4.00	5.00	5.00	4.00	5.00	4.00	5.00	5.00	4.00	5.00	4.00	4.00	4.00	5.00
311	4.00	5.00	4.00	5.00	4.00	5.00	5.00	4.00	5.00	4.00	5.00	4.00	5.00	4.00	5.00	5.00	4.00	5.00	4.00	5.00
312	4.00	5.00	4.00	5.00	4.00	5.00	5.00	4.00	5.00	4.00	5.00	4.00	5.00	4.00	4.00	5.00	4.00	5.00	4.00	5.00
313	5.00	4.00	5.00	4.00	4.00	5.00	4.00	5.00	5.00	4.00	4.00	5.00	4.00	5.00	4.00	4.00	5.00	4.00	4.00	5.00
314	4.00	5.00	4.00	5.00	4.00	5.00	5.00	4.00	4.00	5.00	4.00	5.00	4.00	5.00	4.00	5.00	4.00	5.00	4.00	5.00
315	5.00	4.00	4.00	5.00	4.00	5.00	5.00	4.00	5.00	4.00	5.00	4.00	5.00	4.00	5.00	4.00	5.00	4.00	4.00	5.00
316	4.00	5.00	4.00	4.00	4.00	5.00	5.00	4.00	5.00	4.00	5.00	4.00	4.00	5.00	4.00	5.00	4.00	5.00	4.00	5.00
317	4.00	5.00	4.00	5.00	4.00	5.00	5.00	4.00	5.00	4.00	5.00	4.00	5.00	4.00	5.00	5.00	4.00	5.00	4.00	5.00
318	5.00	4.00	5.00	4.00	5.00	4.00	5.00	4.00	5.00	4.00	5.00	5.00	4.00	5.00	4.00	5.00	4.00	5.00	4.00	5.00
319	5.00	4.00	5.00	4.00	5.00	4.00	5.00	4.00	5.00	4.00	5.00	4.00	5.00	4.00	5.00	4.00	4.00	5.00	4.00	5.00
320	4.00	5.00	4.00	5.00	4.00	4.00	5.00	5.00	4.00	5.00	4.00	4.00	5.00	4.00	5.00	5.00	4.00	5.00	4.00	5.00
321	4.00	5.00	4.00	5.00	4.00	5.00	4.00	5.00	4.00	5.00	4.00	5.00	4.00	5.00	5.00	4.00	5.00	4.00	4.00	5.00
322	4.00	5.00	5.00	4.00	4.00	5.00	5.00	4.00	5.00	4.00	5.00	4.00	5.00	4.00	5.00	4.00	5.00	4.00	4.00	5.00
323	5.00	4.00	5.00	4.00	5.00	4.00	5.00	4.00	5.00	4.00	4.00	5.00	4.00	5.00	4.00	5.00	4.00	4.00	4.00	5.00
324	5.00	5.00	4.00	5.00	4.00	5.00	5.00	4.00	5.00	4.00	4.00	5.00	4.00	5.00	5.00	4.00	5.00	4.00	4.00	5.00
325	4.00	5.00	4.00	5.00	4.00	4.00	5.00	4.00	5.00	4.00	4.00	5.00	4.00	5.00	4.00	5.00	4.00	4.00	4.00	5.00

	CE23	CE24	CE25	CE26	CE27	CE28	SM1	SM2	SM3	SM4	SM5	SM6	SM7	SM8	SM9	SM10	SM11	SM12	FM3R	CE7R
326	5.00	4.00	5.00	4.00	5.00	5.00	5.00	4.00	4.00	5.00	4.00	5.00	4.00	4.00	5.00	4.00	5.00	4.00	4.00	5.00
327	4.00	5.00	4.00	5.00	4.00	5.00	5.00	4.00	4.00	5.00	4.00	5.00	4.00	5.00	4.00	5.00	4.00	5.00	4.00	5.00
328	4.00	5.00	4.00	5.00	4.00	4.00	5.00	4.00	5.00	4.00	5.00	4.00	5.00	4.00	5.00	5.00	4.00	5.00	4.00	5.00
329	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00
330	5.00	4.00	5.00	5.00	4.00	5.00	5.00	5.00	4.00	5.00	5.00	5.00	4.00	5.00	5.00	4.00	5.00	4.00	4.00	5.00
331	5.00	4.00	4.00	4.00	5.00	4.00	4.00	5.00	4.00	5.00	5.00	4.00	5.00	4.00	5.00	4.00	5.00	5.00	4.00	5.00
332	5.00	4.00	4.00	5.00	5.00	5.00	5.00	4.00	4.00	5.00	5.00	4.00	5.00	5.00	4.00	4.00	4.00	4.00	4.00	4.00
333	5.00	5.00	4.00	5.00	5.00	5.00	5.00	4.00	5.00	5.00	5.00	4.00	5.00	5.00	5.00	4.00	5.00	5.00	5.00	5.00
334	4.00	5.00	5.00	5.00	4.00	4.00	5.00	5.00	4.00	4.00	5.00	5.00	4.00	5.00	4.00	5.00	5.00	4.00	5.00	4.00
335	5.00	5.00	4.00	5.00	5.00	5.00	5.00	4.00	5.00	5.00	5.00	4.00	5.00	5.00	5.00	4.00	5.00	4.00	4.00	5.00
336	5.00	4.00	4.00	5.00	4.00	5.00	5.00	4.00	4.00	5.00	4.00	5.00	4.00	5.00	4.00	5.00	4.00	5.00	4.00	5.00
337	5.00	4.00	5.00	5.00	5.00	5.00	5.00	4.00	5.00	5.00	5.00	4.00	5.00	5.00	5.00	4.00	5.00	4.00	4.00	5.00
338	4.00	5.00	5.00	4.00	5.00	4.00	4.00	5.00	4.00	4.00	5.00	4.00	5.00	4.00	5.00	4.00	5.00	4.00	4.00	5.00
339	5.00	5.00	5.00	4.00	5.00	5.00	5.00	4.00	5.00	5.00	5.00	5.00	5.00	4.00	5.00	5.00	5.00	4.00	4.00	5.00
340	5.00	5.00	4.00	4.00	5.00	4.00	5.00	4.00	5.00	5.00	4.00	5.00	4.00	5.00	4.00	5.00	5.00	4.00	4.00	5.00
341	5.00	5.00	4.00	4.00	4.00	4.00	4.00	5.00	4.00	4.00	4.00	4.00	4.00	4.00	5.00	4.00	4.00	4.00	5.00	5.00
342	4.00	4.00	5.00	4.00	5.00	4.00	4.00	5.00	4.00	5.00	5.00	4.00	5.00	5.00	4.00	4.00	5.00	5.00	4.00	5.00
343	4.00	5.00	4.00	5.00	4.00	5.00	5.00	5.00	4.00	5.00	4.00	5.00	4.00	5.00	4.00	5.00	4.00	4.00	5.00	5.00
344	4.00	4.00	5.00	4.00	5.00	4.00	5.00	4.00	5.00	4.00	5.00	5.00	4.00	5.00	4.00	5.00	4.00	5.00	4.00	5.00
345	5.00	4.00	5.00	5.00	4.00	5.00	5.00	4.00	5.00	4.00	5.00	5.00	4.00	5.00	5.00	4.00	5.00	4.00	4.00	5.00
346	4.00	4.00	5.00	4.00	5.00	4.00	5.00	5.00	5.00	4.00	4.00	4.00	4.00	4.00	5.00	4.00	4.00	4.00	5.00	4.00
347	5.00	5.00	4.00	5.00	4.00	4.00	5.00	4.00	5.00	4.00	5.00	4.00	5.00	4.00	5.00	5.00	4.00	5.00	4.00	5.00
348	5.00	4.00	5.00	4.00	5.00	4.00	4.00	5.00	4.00	5.00	5.00	4.00	5.00	5.00	4.00	5.00	4.00	4.00	5.00	5.00
349	5.00	4.00	5.00	4.00	5.00	4.00	5.00	4.00	5.00	4.00	5.00	5.00	4.00	5.00	4.00	5.00	4.00	5.00	4.00	5.00
350	5.00	4.00	5.00	4.00	5.00	4.00	5.00	5.00	4.00	4.00	5.00	4.00	5.00	5.00	4.00	5.00	4.00	5.00	4.00	5.00

	CE23	CE24	CE25	CE26	CE27	CE28	SM1	SM2	SM3	SM4	SM5	SM6	SM7	SM8	SM9	SM10	SM11	SM12	FM3R	CE7R
351	5.00	4.00	4.00	5.00	4.00	5.00	4.00	5.00	5.00	5.00	5.00	4.00	5.00	4.00	5.00	4.00	5.00	4.00	4.00	5.00
352	4.00	4.00	4.00	5.00	4.00	5.00	5.00	4.00	5.00	5.00	4.00	4.00	5.00	4.00	4.00	5.00	4.00	4.00	4.00	4.00
353	5.00	4.00	5.00	4.00	5.00	4.00	5.00	4.00	5.00	4.00	5.00	4.00	5.00	4.00	5.00	4.00	5.00	4.00	4.00	5.00
354	4.00	5.00	4.00	5.00	4.00	5.00	5.00	4.00	5.00	4.00	4.00	5.00	4.00	4.00	5.00	4.00	5.00	5.00	5.00	5.00
355	5.00	4.00	4.00	5.00	4.00	5.00	5.00	5.00	4.00	5.00	5.00	4.00	4.00	5.00	4.00	5.00	5.00	4.00	5.00	5.00
356	5.00	5.00	4.00	5.00	4.00	5.00	5.00	4.00	5.00	4.00	5.00	4.00	5.00	4.00	5.00	4.00	5.00	5.00	5.00	5.00
357	4.00	4.00	5.00	5.00	5.00	4.00	5.00	4.00	5.00	4.00	5.00	4.00	5.00	4.00	5.00	4.00	5.00	4.00	5.00	5.00
358	4.00	5.00	4.00	5.00	4.00	5.00	5.00	5.00	4.00	5.00	4.00	5.00	5.00	4.00	5.00	4.00	5.00	5.00	4.00	5.00
359	5.00	5.00	5.00	4.00	5.00	4.00	5.00	4.00	5.00	5.00	4.00	5.00	4.00	5.00	5.00	4.00	4.00	5.00	4.00	5.00
360	5.00	4.00	5.00	4.00	5.00	4.00	5.00	4.00	5.00	4.00	4.00	5.00	4.00	5.00	4.00	5.00	5.00	4.00	4.00	4.00
361	5.00	4.00	5.00	5.00	4.00	5.00	5.00	4.00	5.00	4.00	5.00	4.00	5.00	4.00	4.00	5.00	4.00	5.00	5.00	4.00
362	4.00	4.00	5.00	4.00	4.00	5.00	5.00	4.00	4.00	5.00	4.00	5.00	4.00	5.00	5.00	4.00	5.00	4.00	5.00	4.00
363	5.00	5.00	4.00	4.00	5.00	4.00	5.00	4.00	4.00	5.00	4.00	5.00	4.00	4.00	5.00	5.00	4.00	4.00	4.00	4.00
364	4.00	4.00	5.00	4.00	5.00	5.00	5.00	5.00	4.00	4.00	5.00	5.00	5.00	5.00	4.00	5.00	4.00	5.00	4.00	4.00
365	4.00	4.00	5.00	5.00	4.00	5.00	5.00	4.00	5.00	4.00	5.00	4.00	4.00	5.00	5.00	5.00	4.00	4.00	4.00	5.00
366	5.00	4.00	5.00	4.00	5.00	4.00	5.00	4.00	5.00	4.00	5.00	4.00	5.00	4.00	5.00	4.00	5.00	4.00	4.00	4.00
367	5.00	4.00	5.00	5.00	5.00	4.00	4.00	4.00	5.00	5.00	4.00	5.00	4.00	4.00	5.00	5.00	4.00	5.00	5.00	5.00
368	5.00	5.00	5.00	5.00	4.00	5.00	5.00	4.00	4.00	5.00	5.00	4.00	5.00	4.00	5.00	4.00	4.00	5.00	5.00	5.00
369	5.00	4.00	5.00	4.00	5.00	4.00	5.00	4.00	5.00	4.00	5.00	4.00	5.00	4.00	5.00	4.00	5.00	4.00	4.00	5.00
370	4.00	5.00	5.00	4.00	5.00	5.00	5.00	4.00	4.00	5.00	4.00	5.00	4.00	5.00	5.00	4.00	5.00	4.00	4.00	5.00
371	4.00	5.00	5.00	4.00	5.00	5.00	5.00	4.00	4.00	5.00	4.00	5.00	4.00	4.00	5.00	4.00	5.00	5.00	4.00	5.00
372	4.00	5.00	5.00	4.00	5.00	4.00	5.00	4.00	5.00	4.00	5.00	4.00	5.00	5.00	4.00	4.00	5.00	4.00	4.00	4.00
373	4.00	5.00	4.00	5.00	4.00	5.00	5.00	4.00	4.00	5.00	5.00	5.00	4.00	5.00	4.00	5.00	4.00	5.00	5.00	4.00
374	5.00	4.00	5.00	4.00	5.00	4.00	5.00	4.00	4.00	5.00	4.00	4.00	5.00	4.00	5.00	4.00	4.00	5.00	4.00	4.00
375	4.00	4.00	5.00	5.00	4.00	4.00	5.00	5.00	5.00	4.00	4.00	5.00	4.00	5.00	4.00	4.00	5.00	5.00	5.00	5.00

