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**PhD Dissertation**

**MANAGING ACCULTURATIVE STRESS AND IMPROVING INTERCULTURAL  
COMMUNICATION SKILLS THROUGH TRANSFORMATIONAL LEADERSHIP  
“the Case of University of Miskolc”**

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COMMUNICATION SKILLS THROUGH TRANSFORMATIONAL LEADERSHIP  
“the Case of University of Miskolc”**

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**Declaration**

I, Somayeh Kariman, confirm that this dissertation was submitted for a PhD. It is based on my research, and my experience at Miskolc University. Also, any uses made within it of the works of other authors in any form (e.g., figures, tables, and text) are duly acknowledged, and the full list of references has been included.

Signed: Somayeh Kariman

Miskolc, 2023

## **Dedication**

I dedicate this dissertation to my parents for nursing me with love and affection and for their dedication to supporting me for the success of my life, as well as to my dear husband, who has always supported me throughout my studies. Without his persistence, understanding, and willingness to support me, this work would not have been possible.

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**Dissertation Title:** A Case Study in Managing Acculturative Stress and Improving Intercultural Communication Skills through Transformational Leadership

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**Recommendation of Supervisor**

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## CHAPTER ONE INTRODUCTION

### 1.1 Introduction

Globalization, both in a cooperative sense and a competitive sense, has changed the way organizations do business. As businesses engage more frequently in activities such as foreign direct investment and opening branches or satellites in other areas of the globe, they create multicultural environments. Furthermore, the miracles of globalization have already produced specific opportunities in terms of creativity and innovation for us through a diversity of cultures. Also, many studies showed the impact of globalization on higher education. “Some have argued that globalization, the internet, and the scientific community will level the playing field in the new age of knowledge interdependence” (Altbach, 2004, p.1). According to Altbach 2004, globalization in higher education and science is effectiveness. Historical of the academic area showed that, higher education has always been international in scope, and it has been categorised by differences. Modern technologies such as the Internet and increase the easy way for communication is enhances the globalization. Therefore, any academic system cannot be existed by itself in the world of the 21st century.

Alternatively, in the era of globalization, ethical culture has tended to provide not only a new space for cultural exchange and integration among nations but also a new environment for the formation of new global ethical principles and concepts for mankind as well. In recent years, one of the main challenges that leaders face in a multicultural organization and environment such as higher education has been developing communication skills. Any higher education is by no means easy and involves many challenges, such as the acceptance and adoption of cultural diversity by employees and international students. In such situations, ensuring trust, integrity, and improving communication across a diversity of cultures is not an easy task. In this regard, higher education needs the help of the leadership to develop the personality and self-awareness of the organization. Because a true leader will combine his or her techniques to achieve the best possible synergy and outcome in the organization that he or she commands. For example, just as plants react differently to heavy rain, some cultures avoid adversity while others thrive in it. A good leader could find a solution to how, where, and when to invest his or her energy, planting the right kind of plants (employees and students from different cultures) together with regards to soil (inside conditions of an organization) and weather (outside conditions of the environment).

Several theories have already introduced leadership effectiveness. Two of the most widespread leadership theories belong to transformational and transactional leadership theories. Although many types of research have agreed that transactional and transformational leadership are different in concept of theory and effectiveness in the organization, many researchers believe that transformational leadership could significantly improve transactional leadership impact at the organization, which results in developing individual, group, and organizational performance (Bass & Avolio 1994; Howell & Avolio 1993; Lowe et al. 1996; Asbari et al. 2019).

### 1.2 Research Objective

The objective of my research is to analyze the factors that affect international students' communication skills and how they manage their acculturative stress at the University of

Miskolc, Hungary (theoretically and practically). Improving communication is never an easy task. It becomes much more difficult when the individual who needs improvement faces other barriers at the same time. For example, when somebody decides to study in a foreign country, they will most likely face such challenges. Like for a football player who plays in an away game, the stress grows as the familiarities of life shrink while the uncertainties grow rapidly. Thankfully, this stress-inducing condition has a name and is manageable. It is called acculturative stress. Therefore, my research includes the six main stages, which include:

- 1) I would like to investigate which factors of acculturative stress are common among international students and what type of strategy and solution an organization can provide for international students to cope with their stress.
- 2) By applying transformational leadership, I would like to improve international students' self-awareness for managing their acculturative stress (Mena & Padilla 1987) and improve their communication skills.
- 3) I would also like to know if there is any relationship between cultural diversity and acculturative stress at the University of Miskolc or not. I will also discuss some theories, such as the Hofstede model of national culture, for developing cultural awareness and improving intercultural communication skills (only theory).
- 4) The effectiveness of demographical factors such as age, gender, education, and nationality/cultural cluster on acculturative stress and transformational leadership will be examined. So, this study inspects the required variables in the literature and employs a focus group to define the appropriate variables.
- 5) I used five main questions and twenty sub-questions to determine my research outcome.
- 6) Finally, I would like to figure out what type of organizational culture is applied at the University of Miskolc. Based on previous studies such as Köse & Korkmaz (2018), there is a strong relationship between organizational culture and academic performance. In addition, the type of organizational culture can affect the students' communication and manage their acculturative stress as well. Therefore, in my research, I would like to explain transformational and transactional leadership.

### **1.3 Research Problem**

Increasing rates of global migration force people to improve their knowledge concerning cross-cultural awareness, and adapt to the new shape of multicultural backgrounds, which could even change the workplace demographic as well. According to Hussain (2018, p.44), "Multicultural organizations (MCOs hereafter) are omnipresent in the current economic system, and we are persistently surrounded by diverse cultures; therefore, workforce diversity is becoming a common feature of the MCO." Also, the size, type, and number of organizations operating across the globe are growing very fast. A multicultural organization such as a university is shaped when students come from different cultural backgrounds and decide to study together to achieve certain common goals in the university.

The problem being addressed in this research is the impact of transformational leadership and the Hofstede model of national culture on the international students' communication skills and managing their acculturative stress at the University of Miskolc.

### **1.4 The Scope of Research**

The target of the research is international students and employees at the University of Miskolc, Hungary. The purpose of this study is to assess the impact of transformational leadership and the Hofstede model on international students' communication skills and ability to manage

acculturative stress. While employing transformational and transactional leadership, I would like to figure out what type of organizational culture is applied at the University of Miskolc. According to some researchers such as Joseph & Kibera (2019), the type of organizational culture can affect the students' communication as well. This study was conducted between September 2020 and September 2022 at the University of Miskolc. Unfortunately, because of COVID-19 and its restrictions, I was not able to access all the international students and employees at the University of Miskolc.

### **1.5 Research Limitations and Assumptions**

My results are based on the Hofstede model of national culture, which limits the generalization of my results. Unfortunately, I couldn't compare my outcome with the Globe project. because Globe Project 2020 is under review and has not yet been completed. The Hofstede model and the Globe have a rational gap in some of their dimensions, which shows that culture can be changed slowly by bypassing time. Also, the Hofstede model data doesn't cover all the counties, so it can pose some limitations for my research and analyzing. My research assumes that the data provided by each international student will be beneficial to guide the University of Miskolc in better interpreting various cultural attitudes and behaviors. Lastly, the study is expected to manage international students' acculturative stress and improve the intercultural communication skills between international students and their educational progress by applying transformational leadership and developing cultural awareness based on the Hofstede model (1980).

## CHAPTER TWO LITERATURE REVIEW

### 2.1 Acculturative Stress

A university's role is not just to provide degrees for students in various fields needed for the global market and businesses, but also to develop students' generic skills, or soft skills, which are required to compete in the global market (Iksan et al., 2011). In this area, international students could provide extremely useful opportunities and also challenges for the university as well. International students are from different countries, with diverse knowledge, experience, and cultural background perspectives. International students, by providing different types of knowledge and attitudes, can develop and spread a wide range of knowledge and experiences at the university. In contrast, freshmen could face different barriers, difficulties, and stress, which is called acculturative stress. For instance, difficulties with the language and adjusting to the academic culture, misunderstandings in their communication with others, culture shock, and difficulties managing their financial needs (Wu et al., 2015). Vergara et al. (2010) argued that there is a relationship between acculturative stress and emotional intelligence with coping responses and length of stay in foreign countries. Acculturative stress, such as language, academic, emotional, cultural, financial, social, and political, could have significant effects on acculturation (Pan et al., 2008). They may have dramatic effects on the emotional (Paukert et al., 2006), psychological, social, and physiological dimensions of adjustment (Scherer and Berry, 1991). Developing emotional support such as social support could also be linked with acculturative stress (Thomas & Choi, 2006), faced with the lack of interpersonal social support (Duru & Poyrazli, 2007), and problems with cultural differences and social adjustment (Sandhu & Asrabadi, 1998). Emotional and physical health are also affected by acculturative stress as seen in negative emotions (Paukert et al., 2006), anxiety and depression (Wei et al., 2007), and a host of health problems which include lack of sleep, low stamina, energy levels, and headaches (Ye, 2005), and psychosomatic illnesses (Greenland & Brown, 2005). Acculturative stress has also been connected to language barriers (Duru & Poyrazli, 2007) and intercultural competence, which refers to effectiveness in intercultural interactions (Torres & Rollock, 2004), which as a result could affect international students' communication with others. Previous studies have also shown that there is a strong relationship between acculturative stress and satisfaction with academic and social life (Ye, 2005) and meaning in life (Pan et al., 2008). Acculturative stress could include homesickness (Poyrazli & Lopez, 2007), fear and guilt (Sandhu & Arasabadi, 1994), and also family communication for those who are married and have children. Yeh & Inose (2003) argue that European international students have lower acculturation stress compared to those from Asia, Africa, or South America in the USA, so culture also has an important role in managing stress. Last but not least, "Mobility has an important impact on the host country's economy and socioglobalization environment" (Candel, 2021, p 200). For example, according to Candel, in 2021, the USA's economy developed more than 48 billion dollars because of international students (NAFSA, 2019). It seems likely that reducing acculturative stress for freshmen could boost their self-confidence, which, eventually, could improve their relationships with other international students, local students, faculty, and staff at the University of Miskolc, which benefits both the international students and the organization as well. For instance, international students can recommend their university to other relatives and friends for further educational purposes.

Acculturation is shaped by a U-s curve-shaped (Ward, 1997). First, foreign cultures such as international students may experience a "honeymoon" period. This brief period, which lasts a

couple of months or can be much shorter for people staying a shorter time, is full of excitement. International students have novel experiences that get more attention and interest from other students. However, international students sooner or later experience a "crisis" or "culture shock." International students may feel homesick, miss their cuisine, and their cultural values. It could be hard for them to manage to make close friends or discover some services such as public transportation. The last stage is called "adjustment," where international students learn to adjust, learn language, customs, and how to interpret a new culture's systems (Mesidor, 2016). Friendships are built during this segment. Figure 2.1 presents these various stages.

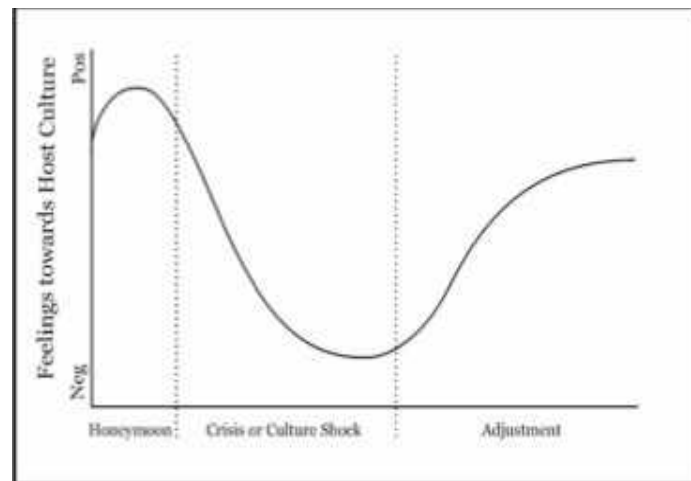


Figure 2.1: The Acculturation Stress Curve  
Sources: Heine, 2016

The first stage for improving communication skills among international students is to interpret and manage acculturative stress. Consequently, in the next section, I would like to introduce some strategies for coping and reducing acculturative stress (Kim et al., 2012) at the University of Miskolc.

## 2.2 Reducing Acculturative Stress

There are different coping strategies for reducing acculturative stress among international students. Here, I would like to mention some of them, but it is not a complete list.

- **Engagement in Various Activities**

International students could be engaged in different activities such as club activities, volunteer work, and hobbies as a simple way to reduce their acculturative stress. By participating in these types of activities, they could improve their sense of happiness and enjoyment in their lives. They could also expand social connections with other international and local students, so they could reduce some levels of stress related to living apart from their family and culture.

- **Social Support**

Social support from friends, family members, and university staff would be another way to reducing acculturative stress. For instance, the University of Miskolc could provide different cuisine based on international students' local food to help them feel that they are not far from home.



- **Psychological Support**

Personality development and improving self-awareness could help manage acculturative stress. Self-esteem and internal locus of control have an effective role in coping with acculturative stress (Mena & Padilla 1987).

- **Using SAFE to Measure and Evaluate the Causes of Stress**

SAFE is a questionnaire designed by (Padilla et al., 1985) “for use with immigrant and acculturating populations” (p.299). The scale includes different sources and experiences of acculturative stress, such as a feeling of social isolation, conflicts arising from individuals’ values, goals, the expectations of their family and relatives, and their own experience of racism in the host country. For instance, “family stress factor is expressed in items that reflect conflicts between one's changed goals or values and family expectations.” (Suh, et al., 2016, p. 221).

- **Acculturative Stress Scale for International Students (ASSIS)**

ASSIS was developed by Sandhu and Asrabadi (1994), and could be used for analyzing acculturative stress. This survey consists of 36 items divided into Perceived Discrimination (8 items), Homesickness (4 items), Perceived Hate/Rejection (5 items), Fear (4 items), Stress due to Change/Culture Shock (3 items), Guilt (2 items), and Nonspecific Concerns (10 items) (Akhtar & Herwig, 2015). In Table 2.1, I would like to present some of the questionnaire items:

**Table 2.1: Twelve Major Recurring Themes of Acculturative Stress for International Students**

<b>1. Perceived Discrimination:</b> I feel that I receive unequal treatment
<b>2. Social Isolation:</b> I am treated differently in social situations
<b>3. The Threat to Cultural Identity:</b> I am losing my ethnic identity
<b>4. Inferiority:</b> I feel sad living in unfamiliar surroundings here.
<b>5. Homesickness:</b> I feel sad living in these unfamiliar surroundings.
<b>6. Fear:</b> I feel insecure here, I feel intimidated to participate in social activities
<b>7. Anger/Disappointments:</b> I get angry when people use racial slurs and jokes about my culture
<b>8. Mistrust:</b> It is hard for me to make trustworthy friends here
<b>9. Communication Problems:</b> I feel nervous to communicate with other students
<b>10. Culture Shock:</b> I feel uncomfortable to adjust to new foods
<b>11. Perceived Hatred:</b> Some people show hatred toward me because of different ethnic background
<b>12. Guilt:</b> I feel guilty that I am living a different lifestyle here

Sources: Sandhu (1994, pp. 437–438)

Research by Bai (2016) showed that international students demonstrated high levels of acculturative stress. In this finding, the students from the Middle East had the highest stress levels, followed by students from Central, South America, and finally students from Africa. According to Bai (2016), students from Asian countries experienced more acculturative stress than other cultural clusters due to large cultural differences and language barriers (Poyrazli et al., 2004).

In my opinion, applying ASSIS for measuring acculturative stress could help host institutions determine, evaluate, and provide a clear strategy to cope with acculturative stress among the international students, which could lead to improving intercultural communication skills at the institution. Besides, knowing and being aware of our characteristics, such as our strengths, weaknesses, and goals, could also help individuals manage their acculturative stress. After managing this stress, international students can more easily enter the next stage, which is called adjustment.

## 2.3 Friendship Adjustment

Gareis (2000) presents a strong argument about intercultural friendship formation in colleges and universities. She found out that, offering institutional and personal benefits concerning friendships among international and local students could provide a unique opportunity to examine the processes of how intimate relationships are formed and maintained. Intercultural friendships could provide an opportunity for international students to compare cultural influences on perceptions of themselves and others. Intercultural friendships also allow them to examine a range of influences on contexts, perceptions, personalities, skills, and behaviors in the beginning and flowering of intimate networks. Besides, some concepts such as social penetration (Altman & Taylor, 1973), uncertainty reduction (Berger & Calabrese, 1975), and dialectics (Baxter, 1988) developed the general interpersonal processes that can be used for intercultural frameworks. Gudykunst and his associates have verified the generalisable ability of social penetration and uncertainty reduction processes in cross-cultural and interethnic contexts (Gudykunst, 1985; Gudykunst et al., 1985, 1987). Others (Gudykunst 1994; Gudykunst & Kim 1997; Gudykunst et al., 1990; Kudo 2000; Sudweeks et al., 1990; Takai 1991) “have discerned the following factors surrounding intercultural contact and relationship development: expectations, motivation, the intensity of cultural identification, communication competence/skills, cultural knowledge, similarity, personality, proximity, shared networks, nature of original groups, intergroup attitudes of other nationals, gender, and time and money”(Kudo & Simkin 2003,p.93). In Hotta and Ting-Toomey’s study (2013), ‘international students reported that American students didn’t like talking to international students, especially when working on group assignments” (Li, 2018, p.391). To understand the dynamics of intercultural friendship formation and better communication among international students, it is necessary to integrate some general conclusions that could be drawn from social psychological research over the last decade. For example, friendship is a dynamic relationship with a large subjective component, with little agreement having been made on the definition of friends and friendships (Callan et al., 1991). Friendship varies according to culture in terms of spread, obligation, duration, and mutual trust (Fahrlander, 1980). According to Kudo and Simkin (2003), 12 key factors are involved in friendship formation among international students: culture, personality, self-esteem, friendship elements, expectations, adjustment stage, cultural knowledge, communicative competence, external variables, proximity, host country elements, and interaction.

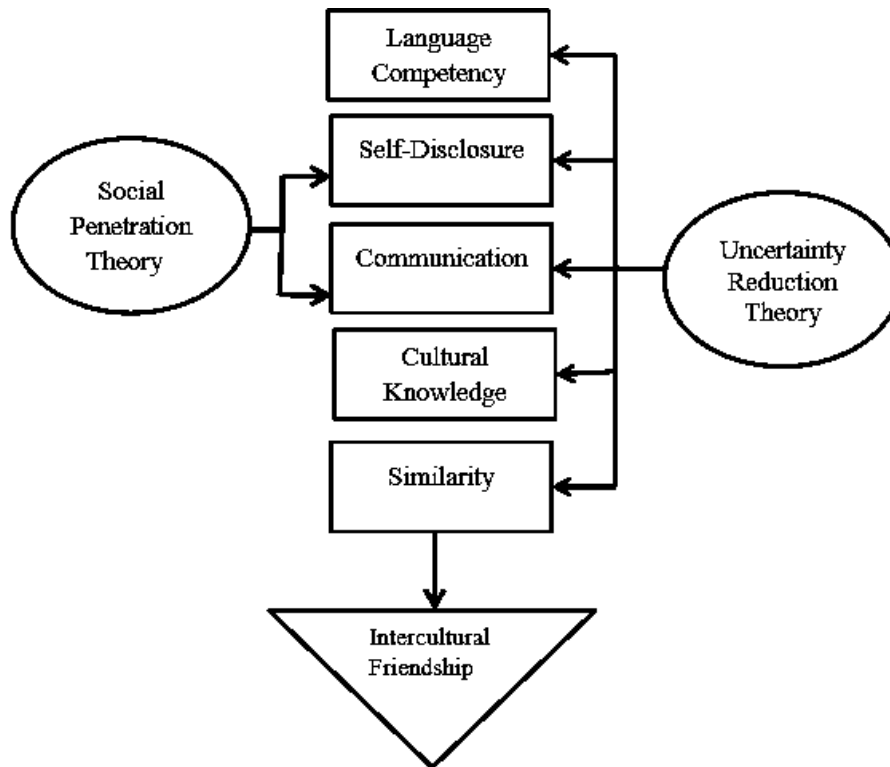
### 2.3.1 The Formation of Intercultural Friendships

Four major themes have emerged as important elements in the development of intercultural friendships:

- **Frequent Contact:** Frequent contact involves two sub-factors: (a) propinquity and (b) shared networks.
- **Similarity:** Two sub-themes appeared in similarity: (a) individual similarity and (b) age.

- **Self-Disclosure:** This involves two parts: (a) spoken English skills and (b) openness of communication.
- **Receptivity of Other Nationals:** The receptivity of other nationals was composed of (a) cross-cultural orientation and (b) empathy.

Figure 2.2 shows some main factors for providing international friendship (Izwayyed 2014).

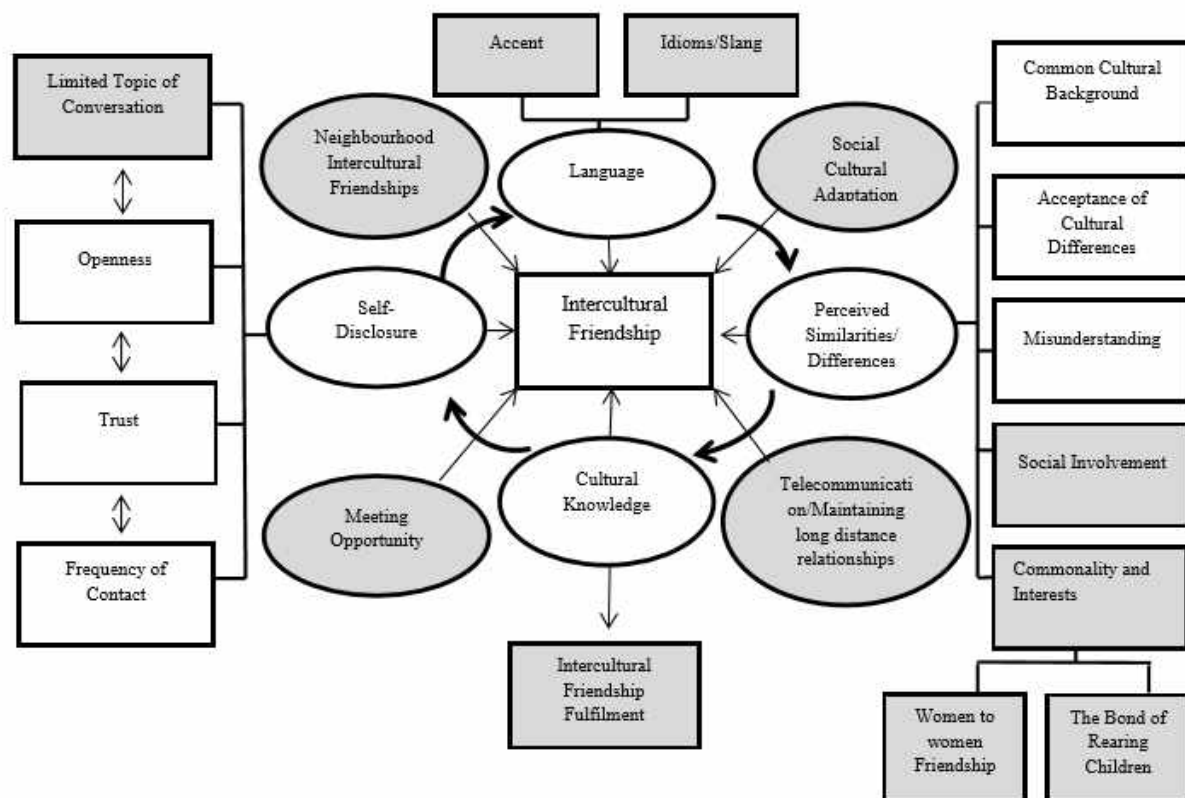


**Figure 2.2: Framework of Factors Impacting Intercultural Friendship Formation**  
Source: Izwayyed, S (2014, p. 44)

- **Social Penetration Theory (SPT):** SPT has suggested a theoretical association between self-disclosure and relationship development (Altman & Taylor, 1973). Altman and Taylor (1973) explained the roles of communication, self-disclosure, and intimacy in the development of interpersonal relationships. SPT proposes four stages through which intercultural relationships can be developed: orientation, exploratory affective exchange, affective exchange, and stable exchange. At the orientation stage, interactions are rather superficial, and people reveal only limited information about themselves. They act in socially desirable ways and are cautious not to disturb societal expectations. The second stage is known as an exploratory effective exchange and occurs when personalities begin to emerge. People begin to explore each other; they reveal more of their personalities and become less cautious. This is typical behavior between casual acquaintances and friendly neighbors. In the effective exchange stage, an even deeper level of self-disclosure takes place through the penetration of each partner's core self. Relationships at this stage are more friendly and relaxed. Personal idioms and private, intimate expressions are exchanged, and this is typical behavior among close friends. The final stage, known as "a stable exchange," is assumed to be the highest level that one can achieve in a relationship. This stage results in complete openness and spontaneity. At this stage, individuals become more intimate and can accommodate the feelings and behaviors of each other more easily and without much

disagreement. "It also assumes communication occurs in person and that disclosures made are directed at one's relational partner" (Pennington, 2021, p.2).

- **Uncertainty Reduction Theory (URT):** URT has described interpersonal relationships (Berger & Calabrese, 1975) and has been used to examine the initial interaction between strangers from different cultures (Douglas, 1991; Gudykunst, 1985). Also, Berger (1979) argues that this theory assumes that people try to reduce uncertainty about others when they expect future interactions with another person. Thus, strangers try to go through certain steps to reduce uncertainty about each other and decide whether they like or dislike each other. This step is called the "stage for providing self-disclosure." Conversely, when nobody is able to successfully reduce this uncertainty, communication outcomes such as trust, attraction, and the level of familiarity needed for closer ties become problematic (Douglas, 1991). Also, one of the important individual variables that influence individuals' processing of and responses to information about highly uncertain environments is intolerance of uncertainty. (Dugas et al., 2004). "The results showed that perceived environmental dynamism positively affected their individual innovation through their information exchange behavior. (Deng et al., 2021, p. 10). In Figure 2.3, I would like to show the main factors that could influence intercultural friendship development (Izwayyed, 2014).



**Figure 2.3: Factors Influencing Intercultural Friendship Development**  
Source: Izwayyed, S (2014, p.132)

As I have already mentioned, interpreting and being aware of our characteristics could help us to manage our acculturative stress, wherever we are (Mena & Padilla 1987). For managing our

acculturative stress, in the beginning, we have to develop our personality. Thus, in the next part, I will discuss self-awareness, and personality development.

## 2.4 Self-Awareness

Self-awareness refers to a capacity to become the object of one's attention (Duval & Wicklund, 1972). According to Morin (1998), in this state, a person actively identifies, develops, and stores information about themselves. The significant distinction here is as follows: One can perceive and process stimuli from the environment, such as color, or food, without explicitly knowing that one is doing so (without consciousness). One becomes self-aware when one reflects on the experience of perceiving and processing stimuli. For example, I see a green object, or I am drinking juice and it tastes good. Self-awareness represents a complex multidimensional phenomenon made up of elements such as emotions, thoughts, personality traits, preferences, goals, attitudes, perceptions, sensations, intentions, and so forth. Also, personality is the means for the collection of patterns. These patterns include thoughts, beliefs, worldviews, feelings, tendencies, and behaviors. So, our experiences and environment condition these patterns in us. Most of these patterns are located below our awareness. Therefore, by getting to know our personality, we bring these patterns into consciousness, increasing our self-awareness. According to Jeffrey (2017), self-awareness activities could improve our personalities, including but not limited to the following:

**1. Personality Tests:** Evaluation tests such as the Enneagram and Myers-Briggs could give us insights into the dominant patterns of our behavior and our personality types. The Myers-Briggs Indicator (MBTI), which was created by Katharine Cook Briggs and her daughter Isabel Briggs Myers (in the 1920's), is based upon Carl Jung's theory that humans experience the world using four basic psychological functions: sensation, intuition, feeling, and thinking; and one of these functions is dominant for everybody. MBTI is a world-renowned assessment and practitioners have placed far more trust in it than organization scholars (Lake et al., 2019). "The Myers-Briggs Type Indicator, or MBTI, is essentially a personality typology that employs four pairs of trait dichotomies to generate 16 personality categories." (Choong & Varathan, 2021, P.3). The four pairs are: Extraversion-Introversion (E-I), Sensing-Intuition (S-N), Thinking-Feeling (T-F), and Finally Judging-Perceiving (J-P). According to Choong & Varathan (2021), the personality type is a binary either-or representation of the four pairs. A person of type ESFJ, for example, will be more dominant in extraversion, sensing, feelings, and judging. Figure 2.4 shows these dimensions.