	CE23	CE24	CE25	CE26	CE27	CE28	SM1	SM2	SM3	SM4	SM5	SM6	SM7	SM8	SM9	SM10	SM11	SM12	FM3R	CE7R
376	4.00	5.00	5.00	5.00	4.00	5.00	5.00	5.00	4.00	5.00	4.00	5.00	4.00	4.00	4.00	4.00	5.00	5.00		5.00
377	4.00	5.00	4.00	5.00	5.00	4.00	5.00	4.00	5.00	5.00	4.00	4.00	5.00	4.00	5.00	4.00	5.00	4.00	4.00	5.00

SPSS 1.sav [DataSet1] - IBM SPSS Statistics Data Editor

414 : SM12

	12	FM3R	CE7R	CE10R	CE11R	CE12R	FMave	CEave	SMave	var	var	var	var	var	var	var	var	var
1	4.00	4.00	5.00	4.00	5.00	5.00	3.82	4.50	4.42									
2	4.00	4.00	5.00	4.00	5.00	5.00	3.36	4.61	4.00									
3	5.00	4.00	5.00	4.00	5.00	5.00	3.64	4.25	4.42									
4	4.00	2.00	4.00	4.00	4.00	4.00	3.27	4.00	3.67									
5	5.00	4.00	5.00	4.00	5.00	5.00	3.73	4.46	4.50									
6	1.00	4.00	5.00	4.00	5.00	5.00	2.73	3.71	2.58									
7	4.00	4.00	5.00	4.00	5.00	5.00	4.00	4.64	4.75									
8	2.00	4.00	5.00	4.00	5.00	5.00	3.00	4.04	3.50									
9	3.00	4.00	5.00	4.00	5.00	5.00	3.09	3.46	3.42									
10	5.00	4.00	5.00	4.00	5.00	5.00	3.73	4.61	4.58									
11	5.00	4.00	5.00	4.00	5.00	5.00	3.64	4.64	4.50									
12	5.00	5.00	5.00	4.00	5.00	5.00	3.91	4.57	4.58									
13	4.00	5.00	5.00	5.00	4.00	4.00	3.82	4.46	4.50									
14	3.00	4.00	5.00	4.00	5.00	5.00	3.82	3.18	3.25									
15	4.00	4.00	5.00	4.00	5.00	5.00	4.00	4.61	4.67									
16	5.00	4.00	5.00	4.00	5.00	5.00	4.00	4.61	4.58									
17	5.00	5.00	5.00	4.00	5.00	5.00	4.00	4.54	4.67									
18	5.00	4.00	5.00	5.00	4.00	4.00	3.82	4.54	4.58									
19	5.00	4.00	5.00	4.00	4.00	4.00	3.55	4.25	4.25									
20	4.00	2.00	4.00	2.00	4.00	2.00	3.82	3.86	3.83									
21	4.00	5.00	5.00	4.00	4.00	4.00	4.00	4.46	4.50									
22	5.00	4.00	5.00	4.00	5.00	5.00	4.18	4.46	4.50									
23	4.00	4.00	5.00	4.00	5.00	5.00	4.18	4.68	4.50									
24	4.00	5.00	4.00	4.00	5.00	5.00	4.09	4.57	4.42									
25	5.00	4.00	4.00	4.00	5.00	5.00	3.91	4.57	4.50									

Data View   Variable View

IBM SPSS Statistics Processor is ready   Unicode:ON

SPSS 1.sav [DataSet1] - IBM SPSS Statistics Data Editor

414 : SM12

	12	FM3R	CE7R	CE10R	CE11R	CE12R	FMave	CEave	SMave	var	var	var	var	var	var	var	var	var
26	1.00	4.00	2.00	2.00	2.00	2.00	2.55	2.71	2.08									
27	5.00	4.00	4.00	4.00	5.00	5.00	3.91	4.54	4.42									
28	3.00	4.00	5.00	4.00	5.00	5.00	2.82	3.14	2.92									
29	4.00	5.00	5.00	5.00	4.00	5.00	4.18	4.54	4.58									
30	4.00	4.00	4.00	5.00	5.00	4.00	3.73	4.57	4.50									
31	3.00	4.00	5.00	4.00	5.00	5.00	2.82	3.57	2.67									
32	4.00	4.00	5.00	4.00	5.00	5.00	3.09	3.79	3.92									
33	5.00	4.00	5.00	5.00	4.00	5.00	4.00	4.61	4.50									
34	5.00	4.00	5.00	5.00	5.00	5.00	3.91	4.61	4.58									
35	4.00	5.00	5.00	5.00	4.00	4.00	4.00	4.61	4.50									
36	4.00	4.00	5.00	5.00	4.00	5.00	3.91	4.57	4.58									
37	5.00	5.00	5.00	5.00	4.00	5.00	4.00	4.57	4.58									
38	4.00	4.00	5.00	5.00	5.00	4.00	3.91	4.64	4.50									
39	5.00	4.00	5.00	5.00	4.00	5.00	3.82	4.50	4.58									
40	4.00	4.00	5.00	4.00	5.00	5.00	3.55	4.54	4.33									
41	4.00	4.00	5.00	4.00	5.00	5.00	3.00	3.68	3.50									
42	5.00	5.00	5.00	5.00	4.00	5.00	4.09	4.61	4.58									
43	4.00	5.00	4.00	5.00	4.00	5.00	4.18	4.54	4.50									
44	5.00	5.00	5.00	5.00	4.00	4.00	4.09	4.57	4.58									
45	5.00	4.00	5.00	4.00	5.00	5.00	4.00	4.61	4.67									
46	4.00	4.00	5.00	4.00	5.00	5.00	4.09	4.57	4.50									
47	4.00	5.00	5.00	4.00	5.00	5.00	4.00	4.57	4.50									
48	4.00	5.00	5.00	5.00	5.00	5.00	4.18	4.54	4.42									
49	5.00	4.00	4.00	4.00	4.00	4.00	4.09	4.46	4.50									
50	4.00	4.00	5.00	4.00	5.00	4.00	4.00	4.61	4.50									

Data View   Variable View

IBM SPSS Statistics Processor is ready   Unicode:ON

	SM12	FM3R	CE7R	CE10R	CE11R	CE12R	FMave	CEave	SMave
51	4.00	4.00	5.00	5.00	4.00	5.00	3.73	4.61	4.50
52	4.00	5.00	5.00	5.00	4.00	4.00	3.55	4.57	4.58
53	5.00	5.00	5.00	5.00	4.00	4.00	3.64	4.54	4.58
54	5.00	4.00	5.00	5.00	5.00	4.00	3.27	4.54	4.58
55	4.00	5.00	5.00	4.00	4.00	5.00	3.73	4.61	4.58
56	4.00	4.00	5.00	5.00	4.00	4.00	2.73	4.61	4.58
57	5.00	5.00	5.00	5.00	5.00	4.00	4.00	4.61	4.58
58	5.00	4.00	5.00	4.00	4.00	4.00	3.00	4.54	4.50
59	5.00	5.00	5.00	5.00	4.00	4.00	3.09	4.57	4.58
60	4.00	4.00	5.00	5.00	5.00	4.00	3.73	4.64	4.58
61	4.00	4.00	5.00	5.00	5.00	4.00	3.73	4.64	4.58
62	5.00	5.00	5.00	5.00	4.00	5.00	3.91	4.57	4.67
63	4.00	5.00	5.00	5.00	4.00	4.00	3.64	4.57	4.58
64	5.00	5.00	5.00	5.00	5.00	4.00	3.82	4.61	4.58
65	4.00	4.00	5.00	5.00	4.00	5.00	4.00	4.68	4.58
66	5.00	4.00	5.00	4.00	4.00	4.00	3.91	4.57	4.67
67	5.00	4.00	5.00	4.00	4.00	5.00	4.09	4.57	4.58
68	4.00	4.00	4.00	5.00	5.00	4.00	3.82	4.54	4.50
69	5.00	4.00	4.00	5.00	4.00	5.00	3.73	4.54	4.58
70	5.00	4.00	4.00	5.00	4.00	5.00	3.91	4.50	4.58
71	5.00	4.00	4.00	5.00	4.00	4.00	3.82	4.57	4.50
72	5.00	4.00	4.00	5.00	5.00	5.00	4.18	4.57	4.67
73	4.00	4.00	5.00	4.00	5.00	5.00	4.09	4.61	4.50
74	5.00	4.00	4.00	5.00	4.00	4.00	3.91	4.57	4.58
75	4.00	5.00	5.00	5.00	4.00	4.00	4.00	4.57	4.50

	SM12	FM3R	CE7R	CE10R	CE11R	CE12R	FMave	CEave	SMave
76	5.00	5.00	5.00	5.00	4.00	5.00	2.64	4.64	4.50
77	4.00	4.00	5.00	5.00	4.00	5.00	4.00	4.57	4.58
78	5.00	4.00	5.00	4.00	5.00	4.00	2.91	4.57	4.58
79	5.00	4.00	5.00	5.00	4.00	5.00	4.00	4.61	4.58
80	4.00	4.00	4.00	5.00	4.00	5.00	3.73	4.54	4.50
81	5.00	5.00	4.00	4.00	5.00	5.00	3.00	4.54	4.58
82	5.00	4.00	4.00	4.00	5.00	4.00	3.00	4.50	4.50
83	5.00	5.00	5.00	5.00	5.00	4.00	4.18	4.54	4.58
84	5.00	4.00	5.00	5.00	4.00	5.00	3.91	4.57	4.50
85	5.00	4.00	5.00	5.00	4.00	5.00	3.91	4.57	4.58
86	5.00	4.00	5.00	4.00	5.00	4.00	4.00	4.61	4.58
87	5.00	4.00	4.00	4.00	5.00	5.00	3.91	4.46	4.50
88	5.00	4.00	5.00	5.00	5.00	4.00	3.91	4.61	4.58
89	5.00	4.00	5.00	5.00	4.00	5.00	3.82	4.57	4.50
90	5.00	4.00	4.00	4.00	5.00	4.00	3.36	4.46	4.58
91	5.00	5.00	5.00	5.00	4.00	5.00	3.27	4.54	4.58
92	5.00	5.00	4.00	5.00	5.00	4.00	4.18	4.57	4.58
93	5.00	4.00	5.00	5.00	5.00	4.00	4.09	4.57	4.58
94	5.00	5.00	5.00	4.00	5.00	2.00	4.18	4.43	4.58
95	4.00	4.00	5.00	4.00	5.00	5.00	4.09	4.61	4.50
96	5.00	5.00	5.00	5.00	5.00	4.00	4.18	4.46	4.50
97	5.00	5.00	5.00	4.00	5.00	4.00	3.91	4.61	4.58
98	4.00	4.00	4.00	5.00	4.00	4.00	4.00	4.54	4.50
99	4.00	4.00	5.00	4.00	5.00	5.00	4.09	4.57	4.58
100	4.00	4.00	5.00	4.00	5.00	5.00	3.82	4.61	4.67

128

SPSS 1.sav [DataSet1] – IBM SPSS Statistics Data Editor

Visible: 65 of 65 Variables

414 : SM12

	12	FM3R	CE7R	CE10R	CE11R	CE12R	FMave	CEave	SMave
101	4.00	5.00	5.00	4.00	5.00	5.00	3.45	4.68	4.58
102	4.00	4.00	5.00	4.00	5.00	5.00	3.64	4.75	4.75
103	5.00	4.00	5.00	4.00	5.00	5.00	3.18	4.64	4.67
104	4.00	4.00	5.00	4.00	5.00	5.00	3.64	4.00	3.33
105	5.00	4.00	5.00	4.00	5.00	5.00	2.64	4.61	4.67
106	5.00	4.00	5.00	4.00	5.00	5.00	3.91	4.64	4.75
107	4.00	4.00	5.00	4.00	5.00	5.00	3.00	4.71	4.75
108	5.00	4.00	5.00	4.00	5.00	5.00	3.00	4.68	4.83
109	5.00	4.00	5.00	4.00	5.00	5.00	3.73	4.68	4.75
110	5.00	4.00	5.00	4.00	5.00	5.00	3.73	4.71	4.75
111	5.00	4.00	5.00	4.00	5.00	5.00	3.82	4.75	4.75
112	4.00	4.00	5.00	4.00	5.00	5.00	3.64	4.71	4.67
113	4.00	4.00	5.00	4.00	5.00	5.00	3.73	4.71	4.75
114	5.00	4.00	5.00	4.00	5.00	5.00	4.00	4.75	4.75
115	5.00	4.00	5.00	4.00	5.00	4.00	3.82	4.68	4.67
116	5.00	4.00	5.00	4.00	5.00	5.00	4.00	4.68	4.83
117	5.00	4.00	5.00	4.00	5.00	5.00	3.82	4.68	4.75
118	5.00	4.00	5.00	4.00	5.00	5.00	3.64	4.68	4.67
119	5.00	4.00	5.00	4.00	5.00	5.00	3.82	4.71	4.67
120	5.00	4.00	5.00	4.00	5.00	5.00	3.91	4.75	4.75
121	5.00	5.00	5.00	4.00	5.00	5.00	4.18	4.71	4.75
122	5.00	5.00	5.00	4.00	5.00	5.00	4.09	4.61	4.75
123	5.00	4.00	4.00	5.00	5.00	4.00	3.82	4.68	4.75
124	5.00	4.00	5.00	5.00	4.00	5.00	3.91	4.71	4.75
125	5.00	4.00	5.00	4.00	5.00	4.00	2.55	4.54	4.75

Data View | Variable View

IBM SPSS Statistics Processor is ready | Unicode:ON

SPSS 1.sav [DataSet1] – IBM SPSS Statistics Data Editor

Visible: 65 of 65 Variables

414 : SM12

	12	FM3R	CE7R	CE10R	CE11R	CE12R	FMave	CEave	SMave
126	5.00	4.00	5.00	4.00	5.00	5.00	3.82	4.71	4.75
127	5.00	4.00	5.00	4.00	5.00	5.00	2.73	4.75	4.75
128	5.00	4.00	5.00	4.00	5.00	5.00	3.91	4.79	4.75
129	5.00	4.00	5.00	5.00	4.00	5.00	3.73	4.71	4.83
130	4.00	4.00	5.00	4.00	5.00	4.00	2.82	4.68	4.83
131	4.00	4.00	5.00	4.00	5.00	5.00	3.09	4.71	4.67
132	5.00	4.00	5.00	4.00	5.00	5.00	3.91	4.71	4.75
133	5.00	4.00	5.00	4.00	5.00	4.00	3.91	4.71	4.75
134	5.00	4.00	5.00	4.00	5.00	5.00	3.91	4.75	4.83
135	4.00	4.00	5.00	5.00	4.00	5.00	4.00	4.79	4.75
136	4.00	4.00	5.00	5.00	4.00	5.00	3.91	4.75	4.75
137	4.00	4.00	5.00	4.00	5.00	5.00	3.91	4.68	4.67
138	5.00	4.00	5.00	5.00	4.00	5.00	3.82	4.68	4.75
139	5.00	4.00	5.00	5.00	4.00	5.00	3.45	4.75	4.83
140	5.00	4.00	5.00	4.00	5.00	5.00	3.18	4.68	4.67
141	4.00	4.00	5.00	5.00	4.00	5.00	4.00	4.68	4.50
142	5.00	4.00	5.00	5.00	4.00	5.00	4.00	4.79	4.75
143	5.00	4.00	5.00	4.00	5.00	4.00	4.00	4.68	4.58
144	5.00	4.00	5.00	5.00	4.00	5.00	4.00	4.68	4.75
145	4.00	4.00	5.00	5.00	4.00	1.00	4.09	4.50	4.67
146	5.00	4.00	5.00	5.00	4.00	5.00	3.82	4.68	4.75
147	5.00	4.00	5.00	4.00	5.00	5.00	4.09	4.75	4.58
148	4.00	4.00	5.00	4.00	5.00	4.00	4.09	4.71	4.67
149	4.00	4.00	5.00	4.00	5.00	5.00	4.00	4.68	4.75
150	5.00	4.00	5.00	4.00	5.00	4.00	4.00	4.71	4.83

Data View | Variable View

IBM SPSS Statistics Processor is ready | Unicode:ON

Visible: 65 of 65 Variables

	112	FM3R	CE7R	CE10R	CE11R	CE12R	FMave	CEave	SMave	var	var	var	var	var	var	var	var	var
151	5.00	4.00	5.00	5.00	4.00	5.00	3.73	4.75	4.75									
152	4.00	4.00	5.00	5.00	4.00	4.00	4.00	4.71	4.75									
153	5.00	4.00	5.00	4.00	5.00	4.00	3.64	4.68	4.67									
154	4.00	4.00	5.00	4.00	5.00	4.00	4.00	4.68	4.75									
155	4.00	4.00	1.00	5.00	4.00	5.00	3.09	4.54	4.75									
156	5.00	4.00	5.00	5.00	4.00	5.00	4.27	4.68	4.75									
157	5.00	5.00	5.00	2.00	1.00	1.00	3.45	4.43	4.92									
158	5.00	4.00	5.00	1.00	1.00	2.00	3.36	4.39	4.75									
159	5.00	4.00	5.00	5.00	4.00	5.00	4.00	4.75	4.75									
160	5.00	4.00	1.00	2.00	1.00	1.00	4.00	4.25	4.83									
161	5.00	4.00	5.00	4.00	5.00	5.00	4.09	4.75	4.67									
162	4.00	4.00	5.00	4.00	5.00	4.00	3.91	4.54	4.67									
163	4.00	5.00	5.00	4.00	5.00	5.00	4.18	4.75	4.67									
164	4.00	4.00	4.00	4.00	4.00	4.00	4.18	4.00	4.00									
165	4.00	4.00	5.00	4.00	5.00	5.00	4.18	4.79	4.75									
166	5.00	4.00	5.00	5.00	4.00	5.00	4.27	4.82	4.83									
167	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.42									
168	4.00	4.00	5.00	5.00	4.00	4.00	3.91	4.25	4.33									
169	5.00	4.00	5.00	4.00	5.00	5.00	4.18	4.64	4.67									
170	5.00	5.00	5.00	5.00	4.00	4.00	4.27	4.39	5.00									
171	4.00	5.00	5.00	5.00	1.00	1.00	4.55	4.32	4.50									
172	5.00	5.00	5.00	5.00	4.00	4.00	4.36	4.54	4.58									
173	5.00	4.00	5.00	4.00	4.00	5.00	4.18	4.50	4.42									
174	5.00	4.00	5.00	5.00	4.00	4.00	4.09	4.50	4.58									
175	5.00	5.00	4.00	4.00	5.00	5.00	3.00	4.68	4.67									

Data View   Variable View

IBM SPSS Statistics Processor is ready   Unicode:ON

SPSS Statistics   File   Edit   View   Data   Transform   Analyze   Graphs   Utilities   Extensions   Window   Help   A   🔋   🛜   Q   🖥   ✳   Fri 15 Mar 12:39 AM

SPSS 1.sav [DataSet1] – IBM SPSS Statistics Data Editor

414 : SM12

Visible: 65 of 65 Variables

	112	FM3R	CE7R	CE10R	CE11R	CE12R	FMave	CEave	SMave	var	var	var	var	var	var	var	var	var
176	5.00	4.00	5.00	4.00	5.00	5.00	4.18	4.50	4.67									
177	4.00	4.00	5.00	4.00	5.00	5.00	3.09	4.46	4.50									
178	4.00	4.00	5.00	4.00	5.00	5.00	4.27	4.50	4.50									
179	5.00	4.00	5.00	4.00	5.00	5.00	4.00	4.57	4.50									
180	4.00	4.00	5.00	4.00	5.00	5.00	3.18	3.96	3.83									
181	5.00	4.00	5.00	4.00	5.00	5.00	3.45	4.50	4.58									
182	4.00	4.00	5.00	4.00	5.00	5.00	4.18	4.57	4.58									
183	4.00	4.00	5.00	4.00	5.00	5.00	4.09	4.54	4.50									
184	5.00	4.00	5.00	4.00	5.00	5.00	4.18	4.61	4.50									
185	5.00	4.00	5.00	4.00	5.00	5.00	4.18	4.57	4.58									
186	4.00	4.00	5.00	4.00	5.00	5.00	4.18	4.54	4.50									
187	5.00	5.00	5.00	4.00	5.00	5.00	4.18	4.57	4.58									
188	5.00	4.00	5.00	4.00	5.00	5.00	4.09	4.50	4.58									
189	4.00	4.00	5.00	4.00	5.00	5.00	3.73	4.46	4.58									
190	4.00	4.00	5.00	4.00	5.00	5.00	3.45	4.50	4.50									
191	4.00	4.00	5.00	4.00	5.00	5.00	4.27	4.50	4.50									
192	5.00	4.00	5.00	4.00	5.00	5.00	4.36	4.50	4.50									
193	5.00	5.00	5.00	4.00	5.00	5.00	4.36	4.64	4.75									
194	5.00	4.00	5.00	4.00	5.00	5.00	4.27	4.50	4.58									
195	5.00	4.00	5.00	4.00	5.00	5.00	4.36	4.46	4.50									
196	5.00	4.00	4.00	4.00	4.00	4.00	4.09	4.43	5.00									
197	4.00	4.00	5.00	4.00	5.00	5.00	4.36	4.54	4.50									
198	5.00	4.00	5.00	4.00	5.00	5.00	4.45	4.54	4.58									
199	4.00	4.00	4.00	4.00	5.00	4.00	4.27	4.68	4.50									
200	5.00	4.00	4.00	4.00	4.00	5.00	4.00	4.43	4.67									