<b>ISTJ</b> Hardworking with sound practical judgement.	<b>ISFJ</b> Devoted caretakers who enjoy being helpful to others.	<b>INFJ</b> Seek cooperation, enjoy intellectual stimulation.	<b>INTJ</b> Driven by their own original ideas to achieve improvements.
<b>ISTP</b> Skilled at understanding how mechanical things work.	<b>ISFP</b> Seek to create a personal environment that is practical.	<b>INFP</b> Value personal growth, focus on dreams and possibilities.	<b>INTP</b> Original thinkers who enjoy creative problem solving.
<b>ESTP</b> Pragmatic problem solvers and skillful negotiators.	<b>ESFP</b> Have common sense, enjoy helping people in tangible ways.	<b>ENFP</b> Value inspiration and enjoy starting new projects.	<b>ENTP</b> Enjoy new ideas and challenges, value inspiration.
<b>ESTJ</b> Like to run the show and gets things done in an orderly fashion.	<b>ESFJ</b> Seek to be helpful enjoy being active and productive.	<b>ENFJ</b> Skilled communicators, organized and responsible.	<b>ENTJ</b> Effective planners of people and long-range planners.

**Figure 2.4: Personality Types Key, Briggs, C, K and Myers, B, I.**  
Sources: Myers-Briggs (1920)

E: Extraversion/ I: Introversion  
J: Judging/ P: Perceiving  
S: Sensing/ N: Intuition  
T: Thinking/ F: Feeling

The four main types of personality are characterized in the following ways:

- ❖ Extraverted people tend to get energy from spending time with other people, whereas introverted people tend to get it from spending time alone;
- ❖ People who are sensing types trust information that is tangible and concrete (facts and details), while people who are intuition types tend to trust information that is based on principles and theories;
- ❖ Thinking type people desire to make decisions based on reason and logic, while feeling type people prefer to make decisions by empathizing with the situation;
- ❖ Judging types prefer the judging function based on thinking or feeling, while perceiving types prefer the perceiving function based on sensing or intuition.

While the Myers-Briggs tests are focused on human nature, the Enneagram is focused on human nurture. Alternatively, Myers-Briggs focuses on the cognitive part of the psyche, whereas the Enneagram focuses on the unconscious part.

The Enneagram has developed as a useful tool for self-discovery and understanding a person's internal processes (Palmer 1988; Riso 1990). The name Enneagram is made up of two Greek words: "Ennea" (it means the number nine); "Grammas" (it means the figure), and it is also called the nine personality styles of human nature (Naranjo, 1994). According to the

Enneagram theory, each person includes nine styles, and one of the styles is more naturally expressed than the others. The following descriptions are a collation of personal experience and fictional descriptions of the styles (Daniels, 2016).

- Style-one is called the perfectionist. They are self-reliant, responsible, and self-controlled. However, under stress, they can also be rigid, critical, and judgmental. They would like to be black and white thinkers, and their main belief is that you must be good and right to have a satisfying life.

- Style two (the Helper): They tend to be relationship-oriented, helpful, caring, and sensitive to the needs of others. Under stress, they can become prideful, demanding, and co-dependent. They believe that in order to live a fulfilling life, they must devote themselves entirely to the needs of others.

- Style-three (the Performer). Individuals who have this type of personality approach life from a reward and success perspective, and they are often involved in "doing" rather than "being." While they are goal-seeking, efficient, and industrious, they can also become inattentive, impatient, and image-driven.

- Style-four is called the Individualist. It is frequently referred to as idealistic because people with this personality tend to long for a highly-idealized relationship in order to have a satisfying life. They can approach life with deep feelings, empathy, authenticity, creativity, and passion. While under stress, they tend to be self-absorbed, moody, and dramatic.

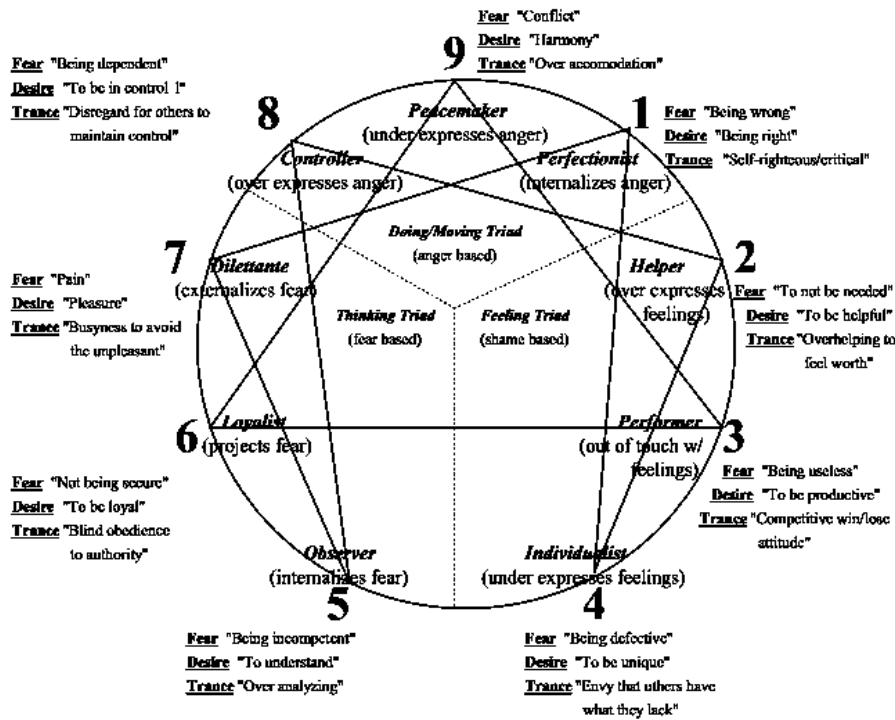
- Style-five (the Observer): They view their life as intrusive and, at times, over-demanding. Their strengths are being self-sufficient, non-demanding, and analytic. Under stress, they can come across as aloof, withdrawn, and detached.

- Style-six is named the Loyalist: They view the world as unpredictable and untrustworthy, and to live a satisfying life, they strive to gain certainty and security. They would like to be loyal and trustworthy, but under stress, they can be extremely cautious, doubtful, accusatory, and paralyzed by their fears.

-Style-seven (The Dilettante): They believe that they must stay positive because the world imposes pain and suffering on them. They tend to be upbeat, optimistic, and pleasure-seeking, but under stress they can become avoidant and use denial as a way of coping.

- Style-eight the Controller. It is also considered a protector, and at their core, they believe that the world is unjust and they must be strong and powerful to assure a satisfying life.

- Style-nine is called the Peacemaker. It is also known as a mediator, and their core belief is that they have to blend in and not upset the equilibrium, to have a satisfying life. They are supportive-oriented and seek harmony. However, under stress conditions, they have the ability to avoid conflict and forget themselves, which can lead to future resentments. Figure 2.5 shows these nine styles (Matise, 2018):



Direction of Integration

1-7-5-8-2-4-1-9-3-6-9

Direction of Disintegration

1-4-2-8-5-7-1-9-6-3-9

Figure 2.5: Enneagram Styles

Source: Matisse (2018, p.11) cited Palmer (1988) & Riso and Hudson (1996)

According to Matisse (2007), "Examination of the nine styles of the enneagram reveals that personalities are often self-deceiving and inhibiting rather than liberating" (p.55). The enneagram can be able to develop the power of individuals to change while observing these patterns. Other personality rests include:

2. **Self-Reflection:** One approach is to take time each evening to reflect on your behavior for the day. Another key question may be how others perceive you today.
3. **Personal Values:** Another activity could be asking yourself what's most important to you in your personal life.
4. **Personal Vision:** One of the best ways is to invest time in clarifying your vision for the future.
5. **Personal Narrative: Our life story could show our personality.** Psychologist Dan McAdams says, "The stories we tell ourselves about our lives don't just shape our personalities—they are our personalities."(Jeffrey, 2017.p.6).



6. **Inner Dialog:** Our minds include the inner voices with their thoughts, feelings, and behaviors. Creating a dialog with these characters out loud could help us develop self-awareness of our emotional terrain.
7. **Observe Others.** We are not the same as others. If we observe other people, we can often learn a great deal by comparing our own behavior with that of others.

These types of activities and processes could help us learn about our personality, improve our intrapersonal intelligence, and build self-awareness. Besides, self-awareness is also a skill that helps us monitor our behavior, attitudes, and values. Self-awareness, just like any other skill, can be developed with the right methods and activities. Therefore, at the first stage, we have to know about our figures, and then, we have to integrate the various regions of our brain that could provide our instincts, and feelings, to increase our self-awareness. As a result, we could improve our communication skills with others.

#### 2.4.1 Personality and Communication

Personality is defined by different personal characteristics such as behavior, cognition, motivation, commitment, or even personal feelings and emotions. In everyday life, the word "personality" is used to describe human specificities and uniqueness (Kunos, 2016). According to Kunos (2016), personality can be classified into several categories and perspectives, such as:

- **Dispositional Perspective:** This is based on the assumption that people hold relatively stable attitudes (dispositions) that manifest themselves in many different situations.
- **Biological Perspective:** This emphasizes that humans are biological creatures. One theory maintains the position that personality is genetically determined, that is, personality dispositions are inherited. Furthermore, it declares that many characteristics of human behavior evolved to serve evolutionary goals. Another theory focuses on the way the central nervous system, together with the harmonic system, affects personality development.
- **Psychoanalytic Perspective:** This is based on the idea that the personality is nothing else but the competition and struggle of the forces inside humans. It is the dynamics of internal forces (and the behavior deriving from them) that is the focus of this perspective. From this perspective, human nature is a set of forces, sometimes conflicting, sometimes cooperating, inside a person.
- **Neo analytic Perspective:** This is derived from the psychoanalytic perspective. Its central themes are the ego and its development, as well as the importance of social interactions in personality and how it functions.
- **Learning Perspective: This highlights the changeable – non-consistent – nature of human behavior.** From this perspective, the most obvious characteristic feature of human nature is its changeability under the influence of experience. It essentially states that personality is a result of all that a person has acquired during his life.
- **Phenomenological Perspective: Its roots can be traced to two basic ideas.** According to the first one, the individual's subjective experience is essential, valuable,

sensible, and unique. This perspective takes the view that it is paramount to explore the way to the internal essence of uniqueness and existence. The second idea is that people are intrinsically capable of self-perfection and development. By exercising free will, everybody can move in this direction. Self-definition and living through it make up important elements of this perspective.

- **The perspective of Cognitive Self-Regulation:** From this perspective, cognitive processes are considered to be the 'building blocks' of personality. According to this perspective, human nature can be described by a machinelike metaphor. The nervous system is a huge organic computer with decision-making rules, information storage and processing patterns that work, in a sense, like an up-to-date computer. Another theory sees human nature as a self-regulatory system, setting certain goals to achieve and continuously monitoring what progress has been made towards that end. This metaphor suggests a robot or a missile.

Interpreting an individual's personality could help international students cope with their acculturative stress and improve their social relationships. Thus, knowing and being aware of their own personality could help them in this regard. Personality refers to an individual's characteristics such as style, behavior, mind-set, and attitude; his/her unique way of perceiving things and seeing the world; and communication skills play a crucial role in honing one's personality.

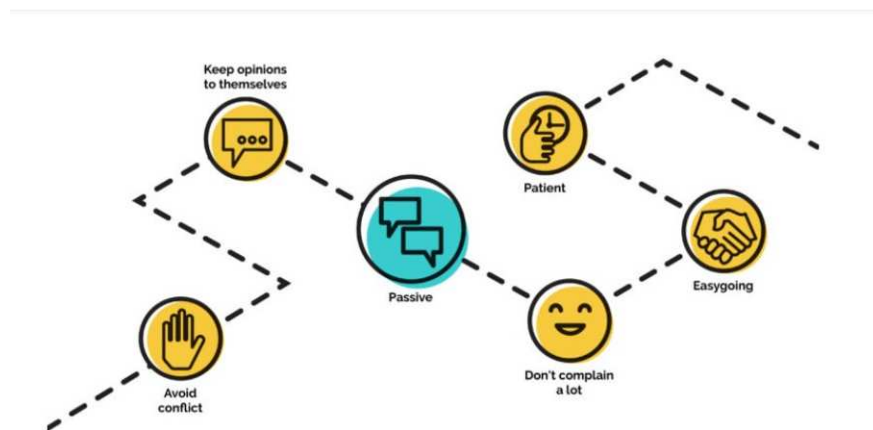
Overall, communication could be identified as a process for exchanging information through verbal and non-verbal methods with the person who will receive the information. The most common method of communication is verbal, which involves using a specific language in a two-way process and providing feedback on the message received. Communication also involves the exchange of ideas, opinions, messages, and information with a specific objective. Also, communication has been defined as sharing and giving meaning, occurring at the same time through symbolic interactions (Seiler & Beall, 2005). Communication begins when a message or information is transferred from a sender to a receiver through a channel (Masri, 1997). Based on these definitions, elements of communication include an individual giving the information, then the receiver collecting the information and providing feedback, and the repetition of these processes creates knowledge development (Iksan et al. 2011). Overall, "communication is an important ability for every human being to have." (Mauliyda et al., 2020). Sharifad et al. (2012) note that "communication is the most important part of any educational process, the aim of which is to transfer or exchange ideas and thoughts" (Sharifirad et al., 2012, p. 8). Developing communication skills helps people make progress in their educational fields, develop their workplace skills, and enhance their marketability and employability (Riemer, 2007 & Keane, 1999). Also, developing effective communication skills in students is an essential component in preparing them for their future careers (Rawboon et al., 2019). In the workplace, managers often look for people who can demonstrate a good set of transferable skills, such as communication, problem-solving, and teamwork (Raftopoulos et al., 2009; Raybould, 2005). Nabi (2003) argued that graduate "employability skills" are not universally defined when he considered research conducted in the British context (Raftopoulos et al., 2009, p.2). He also observed that "the graduate employability skills include traditional academic skills (such as the critical evaluation of evidence, analysis, logical argumentation, and problem-solving) as well as the core or key skills that are required by higher institutions (such as communication, numeracy, and teamwork)" (Raftopoulos et al., 2009, p.2). Therefore, improvement in our communication skills is very important.

In Figure 2.6, I would like to introduce four types of communication based on personalities.



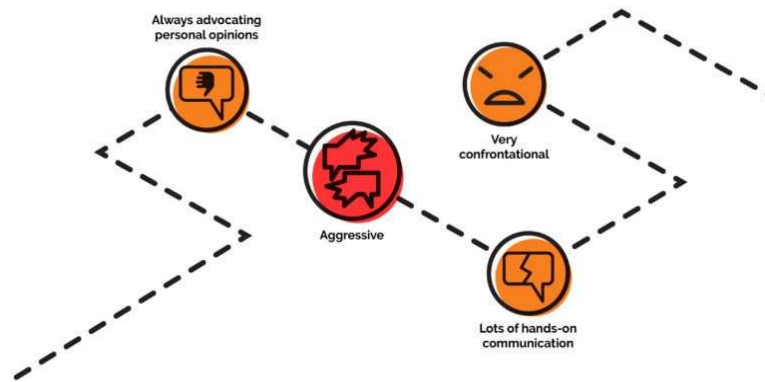
**Figure 2.6: The 4 Communication Styles: How Behavioral Traits Affect Communication**  
Source: Bloom, 2017

**1. Passive Communicators:** In this type of communication, a person avoids eye contact with other people. They feel shyness, shame, guilt, and other negative feelings during their communication. For instance, this type of personality does not have enough confidence. For instance, "I am OK with your idea and whatever you like and decide to do."



**Figure 2.7: Passive Communication Style**  
Source: Whitney, 2020

**2. Aggressive Communicators:** People who depend on this communication style in the workplace, at home, or among friends tend to dominate the conversation, and they don't like to listen to or pay attention to other ideas. For example, they are always expressing and forcing their ideas, always focusing on themselves. Also, "it analyzes the behavior of others, not their person" (Pipaş & Jaradat, 2010, p. 651).



**Figure 2.8: Aggressive Communication Style**  
 Source: Whitney, 2020

**3. Passive-Aggressive Communicators:** This type of communication is most likely to involve body language. They avoid direct and open communication. For example, they blame others (Erikson, 2014).

**4. Assertive Communicators:** “It means you can say what you do not agree with in an elegant manner, without being verbally aggressive, without damaging or disturbing, without being placed in a delicate position, leaving room for discussion, but in terms that you take the freedom to "impose"” (Pipaş & Jaradat, 2010, p.649).



**Figure 2.9: Assertive Communication Style**  
 Source: Zhang, 2018

Table 2.2 presents some characteristics for these four types of communication style.

**Table 2.2: Components of Communication Style based on Personality**

	<b>PASSIVE</b>	<b>AGRESSIVE</b>	<b>PASSIVE- AGRESSIVE</b>	<b>ASSERTIVE</b>
<b>BEHAVIOR</b>	Keep quiet. Don't say what you feel, need or want. Apologies when you express yourself	Express your feelings and wants as thought any other view is unreasonable	Failure to meet the expectations of others through 'deniable' means: forgetting being delayed and so on.	Express your needs, wants, and feelings directly and honestly
<b>NONVERBAL</b>	Make yourself small. Look down , avoid eye contact	Mae yourself large and threatening. Eye contact is fixed and penetrating	Usually mimics the passive style	Body is relaxed, movement are casual. Eye contact is frequent, but not glaring
<b>BELEFS</b>	Others need are more important than your	Your need are important and more justifies than theirs	You are not responsible for your actions	Your needs and those of others are equally important. You have right equal rights to express yourselves
<b>EMOTIONS</b>	Fear of rejection. Helplessness, frustration and anger	Angry or powerful at the time and victorious when you win	Fear that you would be rejected if you were more assertive	You feel positive about yourself and the way you treat others
<b>GOALS</b>	Avoid conflict. Give others control over you	Win at any expense to others	Get your own way without having to take responsibility	Both you and others keep yourself respect

Source: Bloom, 2017

Assertiveness training can develop human communication skills, improve personality behavior, increase positive personal reactions, and reduce social anxiety and conflict (Lambertz & Blight, 2016; Lee et al., 2013).

According to the study by Williams (2005), Adler (as cited in Dignes 1983), believes that some characteristics, such as flexibility, have important value for intercultural communication skills. Besides, Kunst, Hammer, and Wiseman (as cited in Dignes 1983) argue that open mindness to the new idea is also an important factor in intercultural communication. Furthermore, Cleveland, Mangone, and Adams (as cited in Dignes 1983) recognized that cultural empathy is imperative to intercultural effectiveness. Thus, personal characteristics such as strength and stability are important traits for successful intercultural communicators. Stability is one of the most characteristic features of personality but could change over a relatively long period under certain conditions such as experience, environment, and age. On the other hand, some fundamental factors, such as cultural differences or gender, also bring about differences on personality scales.

International students do not only need to develop their communication skills through discussions and presentations in class, but also need to develop their intercultural communication skills with others at the University of Miskolc as well. Therefore, this study aims to improve the overall level of communication skills among international students. According to Iksan et al. (2011), having the ability to speak, write, and socialize could develop communication skills. Thus, it will be useful for the university to develop these three skills for its students. In the next section, I would like to discuss these three types of activities.

- **Verbal Communication**

Verbal communication skills could be developed through different activities such as presentations and open discussions in a class or group. Further, verbal communication skills could also be practiced outside of the classroom through interviews and meetings with other students, staff, and professors.

- **Non-Verbal Communication**

Manusov (2016) noticed that nonverbal communication is not easy to define and includes some factors such as facial expressions, body movements, personal and environmental space, time, and physical appearance. Non-verbal communication is often more effective than verbal communication and can transfer the meaning of message better than words. For instance, maybe one simple smile can show our feelings better than words (Bambaeroo & Shokrpour, 2017). Therefore, in a multicultural environment such as higher education, nonverbal communication can play an important role in communication.

- **Written Communication**

Writing communication could develop through completing written assignments and reports through their academic program at the university. Good written communication skills should use simple and easy-to-understand sentences and also follow the academic writing style. According to Maulyda et al. (2020) results, many students still cannot communicate their outcomes with other students. Therefore, they need to improve their written communication skills.

- **Social Communication**

There are four sub-constructs for social communication, which include negotiating, language, culture and politeness. In this activity, international students need to be able to negotiate and discuss with other students, and professors the other cultural values and norms that go with the common language. This type of communication must be carried out humbly and politely.

After German theologian Hans Kung proposed the idea of global ethics, or universal ethics, in 1990, the Parliament of the World's Religions commissioned him to draft the influential Declaration toward a Global Ethic, which was endorsed in 1993. Furthermore, he expounded further information about the domain of global ethics. Based on the researcher's activities concerning global ethics, there is still a difference between global ethics and international ethics relations for interpretation. For example, global ethics is not regarded as a direct behavior norm for representatives of governments in their dealings with other governments. The subsequent appeal and probe of global ethics within academic circles has formed a "mode of religion" and a "mode of ethics" in academic studies of the concept. Both modes are about the possibility of combining religion with ethics, but they differ as to the status of religion in this combination. The first mode is related to religious cultures, while the second mode gives prominence to plural world cultures and moral traditions. In 2006, academic circles accepted the theme of global ethics, but it is hard to say that there is harmony among all nations to advance further towards a new global order. Besides, because of space and title limitations in my research, I would not like to discuss the significance and defects of the two modes. Therefore, in the next part, I would like to discuss the concept of culture.

## 2.5 Concepts of Culture

Culture describes the patterns of human activity and the figurative structures that give such activities significance and importance (Harper, 2001). According to Tylor (1871), culture, taken in its wide ethnographic sense, is very complex and includes knowledge, belief, art, morals, law, custom, and any other capabilities and habits acquired by man as a member of society. In his work, a vocabulary of culture and society, William (1976) defines culture as the way of life for an entire society. This includes codes of manner, dress, language, religion, rituals, and norms of behavior such as law and morality, and systems of belief as well as art. Among others, UNESCO, in its Universal Declaration on Cultural Diversity, issued on International Mother Language Day, February 21, 2002, regarded culture as: "the set of distinctive spiritual, material, intellectual, and emotional features of society or a social group." It includes, in addition to art and literature, lifestyles, ways of coexisting, value systems, traditions, and beliefs (Madouni, 2021). In this sense, cultural anthropologists tend to use the term "culture" to refer to the human capacity and human activities universally for their classification, codification, and communication of experiences materially and symbolically. Research on both conceptual and empirical studies about cultural differences has already facilitated the creation of multiple and sometimes conflicting models of national culture in the organizational and managerial fields. These kinds of models can be used for comparing management progressions and business strategies across national borders in any organization. Some models, such as those of Hofstede and GLOBE, have gone a step further in constructing cultural and numerical indicators for various countries, which have been widely used in cross-cultural research (Nardon et al., 2009). National culture is a central factor that discriminates a person from one country from those of another. Hofstede (1991, p.12) states that countries "are a source of a considerable amount of common mental programming of their citizens." Also, Hofstede (2001) argues that cultural data should indeed be collected at the national level. For instance, in the greatest countries that have a dominant language, they could identify their education systems, and other integrating mechanisms that inculcate members with common values and outlooks. In my research, I have chosen to use the Hofstede model of national culture, which is suitable for comparing and determining studies about the diversity of culture. It can also facilitate both research and meaningful cross-cultural comparisons.

## 2.6 Hofstede National Culture Model

National culture models include the six models proposed by Kluckhohn, Strodbeck, Hofstede, Hall, Trompenaars, Schwartz, and House, and the GLOBE model (Nardon & Steers, 2009). Hofstede (1980, 2001) introduced the most specific model of cultural differences in organizational conditions and environments. His model determined the employees who came from various countries for a major multinational corporation, and it assumed that the diversity of cultures could be distinguished based on differences in what they valued. Hofstede believed that cultures could be divided into four dimensions, but later added a fifth dimension based on his research with Michael Bond (1991). In the 2000s, Michael Minkov, using data from the World Values Survey, accepted the fifth and he proposed the addition of a sixth dimension to the Hofstede model of national culture (Minkov, 2007; Hofstede et al., 2010). Table 2.3 lists these six dimensions.

Table 2.3: The Six Cultural Dimensions

Cultural Dimensions	Scale Anchors	
Power Distance	Lower Power Distance	Higher Power Distance
Uncertainty Avoidance	Lower Uncertainty Avoidance	Higher Uncertainty Avoidance
Individualism-Collectivism	Collectivism	Individualism
Masculinity-Femininity	Masculinity	Femininity
Long-term vs. Short-term	Short-term orientation	Long-term orientation
Indulgence vs. Restraint	Indulgence	Restraint

Source: Luciara, N., & Richard, M (2009, p.5)

The Hofstede model is one of the best models to increase our knowledge about the diversity of cultural attitudes, behaviors, and values concerning management activities. I chose the Hofstede model for my studies to determine the important roles of leadership in a multicultural organization and to provide a conflict-free environment for international students at the University of Miskolc. Furthermore, in the next part, I explain the meaning of the Hofstede model's dimensions in national culture.

### 2.6.1 Hofstede's Cultural Dimensions

As I have already explained, the Hofstede model includes six dimensions which can distinguish the diversity of culture in a multicultural organization. Therefore, in the next part, I will explain these six dimensions.

- **Power Distance:**

**High:** Society is stratified, and power is sought to provide the social order. Examples are Malaysia, Mexico, and Saudi Arabia.

**Low:** Society has a large middle class, power is often seen as a source of corruption and dominance, and society has high upward mobility. Examples are Sweden, Austria, Denmark, Ireland, and Norway.

- **Uncertainty Avoidance:**

**High:** There is a low tolerance for ambiguity; rules are required to limit uncertainty. Examples are Greece, Portugal, Russia, and Japan.

**Low:** There is a high level of tolerance for ambiguous situations. Few rules are needed to constrain uncertainty. Examples are Jamaica, Denmark, and Sweden.

- **Collectivism and Individualism**

**Collectivism:** In general group interests take precedence over individual interests. Examples are Japan, Korea, Indonesia, Pakistan, and Latin America.

**Individualism:** Individual interests generally take precedence over group interests. Examples are the US, Australia, the UK, the Netherlands, Italy, and the Scandinavian nations.



- **Masculinity and Femininity**

**Masculinity:** The male gender has more values in the workplace, society, and personal goals. Such as Japan, Austria, Italy, Switzerland, and Mexico.

**Femininity:** Female has values concerning the quality of life, and the welfare of others. Examples are Sweden, Norway, the Netherlands, and Costa Rica.

- **Short-term Orientation and Long-term Orientation:**

**Short-term orientation:** It is based on past and present orientation. Values are related to traditions and social obligations. Examples are Pakistan, Nigeria, and the Philippines.

**Long-term orientation:** based on future orientation. Dedication, hard work, and thrift determine values. China, Korea, and Japan display this orientation.