Data View   Variable View

IBM SPSS Statistics Processor is ready   Unicode:ON

130

	112	FM3R	CE7R	CE10R	CE11R	CE12R	FMave	CEave	SMave
201	4.00	4.00	4.00	4.00	5.00	5.00	3.64	4.50	4.58
202	5.00	4.00	4.00	4.00	5.00	4.00	3.91	4.46	4.58
203	4.00	4.00	5.00	4.00	5.00	5.00	3.55	4.61	4.50
204	5.00	4.00	4.00	4.00	4.00	5.00	3.91	4.54	4.50
205	5.00	4.00	5.00	4.00	5.00	5.00	3.09	4.50	4.50
206	5.00	4.00	5.00	4.00	5.00	5.00	4.18	4.50	4.58
207	5.00	4.00	5.00	4.00	5.00	5.00	3.27	4.57	4.50
208	4.00	4.00	5.00	4.00	5.00	5.00	3.27	4.54	4.42
209	5.00	4.00	5.00	4.00	5.00	5.00	3.91	4.54	4.50
210	5.00	4.00	5.00	4.00	5.00	5.00	4.09	4.54	4.50
211	4.00	4.00	5.00	1.00	2.00	1.00	4.18	4.18	4.50
212	4.00	4.00	5.00	4.00	5.00	5.00	4.00	4.54	4.50
213	5.00	4.00	5.00	4.00	5.00	5.00	4.18	4.50	4.42
214	4.00	4.00	5.00	4.00	5.00	5.00	4.27	4.54	4.42
215	4.00	4.00	1.00	4.00	5.00	5.00	4.27	4.25	4.50
216	5.00	4.00	5.00	4.00	5.00	5.00	4.27	4.54	4.50
217	4.00	4.00	5.00	4.00	5.00	5.00	4.00	4.54	4.50
218	4.00	4.00	5.00	4.00	5.00	5.00	3.82	4.50	4.58
219	5.00	4.00	5.00	4.00	5.00	5.00	4.27	4.50	4.50
220	5.00	5.00	5.00	5.00	5.00	4.00	4.27	4.96	5.00
221	4.00	4.00	4.00	4.00	4.00	5.00	4.45	4.50	4.58
222	4.00	4.00	5.00	4.00	5.00	5.00	4.45	4.50	4.50
223	4.00	5.00	1.00	4.00	4.00	4.00	4.27	4.21	4.42
224	4.00	4.00	5.00	4.00	5.00	5.00	4.18	4.50	4.58
225	5.00	4.00	4.00	4.00	5.00	3.00	2.82	4.68	4.33

	112	FM3R	CE7R	CE10R	CE11R	CE12R	FMave	CEave	SMave
226	5.00	5.00	4.00	4.00	4.00	5.00	4.27	4.57	4.67
227	4.00	4.00	5.00	4.00	5.00	5.00	3.09	4.54	4.42
228	5.00	4.00	5.00	4.00	5.00	5.00	4.27	4.54	4.67
229	4.00	4.00	5.00	4.00	5.00	5.00	4.00	4.54	4.50
230	4.00	4.00	4.00	4.00	5.00	5.00	3.09	4.54	4.33
231	5.00	4.00	5.00	5.00	5.00	5.00	3.45	4.93	4.50
232	5.00	4.00	5.00	4.00	5.00	4.00	4.27	4.61	4.33
233	5.00	4.00	5.00	4.00	5.00	5.00	4.09	4.54	4.50
234	5.00	5.00	5.00	5.00	4.00	5.00	4.27	4.57	4.25
235	4.00	4.00	5.00	4.00	5.00	5.00	4.27	4.54	4.50
236	4.00	4.00	5.00	4.00	5.00	5.00	4.09	4.54	4.50
237	5.00	4.00	5.00	4.00	5.00	5.00	4.09	4.54	4.50
238	4.00	4.00	5.00	4.00	5.00	5.00	4.00	4.50	4.50
239	5.00	4.00	5.00	4.00	5.00	5.00	3.73	4.50	4.50
240	5.00	5.00	5.00	5.00	5.00	5.00	3.55	4.82	5.00
241	5.00	5.00	5.00	5.00	5.00	1.00	4.36	4.64	4.83
242	5.00	5.00	5.00	5.00	5.00	5.00	4.45	4.82	4.92
243	4.00	4.00	5.00	4.00	4.00	5.00	4.18	4.50	4.58
244	4.00	4.00	4.00	5.00	4.00	5.00	4.27	4.32	4.33
245	4.00	5.00	5.00	5.00	5.00	5.00	4.45	4.64	4.33
246	5.00	4.00	4.00	4.00	4.00	5.00	4.09	4.54	4.50
247	4.00	5.00	5.00	5.00	5.00	5.00	4.36	4.71	4.75
248	4.00	4.00	4.00	4.00	4.00	5.00	4.36	4.57	4.50
249	5.00	5.00	4.00	4.00	5.00	4.00	4.36	4.29	4.67
250	4.00	4.00	4.00	4.00	5.00	4.00	4.55	4.64	4.50

132

414 : SM12

	112	FM3R	CE7R	CE10R	CE11R	CE12R	FMave	CEave	SMave
301	4.00	4.00	5.00	4.00	5.00	5.00	4.18	4.54	4.42
302	4.00	4.00	5.00	4.00	5.00	5.00	3.73	4.54	4.50
303	4.00	4.00	5.00	4.00	5.00	5.00	3.36	4.50	4.50
304	4.00	4.00	5.00	4.00	5.00	5.00	3.73	4.61	4.50
305	5.00	4.00	5.00	4.00	5.00	5.00	3.36	4.46	4.50
306	4.00	4.00	5.00	4.00	5.00	5.00	3.64	4.54	4.50
307	4.00	4.00	5.00	4.00	5.00	5.00	2.73	4.50	4.50
308	5.00	4.00	5.00	4.00	5.00	5.00	4.00	4.54	4.50
309	4.00	4.00	5.00	4.00	5.00	5.00	3.00	4.54	4.50
310	4.00	4.00	5.00	4.00	5.00	5.00	3.09	4.50	4.50
311	4.00	4.00	5.00	4.00	5.00	5.00	3.73	4.57	4.50
312	5.00	4.00	5.00	4.00	5.00	5.00	3.73	4.54	4.50
313	4.00	4.00	5.00	4.00	5.00	5.00	3.82	4.46	4.42
314	5.00	4.00	5.00	4.00	5.00	5.00	3.73	4.50	4.50
315	4.00	4.00	5.00	4.00	5.00	5.00	3.91	4.54	4.50
316	5.00	4.00	5.00	4.00	5.00	5.00	4.09	4.50	4.50
317	4.00	4.00	5.00	4.00	5.00	5.00	3.91	4.54	4.50
318	5.00	4.00	5.00	4.00	5.00	5.00	4.09	4.54	4.58
319	4.00	4.00	5.00	4.00	5.00	5.00	3.82	4.46	4.42
320	5.00	4.00	5.00	4.00	5.00	5.00	3.73	4.50	4.58
321	4.00	4.00	5.00	4.00	5.00	5.00	4.00	4.57	4.50
322	5.00	4.00	5.00	4.00	5.00	5.00	3.91	4.50	4.58
323	5.00	4.00	5.00	4.00	5.00	5.00	4.27	4.50	4.50
324	4.00	4.00	5.00	4.00	5.00	5.00	4.09	4.50	4.50
325	4.00	4.00	5.00	4.00	5.00	5.00	4.00	4.50	4.42

414 : SM12

	112	FM3R	CE7R	CE10R	CE11R	CE12R	FMave	CEave	SMave
326	4.00	4.00	5.00	4.00	5.00	5.00	4.00	4.50	4.50
327	4.00	4.00	5.00	4.00	5.00	5.00	2.64	4.57	4.50
328	5.00	4.00	5.00	4.00	5.00	5.00	4.00	4.50	4.58
329	4.00	4.00	5.00	4.00	5.00	5.00	2.82	4.11	4.00
330	4.00	4.00	5.00	5.00	4.00	5.00	4.09	4.75	4.75
331	5.00	4.00	5.00	5.00	4.00	5.00	3.73	4.46	4.58
332	4.00	4.00	4.00	4.00	4.00	5.00	2.91	4.64	4.42
333	5.00	5.00	5.00	5.00	4.00	5.00	3.27	4.82	4.75
334	5.00	5.00	4.00	4.00	5.00	5.00	4.18	4.57	4.67
335	5.00	4.00	5.00	5.00	5.00	4.00	4.00	4.71	4.75
336	5.00	4.00	5.00	4.00	5.00	5.00	4.00	4.54	4.50
337	5.00	4.00	5.00	5.00	4.00	5.00	4.09	4.75	4.75
338	4.00	4.00	5.00	4.00	5.00	5.00	4.00	4.54	4.42
339	4.00	4.00	5.00	5.00	4.00	5.00	4.00	4.68	4.75
340	4.00	4.00	5.00	4.00	5.00	5.00	3.82	4.54	4.50
341	4.00	5.00	5.00	4.00	5.00	5.00	3.55	4.57	4.17
342	5.00	4.00	5.00	5.00	4.00	5.00	3.27	4.50	4.58
343	5.00	4.00	5.00	2.00	1.00	2.00	4.09	4.25	4.58
344	5.00	4.00	5.00	4.00	5.00	5.00	4.18	4.50	4.58
345	5.00	4.00	5.00	5.00	4.00	5.00	4.09	4.71	4.75
346	4.00	5.00	4.00	5.00	4.00	5.00	4.09	4.46	4.42
347	4.00	5.00	4.00	4.00	5.00	5.00	4.27	4.50	4.50
348	5.00	4.00	5.00	4.00	5.00	5.00	3.82	4.54	4.50
349	5.00	4.00	5.00	4.00	5.00	5.00	4.18	4.54	4.50
350	4.00	4.00	5.00	1.00	2.00	1.00	3.82	4.14	4.50

Visible: 65 of 65 Variables

	12	FM3R	CE7R	CE10R	CE11R	CE12R	FMave	CEave	SMave
351	5.00	4.00	5.00	4.00	5.00	5.00	3.45	4.54	4.50
352	4.00	4.00	4.00	5.00	4.00	5.00	3.73	4.50	4.58
353	4.00	4.00	5.00	1.00	2.00	1.00	3.36	4.14	4.50
354	5.00	4.00	5.00	4.00	5.00	5.00	3.73	4.54	4.58
355	4.00	5.00	5.00	5.00	4.00	4.00	2.73	4.57	4.58
356	5.00	5.00	5.00	5.00	5.00	5.00	3.91	4.61	4.58
357	4.00	4.00	5.00	5.00	4.00	5.00	3.00	4.68	4.58
358	5.00	4.00	5.00	4.00	4.00	5.00	3.00	4.57	4.67
359	5.00	4.00	4.00	4.00	4.00	5.00	3.82	4.57	4.58
360	4.00	4.00	4.00	5.00	5.00	4.00	3.73	4.54	4.50
361	5.00	5.00	4.00	5.00	4.00	5.00	3.91	4.54	4.58
362	5.00	4.00	4.00	5.00	4.00	5.00	3.64	4.50	4.58
363	5.00	4.00	4.00	5.00	4.00	5.00	3.73	4.57	4.50
364	5.00	4.00	4.00	5.00	5.00	5.00	4.00	4.57	4.67
365	4.00	4.00	5.00	4.00	5.00	5.00	3.91	4.61	4.50
366	5.00	4.00	4.00	5.00	5.00	4.00	4.00	4.57	4.58
367	4.00	5.00	5.00	5.00	4.00	5.00	3.91	4.57	4.50
368	5.00	5.00	5.00	5.00	4.00	5.00	3.73	4.64	4.50
369	4.00	4.00	5.00	5.00	4.00	4.00	4.00	4.57	4.58
370	5.00	4.00	5.00	4.00	5.00	4.00	4.00	4.57	4.58
371	5.00	4.00	5.00	5.00	4.00	5.00	4.18	4.61	4.58
372	4.00	4.00	4.00	5.00	4.00	5.00	4.09	4.54	4.50
373	5.00	5.00	4.00	4.00	5.00	5.00	4.00	4.54	4.58
374	5.00	4.00	4.00	4.00	5.00	4.00	3.82	4.50	4.50
375	5.00	5.00	5.00	5.00	5.00	4.00	2.73	4.54	4.58

Visible: 65 of 65 Variables

	12	FM3R	CE7R	CE10R	CE11R	CE12R	FMave	CEave	SMave
376	5.00	4.00	5.00	5.00	4.00	5.00	3.91	4.57	4.50
377	5.00	4.00	5.00	5.00	4.00	5.00	2.82	4.57	4.58

Appendix 5:

SPSS: Descriptive Analysis

Question 1: Gender

Frequencies

Statistics

Gender

N	Valid	377
	Missing	0
Mean		1.4324
Median		1.0000
Mode		1.00
Std. Deviation		.49606
Variance		.246
Range		1.00
Minimum		1.00
Maximum		2.00
Percentiles	25	1.0000
	50	1.0000
	75	2.0000

Gender

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Female	214	56.8	56.8	56.8
	Male	163	43.2	43.2	100.0
	Total	377	100.0	100.0	

Gender
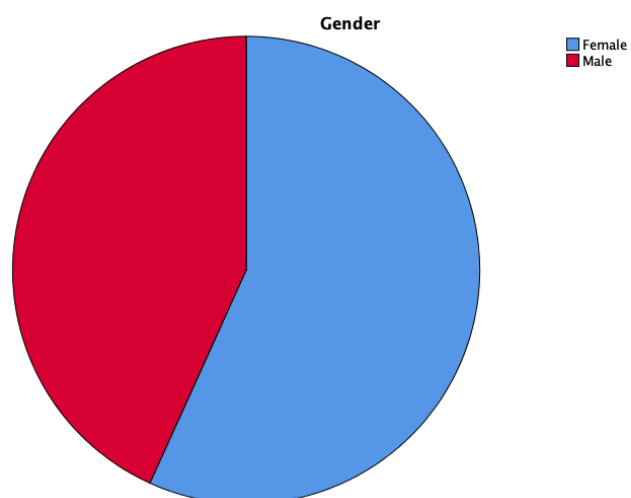
Question 2: Age (Years)

Frequencies

Statistics

Age

N	Valid	377
	Missing	0
Mean		1.8329
Median		2.0000
Mode		2.00
Std. Deviation		.53214
Variance		.283
Range		2.00
Minimum		1.00
Maximum		3.00
Percentiles	25	2.0000
	50	2.0000
	75	2.0000

Age

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	18 – 20	90	23.9	23.9	23.9
	21 – 23	260	69.0	69.0	92.8
	24 and above	27	7.2	7.2	100.0
	Total	377	100.0	100.0	
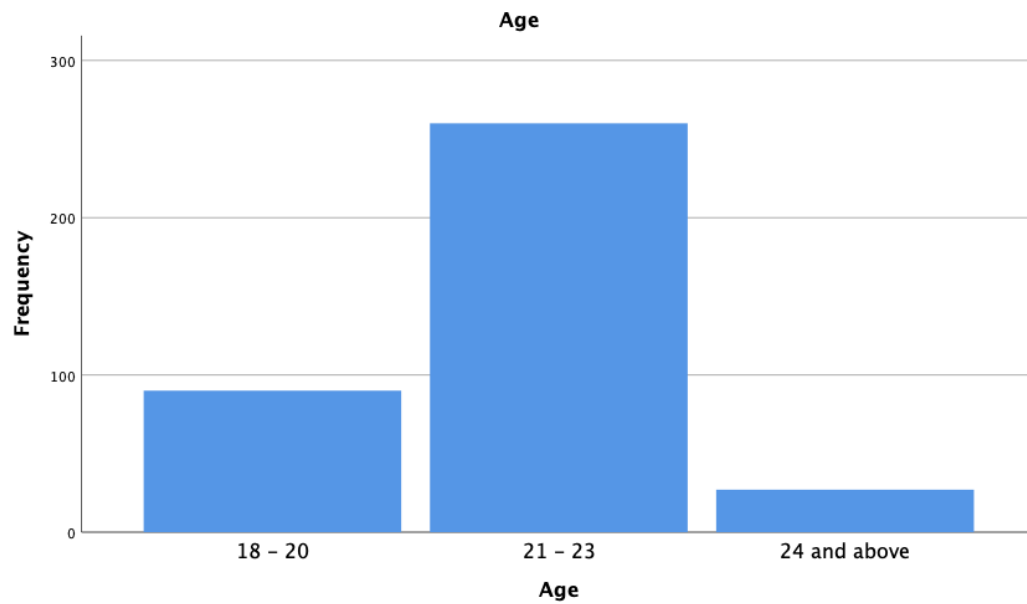
Question 3: Years of Study

Frequencies

Statistics

Years

N	Valid	377
	Missing	0
Mean		2.3554
Median		3.0000
Mode		3.00
Std. Deviation		.86352
Variance		.746
Range		3.00
Minimum		1.00
Maximum		4.00
Percentiles	25	2.0000
	50	3.0000
	75	3.0000

Years

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	First	79	21.0	21.0	21.0
	Second	103	27.3	27.3	48.3
	Third	177	46.9	46.9	95.2
	Fourth	18	4.8	4.8	100.0
	Total	377	100.0	100.0	
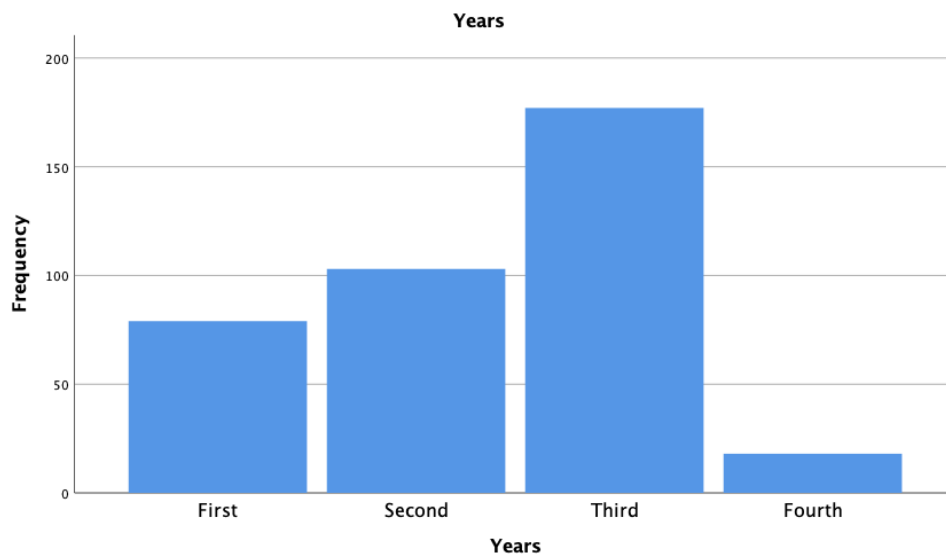
Question 4: Campus

Frequencies

Statistics

Campus

N	Valid	377
	Missing	0
Mean		1.1963
Median		1.0000
Mode		1.00
Std. Deviation		.39772
Variance		.158
Range		1.00
Minimum		1.00
Maximum		2.00
Percentiles	25	1.0000
	50	1.0000
	75	1.0000

Campus

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Campus Kampar	303	80.4	80.4	80.4
	Campus Sungai Long	74	19.6	19.6	100.0
	Total	377	100.0	100.0	

Campus

■ Campus Kampar
■ Campus Sungai Long
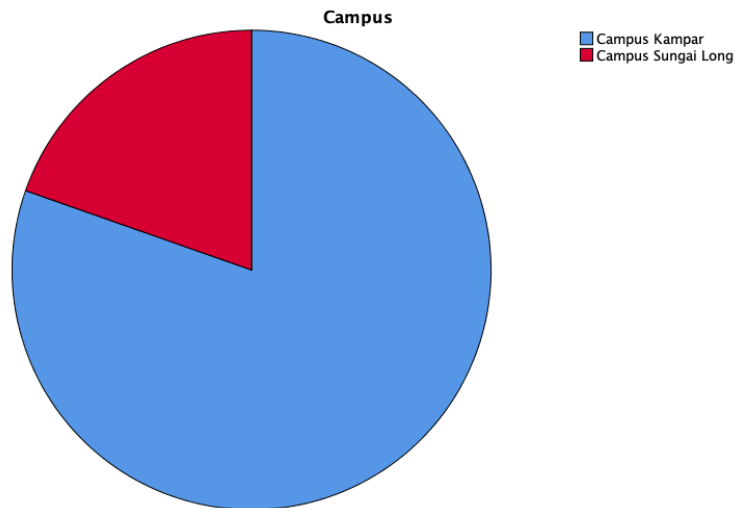
Question 5: Race

Frequencies

Statistics

Race

N	Valid	377
	Missing	0
Mean		1.0928
Median		1.0000
Mode		1.00
Std. Deviation		.40525
Variance		.164
Range		2.00
Minimum		1.00
Maximum		3.00
Percentiles	25	1.0000
	50	1.0000
	75	1.0000

Race

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Chineses	357	94.7	94.7	94.7
	Malay	5	1.3	1.3	96.0
	Indian	15	4.0	4.0	100.0
	Total	377	100.0	100.0	

Race
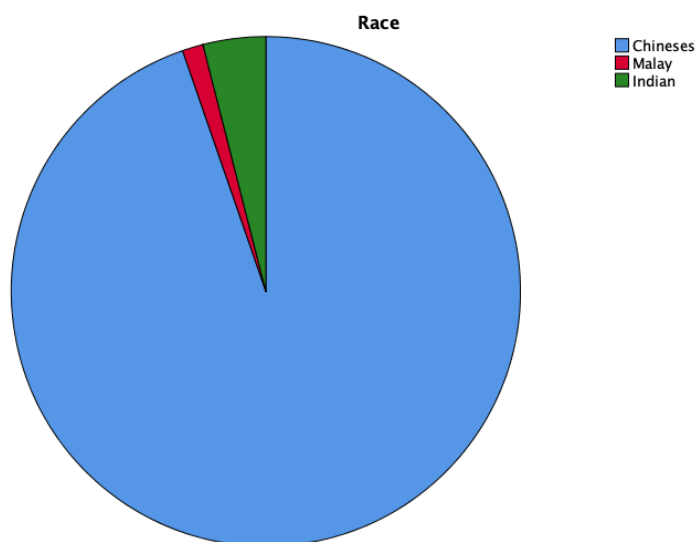
Question 6: Faculty

→ Frequencies

Statistics

Faculty

N	Valid	377
	Missing	0
Mean		4.7825
Median		5.0000
Mode		5.00
Std. Deviation		1.91033
Variance		3.649
Range		9.00
Minimum		1.00
Maximum		10.00
Percentiles	25	4.0000
	50	5.0000
	75	5.0000

Faculty

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Faculty of Engineering and Green Technology	25	6.6	6.6	6.6
	Faculty of Information and Communication Technology	33	8.8	8.8	15.4
	Faculty of Science	24	6.4	6.4	21.8
	Faculty of Accountancy and Management (Sg Long)	36	9.5	9.5	31.3
	Faculty of Business and Finance (Kampar)	169	44.8	44.8	76.1
	Faculty of Arts and Social Science (Kampar)	28	7.4	7.4	83.6
	Faculty of Creative Industries	28	7.4	7.4	91.0
	Institute of Chinese Studies	24	6.4	6.4	97.3
	M. Kandiah Faculty of Medicine and Health Sciences (Sg Long)	5	1.3	1.3	98.7
	Lee Kong Chian Faculty of Engineering and Science	5	1.3	1.3	100.0
	Total	377	100.0	100.0	

Faculty

Legend:
- Faculty of Engineering and Green Technology
- Faculty of Information and Communication Technology
- Faculty of Science
- Faculty of Accountancy and Management (Sg Long)
- Faculty of Business and Finance (Kampar)
- Faculty of Arts and Social Science (Kampar)
- Faculty of Creative Industries
- Institute of Chinese Studies
- M. Kandiah Faculty of Medicine and Health Sciences (Sg Long)
- Lee Kong Chian Faculty of Engineering and Science

Appendix 6 (Pilot study):

Reliability test for Family Motivational Climate

➜ **Reliability**

Scale: ALL VARIABLES

Case Processing Summary

		N	%
Cases	Valid	50	100.0
	Excluded[a]	0	.0
	Total	50	100.0

a. Listwise deletion based on all variables in the procedure.

Reliability Statistics

Cronbach's Alpha	Cronbach's Alpha Based on Standardized Items	N of Items
.700	.690	11

Inter-Item Correlation Matrix

	Look for failure	Get better grades	Not allow acess Internet	No fixed rules	Carry by myself	Not let other bother me	Manage to take time	Enough patience	Visit places	Read books	Do not insist
Look for failure	1.000	-.518	.521	-.111	.570	.463	.409	.368	.512	.236	.162
Get better grades	-.518	1.000	-.418	.244	-.512	-.518	-.322	-.302	-.663	-.323	-.374
Not allow acess Internet	.521	-.418	1.000	-.466	.606	.463	.159	.404	.529	.439	.432
No fixed rules	-.111	.244	-.466	1.000	-.283	-.203	.025	.020	-.020	-.154	-.387
Carry by myself	.570	-.512	.606	-.283	1.000	.458	.358	.477	.609	.673	.274
Not let other bother me	.463	-.518	.463	-.203	.458	1.000	.444	.516	.644	.353	.371
Manage to take time	.409	-.322	.159	.025	.358	.444	1.000	.404	.381	.366	.031
Enough patience	.368	-.302	.404	.020	.477	.516	.404	1.000	.451	.390	-.038
Visit places	.512	-.663	.529	-.020	.609	.644	.381	.451	1.000	.593	.318
Read books	.236	-.323	.439	-.154	.673	.353	.366	.390	.593	1.000	.193
Do not insist	.162	-.374	.432	-.387	.274	.371	.031	-.038	.318	.193	1.000

Item-Total Statistics

	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation	Squared Multiple Correlation	Cronbach's Alpha if Item Deleted
Look for failure	36.6600	18.392	.558	.566	.651
Get better grades	39.4800	26.296	-.612	.571	.786
Not allow acess Internet	37.1400	15.429	.537	.642	.641
No fixed rules	39.6000	24.000	-.261	.461	.779
Carry by myself	36.8200	16.844	.707	.687	.620
Not let other bother me	37.0600	18.098	.621	.598	.642
Manage to take time	36.7600	19.696	.447	.372	.671
Enough patience	36.7200	18.696	.567	.487	.653
Visit places	37.1000	15.071	.734	.746	.597
Read books	37.1000	16.949	.591	.615	.635
Do not insist	36.9600	20.733	.231	.395	.695

Scale Statistics

Mean	Variance	Std. Deviation	N of Items
41.1400	22.449	4.73808	11

Reliability test for Classroom Environment

→ **Reliability**

[DataSet1] F:\SPSS 1.sav

Warnings

The determinant of the covariance matrix is zero or approximately zero. Statistics based on its inverse matrix cannot be computed and they are displayed as system missing values.

Scale: ALL VARIABLES

Case Processing Summary

		N	%
Cases	Valid	50	100.0
	Excluded[a]	0	.0
	Total	50	100.0

a. Listwise deletion based on all variables in the procedure.

Reliability Statistics

Cronbach's Alpha	Cronbach's Alpha Based on Standardized Items	N of Items
.942	.939	28

	Help each other	Find others discuss	Find for help	Advice on progress	Strategies	Praises performance	Design assignments	Study method	Set targets	Rewards students
Help each other	1.000	.576	.699	.512	.434	.538	.532	.574	.376	.493
Find others discuss	.576	1.000	.632	.367	.335	.287	.342	.276	.256	.448
Find for help	.699	.632	1.000	.449	.340	.519	.488	.578	.229	.405
Advice on progress	.512	.367	.449	1.000	.671	.507	.668	.626	.480	.323
Strategies	.434	.335	.340	.671	1.000	.528	.611	.578	.633	.441
Praises performance	.538	.287	.519	.507	.528	1.000	.606	.618	.595	.432
Design assignments	.532	.342	.488	.668	.611	.606	1.000	.688	.645	.457
Study method	.574	.276	.578	.626	.578	.618	.688	1.000	.488	.289
Set targets	.376	.256	.229	.480	.633	.595	.645	.488	1.000	.405
Rewards students	.493	.448	.405	.323	.441	.432	.457	.289	.405	1.000
Contents detail	.458	.408	.305	.128	.362	.445	.273	.178	.365	.398
Revise before test	.413	.457	.476	.139	.195	.354	.265	.269	.154	.492
Ask do not understand	.514	.489	.338	.293	.169	.176	.326	.136	.244	.450
Enough preparation	.406	.141	.366	.329	.473	.339	.364	.220	.337	.508
Noisy	.207	.451	.198	.096	.144	.128	.072	-.044	.143	.278
Speak	.210	.210	.189	.016	-.007	.097	.003	.035	.076	.098
Disturbed	.445	.337	.360	.234	.209	.368	.320	.318	.326	.433
Attention	.121	.242	.128	.062	-.008	.025	.003	-.049	.042	.073
Keep quiet	.449	.276	.311	.497	.609	.576	.607	.482	.535	.560
Adequate time	.336	.293	.369	.463	.673	.590	.569	.565	.535	.478
Work hard	.501	.285	.399	.463	.551	.620	.583	.626	.562	.520
Explain patiently	.390	.214	.367	.755	.690	.473	.612	.537	.580	.364
Attention	.356	.452	.507	.422	.513	.565	.606	.549	.495	.414
Serious teach	.415	.413	.453	.540	.614	.648	.537	.514	.525	.495
Patient	.427	.374	.485	.496	.445	.489	.534	.486	.484	.404
Behave	.177	.230	.161	.051	.245	.141	.272	.022	.252	.245
Answer questions	.460	.478	.453	.449	.392	.509	.435	.424	.353	.520
Very hard study	.440	.331	.461	.293	.324	.322	.565	.425	.460	.486

Inter-Item Correlation Matrix

Contents detail	Revise before test	Ask do not understand	Enough preparation	Noisy	Speak	Disturbed	Attention	Keep quiet	Adequate time	Work hard	Explain patiently	Attention
.458	.413	.514	.406	.207	.210	.445	.121	.449	.336	.501	.390	.356
.408	.457	.489	.141	.451	.210	.337	.242	.276	.293	.285	.214	.452
.305	.476	.338	.366	.198	.189	.360	.128	.311	.369	.399	.367	.507
.128	.139	.293	.329	.096	.016	.234	.062	.497	.463	.463	.755	.422
.362	.195	.169	.473	.144	-.007	.209	-.008	.609	.673	.551	.650	.513
.445	.354	.176	.339	.128	.097	.368	.025	.576	.590	.620	.473	.565
.273	.265	.326	.364	.072	.003	.320	.003	.607	.569	.583	.612	.606
.178	.269	.136	.220	-.044	.035	.318	-.049	.482	.565	.626	.537	.549
.365	.154	.244	.337	.143	.076	.326	.042	.535	.535	.562	.580	.495
.398	.492	.450	.508	.278	.098	.433	.073	.560	.478	.520	.364	.414
1.000	.491	.262	.395	.182	.117	.248	-.015	.378	.369	.304	.052	.279
.491	1.000	.420	.371	.119	.171	.308	.256	.255	.314	.403	.077	.357
.262	.420	1.000	.312	.515	.386	.410	.446	.130	.261	.211	.177	.321
.395	.371	.312	1.000	.046	.040	.129	-.003	.430	.445	.382	.471	.299
.182	.119	.515	.046	1.000	.635	.492	.548	.054	.088	.121	.059	.338
.117	.171	.386	.040	.635	1.000	.382	.670	.023	.011	.137	.047	.215
.248	.308	.410	.129	.492	.382	1.000	.029	.268	.340	.370	.225	.372
-.015	.256	.446	-.003	.548	.670	.029	1.000	-.077	-.026	.202	.010	.248
.378	.255	.130	.430	.054	.023	.268	-.077	1.000	.666	.599	.500	.535
.369	.314	.261	.445	.088	.011	.340	-.026	.666	1.000	.563	.544	.753
.304	.403	.211	.382	.121	.137	.370	.202	.599	.563	1.000	.497	.651
.052	.077	.177	.471	.059	.047	.225	.010	.500	.544	.497	1.000	.492
.279	.357	.321	.299	.338	.215	.372	.248	.535	.753	.651	.492	1.000
.454	.375	.328	.425	.120	.020	.269	.023	.565	.722	.486	.476	.663
.398	.420	.354	.378	.272	.222	.267	.201	.518	.397	.396	.376	.506
.515	.321	.246	.272	.025	-.044	.036	.020	.248	.112	.117	.041	.055
.540	.446	.360	.433	.285	.205	.435	.119	.461	.559	.451	.376	.483
.279	.477	.417	.498	.119	.140	.378	.072	.470	.563	.490	.301	.514

Attention	Serious teach	Patient	Behave	Answer questions	Very hard study
.356	.415	.427	.177	.460	.440
.452	.413	.374	.230	.478	.331
.507	.453	.485	.161	.453	.461
.422	.540	.496	.051	.449	.293
.513	.614	.445	.245	.392	.324
.565	.648	.489	.141	.509	.322
.606	.537	.534	.272	.435	.565
.549	.514	.486	.022	.424	.425
.495	.525	.484	.252	.353	.460
.414	.495	.404	.245	.520	.486
.279	.454	.398	.515	.540	.279
.357	.375	.420	.321	.446	.477
.321	.328	.354	.246	.360	.417
.299	.425	.378	.272	.433	.498
.338	.120	.272	.025	.285	.119
.215	.020	.222	-.044	.205	.140
.372	.269	.267	.036	.435	.378
.248	.023	.201	.020	.119	.072
.535	.565	.518	.248	.461	.470
.753	.722	.397	.112	.559	.563
.651	.486	.396	.117	.451	.490
.492	.476	.376	.041	.376	.301
1.000	.663	.506	.055	.483	.514
.663	1.000	.663	.236	.434	.368
.506	.663	1.000	.182	.375	.356
.055	.236	.182	1.000	.261	.146
.483	.434	.375	.261	1.000	.489
.514	.368	.356	.146	.489	1.000

Item-Total Statistics

	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation	Squared Multiple Correlation	Cronbach's Alpha if Item Deleted
Help each other	116.8400	150.790	.691	.	.938
Find others discuss	117.0400	152.937	.561	.	.940
Find for help	116.9000	153.194	.642	.	.939
Advice on progress	117.0800	152.851	.638	.	.939
Strategies	117.0600	150.833	.691	.	.938
Praises performance	117.0200	151.653	.707	.	.938
Design assignments	116.9400	150.629	.739	.	.938
Study method	117.1600	152.872	.648	.	.939
Set targets	117.0000	153.061	.648	.	.939
Rewards students	117.0600	151.527	.656	.	.939
Contents detail	116.9600	156.692	.502	.	.940
Revise before test	116.8200	157.865	.515	.	.940
Ask do not understand	116.6800	157.651	.500	.	.940
Enough preparation	117.0000	156.000	.530	.	.940
Noisy	116.4800	160.949	.319	.	.942
Speak	116.6400	161.174	.227	.	.943
Disturbed	117.0200	157.163	.490	.	.941
Attention	116.6400	162.602	.176	.	.943
Keep quiet	117.2200	148.461	.673	.	.939
Adequate time	116.9800	149.489	.714	.	.938
Work hard	117.1200	151.455	.706	.	.938
Explain patiently	116.8800	153.822	.604	.	.939
Attention	116.9200	151.667	.732	.	.938
Serious teach	117.0200	150.428	.722	.	.938
Patient	116.8600	155.347	.659	.	.939
Behave	117.1400	162.164	.268	.	.942
Answer questions	116.6800	155.691	.673	.	.939
Very hard study	116.8600	153.592	.614	.	.939

Scale Statistics

Mean	Variance	Std. Deviation	N of Items
121.2600	165.666	12.87112	28

Reliability test for Students' Motivation

→ **Reliability**

[DataSet1] F:\SPSS 1.sav

Scale: ALL VARIABLES

Case Processing Summary

		N	%
Cases	Valid	50	100.0
	Excluded[a]	0	.0
	Total	50	100.0

a. Listwise deletion based on all variables in the procedure.