- **Indulgence and Restraint:**

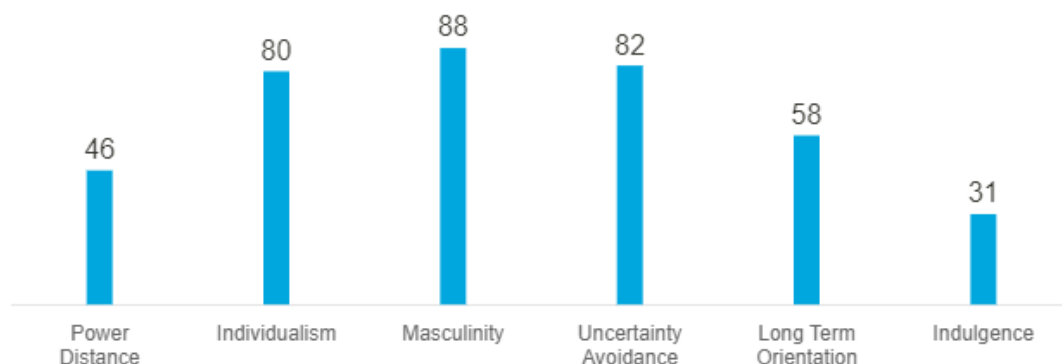
**Indulgence:** This describes a society that allows humans to enjoy nature and have fun, such as Mexico or Taiwan.

**Restraint:** This describes a society that suppresses gratification of needs and regulates them using strict social norms, such as Japan or Korea.

After understanding the Hofstede Model, in the next part, I would like to explain Hungarian culture separately because my research will be applied at the University of Miskolc, Hungary.

## 2.6.2 Hungarian Culture

As my research applies at Miskolc University, Hungary, I would like to determine the Hungarian culture based on the Hofstede model. In the second edition of Hofstede's landmark study, "Cultures and Organizations Software of the Mind" (Hofstede – Hofstede, 2005), results appear for 74 countries and regions, including those in the East-Central European countries, including Hungary. The outcome is shown in the following result ([www.hofstede-insight.com](http://www.hofstede-insight.com), 2021):



**Figure 2.10: Hungarian Cultural Dimensions**  
Source: Hofstede, 2001

The culture of Hungary has a low score on power distance, which means that individuals in societies are not equal. Hungarian culture tends to be independent, gives equal rights, and empowers. Power is decentralized, and managers try to count their team members based on

their experience. Employees expect to be consulted, and control is disliked in Hungarian culture. This culture has direct communication (klára, 2014). Also, Hungary, with a score of 80, is an individualistic society, which shows that individual interests generally take precedence over group interests. On the other hand, Hungary scores 88 on Masculinity and is thus a masculine society. Society will be driven by achievement and success. Based on the Hofstede result, Hungary scores 82 on the Uncertainty avoidance dimension, which means that Hungarian people have a low level of tolerance for ambiguity situations. They need more rules to constrain uncertainty. Hungary has a long-term orientation score of 58, placing it in the middle of the long-term orientation culture. Finally, Hungary scores a 31 on Indulgence which shows that Hungarian society tends toward cynicism and pessimism. Individuals have the perception that their actions and activities are restrained by social norms, and they do not put much emphasis on their leisure time (www.hofstede-insight.com, 2021). According to Klara (2014), p. 204, " we would think Hungarian culture tends to have stronger collectivist values, though the younger generation in the cities, probably partly under the influence of western business practices, show a tendency to become more individualistic." Also, cited by kőváry, Hungarian are as tough as American, romantic like Slavs, curious as the Japanese and cunning as Arabs culture (klára, 2014).

## 2.7 Intercultural Communication Competence

Intercultural communication competencies by Byram in 1989 showed that the skills and abilities needed for success in today's global world of business are not the same as those needed even 20 years ago. The increasing globalization of companies, universities, and communities is certainly one of the major developments in the recent past. Therefore, intercultural communication has become one of the major challenges for managers and leaders around the world. According to Kim (1991), there are three skills or dimensions that relate to this concept and intercultural communication competence: first of all is the cognitive dimension, which is related to the individual's interpretive mechanisms, secondly, an affective dimension, which determines an individual's motivation or willingness to accommodate intercultural encounters, and finally, a behavioral dimension, which explains an individual's ability to be flexible and resourceful in using his or her cognitive and affective skills. Intercultural communication competence enables interaction based on better understanding among individuals and groups (Griffith, 2016). Differences in communication can be based on different language structures, several cultural practices, norms, values, and thinking styles. These differences can cause misunderstandings and conflict, while a good understanding of intercultural communication competence can reduce communication barriers, build better relationships, and facilitate collaboration (Griffith, 2016). Neuliep, 2019 argues that "intercultural communication plays a crucial role in reducing anxiety, discomfort, and uncertainty during interaction with different cultures" (Balakrishnan et al., 2021, p. 85). Also, Ting-Toomey (1999) argued that transcultural competence (TCC) has a significant ability to improve cross-cultural or intercultural communication. Transcultural competence (TCC) has two essential skills for effective intercultural interactions – adaptability and sensitivity. Ting-Toomey explained that TCC is a process whereby communicators learn to "mutually adapt to each other's behaviors appropriately and flexibly" (p. 261) by respectfully observing and reacting to each other's communication processes. "The Cross-Cultural Adaptability Inventory (CCAI) and the Global Competency and Intercultural Sensitivity Index (ISI) were selected as two key instruments to measure these skills" (Williams, 2005, p.360). The CCAI is a simple training instrument that is designed to provide information to the individual about his or her potential for cross-cultural effectiveness (Kelley & Meyers, 1995). So, CCAI could be used for cross-cultural training sessions to help individuals identify their strengths and weaknesses concerning cross-cultural

effectiveness and adaptability. One of the significant goals of CCAI is to help participants improve their skills in interacting with other people from a diversity of cultures. After that, they can identify their strengths and weaknesses through a self-survey (Kelley & Meyers, 1995). Also, Kelley and Meyers (1995) argued that four skill areas could predict success in cross-cultural adaptability, and these are skills that could be identified and improved through training or cross-cultural interaction. Based on Kim's (1991) research, intercultural communication competency is a result of adaptability, and the CCAI could offer a good match for evaluating adaptability and developing intercultural communication skills. The CCAI abilities take a culture-general approach and add the universal aspects of culture shock and cultural adjustment. Kelley and Meyers (1995) argued that "A person who is universally adaptable can adjust to any culture's idiosyncrasies" (p.1). The CCAI includes four dimensions: emotional resilience, flexibility and openness, perceptual acuity, and personal autonomy. These skills have already been identified by many researchers as important to these dimensions.

1. An emotionally resilient person is someone who can deal with stressful feelings constructively and can cope with ambiguity very easily.
2. Flexibility and openness "are characterized by accepting other ways of doing things, a lack of rigidity, and an ethnic relative perspective" (Brislin & Yoshida, 1994, p. 90). People with these skills enjoy interacting with people who think differently than they do.
3. Perceptual acuity "refers to the degree of sensitivity individuals have in terms of verbal and nonverbal messages, as well as to interpersonal relations in general" (Brislin & Yoshida, 1994, p. 90). People with perceptual acuity are sensitive to others, and they focus both on verbal and non-verbal behavior for communication and interpersonal relations (Kelley & Meyers, 1995).
4. According to Williams (2005), personal autonomy refers to "individuals' abilities to maintain their personal beliefs and values when challenged in a new culture. People with personal autonomy have a strong sense of self and do not need to rely on cues from their surroundings to make decisions or form their identity." (p. 361).

The second instrument is called the ISI, which was designed by Olson and Kroeger (2001) to measure the global competencies and intercultural sensitivity of individuals and their relationships on an individual's effectiveness and experience abroad (Williams 2005). The components are global and include substantive knowledge such as knowledge of cultures, languages, world issues, etc; perceptual understanding such as open-mindedness, flexibility, and resistance to stereotyping; and intercultural communication skills such as adaptability, empathy, and cultural mediation (Olson & Kroeger, 2001).

Therefore, the University of Miskolc could develop international students' intercultural communication skills by using CCAI and ISI. Intercultural communication skills will be viewed in terms of the seven aspects of the two indices: emotional resilience (ER), flexibility and openness (FO), perceptual acuity (PAC), and personal autonomy (PA) for the CCAI and for the ISI. In the next part, I would like to discuss this questionnaire very briefly (Williams 2005):

**ER:** When I am working with other international students, I need to receive their approval before I can deal with the stresses of new conditions.

**FO:** I can modify my feelings and ideas with others in the university. I could enjoy relating to other people from a diverse cultural background.

**PAC:** I pay attention to how other international students affect their perceptions of me. / I try to understand and pay attention to other international students' thoughts and feelings when I talk to them.

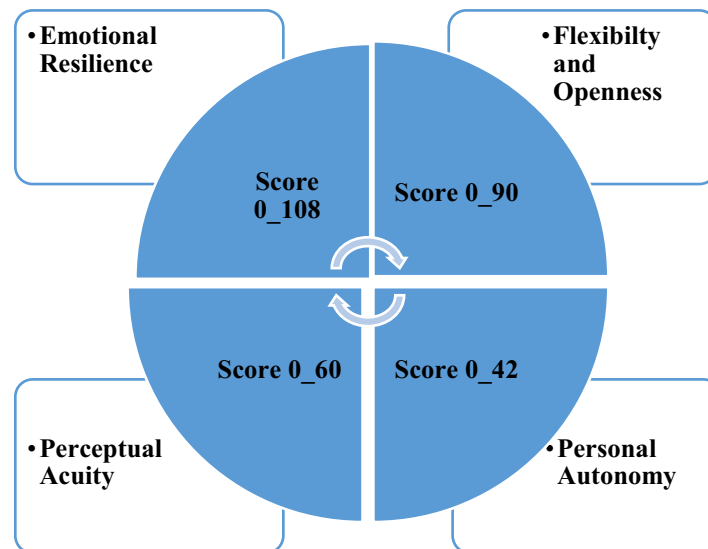
**PA:** I feel free to maintain my values, even among those who do not share them.

**Ethnocentrism:** I do not notice cultural differences.

**Ethno relativism:** I can analyze and interpret events from one or more chosen cultural perspectives.

**ICA/ Intercultural Awareness:** I can act as a cultural mediator and serve as a bridge between people of different cultures.

Figure 2.11 illustrates the CCAI method:



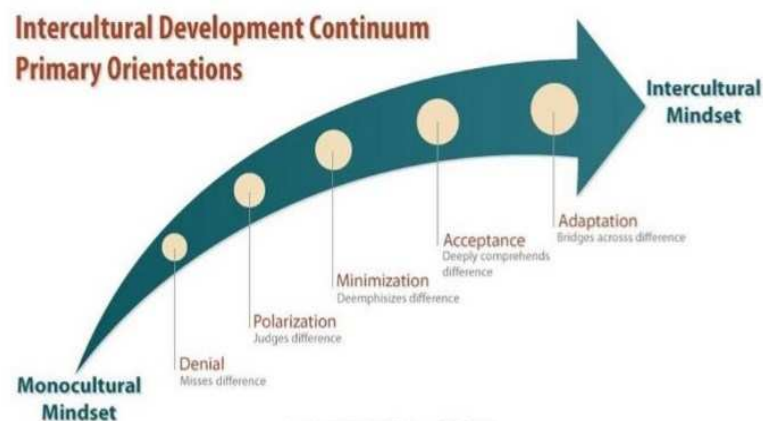
**Figure 2.11: CCAI Method**  
Source: Videmsek, 2015

Globalization has increased dramatically, and the ability to understand and communicate with people from different cultural backgrounds is assuming greater relevance (Chalkiadaki, 2018). Cross-cultural effectiveness has been defined as the ability to use communication and cognitive skills (Hammer et al., 1978), interpersonal skills (Kealey, 1989), and an individual's psychological and sociocultural adjustment (Searle & Ward, 1990; Ward & Searle 1991). It has been associated with the development of cultural empathy and communication competence, traits of flexibility and patience (Cui & Berg 1991). The concept of cross-cultural effectiveness involves the ability to maintain a positive attitude while fitting into the new social network. The result suggests that international students could increase their ability to deal with the stresses of cross-cultural experience and develop their behavior regarding cultural empathy and respect for the host culture. According to Searle and Ward (1990), this would translate into a positive attitude, increased psychosocial well-being, and the ability to "fit in" or negotiate interactive aspects of the new cultural environment. Emotional resilience is an important factor for psychological adjustment, and it is associated with fewer symptoms of depression. Also, perceptual acuity and personal autonomy subscales were associated with fewer sociocultural difficulties involving adaptive behavior that included a cognitive component (Williams, 2005).

Therefore, CCAI could improve cross-cultural effectiveness among the international students and provide important information about the international students' strengths and weaknesses, and then it could provide a format for the skill-development that needs to take place in order to enhance cross-cultural adjustment. According to the results of Williams (2005), "the students who studied abroad generally showed a greater increase in intercultural communication skills than the students who did not study abroad, and students who chose to study abroad had a higher level of intercultural communication skills at the beginning and end of the semester than students who did not choose to study abroad" (p.368). In addition, "both groups of students started the semester with somewhat high scores (on CCAI, abroad students averaged 232.53 and campus students averaged 222.82 out of a possible 288" (Williams, 2005, p.368). In the author's opinion, the high starting value could show the effect of a smaller improvement. In the other research outcome, "quantitative findings indicated no effect for two of the four CCAI dimensions; however, interview responses and observations suggest that some growth did occur in emotional resilience and personal autonomy" (Fong, 2020, p. 65).

## 2.8 Intercultural Development Continuum (IDC)

The Intercultural Development Continuum (IDC) is a set of skills such as knowledge, attitudes, and orientations toward cultural difference and commonality that are arrayed along a continuum from the more mono-cultural mind-sets of Denial and Polarization through the transitional orientation of Minimization to the intercultural or global mindsets of Acceptance and Adaptation. The capability of deeply shifting cultural perspective and bridging behavior across cultural differences is most fully achieved when one maintains an Adaptation perspective. According to Williams (2005), this continuum is adapted from the Developmental Model of Intercultural Sensitivity, which was originally proposed by Milton Bennett (1998).



**Figure 2.12: Intercultural Development Continuum**  
Source: IDI, LLC (2017) & Acheson (2019, p.47)

- **Denial:** A denial mindset is characterized by a person's limited ability to understand cultural differences in values, beliefs, attitudes and behavior. Individuals in this orientation are disinterested in other cultures, and they are more active in the avoidance of cultural differences.
- **Polarization:** People with this type of mindset view cultural differences from an "us versus them" perspective. Polarization could take the form of defense such as 'my cultural

practices are better than other cultural practices or reversal, such as ‘other cultures are better than my culture’.

- **Minimization:** This is a transitional mindset between the more Mono-cultural orientations of Denial, and Polarization and the more Intercultural or Global worldviews for acceptance and adaptation. Minimization highlights commonalities, recognizing similarities such as basic needs and universalism, global values which could provide a deeper understanding of cultural differences.
- **Acceptance:** This is an intercultural or global mindset. Individuals with an Acceptance orientation notice and value patterns of other cultural differences and similarities in their own and other cultures. Also, individuals in the Acceptance orientation are more curious to learn how a cultural pattern of behavior makes sense within different cultural communities.
- **Adaptation:** This orientation consists of both cognitive frame-shifting (shifting one’s cultural perspective) and behavioral code-shifting (changing behavior in authentic and culturally appropriate habits). Overall, “This pedagogical innovation of representing the IDC as a pendulum contributes much to our understanding of the development and maintenance of intercultural sensitivity, offering benefits both for individuals striving to understand their own intercultural adaptation processes and for trainers, educators and coaches attempting to design effective curriculum or programs to prepare and support people crossing cultures”(Acheson, 2019,p.58).

According to Kim (2001), improving communication skills is a main key for cultural adaptation. Also, “intercultural communication difficulties can potentially hinder cross-cultural adaptation” (Doucerain et al., 2015, p.2). These can be effective strategies for developing cross-cultural awareness in both local and other cultures. In this situation, international students can decrease their ambiguity regarding the host and the diversity of culture, which finally allows them to develop their intercultural communication skills and manage their acculturative stress.

## 2.9 Leadership

Nowadays, with the phenomena of globalization and developments in organizational culture, a significant role of leadership is to recognize and analyze issues concerning the diversity of cultures. While the main roles of the managers in the organization are controlled, planned, and analyzed, promoting trust, cohesion, and vision among the members of the organization can also be related to the role of the leader. Effective organizations need both tactical and strategic thinking as well as a cultural characteristic that is built upon and improved by their leaders. One of the most effective definitions of leadership was presented by Kim and Maubourgne (1992), who stated that leadership is a special skill and ability to encourage confidence in the individual that is intended to achieve organizational goals. A leader's leadership style is determined by the leader's actions, attitudes, and behavior to lead their followers to a specific goal (Dubrin, 2001). Based on the different organizational cultures and environments, we have different types of leadership for different environments, such as autocratic, laissez-faire, democratic, transactional, and transformational leadership. For instance, Robbins (1993) believes that national culture can play a significant role in determining the type of leadership in an organization. Gandolfi argues that the combination of five characteristics can define leadership performance. These factors are; they must have a sense of leadership; they must have followers; they must be action-oriented; and finally, they have to have clear goals and objectives (Gandolfi & Stone, 2018). According to Winston and Patterson (2006), a leader is someone who focuses on the organizational mission and, by developing the followers' abilities and skills, follows by emotional support and physical energy, exerts effort to achieve the organizational mission and objectives. (Winston and Patterson, 2006). In Table 2.4, I present various models of leadership styles based on the literature.

**Table 2.4: Summaries Some Leadership Style in Previous Studies**

Lewin et al (1939)	Likert (1967)	Vroom and yetton (1974)	Bass and valenzi (1974)	Muna (1980)	Ali (1993)
<p><b>laissez-faire</b></p> <p>a leader takes to leave the employees alone approach and closely supervises.</p>	<p><b>Consultative</b> Employees have more interaction, communication and power to make decisions.</p> <p><b>Participate</b> This system makes extensive use of employer participation.</p>	<p><b>C1</b> Manager shares a problem with a subordinate.</p> <p><b>C11</b> Manager share problem with group and makes own decision</p>	<p><b>System 3</b></p> <p>Join decision.</p> <p><b>System 4</b> participation</p>	<p><b>System 3</b></p> <p>Join decision.</p> <p><b>System 4</b> Delegation of decision subordinates</p>	<p><b>System 3</b></p> <p>consultative</p> <p><b>System 4</b> participative</p>

Source: Yousef (1998, p.276)

Transformational leadership can provide the necessary types of skills for international students at the University of Miskolc. So, to better interpret this type of leadership in the next part, I will discuss it.

## 2.10 Transformational Leadership

Transformational leaders are those who try to provide a high degree of trust and emotional interest and feelings concerning improving communication skills in the organization. A

transformational leader can develop organizational performance by developing charismatic skills in their followers. "Transformational leaders exhibit no controlling powers, but inspire empowerment and motivation of the subordinates." (Felix et al., 2015, p.570). Transformational leadership may meet the emotional needs of each member in a multicultural organization, and finally, this leader may intellectually stimulate the members to manage their stress in the organization. Kirkan (2011) believed that "transformational leadership" is a person who has the ability to recognize the problems in the organization and is ready to change the current situation for the better based on the organizational objectives (Alqatawenh, 2018). Finally, there are four behaviors that are characteristic of transformational leaders (Bass and Avolio 1990).

- **Idealized Influence:** Provides a vision and a clear mission for their employees.
- **Inspiration of Motivation:** Uses symbols to focus efforts and express important purposes in simple ways.
- **Intellectual Stimulation:** Better problem solving, encouraging followers to take risks and make decisions on their own.
- **Individualized Consideration:** Gives the personnel a high level of attention, treats each employee individually, and coaches him or her.

In my opinion, any student needs to develop the necessary transformational skills to become more successful in their communications and academic fields. Also, they can better cope with their acculturative stress in the new environment. According to my knowledge, transformational leadership is related to theories Z and R. The next part discusses these theories.

### 2.10.1 Theory Z and Theory R

William Ouchi introduced Theory Z as the Japanese consensus style in the 1980s. He believes that western organisations could learn from Japanese companies (<https://www.toolshero.com/leadership/theory-z/>). According to Ouchi (1981), Theory Z involves providing a friendly atmosphere for the employees in the organization to increase employees' commitment and encourage them to stay in the organization for a longer period. Also, this theory involves employees in the process of decision-making, which provides participation among the employees in the organization. Ouchi believes that the "loyalty of employees is increased by offering them a job for life with a strong focus on employee well-being both on the job as well as in their private lives." (p.30). According to Ouchi (1981), the Japanese company's productivity was much higher than American companies' even if they had similar technology for their production (Setiawan et al, 2020). Figure 2.13 summarizes the theory.



**Figure 2.13: Theory Z**  
Source: Based on the William Ouchi Theory and Own Compilation

Theory R is based on human values. For example, this theory states that everybody needs love, feelings of majesty, and respectful treatment. Therefore, these three needs together bring about



a positive influence on self-esteem and thus on employees' state of mind and the quality of their work and productivity in a multicultural organization.

Transformational leadership tries to improve an individual's personality. Transformational leaders, in the first step, try to encourage their international members of their organization to help meet the main objective of improving their communication. By promoting trust, alliance, and integrity among the international students at the University of Miskolc, they can directly affect the students' performance and develop their communication skills. Also, transformational leaders try to increase their international students' self-confidence about their activities and motivation, which finally improves the international students' satisfaction at the University of Miskolc. Additionally, in the next part, I would like to present the role of transactional leadership in the multicultural organization as well, because, as I have already mentioned, I would like to know what type of organizational culture the university has.

## 2.11 Transactional Leadership

The professional characteristic of the transactional leader is that they are used to working within the organizational culture, following the existing rules and regulations, procedures, and norms. A transactional leader tries to clarify the task structure with the "right way" to do things in a way that does not depend on the leader for preferred problem solutions (Bass & Avolio 1990). Besides, the transactional leader can provide a strong and clear strategy for the employees to easily handle a problem with the use of new technology in a multicultural organization. "Transactional leadership styles can involve values, but those values are relevant to exchange processes such as honesty, responsibility, and reciprocity" (Purwanto et al., 2020, p. 306). Transactional leadership includes three dimensions through which a leader enables his or her employees to become more efficient in the organization.

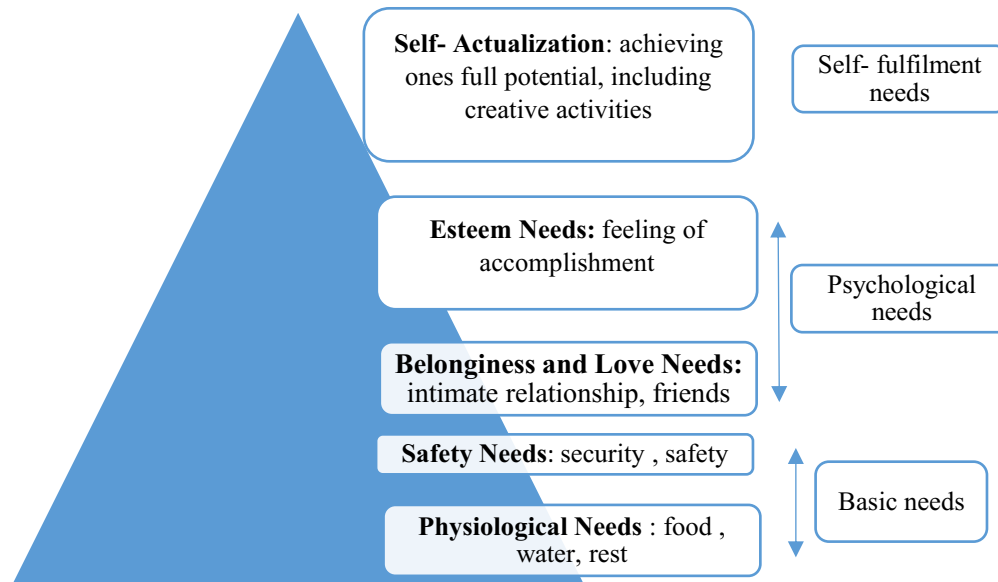
- **Contingent Rewards:** Provide rewards for effort, promise rewards for good performance, and recognize accomplishments.
- **Management by Exception (Active):** Make an appropriate decision before a mistake occurs.
- **Management by Exception (Passive):** Decide after a failure has happened (Bass and Avolio 1990).

Transactional leadership theory is based on Maslow's theory of needs and the McGregor model, so the reward and punishment system can be determined, while the most effective tool for achieving objectives is to manage the basic needs of rewards and punishments in the organization. I am presenting the Maslow theory of needs and the McGregor model, respectively.

### 2.11.1 Maslow's Theory the Hierarchy of Needs

Abraham Maslow's hierarchy of needs was introduced by Abraham Maslow in his 1943 paper "A Theory of Human Motivation." Over the years, Maslow extended the idea, which included his observations of humans' innate curiosity. After his theory, other researchers decided to follow his theory in different fields of research. Nowadays, Maslow's hierarchy of needs theory remains relevant in every sector of business; especially the lower order needs (physiological and safety needs), which may be linked to organizational culture (Nyameh 2013). At the third level of Maslow's hierarchy of needs come the social needs, which can be related to the human resources management responsibility for their organizational culture's needs. Furthermore, the

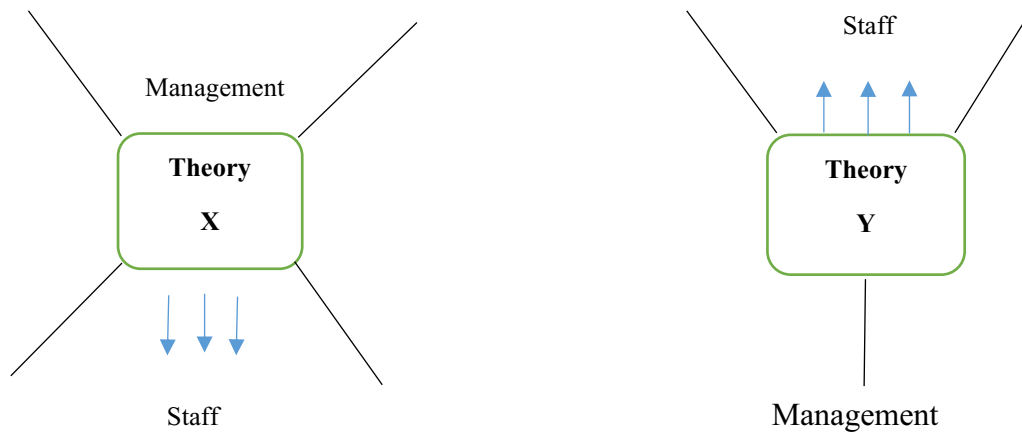
positive relationship between organizational culture and human resource management would produce self-esteem and self-actualization, which finally improve the employees' performance in the success of the project. According to Maslow's theory, one does not feel the second need until the demands of the first have been satisfied, or the third until the second has been satisfied, and so on.



**Figure 2.14: Maslow Theory Needs**  
Source: Nyameh, J. (2013, p. 41) cited by Maslow (1954)

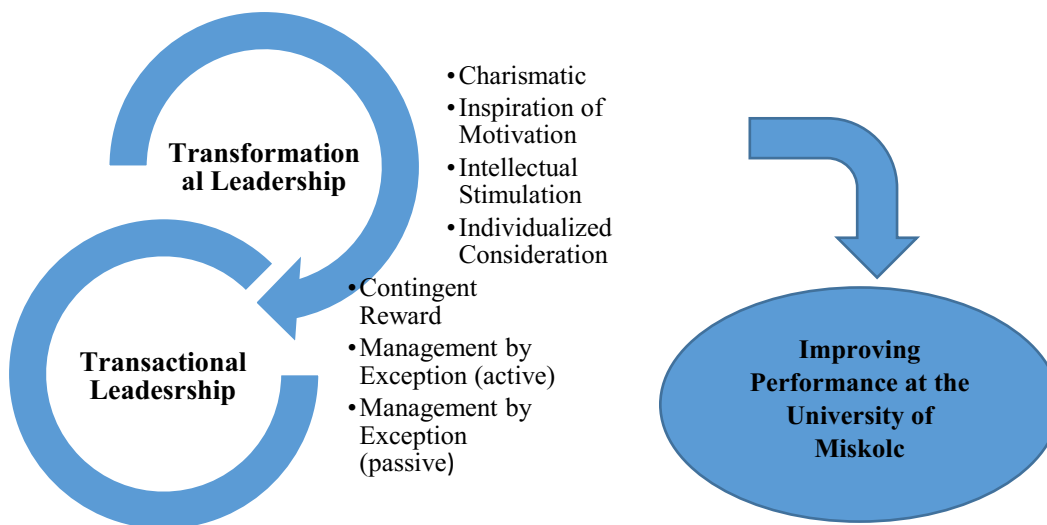
### 2.11.2 The McGregor Model (Theory X and Theory Y)

Influencing leadership styles in organizational performance has long been a significant field of study for researchers. In this area, McGregor (1960) provided two types of theories, which are named Theory X and Theory Y. McGregor's theories can be suitable for small and medium-sized businesses whose owners must sustain an entrepreneurial spirit for their employees in the organization. It is also suitable for innovation, taking a risk, encouraging proactive behavior, and improving the performance of organizations. McGregor (1960) believed that there were two types of managers and leaders who strongly applied Theory X or Theory Y in their organizations. For instance, Theory X describes the manager and leader who believes that employees are lazy and do not have a commitment to or responsibility for their duties in the organization. Consequently, managers believe that employees must be controlled and determined with penalties. However, in Theory Y, the manager and leader try to trust their workers about their duties and that they have a commitment to and responsibility for their organization's performance. Or "Theory Y states that work is as natural as play or rest. People are not inherently lazy, they have become that way as a result of experience" (Aithal & Kumar, 2016, p.2). In this condition, employees must receive specific rewards. A sketch of the theories is shown in Figure 2.15.



**Figure 2.15: Theory X and Theory Y**  
Source: Arslan, A., & Staub (2013)

Combining the two types of leadership (transformational and transactional) could improve organizational performance at the University of Miskolc. This is because each of them has their own specific skills and strategies to improve efficiency and influence individual behavior. For instance, “transformational leadership is positively related to entrepreneurial behavior only when psychological empowerment is high, whereas transactional leadership has a negative relationship with entrepreneurial behavior only under these conditions.” (Afsar et al. 2016, p.1). In Figure 2.16, I present my model concerning the combination of these two types of leadership performance.



**Figure 2.16: Combination of the Transformational and Transactional Styles**  
Source: Own Compilation

As shown in my image, I strongly believe that without the role of transformational and transactional leadership, employees would be faced with different problems in the organization. For example, at the base of the cultural definition, the way that international students communicate in western culture could completely differ from eastern culture. So, this can bring new challenges for the leaders and employers at the University of Miskolc. Transformational leadership enhances the motivation, morale, and performance of both international students and employees at the university. On the other hand, transactional leaders try to concern themselves with processes and strategies rather than forward-thinking ideas. Transactional

leadership, by providing a clear strategy, can improve and develop employees' performance in this type of new environment. Subsequently, in the next part, I would like to compare these two types of leadership.

## 2.12 Comparison Transformational and Transactional Leadership Performance

Ogbonna and Burns (2013) considered the differentiating factors between transactional and transformational leadership by clarifying that, while the transactional leader is a leader who exchanges tangible rewards and punishment for the work and loyalty of followers, transformational leaders are leaders who engage and commit with followers, focus on higher intrinsic motivation, and try to develop clear goals for specific results and new ways in which they could be achieved in the organization (Burns, 2013). In addition, transactional leaders look closer to a passive model than transformational leaders, who establish active behaviors by providing a sense of mission. Finally, in Table 2.5, I will list some further differences.

**Table 2.5: Comparison between Transformational and Transactional Leadership**

<b>Transformational</b>	<b>Transactional</b>
Leadership is proactive	Leadership is responsive
Works to change the organisational culture by implementing new ideas	Works within the organisational culture
Employees achieve objectives through higher ideals and moral values	Employees achieve objectives through rewards and punishments set by the leader
Motivates followers by encouraging them to put group interests first	Motivates followers by appealing to their self-interest.
Each behavior is directed to each individual to express consideration and support	Management-by-exception: maintain the status quo; stress correct actions to improve performance.

Source: Ogbonna & Burns (2013, p.359)

According to Asbari et al. (2019) results, the influence of transformational leadership styles on performance was not significant. And also, "transactional leadership style does not affect performance" (Purwanto et al, 2020, p. 304). Although the leadership can help the members achieve their success, it's essential to know about the type of organizational culture as well. Therefore, in the next section, I will explain it.

## 2.13 Organizational Culture and Typology of Organizational Culture

Theoretically, "organizational culture has been associated with performance through the former's influence on employee attitude and behavior." (Joseph & Kibera, 2019, p.8). The role of leadership can be determined by the type of culture in any organization. For instance, transactional leaders work within their organizational cultures by following the existing rules and norms. On the other hand, transformational leaders change their culture by first understanding it and then realigning the organization's culture with a new vision and an adjustment of its shared expectations, values, and norms (Bass, 1985). Therefore, the decision-making process and strategic thinking in any organization require organizational cultural awareness, which is led by its leaders. Furthermore, in this situation, the vision of the managers can emerge and move forward as the leader constructs a culture that is dedicated to supporting the organizational vision as well. According to Bernard and Bruce (1994), by providing a questionnaire (the Organizational Description Questionnaire), we can identify the impact of transformational and transactional leadership on the organization. The questionnaire could ask respondents how much they agree with the statements. People who strongly agree with the first statement favor transactional leadership, while strong agreement with the second statement

shows a preference for transformational leadership, such as: -You get what you deserve-no more, no less.

And for the transformational leadership:

-we believe in trusting each other to do the right thing

According to the result of the organizational description questionnaire, six types of organizational culture exist.

### 2.13.1 Six Types of Organizational Culture

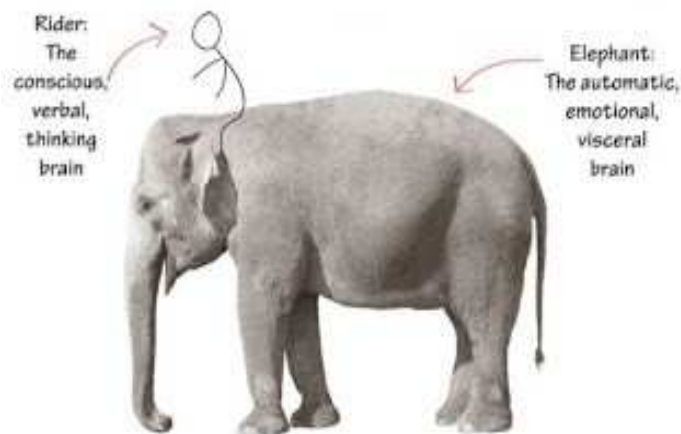
- **A predominant and Moderate Transformational Organizational Culture:** Tends to be characterized by a high score on the ODQ for transformational leadership, and a more negative score on the transactional ODQ. In this type of culture, everyone is free to talk about their purposes, vision, values, and fulfillment without emphasizing the need for formal agreements and controls. The lack of transactional leadership without a clear strategy may make it difficult to consider what people will do.
- **A High-Contrast Organizational Culture:** This type of organization is characterized by high scores in transformational leadership and by a similarly high level of transactional leadership as well.
- **A Coasting Organizational Culture:** It is neither an extremely transformational nor an extremely transactional leadership style. It has been placed in the middle of the range in the organizational culture.
- **Predominantly to Moderate Contractual Organizational Cultures:** This type of organizational culture is categorized as the highest level of transactional leadership and a very low level of transformational leadership. In this culture, individualism is more significant than the interests of the group.
- **The Pedestrian Organization:** This is moderately transactional leadership with little or no transformational qualities. For example, it does not have very formal agreements and risk-taking is avoided.
- **The Garbage Can Organizational Culture:** This has neither transactional nor transformational leadership. Leadership is absent in the organization, and everybody "does their own thing." Cooperation among the members is very low, and the organization is anarchic because it has no clear purposes, visions, values, rules, or regulations to control activities (Bernard & Bruce, 1994).

In my opinion, transformational leadership can develop a personality, and everybody could become closer to being his or her own leader. Consequently, for a better understanding of my opinion concerning this issue, in the next section, I will explain the ant and elephant leadership for the self.

### 2.14 Ant and the Elephant Leadership for the Self

The 2004 book by Vince Poscente, "The Ant and the Elephant", is a story about an ant called Adir and an elephant called Elgo. The ant and the elephant were living in a time of drought, with shortages of water and food. The strong wind takes Adir far away from his ant colony. He feels lonely, but suddenly he hears about a heavenly oasis. However, he does not know where this oasis or paradise could be. On the other hand, Elgo (elephant) emotionally knows about the oasis. He just dreams of being received there, but he knows nothing about it, so he just follows his feelings and imagination. According to Poscente (2004), Adir and Elgo represent

our minds. The ant is playing the conscious part of the mind, while the elephant symbolizes the subconscious part of the mind. According to the neurologist, our subconscious mind can process 20 million bits of information per second while our conscious mind can only process 40 bits of information per second. Therefore, our subconscious mind can process 500,000 times more than our conscious mind. That is why Elgo is so big compared to Adir. However, the end of the story will show how the little Adir becomes Elgo's leader and takes him to the oasis by asking a variety of questions and finding the way rationally. Similarly, our conscious mind can work for us, and control our subconscious as well. Poscente claims that we can communicate with our elephant, but it cannot converse with us. We need to guide our elephant, inspiring him/her, motivating him/her, supporting and empowering him/her, and as a result, we can achieve our goals. Of course, to reach this point, we need to be patient and armed with strong discipline. Although the process is hard and takes a long time, in the end, our dreams could come true. So, understanding our self-awareness, such as our fears and gaining self-confidence, could help us achieve our vision (<http://blog.12min.com/the-ant-and-the-elephant-summary/>). This story aims to understand the main relationship between the conscious and subconscious parts of the mind, which could determine the first step toward becoming a self-leader. Adjusting our behavior to motivate others is not unlike an ant trying to convince an elephant to change its ways. Furthermore, the Ant and the Elephant can improve organizational performance as well when everyone knows how to act (<https://www.leadershipnow.com/leadershop/1893430146.html>). Ants play the personal action, and an elephant plays the personal reaction and emotions. International students, by guiding their subconscious and placing new images on the old images, could improve their self-organization at the University of Miskolc, which as a result could improve the quality of their relationships as well. Figure 2.16 shows the relationship between the ant (small man) and the elephant in our personal and business lives for making decisions.



**Figure 2.17: Stick Man as an Ants Plays as the Rider of the Elephant**  
Sources: Haidt, J. (2012)

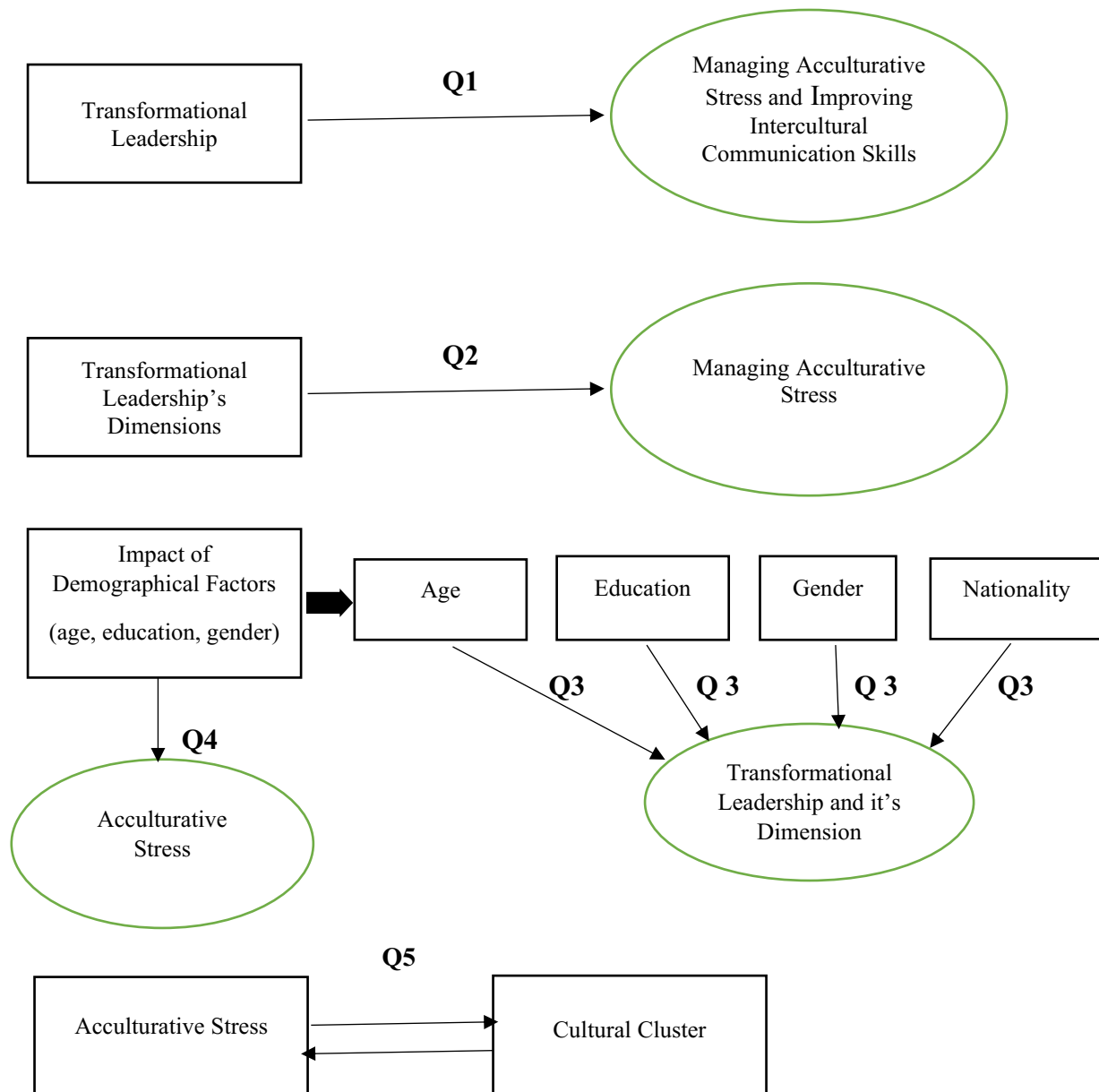
According to my experience as an assistant professor between the academic years (2019–2022), I believed that using transformational leadership, improving cultural awareness, understanding organizational culture, and developing personal leadership skills could help international students cope with acculturative stress, boost their relationships, and encourage intercultural communication, which could improve their educational performance at the University of Miskolc.

## CHAPTER THREE

### RESEARCH MODEL, QUESTION AND METHODOLOGY

As mankind evolved from primitive civilizations to this modern age, we can agree that our ability to manage acculturative stress and develop communication skills was the main driving factor of its evolution. Collins and Foote (2005) argue that stress is "a complex of thoughts, emotions, behaviors, and physical symptoms that arise out of the relationships between a person and his or her environment" (p. 170). Gelberg (2005) also determined that stress based on individual personalities can be a motivating factor for some of them or, for some individuals, can be a debilitating factor. They also believed that stress typically starts from different factors such as personal loss, a difficult lifestyle, or existing personality traits (Bushong, 2018). Stress factors such as anxiety, depression, fear of failure, or fear of losing a relative, especially when they are not close to them, were recognized in several previous studies (Drake et al., 2014; Miller et al., 2015; Duilio et al., 2015; Sutton, 2007; Drake et al., 2012). Based on my personal teaching experience regarding managing acculturative stress and personality development, different factors such as the types of culture, personality traits, age, gender, and experience of international students who have lived outside of their own countries, even for a short time, can have an effect on how they cope with their stress. Also, according to Kim (2001), improving communication skills is a main key for cultural adaptation and reducing stress. International students may be faced with many challenges such as heavy course loads, communication problems with local staff, conflict with roommates, being far away from their home countries, etc. on a daily basis at colleges (Marcus, 2008), which could cause stress for them (Gill et al., 2010). Transformational leadership inside universities is "defined as the extent to which instructors/professors motivate and encourage students to use their own judgment and intelligence to solve education-related problems, transfer missions to students, and express appreciation for good work" (Gill et al., 2010, p.3). Therefore, international students' satisfaction could be related to their understanding of educational goals, coping with stress, which are the outcomes of transformational leadership (Gill et al., 2010). Also, after four semesters of teaching personality development to international master's students at the University of Miskolc (2019–2022) and holding some workshops regarding the ways of coping with acculturative stress and developing communication skills, I noticed that some of the international students were suffering from stress and that it was a little bit difficult for them to adjust to the new environment, such as adaptation to Hungarian food, difficulties staying with other nationalities in the dormitory, or communicating with the host culture. As an international student who has lived in the UAE, which has more than 200 nationalities, for more than 15 years and has been working as a librarian for 8 years, I have lots of experience regarding the diversity of cultures. I decided to find a solution for international students to feel better, easily manage their stress, and develop their intercultural communication skills at the University of Miskolc. While Doucerain et al. (2015) also argued that, although psychological researchers have investigated acculturative stress in general, little attention has been paid to communication-related acculturative stress (CRAS). That is why I decided to consider—with the utmost importance—transformational leadership as a good basis for researching managing acculturative stress regarding the circumstances of communicating in a diverse culture at the University of Miskolc based on the previous studies as well. My conceptual model for this study, which is provided in Figure 3.1, shows the 5 main questions about: the effect of transformational leadership on managing acculturative stress and improving communication skills; the effect of transformational leadership's dimensions on managing acculturative stress; the impact of demographical factors on transformational leadership; the impact of demographical factors on acculturative stress; and finally, is there any relationship between

acculturative stress and cultural diversity or not, based on the Hofstede model and cultural cluster.



**Figure 3.1: Model of the Research Questions**  
Source: Own Compilation

Four main questions (Q1 to Q5) and twenty sub-questions are given below:

**Q1:** Does transformational leadership have a direct effect on managing acculturative stress and improving intercultural communication skills at the University of Miskolc?

**Q2:** Does the transformational leadership dimension have a direct effect on managing acculturative stress at the University of Miskolc?



**Q2-1:** Does transformational leadership influence the international students at the University of Miskolc by providing charisma?

**Q2-2:** Does transformational leadership influence the international students at the University of Miskolc by inspiring them to achieve their goals?

**Q2-3:** Does transformational leadership influence the international students at the University of Miskolc by providing individualized consideration?

**Q2-4:** Does transformational leadership influence the international students at the University of Miskolc by providing intellectual stimulation?

**Q3:** Do demographical factors have a direct effect on transformational leadership?

**Q3-1:** Does an individual's age have an effective role in transformational leadership by providing idealized influence?

**Q3-2:** Does an individual's age have an effective role in transformational leadership through the inspiration of motivation?

**Q3-3:** Does an individual's age have an effective role in transformational leadership by providing individual consideration?

**Q3-4:** Does an individual's age have an effective role in transformational leadership by providing intellectual stimulation?

**Q3-5:** Does personal education have an effective role in transformational leadership by providing idealized influence?

**Q3-6:** Does personal education have an effective role in transformational leadership through the inspiration of motivation?

**Q3-7:** Does personal education have an effective role in transformational leadership by providing individual consideration?

**Q3-8:** Does personal education have an effective role in transformational leadership by providing intellectual stimulation?

**Q3-9:** Does gender play an effective role in transformational leadership by providing idealized influence?

**Q3-10:** Does gender have an effective role in transformational leadership through the inspiration of motivation?

**Q3-11:** Does gender play an effective role in transformational leadership by providing individual consideration?

**Q3-12:** Does gender play an effective role in transformational leadership by providing intellectual stimulation?

**Q3-13:** Does nationality play an effective role in transformational leadership by providing idealized influence?

**Q3-14:** Does nationality have an effective role in transformational leadership through the inspiration of motivation?

**Q3-15:** Does nationality play an effective role in transformational leadership by providing individual consideration?

**Q3-16:** Does nationality play an effective role in transformational leadership by providing intellectual stimulation?

**Q4:** Do demographical factors have a direct effect on acculturative stress?

**Q5:** Is there any relationship between cultural diversity and acculturative stress at Miskolc University or not? (Based on the cultural cluster).

I would like to investigate whether there is a relationship between the independent and dependent variables or not. In this research, I used SEM, Smart PLS software, SPSS, and ANOVA to find my answer for questions.

Finally, I would like to know what type of organizational culture is applied at the University of Miskolc. Because there is a strong relationship between organizational culture and academic performance (Köse & Korkmaz 2018).

### 3.1 Research Methodology

Research is a dynamic process to find solutions to problems and solve them. Throughout time, human beings have always tried to understand phenomena, and since then, the ways of understanding them were in their minds. The basis of every science is the method of understanding it, and the validity of every scientific rule is based on the method of recognition used in that science. Different and particular meanings from scientific articles are given for the term "research method". In some cases, these definitions are dependent and interrelated, and somehow the terms "research methods" and "types of the method" are used interchangeably. In general, research methods are a set of recognized rules and reliable tools to review the facts, explore the ambiguities, and find solutions to the problems.

In this chapter, research models, question, , the review of data collection, types of the questionnaire, and the way of analyzing data are discussed. Furthermore, the fundamental terms such as population, sampling and sampling methods, examinations and tests, and methods of achieving answers to the questions of the research are covered.

### 3.2 Research by Method

This research is classified in the area of the correlational method using the causal method. In correlational research, the main focus is to find out whether or not there is a relation between two or more quantitative (measurable) variables, and if so, to what extent does this relation exist. The aim of correlational research might be to establish a relation or no relation and use relations to make forecasts. Correlational studies examine those variables which are assumed to have relationships with the problem/statement. Variables with no relationships are ignored, and no further research will be conducted on them. To determine the causality of relations between dependent variables, it is required to do detailed causal, comparative, or experimental studies. Casualty (experimental) research examines the cause-effect relationship between the two variables. Cause and effect research often takes place by experimental design. With regards to the type of controlling variables, experimental research is classified into "field research" and "laboratory research" (Aziz, 2017).

### 3.3 Variables of the Study

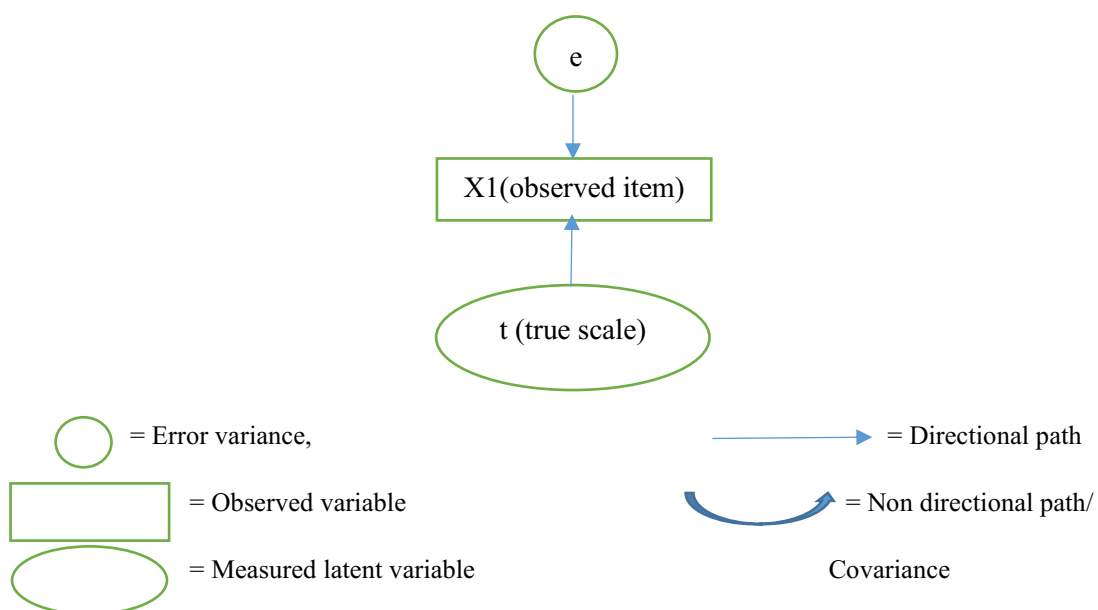
The sets of variables existing in the Structural Equation Model (SEM) are of two types:

- Observed variables
- Latent variables

The Structural Equation Model examines the causal models based on an assumption about the existence of a relationship between variables using a linear equation model. Due to the order of Structural Equation Model, it examines the theoretical relations between the determined, questionnaires, and responses/data the structures and estimates the causal relations among latent (hidden) variables and relations among measured (observed) variables. Independent variables, which are assumed to be measured without error, are called predictor variables, or known variables, and dependent variables are called response variables, or unknown variables. Manifest, or observed variables, are directly measured by the researcher, while latent variables, or hidden variables, are not measured directly, but are inferred from relations or correlations between the measured variables.

The Structural Equation Model has two components: the measurement model in which the latent variables are suggested and examined by Confirmatory Factor Analysis (CFA), and the structural model in which the latent variables and observed variables indicate the latent variables are interrelated in a logical way. The users of SEM display the relations between observed and hidden variables in a path diagram. This diagram, which plays an essential role in the Structural Equation Model, like a computer's flowchart, shows the connection of the variable with the lines of the causal relation. A path diagram can be used as a tool to demonstrate which variables cause changes to other variables. All the independent variables are like arrows leading toward dependent variables. The weight coefficient is placed on top of the arrow. It is important to note that, in addition to the indication of linear equations by arrows, the path diagram in the structural equation models has other aspects as well. First of all, to examine the structural equation model, the variance of the independent variables must be readily available at hand. The variance in the diagram is shown by the curve lines, but the tip of the arrows is not shown. Secondly, some of the variables are demonstrated by the shape of a circle (or oval) and some by the shape of a square (or rectangle). The oval indicates latent variables, and the rectangular or square shapes indicate the measured variables. The hidden residual variables are demonstrated by a circle (Byrne 2001). The main formula and shape of the SEM are  $X=t+e$

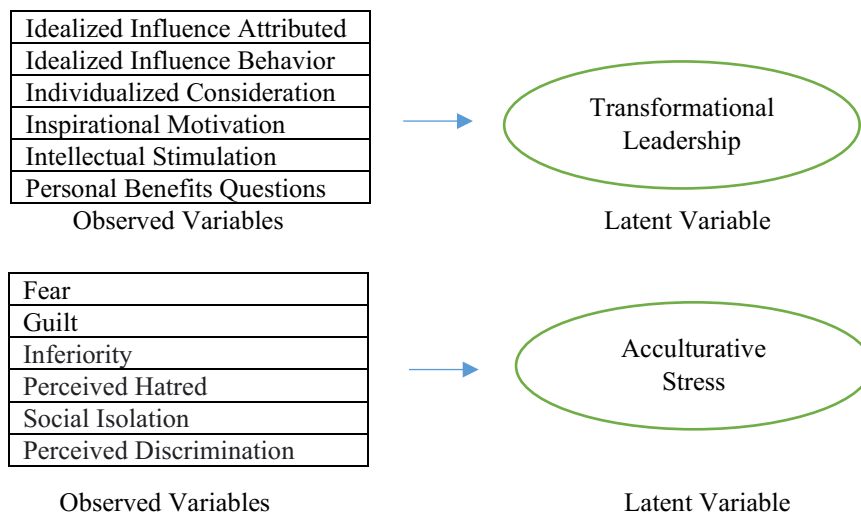
$X$  = Measure variable,  $t$  = True scale,  $e$  = Error



**Figure 3.2: Structural Equation Model**  
Source: Byrne 2001

The structural equation model is a strong multivariable technique of the type of multi-variation regression. In other words, it is a general linear model that allows the researcher to examine sets of regression equations of the same nature simultaneously. The structural equation model is a comprehensive statistical approach to examine the questionnaire responses about the relations between the observed and latent variables. This is also called the structural covariance model, the causality model, and sometimes Lisrel, but the best-known term is the structural equation model. In this research, the structural equation model with Smart PLS software was used to analyze data and examine the research questions (Hulland, J. 1999). Smart PLS is one of the prominent software applications for Partial Least Squares Structural Equation Modeling (PLS-SEM). It was established by Ringle, Wende, & Will (2005). Smart PLS is software with a graphical user interface for variance-based structural equation modeling (SEM) using the partial least squares (PLS) path modeling method. PLS-SEM is a regression-based modeling approach that uses a component-based (similar to principal component factor analysis) technique in analyzing path models (Vinzi et al. 2010 as cited in Rahmana et al. 2013, p.121). "PLS path models are comprised of two sets of linear equations: the outer model, also referred to as a measurement model, and the inner model, also referred to as a structural model" (Rahmana et al. 2013, p.121). Rahmana et al. (2013), p.121, citing Ringle et al. (2010). Finally, PLS-SEM is proven by smaller and medium sample sizes of less than 200 (Kock et al., 2018; Jamil, 2012). On the other hand, analysis of variance (ANOVA) and SPSS software are also used to influence the demographic variables in the Acculturative stress and Transformational Leadership as well. The variables of this research can be classified as follows see Appendix (A: 1.2 and 1.3 for the questionnaire):

### 1. Observed & Latent Variables



**Figure 3.3: Observed & Latent Variables**  
Source: Own Compilation

### 2. Independent Variable:

Transformational leadership and its dimensions, Demographical Factors

### 3. Dependent Variables:

Acculturative stress

### 3.4 Statistical Population and Sample Size

The statistical population is defined as a group of people or items that share one or more characteristics and is always indicated by N. The common attribute is the characteristic that is common among all the statistical population entities and distinguishes the statistical population from the rest of the population's types. Besides, the sample is a part or subset of elements that have already been selected from a population to conduct a study (Kothari, 2004). According to Kumar et al. (2013, p.122), sample size is described in terms of the "total number of subjects in the sample". Researchers decide to estimate an appropriate sample size based on the research approach, analytical method, number of variables or model complexity, time and resources, completion rate, research supervisor, sample size used for similar studies, and data analysis program (Memon et al., 2020). Different samples can be generated, such as:

- **Simple Random Sampling:** The elements are chosen from a random list.
- **Systematic Sampling:** The first part is chosen at random and then the rest of the part is selected at constant intervals.
- **Stratified Sampling:** This is done by dividing the population into parts that respond to established characteristics, then the individuals to participate in the study are chosen randomly.
- **Sampling by a Conglomerate:** The population is divided into heterogeneous groups and these, in turn, are subdivided into homogeneous groups with common characteristics to be studied according to the requirements of the researcher.