Reliability Statistics

Cronbach's Alpha	Cronbach's Alpha Based on Standardized Items	N of Items
.916	.918	12

Inter-Item Correlation Matrix

	Skills	Growth	Suggestions	Exciting	Knowledge	Think badly	Feel proud	Bad grade	Feel guilty	Easier	Good GPA	Intelligent
Skills	1.000	.464	.523	.751	.590	.378	.669	.440	.623	.481	.407	.524
Growth	.464	1.000	.510	.519	.540	.338	.226	.263	.371	.035	.312	.331
Suggestions	.523	.510	1.000	.338	.397	.360	.434	.448	.483	.239	.423	.480
Exciting	.751	.519	.338	1.000	.638	.371	.537	.402	.610	.426	.311	.511
Knowledge	.590	.540	.397	.638	1.000	.476	.463	.528	.617	.443	.371	.507
Think badly	.378	.338	.360	.371	.476	1.000	.437	.557	.449	.247	.355	.561
Feel proud	.669	.226	.434	.537	.463	.437	1.000	.651	.716	.653	.562	.754
Bad grade	.440	.263	.448	.402	.528	.557	.651	1.000	.723	.564	.597	.639
Feel guilty	.623	.371	.483	.610	.617	.449	.716	.723	1.000	.572	.557	.712
Easier	.481	.035	.239	.426	.443	.247	.653	.564	.572	1.000	.435	.559
Good GPA	.407	.312	.423	.311	.371	.355	.562	.597	.557	.435	1.000	.414
Intelligent	.524	.331	.480	.511	.507	.561	.754	.639	.712	.559	.414	1.000

Item-Total Statistics

	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation	Squared Multiple Correlation	Cronbach's Alpha if Item Deleted
Skills	46.2200	46.461	.729	.728	.907
Growth	46.4400	48.864	.460	.548	.917
Suggestions	46.4200	48.289	.568	.487	.913
Exciting	46.3800	46.689	.671	.682	.909
Knowledge	46.3200	46.630	.693	.599	.908
Think badly	46.5200	45.234	.563	.458	.915
Feel proud	46.5800	41.596	.778	.765	.904
Bad grade	46.6400	43.990	.744	.680	.905
Feel guilty	46.6200	41.220	.821	.728	.901
Easier	46.4200	47.555	.592	.567	.912
Good GPA	46.4000	48.571	.595	.486	.913
Intelligent	46.5200	43.316	.775	.717	.904

Scale Statistics

Mean	Variance	Std. Deviation	N of Items
50.6800	53.977	7.34691	12

Appendix 7 (Full study):

SPSS results

→ **Frequencies**

Statistics

		Family	Classroom Environment	Students' Motivation
N	Valid	377	377	377
	Missing	0	0	0
Mean		3.8056	4.5262	4.5237
Std. Deviation		.42781	.22832	.29919

Frequency Table

Family

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	2.55	2	.5	.5	.5
	2.64	4	1.1	1.1	1.6
	2.73	6	1.6	1.6	3.2
	2.82	8	2.1	2.1	5.3
	2.91	2	.5	.5	5.8
	Neutral	14	3.7	3.7	9.5
	3.09	11	2.9	2.9	12.5
	3.18	4	1.1	1.1	13.5
	3.27	8	2.1	2.1	15.6
	3.36	6	1.6	1.6	17.2
	3.45	9	2.4	2.4	19.6
	3.55	7	1.9	1.9	21.5
	3.64	15	4.0	4.0	25.5
	3.73	30	8.0	8.0	33.4
	3.82	33	8.8	8.8	42.2
	3.91	41	10.9	10.9	53.1
	Agree	62	16.4	16.4	69.5
	4.09	42	11.1	11.1	80.6
	4.18	36	9.5	9.5	90.2
	4.27	21	5.6	5.6	95.8
	4.36	9	2.4	2.4	98.1
	4.45	5	1.3	1.3	99.5
	4.55	2	.5	.5	100.0
	Total	377	100.0	100.0	

Classroom Environment

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	2.71	1	.3	.3	.3
	3.14	1	.3	.3	.5
	3.18	1	.3	.3	.8
	3.46	1	.3	.3	1.1
	3.57	1	.3	.3	1.3
	3.68	1	.3	.3	1.6
	3.71	1	.3	.3	1.9
	3.79	1	.3	.3	2.1
	3.86	2	.5	.5	2.7
	3.96	1	.3	.3	2.9
	Agree	6	1.6	1.6	4.5
	4.04	1	.3	.3	4.8
	4.11	1	.3	.3	5.0
	4.14	2	.5	.5	5.6
	4.18	1	.3	.3	5.8
	4.21	1	.3	.3	6.1
	4.25	7	1.9	1.9	8.0
	4.29	1	.3	.3	8.2
	4.32	4	1.1	1.1	9.3
	4.36	1	.3	.3	9.5
	4.39	2	.5	.5	10.1
	4.43	6	1.6	1.6	11.7
	4.46	23	6.1	6.1	17.8
	4.50	52	13.8	13.8	31.6
	4.54	72	19.1	19.1	50.7
	4.57	59	15.6	15.6	66.3
	4.61	34	9.0	9.0	75.3
	4.64	18	4.8	4.8	80.1
	4.68	29	7.7	7.7	87.8
	4.71	19	5.0	5.0	92.8
	4.75	15	4.0	4.0	96.8
	4.79	5	1.3	1.3	98.1
	4.82	5	1.3	1.3	99.5
	4.93	1	.3	.3	99.7
	4.96	1	.3	.3	100.0
	Total	377	100.0	100.0	

Students' Motivation

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	2.08	1	.3	.3	.3
	2.58	1	.3	.3	.5
	2.67	1	.3	.3	.8
	2.92	1	.3	.3	1.1
	3.25	1	.3	.3	1.3
	3.33	1	.3	.3	1.6
	3.42	2	.5	.5	2.1
	3.50	2	.5	.5	2.7
	3.67	1	.3	.3	2.9
	3.83	2	.5	.5	3.4
	3.92	1	.3	.3	3.7
	Agree	5	1.3	1.3	5.0
	4.17	1	.3	.3	5.3
	4.25	2	.5	.5	5.8
	4.33	9	2.4	2.4	8.2
	4.42	27	7.2	7.2	15.4
	4.50	119	31.6	31.6	46.9
	4.58	96	25.5	25.5	72.4
	4.67	39	10.3	10.3	82.8
	4.75	47	12.5	12.5	95.2
	4.83	12	3.2	3.2	98.4
	4.92	2	.5	.5	98.9
	Strongly Agree	4	1.1	1.1	100.0
	Total	377	100.0	100.0	

➜ Regression

Variables Entered/Removed[a]

Model	Variables Entered	Variables Removed	Method
1	Classroom Environment, Family[b]	.	Enter

a. Dependent Variable: Students' Motivation

b. All requested variables entered.

Model Summary[b]

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.852[a]	.727	.725	.15685

a. Predictors: (Constant), Classroom Environment, Family

b. Dependent Variable: Students' Motivation

ANOVA[a]

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	24.456	2	12.228	497.037	.000[b]
	Residual	9.201	374	.025		
	Total	33.657	376			

a. Dependent Variable: Students' Motivation

b. Predictors: (Constant), Classroom Environment, Family

Coefficients[a]

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	−.634	.165		−3.842	.000
	Family	.067	.019	.096	3.451	.001
	Classroom Environment	1.083	.036	.827	29.867	.000

a. Dependent Variable: Students' Motivation

Casewise Diagnostics[a]

Case Number	Std. Residual	Students' Motivation	Predicted Value	Residual
2	−3.709	4.00	4.5818	−.58177
6	−6.303	2.58	3.5719	−.98860
31	−4.824	2.67	3.4232	−.75657
104	−3.882	3.33	3.9422	−.60888
157	3.330	4.92	4.3944	.52229
160	3.800	4.83	4.2374	.59598
170	3.759	5.00	4.4103	.58965
196	3.590	5.00	4.4369	.56311

a. Dependent Variable: Students' Motivation

Residuals Statistics[a]

	Minimum	Maximum	Mean	Std. Deviation	N
Predicted Value	2.4764	5.0294	4.5237	.25503	377
Residual	−.98860	.59598	.00000	.15643	377
Std. Predicted Value	−8.027	1.983	.000	1.000	377
Std. Residual	−6.303	3.800	.000	.997	377

a. Dependent Variable: Students' Motivation

Reliability test for Family Motivational Climate

Reliability

Scale: ALL VARIABLES

Case Processing Summary

		N	%
Cases	Valid	377	100.0
	Excluded[a]	0	.0
	Total	377	100.0

a. Listwise deletion based on all variables in the procedure.

Reliability Statistics

Cronbach's Alpha	Cronbach's Alpha Based on Standardized Items	N of Items
.636	.680	11

Inter-Item Correlation Matrix

	Look for failure	Get better grades	Not allow acess Internet	No fixed rules	Carry by myself	Not let other bother me	Manage to take time	Enough patience	Visit places	Read books	Do not insist
Look for failure	1.000	-.187	.121	-.022	.091	.110	.074	.085	.078	.012	-.007
Get better grades	-.187	1.000	-.046	.060	-.042	-.053	-.044	-.023	-.058	-.029	-.047
Not allow acess Internet	.121	-.046	1.000	-.475	.588	.471	.159	.390	.517	.427	.077
No fixed rules	-.022	.060	-.475	1.000	-.273	-.185	.021	.021	-.021	-.139	-.058
Carry by myself	.091	-.042	.588	-.273	1.000	.467	.364	.459	.604	.672	.033
Not let other bother me	.110	-.053	.471	-.185	.467	1.000	.448	.523	.645	.366	.082
Manage to take time	.074	-.044	.159	.021	.364	.448	1.000	.404	.401	.386	-.029
Enough patience	.085	-.023	.390	.021	.459	.523	.404	1.000	.446	.383	.018
Visit places	.078	-.058	.517	-.021	.604	.645	.401	.446	1.000	.598	.023
Read books	.012	-.029	.427	-.139	.672	.366	.386	.383	.598	1.000	.020
Do not insist	-.007	-.047	.077	-.058	.033	.082	-.029	.018	.023	.020	1.000

Item-Total Statistics

	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation	Squared Multiple Correlation	Cronbach's Alpha if Item Deleted
Look for failure	37.3183	21.558	.047	.061	.647
Get better grades	39.4934	21.075	-.072	.044	.725
Not allow acess Internet	37.8886	16.179	.428	.564	.580
No fixed rules	40.2918	23.244	-.217	.375	.714
Carry by myself	37.5676	16.991	.641	.607	.546
Not let other bother me	37.7772	17.934	.589	.560	.566
Manage to take time	37.4801	19.484	.431	.316	.599
Enough patience	37.4642	18.457	.560	.407	.576
Visit places	37.8355	15.079	.695	.643	.510
Read books	37.8355	16.776	.574	.535	.552
Do not insist	37.6684	21.876	.020	.019	.646

Scale Statistics

Mean	Variance	Std. Deviation	N of Items
41.8621	22.146	4.70593	11

Reliability test for Classroom Environment

```
RELIABILITY
  /VARIABLES=CE1 CE2 CE3 CE4 CE5 CE6 CE8 CE9 CE13 CE14 CE15 CE16 CE17 CE18 CE19 CE20 CE21
CE22 CE23
    CE24 CE25 CE26 CE27 CE28 CE7R CE10R CE11R CE12R
  /SCALE('ALL VARIABLES') ALL
  /MODEL=ALPHA
  /STATISTICS=SCALE CORR
  /SUMMARY=TOTAL.
```

Reliability

Warnings

The determinant of the covariance matrix is zero or
approximately zero. Statistics based on its inverse matrix
cannot be computed and they are displayed as system
missing values.

Scale: ALL VARIABLES

Case Processing Summary

		N	%
Cases	Valid	377	100.0
	Excluded[a]	0	.0
	Total	377	100.0

a. Listwise deletion based on all
   variables in the procedure.