This research analyses the effects of transformational leadership on international students (master-level and PhD-level) in managing their acculturative stress and improving their intercultural communication skills at the University of Miskolc. For this research, stratified sampling considering the model structure, to achieve more assurance, a population size of 334 with 44 different cultures would be selected. Then, to determine how many sample sizes I needed based on my population size, I found out that at the mean, 180 or more measurements/surveys are needed to have a confidence level of 95% that the real value is within  $\pm 5\%$  of the measured/surveyed value (Sample Size Calculator). Therefore, among 334 international students, only 182 of them filled out the questionnaire (more than 50% of the total population size). Therefore, because my sample size was less than 250, I used PLS-SEM for running my data (Hwang et al., 2010; Wong, 2013; and Kock et al., 2018). On the other hand, I tend to investigate what type of organizational culture is applied at the University of Miskolc. As a result, I have a second sample size among international and local employees at the University of Miskolc. In this research, stratified sampling is used. Also, because the population size is 334, with 44 different nationalities, I would like to classify these 44 national cultures into seven main cultural clusters. This can be justified because each cultural cluster reflects a shared history, religion, economic development, and other factors (Mensah 2013).

1. **Anglo Cluster:** The Anglo cluster includes Great Britain, Australia, South Africa (White), Canada, New Zealand, Ireland, and the United States.

2. **West Europe**

Germanic Europe: It includes the Netherlands, Austria, and Switzerland.

Latin Europe: The Latin Europe cluster consists of the regions influenced by Roman culture, which rejected Protestant reforms: It includes Italy, Portugal, Spain, France, Switzerland (French-speaking), and Israel.

Nordic Europe is made up of the Scandinavian countries: It includes Finland, Sweden, Norway, and Denmark.

3. **East Europe:** The East European cluster includes Hungary, Russia, Kazakhstan, Albania, Poland, Greece, Slovenia, and Georgia.
4. **Latin America:** This includes Chile, Mexico, Peru, Venezuela, Costa Rica, Venezuela, Ecuador, Mexico, El Salvador, Colombia, Guatemala, Bolivia, Brazil, and Argentina.
5. **Africa and the Middle East**  
Sub-Saharan Africa: Nations in the Sub-Saharan African cluster include Namibia, Zambia, Zimbabwe, Nigeria, and South Africa (Black).  
Middle East: Includes Qatar, Morocco, Turkey, Egypt, and Kuwait
6. **Southern Asia:** The Southern Asia cluster includes Iran, India, Indonesia, the Philippines, Malaysia, Nepal, and Fiji.
7. **Confucian Asia:** This includes Taiwan, Singapore, Hong Kong, South Korea, China, and Thailand.

### 3.5 Data Collection Tools/Instruments

Questionnaires are thoughts, assumptions, solutions, and possible answers to the topic of research. A researcher must use some tools to gather the necessary data from the sample of the population and, by analyzing, processing, and converting the data into information, test the questionnaires. Different types of data collection tools are required to collect data. The type of these tools depends on different factors, such as nature and the research method. For the framework, the data collection tools used in this research are a review of the literature, interviews, and questionnaires. Furthermore, I will use both primary and secondary data for collecting my information. Also, to achieve my research objective, both qualitative and quantitative research methods will be used.

Primary data is collected by the investigator himself/ herself for a specific purpose. Table 3.1 lists the types of data in primary data collection.

**Table 3.1: Example of Primary Data in Social Research**

	<b>Solicited</b>	<b>Spontaneous</b>
<b>Quantitative</b>	Interview Survey, Mail Survey, Web Survey	Administrative Records such as databases
<b>Qualitative</b>	Open Interview, Focus Group	Existing Records such as Images

**Sources: Hox, J.J & Boeijs, H.R. (2005)**

Quantitative data is determined numerically in terms of objects, variables, and their values, but qualitative data involves an understanding of the details and context of the research subject.

Secondary data was collected by someone else earlier. This includes sources such as surveys, books, journal articles, and internal records.

#### 3.5.1 Interview

There are three types of interviews: unstructured, semi-structured, and structured. I used semi-structured interviews among the international students (MBA-Master level) when I was teaching personality development to them, which means that I had an idea to ask specific questions, but the questions didn't have a fixed structure. The main question was:

- What was your main problem when you were on campus?
- What has been the most important problem in establishing communication at Miskolc University?
- Has cultural diversity been a problem for you?
- Did you become aware of your self-awareness, such as your weaknesses and strengths (end of semester)?
- Did you improve your cultural awareness for better communication (end of semester)?

Semi-structured, face-to-face, and in-depth interviews were conducted in this research. When I was holding the course, these questions were asked of the international students (Master level) as part of the course during the personality development subject. It had about fifty international students between the 2020 and 2022 academic years (Spring Semester). And, there were almost 20 international students (Master-PhD levels) when I was holding a workshop regarding what is acculturative stress, how we can cope with it, and cultural awareness for developing intercultural communication skills (Hofstede model, 1980; and cross-cultural adaptability inventory) in October 2020 at the University of Miskolc. The main reason for these questions is that I decided to figure out the main problems of international students' acculturative stress at the organization and also whether my workshops and personality development courses have a positive effect on them or not. Consequently, my semi-structured interview sample size is approximately seventy (70). Table 3.2 presents my outcome:

**Table 3.2 Semi-structured Interview Result**

<b>Question</b>	<b>Result%</b>
What was your main problem when you were on campus?	More than 80% of the responses were related to dormitories (cultural differences and a shortage of dormitory facilities). Some students, for example, do not consider the dormitory regulations, such as cooking and sleeping time. They are also suffering from a shortage of public equipment such as kitchens and bathrooms, and in Muslim culture, they are looking for a specific place for praying.
What has been the most important problem in establishing communication at Miskolc University?	More than 80% was related to intercultural communication (little information about the host culture, such as late replies to emails or usage of the words "Nem Tudom" by university employees). Which can cause a lack of cultural understanding.
Has cultural diversity been a problem for you?	More than 80% of the responses were positive. For example, there is a shortage of international food options inside the campus. (Especially for Muslim culture).
<b>End of semester:</b> Did you become aware of your self-awareness, such as your weaknesses and strengths?	More than 90% of the responses were positive.
<b>End of semester:</b> Did you improve your cultural awareness for better communication?	More than 90% of the responses were positive.

**Source: Own Compilation**

The outcome is that improving cultural awareness and providing better facilities inside the dormitories are needed for managing acculturative stress and developing intercultural communication skills. Chavajay & Skowronek (2008) also argued that limited understanding of cultural diversity causes acculturative stress. According to previous studies, socialization

and social support for international students are the most powerful factors for acculturation (Baba & Hosoda, 2014; Zhang & Yung, 2018).

### 3.5.2 Questionnaire

Because of the COVID-19 condition, it would be extremely difficult to access all international students at a university in person. Therefore, in this study, I have chosen a questionnaire for data collection because it has advantages over other types of surveys, such as being cheap and not requiring as much effort to fill in. Also, technologies, such as Gmail and Whatsapp, have provided better and easier conditions for collecting information in a short time. So, in my study, I would like to use four types of constructs to achieve a highly significant outcome. These are:

- **Demographics Questionnaires:** How do demographic factors such as age, education, gender, and nationality influence acculturative stress and transformational leadership (four questions)? I will use the online method to collect my questionnaire (see Appendix A: 1.1 for the questionnaire).
- **Acculturative Stress Scale for International Students (ASSIS):** Bai, 2012; and Akhtar & Herwig, 2015 cited by Sandhu, 1994, determined from the specific questionnaire that international students demonstrated high levels of acculturative stress. In this research, I used 13 questions to analyze the acculturative stress among the international students at Miskolc University. I asked about their personal opinion regarding six factors which they would like to upgrade at the University of Miskolc as well (see Appendix A: 1.2 for the questionnaire).
- **MLQ-5X Subscales of Transformational and Transactional Leadership:** The Multifactor Leadership Questionnaire (MLQ-5X) is the standard instrument for assessing transformational and transactional leadership behavior (Bass & Avolio, 2000; Avolio & Bass, 2004). It has been translated into many languages and is used successfully by researchers and practitioners around the world (Rowold, 2005). In detail, I am going to use only five transformational (total of MLQ-5X is 20 questions plus four personal questions) question sets for the international student's questionnaire based on MLQ-5X (see Appendix A: 1.3 for the questionnaire).
- **Organizational Description Questionnaire:** According to the researchers of Bass and Avolio (1993), by providing the questionnaire (Organizational Description Questionnaire (ODQ)), I can identify cultures using and applying transformational leadership and transactional leadership among the international employees at the University of Miskolc. It includes 15 questions on transformational leadership and 4 questions on transactional leadership (see Appendix A: 1.4 for the questionnaire).

### 3.6 Validity of the Research Instrument

Validity means accuracy and authenticity, which means that the measurement tools should be able to measure the desired features and characteristics. Validity is critical because poor and insufficient measurements can render any scientific research useless and illegal. In general, validity refers to the researchers' accuracy of the measurement. Validity is classified into different types, and in my research, I used some of them, such as:

- Construct validity
- Convergent validity
- Discriminant validity
- Face validity



In this research, construct validity, convergent validity, face validity, and discriminant validity are reviewed. Therefore, in the following page, I will describe these four types of validities.

### **3.6.1 Construct Validity**

Scholars should check the construct validity of their research and choose the best theorized concept. In this regard, the more construct validity is employed, the more validity can be constructed (Malhotra & Stanton, 2004). Construct validity includes two types of validity: convergent validity and discriminant validity.

### **3.6.2 Convergent Validity**

Convergent validity is evaluated by the Average Variance Extracted (AVE), and it shows that the degree of one-dimension is correlated with its questions, which means that the higher the correlation, the better the fit. A value of AVE above 0.5 indicates acceptable convergence (Fornell & Larcker, 1981).

### **3.6.3 Discriminant Validity**

One method that is used for examining discriminant validity is the Fornell and Larcker matrices. This is a measure by which one dimension is properly distinguished from other dimensions and indicates that one dimension is unique. Overall, discriminant validity refers to observed constructs that should not be related to each other (Hair et al., 2010).

### **3.6.4 Face Validity**

Face validity is a preliminary concept of content validity. Face validity measures what it is supposed to measure. Face validity shows the elements that are supposed to measure a concept. They measure the face of the concept and make it look like they are going to measure the concept. To measure face validity, the questionnaire and its content are reviewed by the research supervisor and advisor, and their comments are applied to the research.

## **3.7 Reliability of Research Measurement Tools**

One of the measurements' technical tools is the degree of reliability. The mentioned concept deals, within equal circumstances, with to what extent the same results are drawn from the measurement tools. One of the definitions of reliability is given by Ebel and Frisbie (1972): the correlation between a set of marks and another set of marks in an equal test that is achieved independently. With regards to this definition, the coefficient of reliability varies between 0 (no relation) and 1 (complete relation). The coefficient of reliability shows to what extent the measurement tools measure stable testable characteristics or temporary changeable characteristics. Furthermore, the reliability of a test can vary in different circumstances. and also from one group to another. There are different methods to calculate the coefficient of reliability of measurement tools, some of which are:

- Test-retest method
- Factor load coefficients
- Composite reliability
- Split-half method

- Kuder-Richardson method
- Cronbach's Alpha method

In this research, the Cronbach's alpha, composite reliability, and factor load coefficients are used to evaluate the reliability.

### 3.7.1 Cronbach's Alpha Method

This method is used to calculate the internal integrity of measurement tools such as questionnaires or experiments that examine different characteristics. In this tool, the answers to each question could be any number. To calculate the Cronbach's alpha coefficient, first, the variance of the numbers of each question in the questionnaire should be calculated, and then the total variance should be calculated. Then, use the following formula to calculate the coefficient of alpha (Cronbach, 1951).

$$r_{\alpha} = \frac{j}{j-1} \left( 1 - \frac{\sum S_j^2}{s^2} \right)$$

Where  $j$  = the number of subsets of questions of the questionnaire;  $S_j^2$  = variance of the  $j$ 's sub-test, and  $S^2$  = total variance

### 3.7.2 Composite Reliability

Composite reliability is modern reliability, and it was developed by Werts, Linn, and Joreskog (1974), which measures a construct's reliability in the measurement model. The composite reliability is calculated using the following equation:

$$\text{Composite reliability} = \frac{(\sum \text{standardized loading})^2}{(\sum \text{standardized loading})^2 + \sum \epsilon_j}$$

Source: Hair et al (1998, p.624)

The composite reliability index that exceeds 0.70 indicates satisfactory internal consistency (Hair et al. 1998).

The Average Variance Extracted (AVE) relates to the quantity of variance confined by the construct versus the amount due to measurement error (Hair et al. 2006). Malhotra and Stanton (2004) noted that the AVE should be greater than 0.50 to validate employing a construct.

$$\text{Variance Extracted} = \frac{\sum (\text{standardized SMC})^2}{\sum (\text{standardized SMC})^2 + \sum \epsilon_j}$$

Source: Hair et al (1998, p. 624)

After determining the research method and using the adequate tools to gather data to examine the questionnaires, it is time for the researcher to use the adequate statistical technique that is compatible with the research method and the types of variables to classify the gathered data and analyze them, and at the end, examine the questionnaires used in the research paper that guided the research to this point.

### 3.8 The Importance of Relevance and My Expectations

During the last decade, the topic concerning leadership has grown very widely, especially concerning transformational leadership's ability and skills, which could improve the individual personalities in multicultural organizations. Based on the previous studies concerning this type of leadership, I would like to use transformational leadership to improve international students' acculturative stress and their intercultural communication skills at the University of Miskolc. This type of leadership has four main characteristics and abilities, which I have already explained in the previous chapter. Also, by using the Hofstede model of national culture, international students can strengthen their knowledge concerning cross-cultural-awareness as well, which would build trust, integrity, and better communication skills among them. I believe that, after finishing this process, I can come up with a very good result regarding improving international students' communication skills and cultural understanding, and I will also be able to improve my leadership skills.

After providing the questionnaire and holding a four-semester class and a few workshops with the international students, I decided to create an online survey to gather information from the international students' community. The choice of the students was constrained by the outbreak of COVID-19, which has minimalized my chances of contact with the surveyed group, and I had to select the subjects of the survey at random. I also conducted an online survey among the employees of Miskolc University. Unfortunately, because of the pandemic and language barriers, I could only acquire answers from 10% of the employees, who were mostly closely related to international studies. Based on the sources of collected data, the surveyed group has one thing in common: they are international students who are enrolling either at the Master or PhD level.

## CHAPTER FOUR DATA ANALYSING

### 4.1 Data Analysing

Statistics and data analysis are divided into descriptive and inferential parts. In the descriptive statistics section, with the help of frequency tables and graphs, the data are summarized and the obtained information for the studied population is presented. Although the description of the conditions prevailing in a society can lead to analyses of them, for presenting a definite result and generalizing it to the whole society, stronger evidence is needed, which is done through appropriate tests in inferential statistics. In this chapter, in the descriptive statistics section, the information obtained from the questionnaire is shown in the tables, and in the inferential statistics section, the research questions are examined and analyzed by applying model techniques.

### 4.2 Descriptive Statistics

#### 4.2.1 Demographic Factors

The demographic characteristics of international students who participated in this research, such as gender, age, education, and nationality, are shown in some tables. Based on the International Relations Office report, the total number of international students at the University of Miskolc in 2021–2022 was 334 (population size). Among 334 international students, only 182 filled out the questionnaire. Therefore, in this research, the total sample size of international students at the University of Miskolc is 182. Tables 4.1, 4.2, and 4.3 show the characteristics and diversity of nationalities among international and Hungarian students at the University of Miskolc.

**Table 4.1: Descriptive Statistics of Demographic Characteristics of Participants in the Study**

		N	N %
Gender	Male	119	61%
	Female	62	38.4%
	I prefer not to say	1	0.6%
Age	<=30	117	64.3%
	>30	65	35.7%
Degree Course	Master	116	63.7%
	PhD	66	36.3%

**Source: Own Compilation**

The result shows that male students (61%) under the age of 30 (64.3%), studying for a master's degree (63.7%), gave the most answers. Table 4.2 shows the population size and the different nationalities represented among international students at the University of Miskolc.

Table 4.2: Number of International Students and Nationalities Participating at Miskolc University (2021-2022)

	Scholarship Students & Self-Financing Students		Number of Participation
No.	Country/Culture	No. of Students	
1	Algeria	5	3
2	Angola	4	1
3	Argentina	1	0
3	Azerbaijan	10	3
4	Bangladesh	3	1
5	Brazil	6	4
6	Cambodia	3	0
7	China	1	1
8	Colombia	2	2
9	Ecuador	7	6
10	Egypt	9	5
11	Eritrea	1	0
12	Ethiopia	5	2
13	Ghana	7	5
14	India	32	24
15	Indonesia	4	3
16	Iran	13	13
17	Iraq	47	25
18	Jordan	21	15
19	Kazakhstan	3	1
20	Kenya	8	6
21	Kyrgyzstan	1	0
22	Laos	2	2
23	Malaysia	1	0
24	Mexico	1	0
25	Mongolia	2	1
26	Morocco	11	4
27	Myanmar (Burma)	1	0
28	Nigeria	5	5
29	Pakistan	21	9
30	Palestine	4	4
31	Peru	1	1
32	Philippines	1	0
33	Russia	1	0
34	South Africa	1	1
35	Sudan	5	2
36	Syria	38	12
37	Tanzania	2	1
38	Togo	1	0
39	Tunisia	23	9
40	Turkey	6	2
41	Uzbekistan	4	4
42	Ukraine	2	2
43	Vietnam	4	1

44	Yemen	4	2
	<b>Total</b>	<b>334</b>	<b>182</b>

Source: International Office at the University of Miskolc; 2022 & Own Compilation

For better interpretation, I categorized these forty-four different nationalities into cultural clusters (Mensah 2013). Table 4.3 presents the results.

**Table 4.3: Represented Cultural Clusters among the International Students and Percentages at University of Miskolc**

Cultural Clusters	Including	Country	Cases	N %
1.East Europe	Hungary, Russia, Kazakhstan, Albania, Poland, Greece, Slovenia, and Georgia	Kazakhstan	1	1.6%
		Ukraine	2	
2.Latin America	Includes Chile, Mexico, Peru, Venezuela, Costa Rica, Venezuela, Ecuador, Mexico, El Salvador, Colombia, Guatemala, Bolivia, Brazil, and Argentina	Brazil	4	7.1%
		Colombia	3	
		Ecuador	5	
		Peru	1	
3.Africa and the Middle East	Sub-Saharan Africa	Angola	1	60.9%
		Ethiopia	2	
		Ghana	5	
		Kenya	6	
		Nigeria	5	
		South Africa	1	
		Tanzania	1	
	Middle East	Algeria	3	60.9%
		Azerbaijan	3	
		Egypt	5	
		Palestine	4	
		Iraq	25	
		Jordan	15	
		Morocco	4	
		Sudan	2	
		Syria	12	
		Turkey	2	
		Tunisia	9	

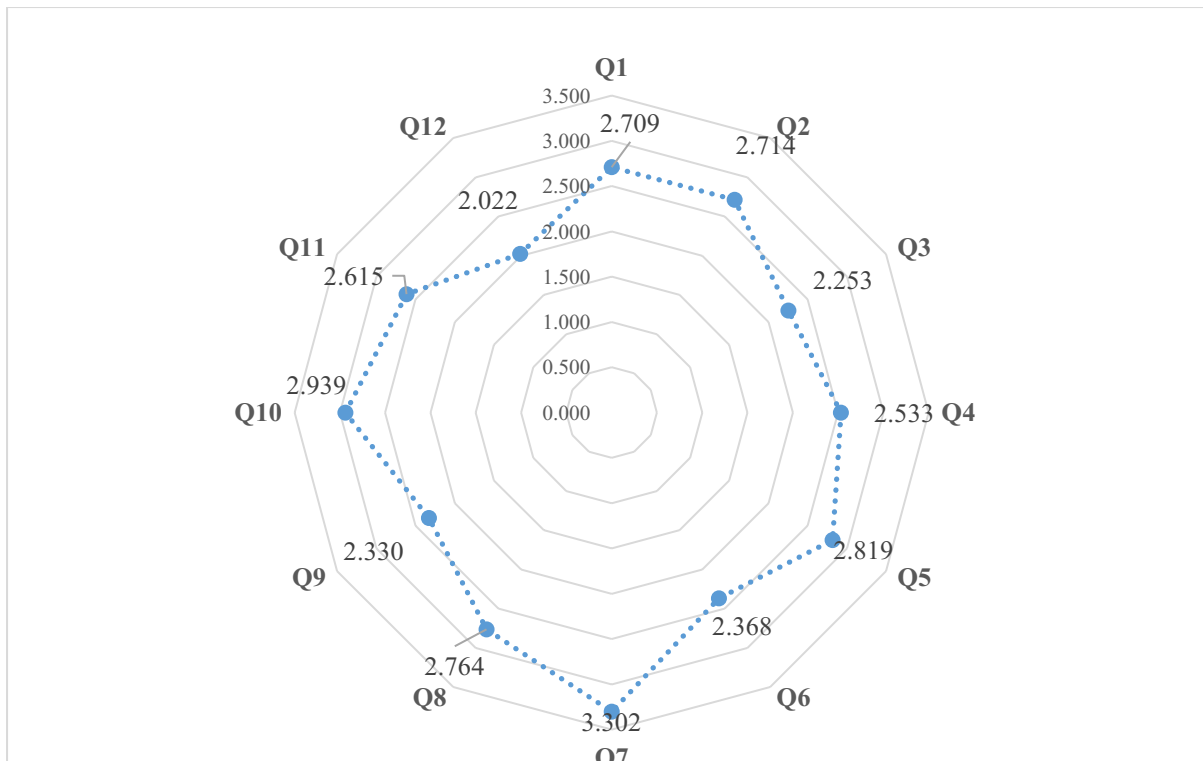
		Uzbekistan	4	
		Yemen	2	
4. Southern Asia	Iran, India, Indonesia, the Philippine, Nepal and Fiji, Pakistan	Bangladesh	1	26.9%
		Pakistan	9	
		Iran	13	
		India	24	
		Indonesia	2	
5. Confucian Asia	Taiwan, Singapore, Hong Kong, South Korea, China, Japan, Thailand	China	2	3.2%
		Mongolia	1	
		Laos	2	
		Vietnam	1	

Source: Own Compilation

According to Table 4.3, the University of Miskolc includes a diversity of cultures. And most participants belonged to the African and Middle East cultural clusters (60.9%). Therefore, to be able to statistically analyse the cultural diversity at the University of Miskolc, I have to divide it into two main parts: Africa and the Middle East cultural cluster and other cultural clusters.

#### 4.2.2 Investigating the Mean of Acculturative Stress based on the Spider Web Diagram

The mean of analyzing acculturative stress (ASSIS) based on the spider web diagram are used to analyze and determine which factors of acculturative stress had the greatest effect on the international students. Figures 4.1 and 4.2 present the most and least common problems in the ASSIS questionnaire and my personal questionnaire among the international students, respectively.



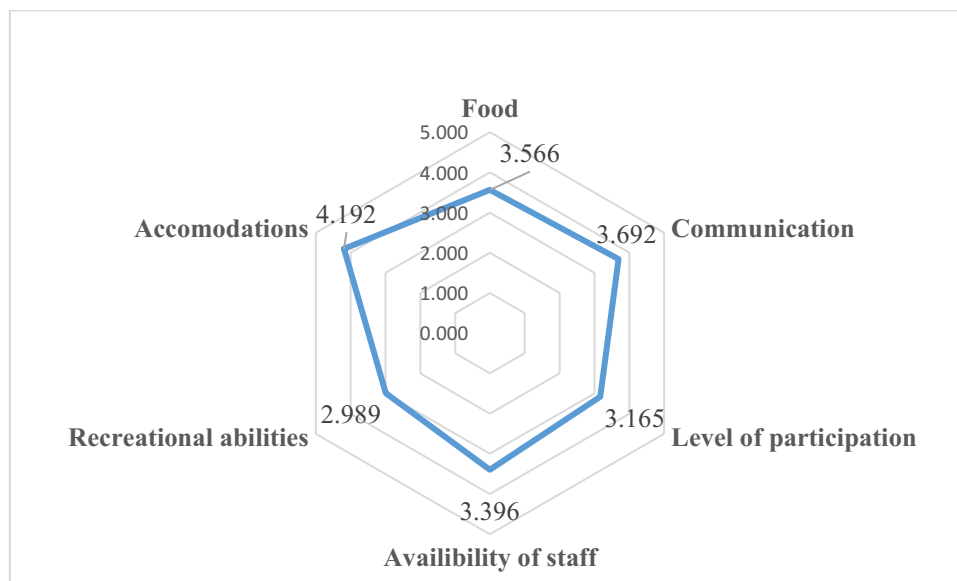
**Figure 4.1: Mean of ASSIS**  
Sources: Own Compilation

- Q1: Perceived Discrimination:** I feel that I receive unequal treatment.
- Q2: Social Isolation:** I am treated differently in social situations.
- Q3: The Threat to Cultural Identity:** I am losing my ethnic identity.
- Q4: Inferiority:** I feel sad living in unfamiliar surroundings here.
- Q5: Homesickness:** I feel sad living in these unfamiliar surroundings.
- Q6: Fear:** I feel insecure here, I feel intimidated to participate in social activities.
- Q7: Anger/Disappointments:** I get angry when people use racial slurs and jokes about my culture.
- Q8: Mistrust:** It is hard for me to make trustworthy friends here.
- Q9: Communication Problems:** I feel nervous to communicate with other students.
- Q10: Culture Shock:** I feel uncomfortable to adjust to new foods.
- Q11: Perceived Hatred:** Some people show hatred toward me because of different ethnic background.
- Q12: Guilt:** I feel guilty that I am living a different lifestyle here.

According to Figure 4.1, the greatest problems of international students are related to Q7 which shows that the shortage of knowledge concerning other cultures is widespread. This can lead to the main problems, such as mocking and a lack of respect for other cultures. As I have already discussed in the literature review, the Intercultural Development Continuum (IDC) is a set of skills such as knowledge, attitudes, and orientations toward cultural difference and commonality that are arrayed along a continuum from the more mono-cultural mind-sets of Denial and Polarization through the transitional orientation of Minimization to the intercultural or global mindsets of Acceptance and Adaptation (Bennett, 1998). The capability of deeply shifting cultural perspective and bridging behavior across cultural differences is most fully achieved when one maintains an Adaptation perspective. Also, according to Kim (2001), improving communication skills is a main key for cultural adaptation. Adjusting to new foods (especially Hungarian foods) and homesickness are also issues for international students, indicating that managers should begin to consider these issues as well. For example, increasing specific activities related to managing acculturative stress, such as personality development, improving cultural awareness, developing the diversity of cultural values and norms, and



attempting to provide international food at the organization at least one or two days per week can help international students tolerate being away from home (home sicknesses). The next figure shows the mean of the personal questionnaire outcome:



**Figure 4.2: Mean of Personal Questionnaire**  
Sources: Own Compilation

- Q1:** Food
- Q2:** Communication
- Q3:** Level of participation.
- Q4:** Availability of staff
- Q5:** Recreational abilities
- Q6:** Accommodation

The results are shown in Figure 4.2 that international students are not satisfied with the accommodation and other resources. According to my semi-interview result, some international students are not aware of the policies in the dormitory, such as the timing of sleeping or cooking. Or even if they used to cook foods from their home country, which do not elicit the same positive feelings in other cultures, such as the smell of food. So it could be a good strategy for the dormitory managers to determine the students' culture or similarity to their culture and provide more facilities for better feelings and comforting results. Communication and food again show the major problems, respectively, so developing intercultural communication skills and considering international foods are needed. Last but not least, the availability of staff causes additional issues for international students. According to the international office report, most international students belong to Africa and the Middle East cultural clusters. This means that they are collectivist; they have high power distance in society; and they have high uncertainty avoidance, which means that they need the hierarchy strategy to make decisions together and they dislike ambiguity (Hofstede, 1980). Therefore, it could be good for the employees to be a little bit more flexible in their answers and availability. In my opening, awareness regarding international students' cultures can help international students tolerate being away from home.

### 4.3 Inferential Statistics

To investigate the research questions about the impact of transformational leadership and its dimensions on acculturative stress, a structural equation model with Smart PLS software using partial least squares (PLS) has been used (Wetzels et al., 2009). The structural equation model can be used as a tool for showing which variables could cause changes in the other variables. If the model being drawn is confirmed and the data fits with the parameters of the model, then that model can be used to test questions about the existence of a causal relationship between variables in the path diagram. Analysis of variance (ANOVA) and SPSS software are also used to influence the demographic variables on the dimensions of the transformational leadership and acculturative stress as well. In this research, I will analyze the characteristics of the drawn model based on the conceptual models of the research (Figures 4.3 and 4.4), and after that, I will examine the objectives of the questions in my research.

#### 4.3.1 Investigating the Structural Model Indicators of the Impact of Leadership on Acculturative Stress

The conceptual model shown in Figure 4.3 shows the impact of transformational leadership on acculturative stress. For data analysis and model fit in Smart PLS software, and three stages of evaluation of the measurement model (validity, reliability, and structural model evaluation), I examine all these three factors. After confirming the model and using the desired indicators, I will examine the questions.

##### 4.3.1.1 Evaluation of Measurement Model (Validity and Reliability)

To evaluate the model's measurement, Cronbach's alpha, composite reliability, factor load coefficients, convergent validity, and discriminant validity are used. Cronbach's alpha is a classic measure of reliability and internal consistency. Values of this criterion above 0.7 indicate a high amount of variance between one dimension and related questions (Cronbach 1951). Thus, the results in Table 4.5 indicate the acceptance of the model's variables. Composite reliability is a more modern criterion than Cronbach's alpha. In this model, the reliability of the dimensions is calculated according to the factor load of the questions, and values above 0.7 are desirable for this index (Nunnally, 1978). According to the results in Table 4.4, the composite reliability of the latent variables introduced in the model indicates the strong reliability of the extracted factors except for the acculturative stress. When instead, convergent validity is evaluated by the Average Variance Extracted (AVE), results show the degree to which one-dimension has correlated with its questions, the higher the correlation, the better the fit. The value of the AVE above 0.5 is indicated as an acceptable convergence (Fornell & Larcker, 1981). According to the results, the latent variables introduced in the model are above 0.6 (Table 4.4), so it is desirable except for acculturative stress.

**Table 4.4: Cronbach's Alpha Coefficient, Composite Reliability, and Convergent Validity of each Dimension in the Impact of Leadership in Acculturative Stress**

Dimensions	Cronbach's Alpha	Composite Reliability	Average Variance Extracted (AVE)
Acculturative Stress	0.891	0.670	0.194
Idealized Influence Attributed	0.806	0.873	0.636

<b>Idealized Influence Behavior</b>	<b>0.804</b>	<b>0.865</b>	<b>0.563</b>
<b>Individualized Consideration</b>	<b>0.808</b>	<b>0.874</b>	<b>0.634</b>
<b>Inspirational Motivation</b>	<b>0.859</b>	<b>0.914</b>	<b>0.780</b>
<b>Intellectual Stimulation</b>	<b>0.868</b>	<b>0.910</b>	<b>0.718</b>
<b>Personal benefits</b>	<b>0.801</b>	<b>0.870</b>	<b>0.627</b>
<b>Transformational Leadership</b>	<b>0.941</b>	<b>0.947</b>	<b>0.668</b>

Source: Own Compilation

Considering that the value of the AVE index for acculturative stress is much smaller than the value of 0.5, I decided to remove some questions related to the acculturative stress questionnaire from the model to correct this index. To remove the questions, I started with the questions whose factor loading value was the lowest and very small (less than 0.4). I continued to remove questions until the AVE index for acculturative stress approaches 0.5. Therefore, the following questions were deleted in order, and as a result, the AVE value increased to an acceptable value of 0.513.

- Culture Shock: I feel uncomfortable to adjust to new foods
- Anger/Disappointments: I get angry when people use racial slurs and jokes about my culture.
- Homesickness: I feel sad living in these unfamiliar surroundings
- Mistrust: It is hard for me to make trustworthy friends here
- The Threat to Cultural Identity: I am losing my ethnic identity.
- Communication Problems: I feel nervous to communicate with other students.

Table 4.5: Cronbach's Alpha Coefficient, Composite Reliability, and Convergent Validity of Each Dimension in the Model after Removing The Questions

<b>Dimensions</b>	<b>Cronbach's Alpha</b>	<b>Composite Reliability</b>	<b>Average Variance Extracted (AVE)</b>
<b>Acculturative Stress</b>	<b>0.860</b>	<b>0.860</b>	<b>0.513</b>
<b>Idealized Influence Attributed</b>	<b>0.806</b>	<b>0.873</b>	<b>0.636</b>
<b>Idealized Influence Behavior</b>	<b>0.804</b>	<b>0.865</b>	<b>0.563</b>
<b>Individualized Consideration</b>	<b>0.808</b>	<b>0.874</b>	<b>0.634</b>
<b>Inspirational Motivation</b>	<b>0.859</b>	<b>0.914</b>	<b>0.780</b>
<b>Intellectual Stimulation</b>	<b>0.868</b>	<b>0.910</b>	<b>0.718</b>
<b>Personal benefits</b>	<b>0.801</b>	<b>0.870</b>	<b>0.627</b>
<b>Transformational Leadership</b>	<b>0.941</b>	<b>0.947</b>	<b>0.668</b>

Source: Own Compilation

Another indicator of reliability confirmation is the measurement of factor loads. It is calculated by the correlation value of one-dimensional questions with that dimension; if this value is

greater than or equal to 0.4 (Hulland, 1999), the reliability of the measurement model is acceptable. In Table 4.6, I present these results.

Table 4.6: Factor Load of Questions in the Model

Outer Model	Direct Effects	T Statistics	P Values	Confidence Inrvl	
				2.5%	97.5%
Fear <- Acculturative Stress	0.523	2.038	0.042	-0.240	0.810
Guilt <- Acculturative Stress	0.784	2.903	0.004	-0.276	0.891
Perceived Discrimination <- Acculturative Stress	0.706	3.064	0.002	-0.020	0.861
Perceived Hatred <- Acculturative Stress	0.847	3.548	0.000	-0.089	0.896
Social Isolation <- Acculturative Stress	0.809	3.456	0.001	0.002	0.905
Inferiority <- Acculturative Stress	0.563	2.236	0.025	-0.190	0.820
IC: different needs <- Individualized Consideration	0.741	14.307	0.000	0.621	0.824
IC: individual <- Individualized Consideration	0.783	16.682	0.000	0.676	0.858
IC: strengths <- Individualized Consideration	0.835	36.007	0.000	0.786	0.877
IC: teaching and coaching <- Individualized Consideration	0.823	31.623	0.000	0.767	0.869
IIA: purpose <- Idealized Influence Attributed	0.876	46.325	0.000	0.834	0.909
IIA: values and beliefs <- Idealized Influence Attributed	0.660	11.500	0.000	0.530	0.754
IIA: mission <- Idealized Influence Attributed	0.795	23.627	0.000	0.723	0.854
IIA: moral and ethical <- Idealized Influence Attributed	0.841	34.319	0.000	0.790	0.885
IIB: respect <- Idealized Influence Behavior	0.832	26.545	0.000	0.765	0.888
IIB: Instils pride <- Idealized Influence Behavior	0.721	19.572	0.000	0.643	0.788
IIB: power and confidence <- Idealized Influence Behavior	0.728	14.246	0.000	0.614	0.811
IIB: self-interest <- Idealized Influence Behavior	0.692	12.815	0.000	0.573	0.784
IIB: trust <- Idealized Influence Behavior	0.770	20.325	0.000	0.688	0.836
IM: accomplished <- Inspirational Motivation	0.884	34.722	0.000	0.826	0.924
IM: achieved <- Inspirational Motivation	0.888	45.789	0.000	0.846	0.921
IM: optimistically <- Inspirational Motivation	0.878	45.636	0.000	0.835	0.911
IS: Re-examines <- Intellectual Stimulation	0.802	23.299	0.000	0.724	0.860
IS: different angles <- Intellectual Stimulation	0.849	31.196	0.000	0.787	0.895

<b>IS: differing perspectives &lt;- Intellectual Stimulation</b>	0.891	53.495	<b>0.000</b>	0.855	0.920
<b>IS: new ways &lt;- Intellectual Stimulation</b>	0.844	31.052	<b>0.000</b>	0.784	0.890
<b>PB: acculturative stress &lt;- Personal benefits</b>	0.835	27.816	<b>0.000</b>	0.767	0.884
<b>PB: communication skills &lt;- Personal benefits</b>	0.816	30.850	<b>0.000</b>	0.761	0.864
<b>PB: community &lt;- Personal benefits</b>	0.734	15.996	<b>0.000</b>	0.632	0.811
<b>PB: interests &lt;- Personal benefits</b>	0.778	19.529	<b>0.000</b>	0.689	0.846

Source: Own Compilation

Based on the results, the factor loads of all questions (standard estimates) are above 0.7, which is determined to be a desirable amount. To investigate the significance level of factor loads which are drawn in the path model, the significance of path coefficients has been used. Measuring the variable is shown by the numbers (t): if the value of these numbers is greater than 1.96, there is a significant relationship between the questions and the relevant dimension. Therefore, the model confirms when all the questions considered in the model have significant t numbers (above 1.96).

Discriminant validity is the measure by which one dimension is properly distinguished from other dimensions and indicates that one dimension is unique. One method for examining discriminant validity is the Fornell and Larcker matrices. In this method, the correlation between one-dimensional questions and other dimensions is compared; if the values on the principal diameter, which are the same as the square root of the AVE, are higher than the correlation between them (sub-diameter values), this indicates proper discriminant validity and a good fit for the measurement model. According to Table 4.7, the values at the main diameter are higher than the sub-diameters, and the model has good discriminant validity.

Table 4.7: Discriminant Validity of Fornell-Larker Matrix Method

	Acculturative Stress	Idealized Influence Attributed	Idealized Influence Behavior	Individualized Consideration	Inspirational Motivation	Intellectual Stimulation	Personal benefits
Acculturative Stress	<b>0.716</b>						
Idealized Influence Attributed	-0.106	<b>0.797</b>					
Idealized Influence Behavior	-0.112	0.627	<b>0.750</b>				
Individualized Consideration	-0.175	0.596	0.561	<b>0.796</b>			
Inspirational Motivation	-0.218	0.626	0.573	0.723	<b>0.883</b>		
Intellectual Stimulation	-0.157	0.533	0.562	0.682	0.645	<b>0.847</b>	
Personal benefits	-0.251	0.497	0.469	0.652	0.637	0.627	<b>0.792</b>

Source: Own Compilation

Another indicator for evaluating the discriminant validity of the measurement model is the cross-loading matrix. In this method, the degree of one-dimensional correlation with that

dimension and the degree of correlation between one-dimensional questions and other dimensions are compared. In this case, if the correlation of the questions with their dimensions is less than the correlation of the questions with other dimensions, the discriminant validity of the model is called into question (Hensler et al. 2009). These results are shown in Table 4.8, where the yellow cells indicate the correlation of the questions with their dimension.

**Table 4.8: Discriminant Validity by Cross-Loading Matrix**

	Acculturative Stress	Idealized Influence Attributed	Idealized Influence Behavior	Individualized Consideration	Inspirational Motivation	Intellectual Stimulation	Personal Benefits
<b>Fear</b>	0.523	0.028	-0.013	0.038	0.040	0.045	-0.041
<b>Guilt</b>	0.784	-0.084	-0.131	-0.146	-0.163	-0.131	-0.203
<b>Perceived Discrimination</b>	0.706	-0.024	-0.054	-0.002	-0.073	-0.023	-0.109
<b>Perceived Hatred</b>	0.847	-0.102	-0.003	-0.160	-0.179	-0.101	-0.208
<b>Social Isolation</b>	0.809	-0.059	-0.110	-0.116	-0.175	-0.137	-0.187
<b>Inferiority</b>	0.563	0.045	0.048	0.052	-0.013	0.036	-0.009
<b>IC: different needs</b>	-0.058	0.371	0.343	0.741	0.379	0.421	0.495
<b>IC :individual</b>	-0.055	0.449	0.411	0.783	0.565	0.511	0.419
<b>IC: strengths</b>	-0.255	0.535	0.573	0.835	0.664	0.666	0.612
<b>IC: teaching and coaching</b>	-0.153	0.522	0.429	0.823	0.653	0.540	0.532
<b>IIA: purpose</b>	-0.142	0.876	0.551	0.557	0.571	0.429	0.487
<b>IIA: values and beliefs</b>	0.010	0.660	0.286	0.385	0.384	0.293	0.313
<b>IIA: mission</b>	-0.116	0.795	0.591	0.452	0.467	0.481	0.381
<b>IIA: moral and ethical</b>	-0.063	0.841	0.527	0.492	0.554	0.476	0.389
<b>IIB: respect</b>	-0.119	0.509	0.832	0.491	0.510	0.493	0.386
<b>IIB: Instils pride</b>	0.037	0.428	0.721	0.395	0.444	0.386	0.337
<b>IIB: power and confidence</b>	-0.074	0.480	0.728	0.330	0.339	0.344	0.296
<b>IIB: self-interest</b>	-0.101	0.496	0.692	0.370	0.360	0.380	0.383
<b>IIB: trust</b>	-0.149	0.444	0.770	0.496	0.477	0.482	0.352
<b>IM: accomplished</b>	-0.223	0.598	0.563	0.660	0.884	0.602	0.596
<b>IM: achieved</b>	-0.194	0.521	0.487	0.591	0.888	0.504	0.500
<b>IM: optimistically</b>	-0.159	0.536	0.466	0.662	0.878	0.597	0.585
<b>IS: Re-examines</b>	-0.103	0.452	0.402	0.565	0.539	0.802	0.591
<b>IS: different angles</b>	-0.101	0.459	0.503	0.538	0.554	0.849	0.487
<b>IS: differing perspectives</b>	-0.169	0.486	0.510	0.622	0.594	0.891	0.556
<b>IS:new ways</b>	-0.156	0.409	0.485	0.582	0.495	0.844	0.488
<b>PB: acculturative stress</b>	-0.187	0.397	0.417	0.555	0.518	0.504	0.835
<b>PB: communication skills</b>	-0.191	0.411	0.367	0.553	0.553	0.549	0.816
<b>PB: community</b>	-0.233	0.268	0.324	0.443	0.476	0.463	0.734
<b>PB: interests</b>	-0.192	0.486	0.372	0.503	0.466	0.465	0.778

Source: Own Compilation

Based on Table 4.8, the correlation of questions with their own dimensions is higher than the correlation of questions with other dimensions, and this shows the validity of the measurement model.

#### 4.3.1.2 Evaluation of Structural Model

To evaluate the structural model, which includes the ability to predict the predictor variables of the model from the criteria of the model, the coefficient of determination ( $R^2$ ) and ( $Q^2$ ) have been used.  $R^2$  is a criterion used to connect the measurement part and the structural part of the structural equation model and shows the effect an exogenous variable has on the endogenous variable. In the coefficient of determination, 0.19, 0.33, and 0.67 indicate weak, medium, and strong values, respectively (Chin 1998). Henseler et al. (2009) argued that if in one model, one endogenous dimension is affected by only one or two exogenous dimensions and the value of  $R^2$  is 0.33 or above, this indicates the strength of the relationship between those dimensions and the endogenous dimension in the model. Referring to Table 4.9, except in the case of acculturative stress, which is less than 0.19 and is unfavorable. The  $Q^2$  indicator was introduced by Stone and Geisser and determines the predictive power of the model. Hensler et al. (2009) determined the predictive power of the model as 0.02, 0.15, and 0.35, where 0.02 indicates poor predictive power. As it can be seen in the present model, this amount for all defined endogenous variables except for acculturative stress is above 0.15, and in the case of acculturative stress it is less than 0.15, which again shows the strength of the poor vision of transformational leadership for acculturative stress.

**Table 4.9: The Values of the R2 and Q2 Dimensions of the Model**

	<b>R2</b>	<b>Q2</b>
<b>Acculturative Stress</b>	0.043	0.002
<b>Idealized Influence Attributed</b>	0.617	0.385
<b>Idealized Influence Behavior</b>	0.600	0.328
<b>Individualized Consideration</b>	0.742	0.457
<b>Inspirational Motivation</b>	0.730	0.562
<b>Intellectual Stimulation</b>	0.698	0.496
<b>Personal benefits</b>	0.621	0.384

Source: Own Compilation

#### 4.3.1.3 General Evaluation of the Model

For evaluating the fitting of the general research model, the criterion SRMR (Standard Root Mean Square Residual) has been used in this research. A lower index shows a stronger fit of the model, and values less than 0.08 are considered optimal values (Hu & Bentler 1999). The results show that the value of the index obtained for the model is close to the desired value. Another measure of the overall fit of the model is the Goodness of Fit (GOF) index. Wetzel et al. (2009) introduced the three values of 0.01, 0.25, and 0.36 as weak, medium, and strong values for the GOF index. According to Table 4.10, in the assumed model, this value is within the allowable range, and the developed model is within the acceptable range and shows the optimal fit of the model.

Table 4.10: The Overall Fit Index of the Model

	Estimated Model
SRMR	0.112
GOF	0.607

Source: Own Compilation

The structural equation model considered for the transformational leadership influence model on acculturative stress is presented in Figure 4.3. According to the drawn model and that in the assumed model, the effectiveness of transformational leadership from each of its dimensions and their significance is one of the factors that show the approval of the overall structure of the conceptual model of the research, so the results of this effectiveness and its significance. It is presented in Table 4.11.

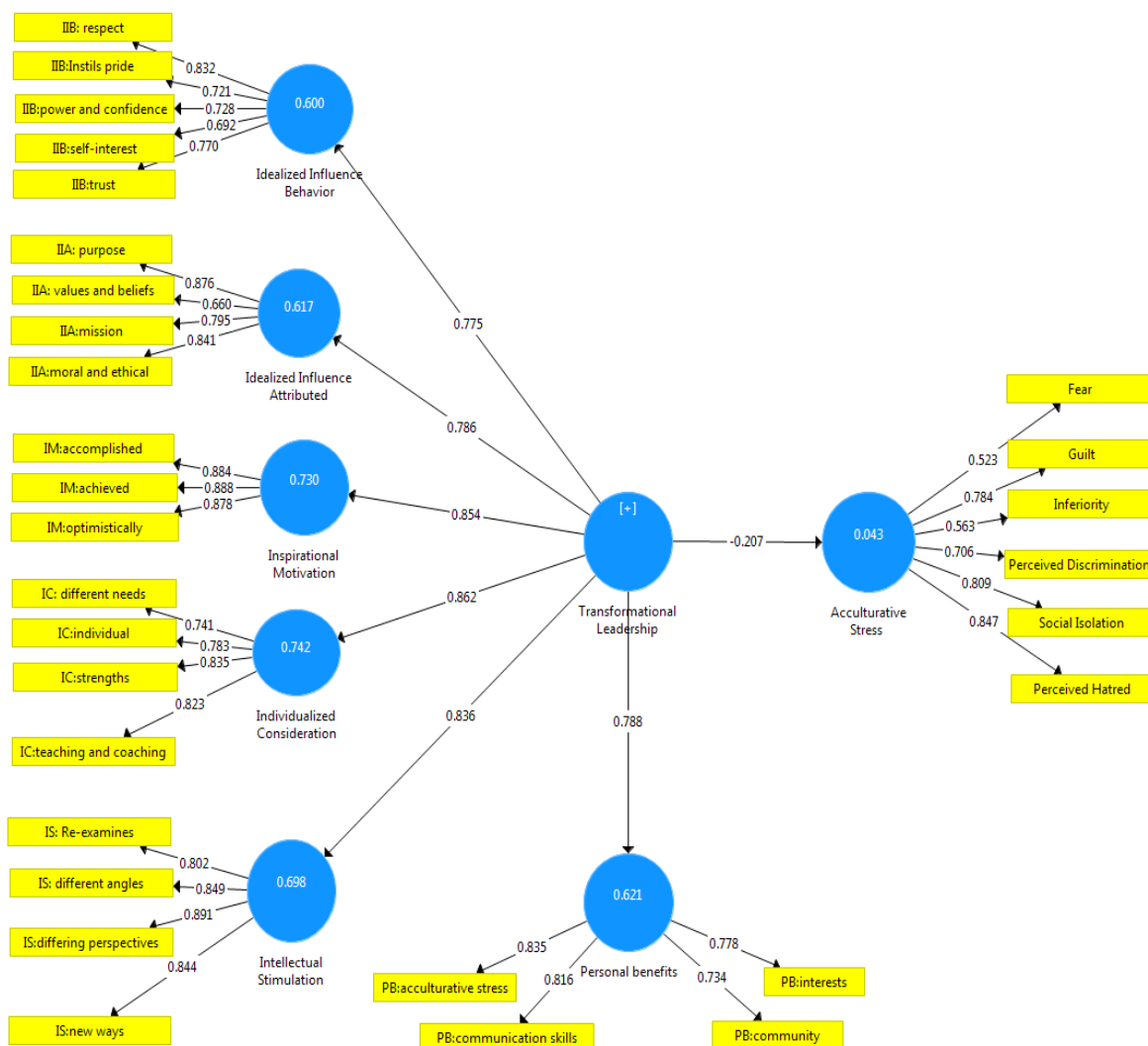


Figure 4.3: The Impact of Transformational Leadership on Acculturative Stress Using a Structural Equation Model

Source: Own Compilation



**Table 4.11: An estimation was made for the coefficients in the model of the effect of Transformational Leadership on Acculturative Stress**

Inner Model	Path Coefficients (Direct Effects)	T Statistics	P Values	Confidence Interval	
				2.5%	97.5%
<b>Transformational Leadership -&gt; Acculturative Stress</b>	-0.207	1.203	<b>0.229</b>	-0.381	0.334
<b>Transformational Leadership -&gt; Idealized Influence Attributed</b>	0.786	23.323	<b>0.000</b>	0.715	0.847
<b>Transformational Leadership -&gt; Idealized Influence Behavior</b>	0.775	19.219	<b>0.000</b>	0.686	0.843
<b>Transformational Leadership -&gt; Individualized Consideration</b>	0.862	37.501	<b>0.000</b>	0.814	0.904
<b>Transformational Leadership -&gt; Inspirational Motivation</b>	0.854	41.031	<b>0.000</b>	0.811	0.893
<b>Transformational Leadership -&gt; Intellectual Stimulation</b>	0.836	23.651	<b>0.000</b>	0.760	0.897
<b>Transformational Leadership -&gt; Personal benefits</b>	0.788	16.499	<b>0.000</b>	0.681	0.866

\*P Value&lt;0.05

**Source: Own Compilation**

The results of table 4.11 show that transformational leadership did not have a significant effect on acculturative stress. ( $|T| < 1.96$   $P > 0.05$ ). Secondly, transformational leadership is significantly affected by all its dimensions ( $|T| > 1.96$   $0.05$ ), which leads me to believe that the variance of this variable by dimension is significant. The greatest impact of transformational leadership is from the individualized consideration dimension, with a coefficient of 0.862, so the results show that the variance of transformational leadership could explain 74.2 % ( $R^2 = 0.742$ ) of the changes in individualized consideration. Since the obtained confidence interval of this dimension overlaps with the confidence interval of all other dimensions of transformational leadership, I can conclude that there is no significant difference between the ability to explain the variance of transformational leadership in the individualized consideration dimension and other dimensions.

#### 4.3.1.4 Examining Question 1

**Question 1:** Does transformational leadership have a direct effect on managing acculturative stress and improving intercultural communication skills at the University of Miskolc?

As shown in Figure 4.3, one of the relationships discussed in the research model is the effect of transformational leadership on acculturated stress. The results of this goal are presented in Table 4.11. According to these outcomes, I can say that the significance level of this path (Transformational Leadership -> Acculturative Stress) is more than 0.05 ( $P < 0.05$ ), so this path is not meaningful and transformational leadership does not affect acculturative stress. For example, in the interpretation of this value, I can say that Idealized Influence Attributed has a coefficient of determination of 0.617, and this means that the variance of transformational leadership can explain 61.7% of the changes in idealized influence attributed. In other words, 61.7% of the changes in idealized influence attributed were caused by transformational

leadership. But in the case of acculturative stress, I can say that only 4.3% of the changes in acculturative stress were caused by transformational leadership, and this indicates low explanatory power and shows that there are other effective factors for acculturative stress that were not measured in this study, and it is not included in the model. On the other hand, personal benefits have a coefficient of determination of 0.621, which means that the variance of transformational leadership can explain 62.1% of the changes in personal benefits. In other words, 62.1% of the changes in personal benefits were caused by transformational leadership. Also, personal benefits of the transformational leadership dimension can directly affect acculturative stress and communication skills by 83.5% and 81.6%, respectively. Therefore, transformational leadership cannot directly affect acculturative stress, but the personal benefits dimension can have a direct effect by improving communication skills and reducing acculturative stress.

**Therefore, the answer to question 1 will be:** Transformational leadership cannot directly affect acculturative stress and communication skills, but the personal benefits of transformational leadership have a direct effect on the acculturative stress and communication skills of its dimension.

#### **4.3.2 Investigating the Structural Model Indicators of the Impact of Leadership's Dimension on Acculturative Stress**

The structural equation model is used to investigate the questions of the effect of transformational leadership's dimension on the acculturative stress. The structural model in section 4.3.1 was fully investigated and analyzed, and all factor loads, and model fit indices were confirmed expect the acculturative stress. Therefore, according to the model, in this section, the questions can be examined.

##### **4.3.2.1 Evaluation of Structural Model**

To evaluate the structural model of this research, the coefficient of determination ( $R^2$ ) and ( $Q^2$ ) criteria have been used.