Reliability Statistics

Cronbach's Alpha	Cronbach's Alpha Based on Standardized Items	N of Items
.807	.814	28

Inter-Item Correlation Matrix

	Help each other	Find others discuss	Find for help	Ask do not understand	Keep quiet	Work hard	Very hard study	Behave	Answer questions	Patient	Attention	Explain patiently
Help each other	1.000	.051	.319	.296	.232	.276	.230	.067	.300	.152	.187	.163
Find others discuss	.051	1.000	-.062	.088	.264	.053	.124	.172	.089	.178	.170	.218
Find for help	.319	-.062	1.000	.019	.099	.213	.164	.093	.200	.086	.198	.078
Ask do not understand	.296	.088	.019	1.000	-.097	.108	.256	-.004	.206	.094	.106	.118
Keep quiet	.232	.264	.099	-.097	1.000	.074	.155	.233	.253	.252	.200	.237
Work hard	.276	.053	.213	.108	.074	1.000	.286	.059	.254	.126	.197	.171
Very hard study	.230	.124	.164	.256	.155	.286	1.000	-.150	.297	.115	.198	.138
Behave	.067	.172	.093	-.004	.233	.059	-.150	1.000	.050	.167	.039	.140
Answer questions	.300	.089	.200	.206	.253	.254	.297	.050	1.000	-.086	.179	.126
Patient	.152	.178	.086	.094	.252	.126	.115	.167	-.086	1.000	-.130	.260
Attention	.187	.170	.198	.106	.200	.197	.198	.039	.179	-.130	1.000	-.077
Explain patiently	.163	.218	.078	.118	.237	.171	.138	.140	.126	.260	-.077	1.000
Serious teach	.317	.089	.269	.106	.224	.212	.154	.094	.151	.157	.296	-.047
Adequate time	.156	.254	.137	.087	.278	.254	.202	.204	.212	.180	.246	.337
Enough preparation	.267	.073	.159	.095	.247	.137	.256	.077	.199	.135	.145	.161
Contents detail	.195	.163	.109	.091	.131	.099	.096	.142	.212	.201	.099	.130
Revise before test	.198	.152	.164	.165	.097	.139	.147	.154	.162	.162	.142	.033
Rewards students	.251	.210	.191	.079	.270	.220	.253	.134	.139	.227	.114	.183
Set targets	.217	.126	.070	.205	.219	.179	.201	.113	.100	.138	.198	.219
Study method	.336	.146	.205	.083	.290	.273	.166	.098	.194	.205	.151	.233
Advice on progress	.299	.133	.216	.121	.238	.182	.182	.051	.219	.139	.106	.242
Praises performance	.264	.084	.235	.149	.262	.233	.207	.087	.134	.185	.149	.209
Design assignments	.268	.158	.224	.078	.249	.216	.196	.130	.205	.191	.172	.214
Strategies	.219	.174	.067	.116	.251	.251	.158	.081	.259	.158	.141	.241
Noisy	.012	.097	.045	.099	.000	.096	.134	-.061	.141	.055	.007	-.108
Disturbed	.187	.101	.016	.190	.095	.101	.144	-.033	.245	.053	.070	.098
Attention	-.062	.091	.011	.111	-.064	-.011	-.056	.024	-.033	.018	-.040	-.078
Speak	.039	.068	-.030	.053	-.014	-.029	-.013	.002	.066	-.040	-.013	-.027

Explain patiently	Serious teach	Adequate time	Enough preparation	Contents detail	Revise before test	Rewards students	Set targets	Study method	Advice on progress	Praises performance	Design assignments
.163	.317	.156	.267	.195	.198	.251	.217	.336	.299	.264	.268
.218	.089	.254	.073	.163	.152	.210	.126	.146	.133	.084	.158
.078	.269	.137	.159	.109	.164	.191	.070	.205	.216	.235	.224
.118	.106	.087	.095	.091	.165	.079	.205	.083	.121	.149	.078
.237	.224	.278	.247	.131	.097	.270	.219	.290	.238	.262	.249
.171	.212	.254	.137	.099	.139	.220	.179	.273	.182	.233	.216
.138	.154	.202	.256	.096	.147	.253	.201	.166	.182	.207	.196
.140	.094	.204	.077	.142	.154	.134	.113	.098	.051	.087	.130
.126	.151	.212	.199	.212	.162	.139	.100	.194	.219	.134	.205
.260	.157	.180	.135	.201	.162	.227	.138	.205	.139	.185	.191
-.077	.296	.246	.145	.099	.142	.114	.198	.151	.106	.149	.172
1.000	-.047	.337	.161	.130	.033	.183	.219	.233	.242	.209	.214
-.047	1.000	.057	.262	.105	.218	.168	.243	.214	.258	.169	.294
.337	.057	1.000	.004	.211	.125	.342	.154	.253	.174	.302	.223
.161	.262	.004	1.000	-.086	.174	.116	.246	.189	.166	.211	.101
.130	.105	.211	-.086	1.000	-.131	.234	.112	.125	.149	.124	.210
.033	.218	.125	.174	-.131	1.000	-.068	.287	.070	.202	.167	.142
.183	.168	.342	.116	.234	-.068	1.000	.038	.297	.190	.342	.157
.219	.243	.154	.246	.112	.287	.038	1.000	.063	.304	.266	.350
.233	.214	.253	.189	.125	.070	.297	.063	1.000	.090	.375	.220
.242	.258	.174	.166	.149	.202	.190	.304	.090	1.000	.073	.373
.209	.169	.302	.211	.124	.167	.342	.266	.375	.073	1.000	.042
.214	.294	.223	.101	.210	.142	.157	.350	.220	.373	.042	1.000
.241	.249	.295	.236	.131	.158	.249	.201	.320	.203	.368	-.017
-.108	.042	-.010	.050	.016	.021	.008	-.026	.043	.025	.025	.006
.098	.091	.092	-.012	.157	-.045	.107	.044	.053	.101	.079	.070
-.078	.053	.001	-.069	.059	-.039	-.046	-.076	.048	-.048	-.035	.004
-.027	.056	.039	-.097	.101	-.020	.029	-.071	.019	-.004	-.004	-.050

155

Design assignments	Strategies	Noisy	Disturbed	Attention	Speak
.268	.219	.012	.187	-.062	.039
.158	.174	.097	.101	.091	.068
.224	.067	.045	.016	.011	-.030
.078	.116	.099	.190	.111	.053
.249	.251	.000	.095	-.064	-.014
.216	.251	.096	.101	-.011	-.029
.196	.158	.134	.144	-.056	-.013
.130	.081	-.061	-.033	.024	.002
.205	.259	.141	.245	-.033	.066
.191	.158	.055	.053	.018	-.040
.172	.141	.007	.070	-.040	-.013
.214	.241	-.108	.098	-.078	-.027
.294	.249	.042	.091	.053	.056
.223	.295	-.010	.092	.001	.039
.101	.236	.050	-.012	-.069	-.097
.210	.131	.016	.157	.059	.101
.142	.158	.021	-.045	-.039	-.020
.157	.249	.008	.107	-.046	.029
.350	.201	-.026	.044	-.076	-.071
.220	.320	.043	.053	.048	.019
.373	.203	.025	.101	-.048	-.004
.042	.368	.025	.079	-.035	-.004
1.000	-.017	.006	.070	.004	-.050
-.017	1.000	.129	.044	-.011	.049
.006	.129	1.000	.090	.274	.195
.070	.044	.090	1.000	.167	.331
.004	-.011	.274	.167	1.000	.519
-.050	.049	.195	.331	.519	1.000

Item-Total Statistics

	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation	Squared Multiple Correlation	Cronbach's Alpha if Item Deleted
Help each other	121.9867	37.620	.492	.	.795
Find others discuss	122.3528	38.373	.316	.	.801
Find for help	122.1857	38.508	.310	.	.801
Ask do not understand	122.1406	38.876	.271	.	.803
Keep quiet	122.3263	37.321	.420	.	.796
Work hard	122.2785	37.808	.392	.	.798
Very hard study	122.1194	37.765	.380	.	.798
Behave	122.3714	39.362	.190	.	.806
Answer questions	122.0610	38.217	.408	.	.798
Patient	122.2228	38.652	.304	.	.802
Attention	122.2175	38.596	.291	.	.802
Explain patiently	122.1326	38.461	.323	.	.801
Serious teach	122.1963	37.754	.408	.	.797
Adequate time	122.2918	37.393	.438	.	.796
Enough preparation	122.1804	38.584	.302	.	.802
Contents detail	122.2361	38.670	.290	.	.802
Revise before test	122.1592	38.975	.260	.	.803
Rewards students	122.2255	37.643	.403	.	.797
Set targets	122.2281	37.990	.364	.	.799
Study method	122.2308	37.524	.433	.	.796
Advice on progress	122.2149	37.749	.392	.	.798
Praises performance	122.2149	37.547	.425	.	.796
Design assignments	122.2095	37.852	.397	.	.798
Strategies	122.2599	37.581	.429	.	.796
Noisy	122.0265	39.505	.136	.	.809
Disturbed	122.4934	38.554	.248	.	.804
Attention	122.1671	39.666	.082	.	.813
Speak	122.1088	39.177	.118	.	.813

Scale Statistics

Mean	Variance	Std. Deviation	N of Items
126.7347	40.871	6.39304	28

Reliability test for Students' Motivation

→ **Reliability**

Scale: ALL VARIABLES

Case Processing Summary

		N	%
Cases	Valid	377	100.0
	Excluded^a	0	.0
	Total	377	100.0

a. Listwise deletion based on all
variables in the procedure.

Reliability Statistics

Cronbach's Alpha	Cronbach's Alpha Based on Standardized Items	N of Items
.757	.754	12

Inter-Item Correlation Matrix

	Skills	Growth	Suggestions	Exciting	Knowledge	Think badly	Feel proud	Bad grade	Feel guilty	Easier	Good GPA	Intelligent
Skills	1.000	.020	.225	.393	.247	.264	.340	.267	.349	.188	.283	.239
Growth	.020	1.000	-.111	.279	.182	.180	.135	.153	.201	.116	.103	.199
Suggestions	.225	-.111	1.000	-.058	.159	.234	.147	.208	.209	.126	.175	.152
Exciting	.393	.279	-.058	1.000	.082	.238	.272	.194	.363	.178	.139	.281
Knowledge	.247	.182	.159	.082	1.000	.066	.250	.272	.223	.185	.105	.206
Think badly	.264	.180	.234	.238	.066	1.000	.073	.347	.245	.212	.208	.324
Feel proud	.340	.135	.147	.272	.250	.073	1.000	.172	.429	.276	.278	.340
Bad grade	.267	.153	.208	.194	.272	.347	.172	1.000	.241	.281	.222	.342
Feel guilty	.349	.201	.209	.363	.223	.245	.429	.241	1.000	.033	.287	.313
Easier	.188	.116	.126	.178	.185	.212	.276	.281	.033	1.000	-.124	.299
Good GPA	.283	.103	.175	.139	.105	.208	.278	.222	.287	-.124	1.000	-.041
Intelligent	.239	.199	.152	.281	.206	.324	.340	.342	.313	.299	-.041	1.000

Item-Total Statistics

	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item–Total Correlation	Squared Multiple Correlation	Cronbach's Alpha if Item Deleted
Skills	49.5570	10.965	.496	.335	.730
Growth	49.8753	11.663	.251	.184	.756
Suggestions	49.7745	11.654	.251	.192	.756
Exciting	49.7082	11.074	.412	.320	.738
Knowledge	49.7454	11.366	.338	.181	.746
Think badly	49.8382	10.769	.413	.284	.738
Feel proud	49.7480	10.540	.472	.374	.730
Bad grade	49.7825	10.671	.472	.286	.731
Feel guilty	49.7851	10.387	.511	.359	.725
Easier	49.7639	11.457	.307	.268	.750
Good GPA	49.7772	11.615	.282	.292	.752
Intelligent	49.7666	10.685	.473	.335	.730

Scale Statistics

Mean	Variance	Std. Deviation	N of Items
54.2838	12.890	3.59026	12