**Table: 4.12: The Values of the Coefficient to Determination  $R^2$  and  $Q^2$**

	<b><math>R^2</math> Adjusted</b>	<b><math>Q^2</math></b>
<b>Acculturative Stress</b>	0.06	0.01

**Source: Own Compilation**

According to Table 4.12, the coefficient of determination for the endogenous variables defined in the dimensions of the leadership model on acculturative stress is 0.06. Therefore, I can conclude that in terms of structural parts and from the point of view of this index, the model is not in a favorable situation. And this means that the dimensions of leadership were only 6% effective in explaining acculturative stress changes. This suggests that there are other effective factors on acculturative stress that were not measured in this study and were not included in the model. The results also show that in the current model, this  $Q^2$  value is equal to 0.01 and is less than 0.15, which again shows the weak predictive power of the dimensions of transformational leadership for acculturative stress.

4.3.2.2 General Evaluation of the Model

As I have already discussed in the previous section, two criteria, SRMR and GOF, have been used for evaluating the fit of the general research model. The lower the SRMR index, the stronger the model fits (values less than 0.08). Another measure of the overall fit is the GOF index model, which is shown in the poor range, as seen in Table 4.13.

Table 4.13: The Overall Fit Index of the Dimensions of Leadership Effect on Acculturative Stress

	Estimated Model
SRMR	0.091
GOF	0.191

Source: Own Compilation

The structural equation model for the impact of leadership’s dimensions on acculturative stress is shown in Figure 4.4. Their impact and significance are also presented in Table 4.14.

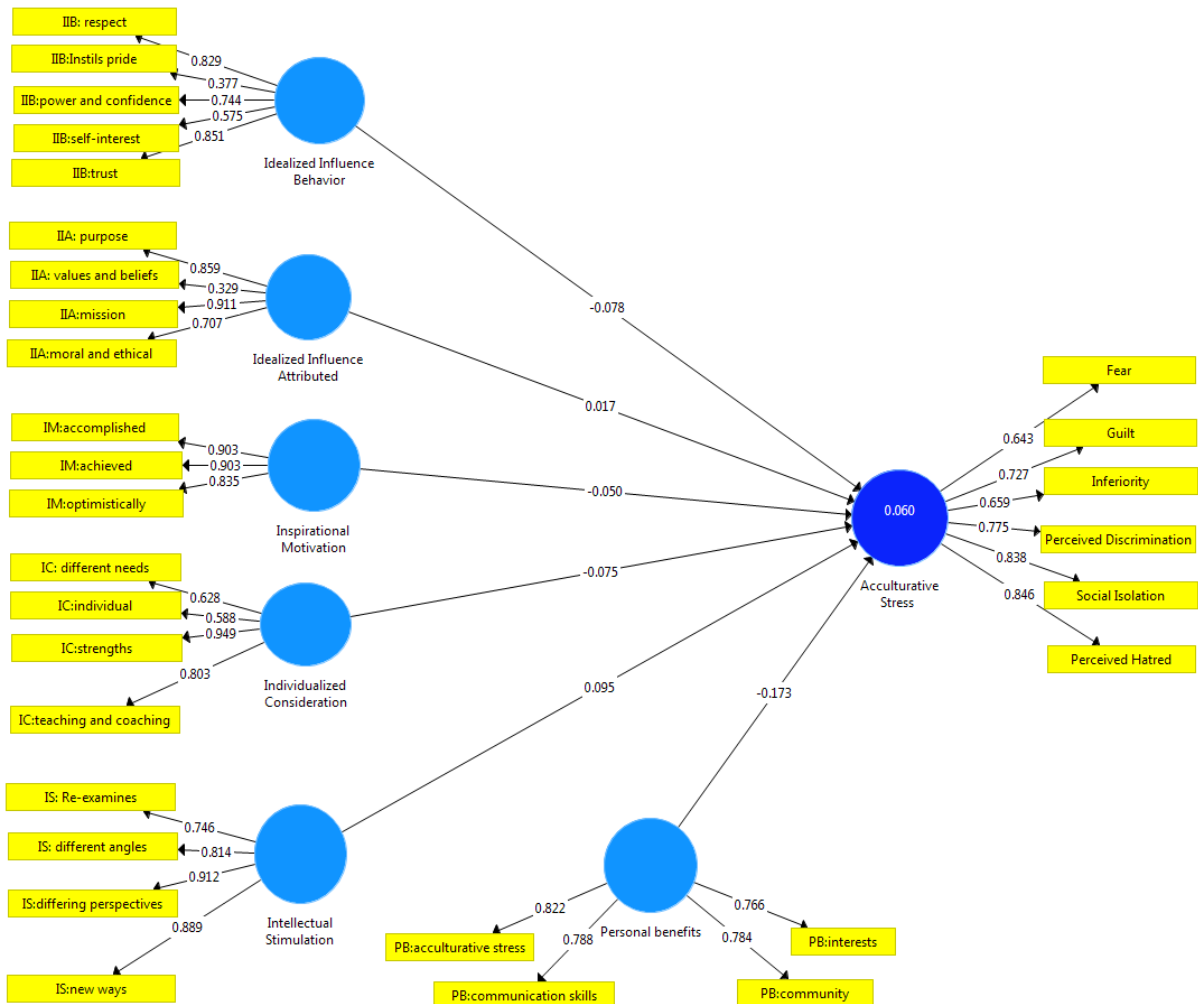


Figure 4.4: The Structural Equation Model of the Impact of Transformational Leadership’s Dimensions on the Acculturative Stress

Source: Own Compilation

**Table 4.14: Estimation of Coefficients in the Impact of Transformational Leadership's Dimensions on Acculturative Stress**

Inner Model	Path Coefficients (Direct Effects)	T Statistics	P Values	Confidence Interval	
				2.5%	97.5%
<b>Idealized Influence Attributed -&gt; Acculturative Stress</b>	0.017	0.120	<b>0.905</b>	-0.227	0.295
<b>Idealized Influence Behavior -&gt; Acculturative Stress</b>	-0.078	0.490	<b>0.624</b>	-0.268	0.312
<b>Individualized Consideration -&gt; Acculturative Stress</b>	-0.075	0.404	<b>0.686</b>	-0.347	0.329
<b>Inspirational Motivation -&gt; Acculturative Stress</b>	-0.050	0.377	<b>0.707</b>	-0.339	0.190
<b>Intellectual Stimulation -&gt; Acculturative Stress</b>	0.095	0.744	<b>0.457</b>	-0.194	0.301
<b>Personal benefits -&gt; Acculturative Stress</b>	-0.173	1.287	<b>0.198</b>	-0.395	0.131

\*P Value&lt;0.05

Source: Own Compilation

According to Table 4.14, I can conclude that the significance level of all paths is more than 0.05 ( $P > 0.05$ ), so these paths are not significant, which shows that the transformational leadership dimension didn't have a significant effect on acculturative stress.

#### 4.3.2.3 Examining Question 2

**Question 2:** Does the transformational leadership dimension have a direct effect on managing acculturative stress at the University of Miskolc?

According to Figure 4.4 and Table 4.14, the significance level of this path is more than 0.05 ( $P > 0.05$ ), so this path is not significant, and leadership's dimensions do not have any effect on the acculturative stress. Also, leadership's dimension is 6% effective in explaining the variance ( $R^2 = 0.06$ ) in acculturative stress. Therefore, based on the results in this section, the answer to Question 2 is no.

#### 4.3.3 Examining the Impact of Demographic Variables (gender, age, and education) on Transformational Leadership and Its Dimensions.

First, I used the Kolmogorov–Smirnov method to find normality. If the significance level in this test is less than 5% error ( $P < 0.05$ ), the effect of the qualitative variable on the quantitative variable is accepted.

##### 4.3.3.1 Determining the Answer to the Question of the Model

The normality of the variables at different levels of predictor variables is checked. So, the normality of the impact of gender, age, and education on transformational leadership will be examined respectively.

Table 4.15: Normality Test of the Impact of Gender on Transformational Leadership

Dependent variable		Independent variable	Leadership	Idealized Influence Attributed	Idealized Influence Behavior	Individualized Consideration	Inspirational Motivation	Intellectual Stimulation	Personal benefits
Education level	Master	Kolmogorov-Smirnov Z	0.139	0.132	0.102	0.131	0.190	0.153	0.159
		p-value	<b>0.000*</b>	<b>0.000*</b>	<b>0.005*</b>	<b>0.000*</b>	<b>0.000*</b>	<b>0.000*</b>	<b>0.000*</b>
	Ph.D.	Kolmogorov-Smirnov Z	0.131	0.135	0.100	0.138	0.157	0.170	0.097
		p-value	<b>0.007*</b>	<b>0.004*</b>	<b>0.099</b>	<b>0.003*</b>	<b>0.000*</b>	<b>0.000*</b>	<b>0.200</b>
Gender	Male	Kolmogorov-Smirnov Z	0.107	0.144	0.105	0.142	0.177	0.142	0.136
		p-value	<b>0.002*</b>	<b>0.000*</b>	<b>0.003*</b>	<b>0.000*</b>	<b>0.000*</b>	<b>0.000*</b>	<b>0.000*</b>
	Female	Kolmogorov-Smirnov Z	0.154	0.146	0.101	0.123	0.177	0.164	0.136
		p-value	<b>0.001*</b>	<b>0.006*</b>	<b>0.183</b>	<b>0.020*</b>	<b>0.000*</b>	<b>0.000*</b>	<b>0.006*</b>
Age	21-30	Kolmogorov-Smirnov Z	0.120	0.129	0.085	0.135	0.186	0.145	0.129
		p-value	<b>0.000*</b>	<b>0.000*</b>	<b>0.038*</b>	<b>0.000*</b>	<b>0.000*</b>	<b>0.000*</b>	<b>0.000*</b>
	≥ 31	Kolmogorov-Smirnov Z	0.139	0.178	0.127	0.113	0.164	0.161	0.161
		p-value	<b>0.003*</b>	<b>0.000*</b>	<b>0.011*</b>	<b>0.037*</b>	<b>0.000*</b>	<b>0.000*</b>	<b>0.000*</b>

Source: Own Compilation

According to the table 4.15, the assumption of normality for dependents variables is not established at most levels of independent variables (P-Value<0.05). But since the number of samples in these categories is more than 30, therefore, according to the Central Limit Theorem, the sample mean distribution of these variables is normal. Table 4.16 shows the result:

Table 4.16: The Results of Variance Analysis Were Used to Investigate the Effect of Independent Variables on Leadership

Independent variable	N	Mean	Std. Deviation	95% Confidence Interval for		F	p-value	
				Mean				
				Lower Bound	Upper Bound			
Education level	Master	116	3.72	0.64	3.60	3.84	0.86	0.35
	Ph.D.	66	3.63	0.64	3.47	3.79		
Gender	Male	119	3.70	0.61	3.58	3.81	0.08	0.76
	Female	62	3.67	0.70	3.49	3.84		
Age	21-30	117	3.69	0.65	3.57	3.81	0.005	0.94
	≥ 31	65	3.68	0.62	3.53	3.84		

Source: Own Compilation

According to the table 4.16, in the analysis of variance, none of the variables of education level, gender, or age had a significant effect on leadership because ( $P\text{-value} > 0.05$ ). In the following tables, I show the analyse of variance for the effect of independent variables on the leadership dimensions.

**Table 4.17: The Results of Variance Analysis Were Used to Investigate the Effect of Independent Variables on Personal Benefits**

Independent variable		N	Mean	Std. Deviation	95% Confidence Interval for Mean		F	p-value
					Lower Bound	Upper Bound		
Education level	Master	116	3.65	0.79	3.50	3.80	0.06	0.80
	Ph.D.	66	3.62	0.76	3.43	3.81		
Gender	Male	119	3.61	0.07	3.47	3.75	0.32	0.56
	Female	62	3.68	0.10	3.48	3.88		
Age	21-30	117	3.69	0.82	3.54	3.84	1.47	0.22
	≥ 31	65	3.55	0.68	3.38	3.71		

Source: Own Compilation

According to table 4.17, I can summarize that personal benefit questions had a mean of 3.68, more in the female gender than the male gender. But, in the analysis of variance, none of the variables of education level, gender, or age had a significant effect on personal benefits of the leadership dimensions because ( $P\text{-value} > 0.05$ ).

**Table 4.18: The Results of Variance Analysis Were Used to Investigate the Effect of Independent Variables on Intellectual Stimulation**

Independent variable		N	Mean	Std. Deviation	95% Confidence Interval for Mean		F	p-value
					Lower Bound	Upper Bound		
Education level	Master	116	3.74	0.83	3.59	3.89	1.007	0.31
	Ph.D.	66	3.61	0.81	3.41	3.81		
Gender	Male	119	3.72	0.76	3.58	3.86	0.59	0.44
	Female	62	3.62	0.93	3.39	3.86		
Age	21-30	117	3.68	0.84	3.53	3.84	0.05	0.80
	≥ 31	65	3.71	0.81	3.51	3.92		

Source: Own Compilation

According to table 4.18, the intellectual stimulation measured by a mean of 3.71 in the leadership dimension was greater in the age group  $>30$  than in any other age group. Which shows that students in this age group like challenges, and their leaders (professors) assist them in taking risks and solving problems. But, in the analysis of variance, none of the variables of

education level, gender, or age had a significant effect on the intellectual stimulation of the leadership dimensions (P-value>0.05).

**Table 4.19: The Results of Variance Analysis Were Used to Investigate the Effect of Independent Variables on Inspirational Motivation**

Independent variable		N	Mean	Std. Deviation	95% Confidence Interval for Mean		F	p-value
					Lower Bound	Upper Bound		
					<b>Education level</b>	<b>Master</b>		
	<b>Ph.D.</b>	66	3.71	0.87	3.50	3.93		
<b>Gender</b>	<b>Male</b>	119	3.87	0.89	3.71	4.03	0.16	0.68
	<b>Female</b>	62	3.81	0.88	3.59	4.04		
<b>Age</b>	<b>21-30</b>	117	3.87	0.91	3.70	4.04	0.08	0.76
	<b>≥ 31</b>	65	3.83	0.84	3.62	4.04		

Source: Own Compilation

According to table 4.19, the inspirational motivation measured by a mean of 3.93 in the leadership dimension was greater in the master's level group than the PhD level group. Which means that students in this group like to be motivated, and their sense of purpose is more important than in other groups. On the other hand, in the analysis of variance, none of the variables of education level, gender, or age had a significant effect on inspirational motivation in the leadership dimensions (P-value > 0.05).

**Table 4.20: The Results of Variance Analysis Were Used to Investigate the Effect of Independent Variables on Individualized Consideration**

Independent variable		N	Mean	Std. Deviation	95% Confidence Interval for Mean		F	p-value
					Lower Bound	Upper Bound		
					<b>Education level</b>	<b>Master</b>		
	<b>Ph.D.</b>	66	3.59	0.78	3.40	3.79		
<b>Gender</b>	<b>Male</b>	119	3.65	0.74	3.51	3.78	0.10	0.75
	<b>Female</b>	62	3.61	0.82	3.40	3.82		
<b>Age</b>	<b>21-30</b>	117	3.64	0.77	3.50	3.78	0.005	0.94
	<b>≥ 31</b>	65	3.63	0.77	3.44	3.82		

Source: Own Compilation

According to table 4.20, in the analysis of variance, none of the variables of education level, gender, or age had a significant effect on individualized consideration of the leadership dimensions (P-value>0.05).

**Table 4.21: The Results of Variance Analysis Were Used to Investigate the Effect of Independent Variables on Idealized Influence Behavior**

Independent variable		N	Mean	Std. Deviation	95% Confidence Interval for Mean		F	p-value
					Lower Bound	Upper Bound		
Education level	Master	116	3.70	0.72	3.56	3.83	0.002	0.96
	Ph.D.	66	3.70	0.70	3.53	3.88		
Gender	Male	119	3.73	0.65	3.61	3.85	0.72	0.39
	Female	62	3.63	0.83	3.42	3.84		
Age	21-30	117	3.65	0.71	3.52	3.78	1.62	0.20
	≥ 31	65	3.79	0.71	3.61	3.97		

Source: Own Compilation

Table 4.21 shows that idealized influence behavior is lower in females between the ages of 21 and 30 than in men and adults over 30. But, in the analysis of variance, none of the variables of education level, gender, or age had a significant effect on the idealized influence behavior of the leadership dimensions (P-value > 0.05).

**Table 4.22: The Results of Variance Analysis Were Used to Investigate the Effect of Independent Variables on Idealized Influence Attributed**

Independent variable		N	Mean	Std. Deviation	95% Confidence Interval for Mean		F	p-value
					Lower Bound	Upper Bound		
Education level	Master	116	3.65	0.75	3.51	3.79	0.96	0.32
	Ph.D.	66	3.54	0.78	3.34	3.73		
Gender	Male	119	3.59	0.74	3.46	3.73	0.11	0.73
	Female	62	3.63	0.80	3.43	3.84		
Age	21-30	117	3.62	0.78	3.47	3.76	0.02	0.88
	≥ 31	65	3.60	0.74	3.42	3.78		

Source: Own Compilation

Table 4.22 shows that the idealized influence attributed to the leadership dimension was greater in the master's group than in the PhD group, indicating that international students in the master's group prefer to follow their leaders more than those in the PhD group. In the analysis of variance, none of the variables of education level, gender, or age had a significant effect on the idealized influence attributed to the leadership dimensions (P-value > 0.05).

According to the outcomes, demographical factors are normal at the 5% error level, because, in most cases, the significance level is greater than 0.05 (P > 0.05) and normality is established. Therefore, the answer to question 3 with 95% confidence is no.



**Question 3:** Do demographic factors have a direct effect on transformational leadership?

#### 4.3.4 Investigating the Questions of the Impact of Demographic Variables (Gender, Age, Education) on Acculturative Stress

Parametric analysis of variance is used to investigate the effect of a qualitative variable on a quantitative variable, which indicates that the distribution of the quantitative variable is normal at different levels of the qualitative variable. Two very well-known tests for normality, the Kolmogorov–Smirnov and the Shapiro–Wilk tests, are considered. Both may be normalized using Johnson’s (1949)  $S_B$  distribution (Hanusz & Tarasińska, 2015, p.85). In this study, I used the Kolmogorov–Smirnov method to find normality. Also, if the significance level in this test is less than 5% error ( $P < 0.05$ ), the effect of the qualitative variable on the quantitative variable is accepted.

##### 4.3.4.1 Determining the Answer to the Question of the Model

First, the normality of the variables at different levels of predictor variables is checked.

**Table 4.23: Examine the Normality of Demographical Factors' Influence on Acculturative Stress**

Independent variable		Statistic	P-value
Education level	Master	Kolmogorov-Smirnov Z	0.073
		p-value	<b>0.179</b>
	Ph.D.	Kolmogorov-Smirnov Z	0.089
		p-value	<b>0.200</b>
Gender	Male	Kolmogorov-Smirnov Z	0.067
		p-value	<b>0.200</b>
	Female	Kolmogorov-Smirnov Z	0.113
		p-value	<b>.048</b>
Age	21-30	Kolmogorov-Smirnov Z	0.079
		p-value	<b>0.068</b>
	≥ 31	Kolmogorov-Smirnov Z	0.083
		p-value	<b>0.200</b>

Source: Own Compilation

According to the tables 4.23, I can conclude that demographical factors are normal at the 5% error level, because in most cases the significance level is more than 0.05 ( $P > 0.05$ ). Therefore, the parametric test of variance analysis is used to check in this section. Table 4.29 shows the results:

**Table 4.24: The Variance Analysis Was Used to Look into the Impact of Demographic Factors on Acculturative Stress**

Independent variable	N	Mean	Std. Deviation	95% Confidence Interval for Mean		F	p-value
				Lower Bound	Upper Bound		
				Master	116		

<b>Education level</b>	<b>Ph.D.</b>	66	2.52	0.68	2.35	2.69		
<b>Gender</b>	<b>Male</b>	119	2.58	0.88	2.42	2.74	2.44	0.12
	<b>Female</b>	62	2.36	0.86	2.14	2.58		
<b>Age</b>	<b>21-30</b>	117	2.44	0.89	2.28	2.61	1.73	0.19
	<b>≥ 31</b>	65	2.62	0.85	2.41	2.84		

Source: Own Compilation

According to table 4.24, I can summarize that males have a greater impact on acculturative stress by a mean of 2.58. Also, age >30 has a greater impact on acculturative stress by a mean of 2.62. On the other hand, based on the statistical result, none of the variables (education level, gender, or age) had a significant effect on acculturative stress in the analysis of variance (P-value > 0.05). Therefore, the answer to question 4 will be no.

**Question 4:** Do demographic factors have a direct effect on acculturative stress?

#### 4.3.5 Investigating the Questions of the Impact of Cultural Diversity on Acculturative Stress

Kolmogorov–Smirnov method to find normality will be used. If the significance level in this test is less than 5% error ( $P < 0.05$ ), the effect of the qualitative variable on the quantitative variable is accepted.

##### 4.3.5.1 Determining the Answer to the Question of the Model

Most responses for my research belonged to Africa and the Middle East (107 of 182 responses), and for other cultural diversity, the number of responses was not very high for statistical analysis, so I divided the cultural cluster into two parts: Africa and the Middle East and Another Cultural Cluster. Table 4.25 shows the normality of the impact of cultural clusters on acculturative stress and will be examined.

4.25: Normality Test of the Impact of Nationality on Acculturative Stress

<b>Independent variable</b>		<b>Statistic</b>	<b>P-value</b>
<b>Cultural diversity</b>	<b>Africa and the Middle East</b>	Kolmogorov-Smirnov	0.063
		Z	
	<b>Other Cultures</b>	<b>p-value</b>	<b>0.200</b>
		Kolmogorov-Smirnov	0.091
	Z		
		<b>p-value</b>	<b>0.200</b>

Source: Own Compilation

According to table 4.25, the assumption of normality for the response variable at the level of the cultural diversity variable is established ( $P\text{-Value} > 0.05$ ). Therefore, the parametric test of variance analysis is used to check in this section. Table 4.26 shows the result:

**Table 4.26: The Results of Variance Analysis Were Used to Investigate the Effect of Cultural Diversity on Acculturative Stress**

Independent variable		N	Mean	Std. Deviation	95% Confidence Interval for Mean		F	p-value
					Lower Bound	Upper Bound		
Cultural diversity	Africa and the Middle East	107	2.48	0.89	2.31	2.66	0.18	0.66
	Other Cultures	75	2.54	0.86	2.34	2.74		

Source: Own Compilation

According to table 4.26, in the analysis of variance, none of the variables in the cultural cluster had a significant effect on acculturative stress because ( $P\text{-value} > 0.05$ ). So, the answer to question 5 with 95% confidence is no.

**Question 5:** Is there any relationship between cultural diversity and acculturative stress at Miskolc University or not?

Based on the mean results, I can conclude that younger students from Africa and the Middle East cultural cluster, females, and those who are studying for a master's degree have a better ability to manage their stress than other groups. Managing acculturative stress can affect "men and women "in different ways depending on culturally ascribed roles and expectations" (Lee & Padilla, 2014, p. 245). For instance, Mayorga et al. (2018) argued that female students are more successful than men overall at adapting themselves to their environment and have better personal skills, social skills, and general adjustment levels (Temircan, 2022). Also, the type of culture can have an impact on how a person copes with stress. For instance, Reynolds, A. L., & Constantine, M. G. 2007, p. 345, found out that "African, Asian, and Latin American international students' concerns about their competence in social, academic, and career contexts were predictive of greater difficulties in identifying their career aspirations and in expecting positive future career outcomes". Also, based on the results, most international students are from Africa and the Middle East. As a result, they have a better chance of making friends from their own country than international students from other countries, since they are from a collectivist society in which they have strong relationships and everybody takes responsibility for following members of their group (Hofstede, 1980), so that can help them cope with stress better than students from other cultures. In addition, according to my statistical analysis data and the result, I can conclude that, transformational leadership and its dimensions didn't have any impact on acculturative stress, while the personal benefits dimension of transformational leadership shows the opposite outcome (Figure 4.3) So, maybe there are other effective factors for acculturative stress that were not measured in this study, such as financial support for managing acculturative stress. Also, demographic factors such as age, gender, education, and nationality didn't have an impact both on transformational leadership and acculturative stress, while the descriptive analysis showed the opposite result. For example, younger students, especially females and those who are studying for a master's degree, have a better ability to manage their stress than other groups. Maybe my sample size

for diversity of nationality and other demographic factors was not enough for statistical analysis and showed my limitations in research.

Based on finalizing my results and findings, I reached this outcome concerning the impact of transformational leadership on the international students at the University of Miskolc. Table 4.27 presents my findings:

**Table 4.27: Questions and Sub-Questions' Results**

<b>Q</b>	<b>Explanation</b>	<b>Finding</b>
<b>Q1</b>	Does transformational leadership have a direct effect on managing acculturative stress improving intercultural communication skills at the University of Miskolc?	Transformational leadership cannot directly affect acculturative stress, but the personal benefits of the transformational leadership dimension can have a direct effect by improving communication skills and reducing acculturative stress on its own dimension. (Figure 4.3).
<b>Q2</b>	Does the transformational leadership dimension have a direct effect on managing acculturative stress at the University of Miskolc?	No
<b>Q2-1</b>	Does transformational leadership influence the international students at the University of Miskolc by providing charisma?	Yes, based on the descriptive statistics analyzing
<b>Q2-2</b>	Does transformational leadership influence the international students at the University of Miskolc by inspiring them to achieve their goals?	Yes, based on the descriptive statistics analyzing
<b>Q2-3</b>	Does transformational leadership influence the international students at the University of Miskolc by providing individualized consideration?	Yes, based on the descriptive statistics analyzing
<b>Q2-4</b>	Does transformational leadership influence the international students at the University of Miskolc by providing intellectual stimulation?	Yes, based on the descriptive statistics analyzing
<b>Q3</b>	Do demographic factors have a direct effect on transformational leadership?	No
<b>Q3-1</b>	Does an individual's age have an effective role in transformational leadership by providing idealized influence?	No
<b>Q3-2</b>	Does an individual's age have an effective role in transformational leadership through the inspiration of motivation?	No
<b>Q3-3</b>	Does an individual's age have an effective role in transformational leadership by providing individual consideration?	No
<b>Q3-4</b>	Does an individual's age have an effective role in transformational leadership by providing intellectual stimulation?	No

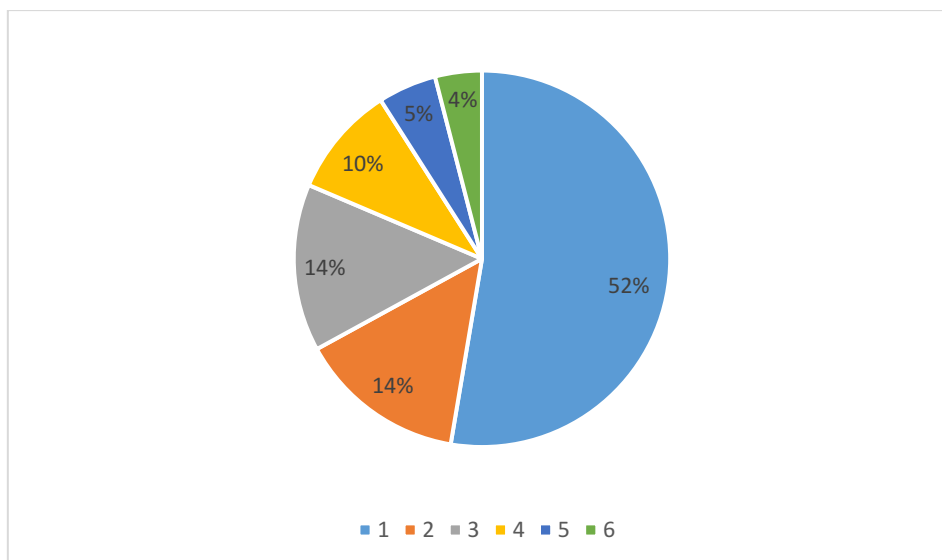
<b>Q3-5</b>	Does personal education have an effective role in transformational leadership by providing idealized influence?	No
<b>Q3-6</b>	Does personal education have an effective role in transformational leadership through the inspiration of motivation?	No
<b>Q3-7</b>	Does personal education have an effective role in transformational leadership by providing individual consideration?	No
<b>Q3-8</b>	Does personal education have an effective role in transformational leadership by providing individual consideration?	No
<b>Q3-9</b>	Does gender play an effective role in transformational leadership by providing idealized influence?	No
<b>Q 3-10</b>	Does gender have a direct effect on transformational leadership at the University of Miskolc?	No
<b>Q 3-11</b>	Does gender play an effective role in transformational leadership by providing individual consideration?	No
<b>Q 3-12</b>	Does gender play an effective role in transformational leadership by providing intellectual stimulation?	No
<b>Q3-13</b>	Does nationality play an effective role in transformational leadership by providing idealized influence?	No
<b>Q3-14</b>	Does nationality have an effective role in transformational leadership through the inspiration of motivation?	No
<b>Q3-15</b>	Does nationality play an effective role in transformational leadership by providing individual consideration?	No
<b>Q3-16</b>	Does nationality play an effective role in transformational leadership by providing idealized influence?	No
<b>Q4</b>	Do demographic factors have a direct effect on acculturative stress?	No
<b>Q5</b>	Is there any relationship between cultural diversity and acculturative stress at Miskolc University or not? (Based on the cultural cluster).	No

**Source: Own Compilation**

After obtaining the outcomes concerning my questions, I attempted to figure out the type of organizational culture at the University of Miskolc. Then, in the next section, I will discuss my theory and results.

#### 4.4 Organizational Description Questionnaire Result

In another questionnaire, I examined the employee's opinion concerning the impact of transformational and transactional leadership on the organization to find out the organizational culture at the University of Miskolc. On the other hand, because of the unusual conditions due to COVID-19 and language barriers, I could not find many employees at the university. Therefore, the demographic data from the 21 employees who were close to the international students and filled in the questionnaire is that: 51.7% were female and 48.3% were male. In matters of education, 38.1 % of the respondents gave a PhD or master's degree as their highest education level. 14.3% had a bachelor's degree, and 9.5% did not answer. Based on this data, most of the respondents had some type of higher education. 38.1% of the answers came from people who are older than 50; 14.3% gave their age as between 41 and 50, 28.6% were between 31 and 40; and 19% were between 21 and 30. Overall, many of the respondents (81%) are older than 30. About employment, more than half of the answerers (57, 2%) were employees, and 28.6% were working in either middle (14.3%) or higher level (14.3%) management. 9.5% preferred not to answer and 4.8% were self-employed. Overall, I can conclude that, based on the data, every working group is represented fairly. Figure 4.5 presents the employment data.



1. I am an employee
2. I am working in middle management or equivalent to that
3. I am working in senior management or equivalent to that
4. I prefer not to say
5. University professor
6. I am self-employed.

**Figure 4.5: Employment Status at University of Miskolc**  
Sources: Own Compilation

Tables 4.28 and 4.29 are presented my outcome concerning the effect of transformational and transactional leadership at the organization.

**Table 4.28: The Following Outcomes about Transformational Leadership.**

<b>Transformational Leadership</b>	<b>Mean Result</b>
<b>L1:</b> Talks about his/her most important values and beliefs	3.76
<b>L1:</b> Specifies the importance of having a strong sense of purpose	3.76
<b>L1:</b> Considers the moral and ethical consequences of decisions	3.86
<b>L1:</b> Emphasizes the importance of having a collective sense of mission	3.81
<b>L2:</b> Talks optimistically about the future	3.91
<b>L2:</b> Talks enthusiastically about what needs to be accomplished	3.81
<b>L2:</b> Expresses confidence that goals will be achieved	4.1
<b>L3:</b> Spends time teaching and coaching	3.76
<b>L3:</b> Treats me as an individual rather than just a member of the group	3.86
<b>L3:</b> Helps me to develop my strengths	4.14
<b>L3:</b> Considers me as having different needs, abilities, and aspirations from others	3.81
<b>L4:</b> Re-examines critical assumptions to question whether they are appropriate	3.76
<b>L4:</b> Seeks differing perspectives when solving problems	4.1
<b>L4:</b> Gets me to look at problems from many different angles	4.05
<b>L4:</b> Suggest new ways of looking at how to complete assignments	4

Sources: Allen (2010, pp. 56-60) & Own Compilation

**L1: Idealized Influence**

**L2: Inspirational Motivation**

**L3: Individualized Consideration**

**L4: Intellectual Stimulation**

From the results in Table 4.28, I can observe that the leaders of the University of Miskolc are providing intellectual challenges and methods for work to their employees, and giving everything, they must stimulate the thinking minds. From this questionnaire, I can summarize that the leaders of the University of Miskolc are perceived by their employees as true leaders. Despite some minor flaws, the managers at the university can be considered good transformational leaders of their subordinates. Table 4.29 presents the impact of transactional leadership in the university (see Appendix A: 1.4 for the questionnaire).

**Table 4.29: Outcomes about Transactional Leadership.**

<b>Transactional Leadership</b>	<b>Mean Result</b>
* My manager concentrates his/her full attention on dealing with mistakes, complaints, and providing strategy	3.1
** My manager fails to interfere until problems become serious	2.81
*** Managers give rewards for innovation Ideas	3.43

*** Provides me with assistance in exchange for my efforts	3.9
--	-----

Sources: Allen (2010, pp. 53-55) & Own Compilation

**\*Management by Expectation Active**

**\*\*Management by Expectation Passive**

**\*\*\*Contingent Rewards**

According to the outcome, the managers at the University of Miskolc have good transformational and transactional leadership potential. According to Bernard and Bruce (1994), I can summarise the type of organizational culture at the University of Miskolc: a coasting organizational culture, which is determined by transformational and transactional leadership, is placed in the middle of the range. Also, according to the semi-structured interview results (chapter three) and statistical results (chapter four), I can strongly conclude that improving cultural awareness could be a good strategy for the University of Miskolc



## CHAPTER FIVE

### DISCUSSION AND CONCLUSION

#### 5.1 Summary of the Results

In the literature review of the dissertation, the constructs have been developed and discussed based on previous research and currently available theories. The main constructs of the dissertation were managing acculturative stress and developing intercultural communication skills among the international students at the University of Miskolc. The aim of the dissertation was to figure out the main factors and problems that international students are facing in managing their stress and developing intercultural communication skills at the organization. I provided some theoretical framework to describe the main factors in this dissertation, such as acculturative stress and factors for developing communication skills. According to my findings, intercultural communication skills and developing self-awareness are categorized as the critical factors for developing one's personality in a global environment, such as a university. While academic performance is the most important element for developing individuals, the balance between academic performance and these competencies should be taken seriously. For example, students could graduate and be excellent in their academic skills but poor in self-awareness for managing their stress and communication skills. Fortunately, a few factors have already been found to help international students better adjust, such as familiarity and similarity of culture, language ability, developing personality, and improving self-awareness. Consequently, the university should provide some programs, such as engagement in various activities or social support for coping with acculturative stress (Kim et al., 2012) and developing intercultural communication skills at the organization. Soft skills are non-technical skills that determine how a person works. They include how a person interacts with her/his colleagues (classmates, roommates), solves problems, and manages her/his performance. As opposed to hard skills, which are learned, soft skills are similar to emotions and allow a person to read the feelings and values of others. Soft skills are much harder to learn, particularly in a cross-cultural environment. Therefore, they could also be much harder to measure and evaluate. Intercultural communication skills are considered a soft skill and personality trait. Consequently, improving these skills could contribute to the success of international students both in education and in global markets. Finally, developing and improving soft skills, such as self-awareness or intercultural communication skills, will be beneficial for international students on two different levels. First, by reducing acculturative stress, they can improve their academic achievements. Second, they could be successful in the job market by better integrating and cooperating with other people who have different cultural backgrounds.

My research includes different stages. In the first stage, during the teaching of personality development (at the MBA- master's level) in the 2019–2022 academic years and holding some workshops for international students (at the master's–PhD level) in the 2020 academic years, I decided to know what the main problems international students are facing according to the ASSIS questionnaire; then, using my transformational leadership abilities, I tried to develop the international students' personalities to better manage and cope with their acculturative stress. After that, I decided to figure out whether there was any relationship between cultural diversity and acculturative stress at Miskolc University or not (based on the Hofstede model / cultural cluster). Finally, by educating the students in cultural awareness using such tools as the Hofstede model, I decided to improve cultural awareness among them and finally develop the students' intercultural communication skills at the University of Miskolc.

Organizational culture partly determines the important role of leadership in an organization. "Organizational culture and firm performance have attracted significant research attention" (Joseph & Kibera, 2019, p. 8). Hofstede (2001) argued that organizational culture is determined by the collective programming of the mind, which could distinguish the members of one organization from another. According to Schein (2004), organizational culture is a pattern of shared basic assumptions that are learned by the organization as it solves its problems of external adaptation and internal integration. These have worked well enough to be considered valid and, therefore, to be taught to new members as the correct way to perceive, think about, and feel about those problems. Also, organizational culture is defined as the important role of leadership, values, and beliefs of management, which could reflect the staff's performance. To my knowledge, this type of organizational culture is effective in improving communication skills among the international students and staff at the University of Miskolc. Therefore, the objective of this research is also to analyze the international students' acculturative stress and develop intercultural communication skills by applying transformational leadership and analyzing the organizational culture at the University of Miskolc.

In the first phase of the empirical research, 70 semi-structured, face-to-face, and in-depth interviews were conducted. In the second phase of the empirical research, 182 responses were collected from international students through an online survey such as Whatsapp or Messenger, and I used a spider web diagram, SEM, PLS-Smart Path Modeling, ANOVA, and SPSS for analyzing the data. The research results are presented through the research questions, and sub-questions, in the dissertation.

**Spider Web Diagram Result for the ASSIS Questionnaire:** According to the mean result of the ASSIS questionnaire and my personal questionnaire (see figures 4.1 and 4.2), I noticed that sometimes a lack of knowledge concerning cultural diversity is noted inside the organization, such as in cultural values, norms, behavior, and intercultural communication skills. Home sickness and adjusting to new foods (especially Hungarian foods) are also issues for international students. Therefore, managers might better begin to consider ways to solve these issues, such as increasing specific activities for managing acculturative stress, developing cultural awareness, improving intercultural communication skills, and attempting to provide international food on campus at least one or two days per week to show them they are not too far from their home countries. On the other hand, it's better for the managers to consider other cultural values as well. For example, according to the international office report, almost 50% of international students are Muslim, such as in Iran, Iraq, Jordan, Syria, Azerbaijan, Pakistan, Algeria, Tunisia, and Morocco, which means that, in their religion, Muslims are not allowed to eat meat, which is not under the rules of their religion, and they have to eat halal meat. "In recent decades, the increasing visibility of halal food has become highly emotive and controversial, with halal meat being seen as an indicator of the growing presence of Islam and what are seen as "barbaric" Muslim food practices. (Lever, 2020, p. 89) For instance, in the UK halal market, the range of halal dining options has increased to help the Muslim culture decrease their difficulties with food options (Level 2020). According to Altbach and Knight (2007) and Qiang (2003), profit-making is a main factor for motivation in the internationalization strategy for higher education institutions (HEIs), and "the recruitment of international students has become a significant factor for institutional income and of national economic interest" (Jamil et al., 2019, p. 145). Consistent with Eshaby (2019), halal food is one of the main reasons why international students continue and pursue their tertiary education in Malaysia, however, "research and studies on this area are very limited" (Jamil et al., 2019,

p. 147). In my opinion, providing halal food at least once a week can improve the organization's hospitality and give Muslim students the impression that all students from different cultures and religions are the same. While Abraham Maslow (1954) classified food at the bottom and key level of the hierarchy of needs, known as psychological needs. According to the results international students are dissatisfied with their accommodations and other sources. According to the semi-structured interview results, some international students are not aware of the policies in the dormitory, such as the timing of sleeping, cooking, and studying, so it could be a good strategy for the dormitory managers to divide the international students based on the similarity of their cultures. For instance, Pakistanis and Indians have similar cooking tastes, and African cultures such as Ghana, Algeria, and Kenya used to talk loudly. The opposite of them, eastern cultures such as Chinese or Thailand, are very calm and quiet. Or, in Muslim cultures such as Iranian, Syrian, Jordanian, and Tunisian, people are looking for a specific place for their daily prayers. Therefore, considering the cultural religion and providing a specific place for their prayers can be very effective for them at the dormitory and help develop their cultural awareness as well. Maybe these factors aren't very important, but they have a strong impact on managing acculturative stress. Finally, the availability of staff causes additional issues for international students. According to the international office report, most international students belong to collectivist, high power distance, and high uncertainty avoidance societies such as Iraq, Jordan, Tunisia, Syria, and Pakistan, which means they need the hierarchy strategy. They would like to make decisions together, share information, work as a group, and don't like ambiguity (Hofstede, 1980). Also, Roberts and Dounworth (2012) argue that international students are looking for three forms of support from the organization, which include: cognitive support, such as learning needs; affective support, such as emotional needs; and systemic support, such as information and administrative support. Therefore, it could be good for the employees to be a little bit more flexible in their answers and availability and try to reply to their emails as soon as possible to support their emotional needs. Because international students' culture is very different from the host culture, when Hungarians are more individualistic and come from a low-power distance society (Hofstede, 1980), it can cause ambiguity for international students, such as why employees don't reply to our email. Maybe they don't care? Or maybe we are not a priority for them. While Warter (2019) argues that "unlike many other organizations, universities have certain peculiarities that need to be clearly understood and that dominate the organizational culture of academic institutions" (p. 174). Or, "the administration and teaching staff should particularly focus their attention on how to assist international students in their adaptation to a new cross-cultural environment" (Nailevna, 2017, p. 1177). Finally, according to Kim et al. (2012), the adaptation process is shaped not only by negative feelings but also by positive feelings and emotions associated with enjoyment and happiness. "Facing the challenging circumstances related to the adaptation process, participants were able to develop the ability to deal with challenges and become aware of their strengths and talents as facilitators of a sense of positive emotion and coping resources for dealing with stressful situations" (Kim et al., 2012. p. 7). As I have already mentioned in the literature review, developing self-awareness (Mena & Padilla, 1987) could help international students cope with their acculturative stress. For instance, Kim et al. (2012) argues that some participants in their research, after developing positive emotions, can manage stress better, such as "I realized that I had the ability to deal with all challenging situations with a positive mindset" (Kim et al., 2012, p. 6). Therefore, according to my outcome, providing some theoretical and practical workshops and activations for coping with acculturative stress is needed. Hansen

et al. (2018) also argue that managing acculturative stress can directly impact international students' health and their college success as well.

The reason for the question's negative response was as follows:

**Research Question 1: Does Transformational Leadership Have a Direct Effect on Managing Acculturative Stress and Improving Intercultural Communication Skills at the University of Miskolc?**

After analyzing the impact of transformational leadership on the ASSIS and personal benefits questions, I found two different outcomes. Unfortunately, transformational leadership and its dimensions didn't have a significant impact on managing acculturative stress in the organization. The results in Table 4.11 show that transformational leadership did not have a significant effect on acculturative stress. ( $T < 1.96$ ,  $P > 0.05$ ), and transformational leadership was responsible for only 4.3% of the changes in acculturative stress, indicating low explanatory power and indicating that there are other effective factors for acculturative stress that were not measured in this study. The dimension of leadership is also only 6% effective in explaining the variance ( $R^2 = 0.06$ ) in acculturative stress. On the other hand, the personal questions showed the opposite outcome. According to Figure 4.3, the personal benefits of transformational leadership have an 83.5% impact on managing acculturative stress and a nearly 82% impact on communication skills on their own dimension, indicating that transformational leadership alone cannot eliminate and manage acculturative stress. Based on the statistical result, maybe international students were satisfied with their leadership performance, but in the end, they couldn't manage their stress. So maybe leadership needs the support of managerial performance in the organization as well. Leadership is used to create the new changes and find the problems, and managers are used to apply new strategies for solving the problems in the organization (Wajdi, 2017).

**Research Question 2: Does the Transformational Leadership Dimension have a Direct Effect on Managing Acculturative Stress at the University of Miskolc?**

According to Figure 4.4, leadership's dimension is only 0.6% effective in explaining the variance ( $R^2 = 0.06$ ) in acculturative stress, which means that only 6% of the transformational leadership dimension can change acculturative stress. According to Table 4.14, the significance level of this path is greater than 0.05 ( $P > 0.05$ ), indicating that this path is not significant and that the leadership dimensions have no effect on acculturative stress. As a result, I can conclude that transformational leaders, such as professors, are very aware of the problems of international students, and according to Figure 4.3, they could successfully guide international students in managing their acculturative stress and improving their communication skills, but they couldn't be successful, and as a result, transformational leadership may require additional factors for success, such as financial or management support.

**Research Question 3: Do Demographical Factors Have a Direct Effect on Transformational Leadership?**

According to the descriptive results, transformational leadership is more effective in the female gender than in the male gender, with idealized influence attributed by a mean of 3.63 and personal benefit questions by a mean of 3.68. Or, overall, the transformational leadership dimension in the master group was greater than that in the PhD group. However, according to table 4.16, in the analysis of variance, none of the variables of education level, gender, or age had a significant effect on leadership ( $P\text{-value} > 0.05$ ).

#### **Research Question 4: Do Demographical Factors Have a Direct Effect on Acculturative Stress?**

According to descriptive statistical analysis, I noticed that demographical factors such as age, gender have a great influence on the development of acculturative stress. For example, males have a greater impact on acculturative stress by a mean of 2.58 than females. Or age >30 has a greater impact on acculturative stress by a mean of 2.62 than any other age group. Some quantitative studies, for example, found that coping with acculturative stress is more difficult for men and older students (Gebregergis et al., 2019; Ye, 2006). Although these findings do not support a Romanian study that found that female international students were more affected by acculturative stress (Iorga et al., 2020), they do support the findings of this study. According to Candel, in 2021, gender has different reasons for being affected by acculturative stress. For instance, "men are more stressed about their future opportunities, and females are more affected by dating and financial problems." (Candel, 2021, p. 204). However, according to Table 4.24, none of the variables of education level, gender, or age had a significant effect on acculturative stress in the analysis of variance (P-value > 0.05).

#### **Research Question 5: Is There Any Relationship between Cultural Diversity and Acculturative Stress at Miskolc University or Not?**

According to descriptive statistical analysis, although the majority of participants belonged to the African and Middle East cultural clusters (60.9%), they had a lower impact on the acculturative stress by a mean of 2.48 than other cultural clusters such as East Europe or Southern Asia. Yeh & Inose (2003) argue that European international students have lower acculturation stress compared to those from Asia, Africa, or South America in the USA. Collectivism culture focuses on the community, whereas individualism culture focuses on independence, individualistic societies, such as European culture, have a greater ability to manage stress than collectivist societies, such as those in Africa or South America. Or in a society with a lower level of uncertainty avoidance, such as India, people are used to ambiguity. But in a society with a high level of uncertainty avoidance, such as Pakistan, Turkey, and African cultures such as Ghana and Kenya, people are not comfortable in situations that are "novel, unknown, surprising, and different from the usual" (Hofstede, 1994; Stowers, 2013, p. 8). According to Hofstede (2001), power distance is "a measure of the interpersonal power between B (the boss) and S (the subordinate) as perceived by the less powerful of the two, S" (p. 83). Society is emphasized in low-power distant cultures by equality and openness between B and S, whereas society is emphasized in high-power distant cultures by hierarchy, power, and wealth (Hofstede, 2001). Therefore, in societies with high power distances such as Iraq, India, and Tunisia, international students may be especially in need of assistance to cope with acculturative stress (Guzel, 2016). Also, according to Hofstede, (2001), high uncertainty avoidance is one type of cultural adaptation for better managing stress in places such as Syria, Jordan, and Iraq. According to Hofstede (2001), different cultures have different ways of reacting to ambiguous situations. Hofstede argued that people in high uncertainty avoidance cultures such as Egypt, Kenya, and Tunisia from Africa and the Middle East cultural cluster have higher levels of anxiety and strain, and they have less subjective well-being than people in low uncertainty avoidance cultures (Guzel, 2016). However, the significance level of the ANOVA test for all dimensions of acculturative stress is greater than 5%, so it is showed that nationality or cultural cluster have no effect on acculturative stress in my research.

Lastly, I decided to investigate what the type of organizational culture at the University of Miskolc is. According to Bass and Avolio (1993), by providing the questionnaire (Organizational Description Questionnaire (ODQ)), we can figure out what types of organizational culture are applied inside the organization, so the type of organizational culture could influence the relationship between employees and international students at a university. After analyzing the data, I noticed that the organizational culture at the University of Miskolc is in a coasting mode, which is determined by the transformational and transactional leadership being placed in the middle of the range at the organization. Of course, I must note that my sample size for the organizational cluster was not large enough; a larger sample size could have modified my outcomes. Overall, I believe that it would be better for the University of Miskolc to promote its organizational culture towards a high-contrast model because, in this condition, both transformational and transactional leadership have a high stage of impact.

## 5.2 My Findings and Theses

The theoretical and practical contribution of the dissertation could guide the University of Miskolc and other higher education institutions to notify and design new strategies for their international student community. Doucerain et al. (2015) also believed that, although psychological researchers have investigated acculturative stress in general, little attention has been paid to communication-related acculturative stress (CRAS). International students who are studying in foreign countries could face a number of challenges and difficulties, such as language; accommodation; financial, and communication problems (Mori, 2000; Pan, Yue, & Chan, 2010). Therefore, managers and employees need to be aware of the role culture can play in conceptualizing advisory and supervisory relationships (Kelly & Moogan, 2012). According to Zhou et al. (2017, p. 17), "discussions, preferably at the beginning of the advisory relationships, may help to reduce students' confusion regarding academic expectations and break down potential biases and prejudicial attitudes." Gudykunst (2005) argues that reduced anxiety and uncertainty are important factors in improving intercultural communication skills and that developing trust would likely contribute to reducing communication anxiety and stress among international students at universities. Consequently, it could also have a positive effect on developing intercultural communication skills (Doucerain et al., 2015). According to Doucerain et al. (2015), language occupies a key position in acculturation, both in the field of cross-cultural psychology (Noels et al., 1996; Masgoret & Ward, 2006) and intercultural communication (Nishida, 1999; Kim, 2001; Gudykunst, 2005).

Most participants in this study belonged to the African and Middle East cultural clusters. According to Hofstede (1980) and Hofstede insights, most of this cultural cluster nationality is part of a high-power distance society, which means that people in a society are related to one another in a hierarchical manner. According to Hofstede (1980), they belong to a collectivism society, in which people work together and tend to help each other; as a result, when some people move to foreign countries, they will face a lot of problems, especially in individualism societies such as Hungary, because they grew up in a society where everyone was dependent on each other's help and needs; as a result, international students who belong to this type of society may suffer from various types of problems. Based on my findings in this study, I provide some practical insights for higher education academic staff and management, such as the University of Miskolc, in assisting international students with acculturative stress and

developing intercultural communication skills. Social support from friends, university staff, and management of the organization would be a professional way to reduce acculturative stress (Kim et al., 2012). My theses are:

**T1. "Increasing cultural awareness inside the university can help international students better manage their acculturative stress and develop their intercultural communication skills".**

By developing cultural awareness, both international students and organizations become aware of each other's needs and values. Can communicate better without any misstatements. Have some workshops to develop intercultural awareness, especially about the host culture, to decrease ambiguity among the international students when they are coming from a diversity of cultures. Also, after developing cultural awareness, organizations can notice the common problems that international students have, such as dormitories, consequently my T2 is:

**T2. "Classify international students in the dormitory based on their culture or cultural values and norms; in this regard, students have a similar habitat for eating and sleeping. Also, providing better services and facilities in the dormitory is needed while the international students have problems regarding dormitory's service quality, such as the cleanliness of room or inadequate facilities in the rooms, kitchen and bathroom".**

According to the international office, nearly half of international students are Muslim, so considering their begging needs can help them manage their stress better. According to Mukminin et al. (2013) outcomes and previous literature (Cole & Ahmadi, 2003; Nasir & Al-Amin, 2006), "Muslim students experience many challenges related to their religious beliefs and practices." (p. 43). Therefore, my T3 will be:

**T3. "Providing a room in the dormitory as well as a room in the university for Muslim culture (praying time) is important, but the room should be divided into two sections (male and female)".**

Abraham Maslow (1954), in his theories of the hierarchy of needs, categorized food at the bottom and key level, known as psychological needs. According to Maslow's theory (1954), one does not feel the second need until the demands of the first have been satisfied, or the third until the second has been satisfied, and so on. Therefore, providing food for international students should be considered. Another cultural religion need for Muslim international students is fasting time; thus, considering this need when nearly 50% of international students are Muslim can provide social support for the organization. My T4 will be;

**T4. "At least one day per week is provided by halal food from a Turkish restaurant for Muslim culture and other cultures inside the university. Or, determining some food coordinates, such as discount coupons from Turkish, Leves and Chinese restaurants, can make the weekend more enjoyable because they will be able to eat their favorite foods and have fun with their friends. Also, it could be a professional attitude if the university could provide some services and facilities for Ramadan, when almost 50% of international students are Muslim, and they would like to fast during this month based on their religion. For example, at Iftar time, when they can begin to eat, providing a large kettle of hot tea and some cookies can satisfy them that the organization respects and values their culture".**

Paying more attention to cultural values can support international students when they are far from their home countries and help them manage their acculturative stress. They believe that if we are separated from our home countries, organizations will try to create a new home for us (home sickness). Hofsedte (1980) defines collectivism in societies that require more attention and support, such as the African and Middle Eastern cultural clusters. Also, according to Kim et al. (2012), the adaptation process is shaped not only by negative feelings but also by positive feelings and emotions associated with enjoyment and happiness. So, my T5 is:

**T5. "Some parts of Syria, Pakistan, Kazakhstan, Azerbaijan, and the Kurds in Iraq, Turkey, and Iran are celebrating Nowruz (20 March) as the New Year. It could be a professional attitude if the organization considers their own New Year as well, by providing a simple celebration when they are unable to celebrate with their families. Or, Indian culture used to celebrate November 24 as Diwali. It is one of the biggest festivals of lights and has become a national Indian festival. Other nationalities, such as African culture, have the biggest traditional festival, which is called Mombasa carnival, Mombasa carnival is the most popular festival in Kenya. This vibrant festival is held in November in Mombasa, a city that has been influenced by African and Arabic customs for many years. Therefore, Miskolc University could develop cultural diversity values and norms within the organization in this situation. In my introduction, I state that understanding international students' cultures and paying more attention to these cultural values can help international students cope with their stress when they are away from home (home sickness)".**

According to Erturk & Luu (2022), students from Turkey in Hungary are facing different challenges which can cause difficulties in their adaptation process in their academic setting in the host country. "There are two themes under this category for participants in Hungary: interaction with university staff and challenges" (p.5)". So, my T6 is:

**T6. "Developing the availability of staff for international students could help them manage their acculturative stress. Because they can feel that if they need something, they can access the staff easily and their problem will be solved in a short time".**

International students are from diverse cultures such as Arab and East Asian cultures, which means that they are not similar to Hungarian culture. In this regard, international students may be hesitant to share their problems openly because most of them are on scholarship. So, maybe they deserve to lose their scholarship, and they can say any problem that they have; therefore, my T7 is:

**T7. "Providing a suggestion box can help the international students share their problems indirectly with the management. This can bring some benefits for both sides. International students can easily share their problems with the management without any stress or negative feelings and feedbacks, and on the other hand, the management can notice the common problems among them and try to find new strategies for developing social support".**



According to my research, because of cultural diversity which applied at the organization, some of the international students couldn't communicate with the employees very easily therefore my T8 is:

**T8. "Assertive communication skills should replace any type of communication skill. When the majority of international students are members of the collectivism of society, and they are looking for clear communication."**

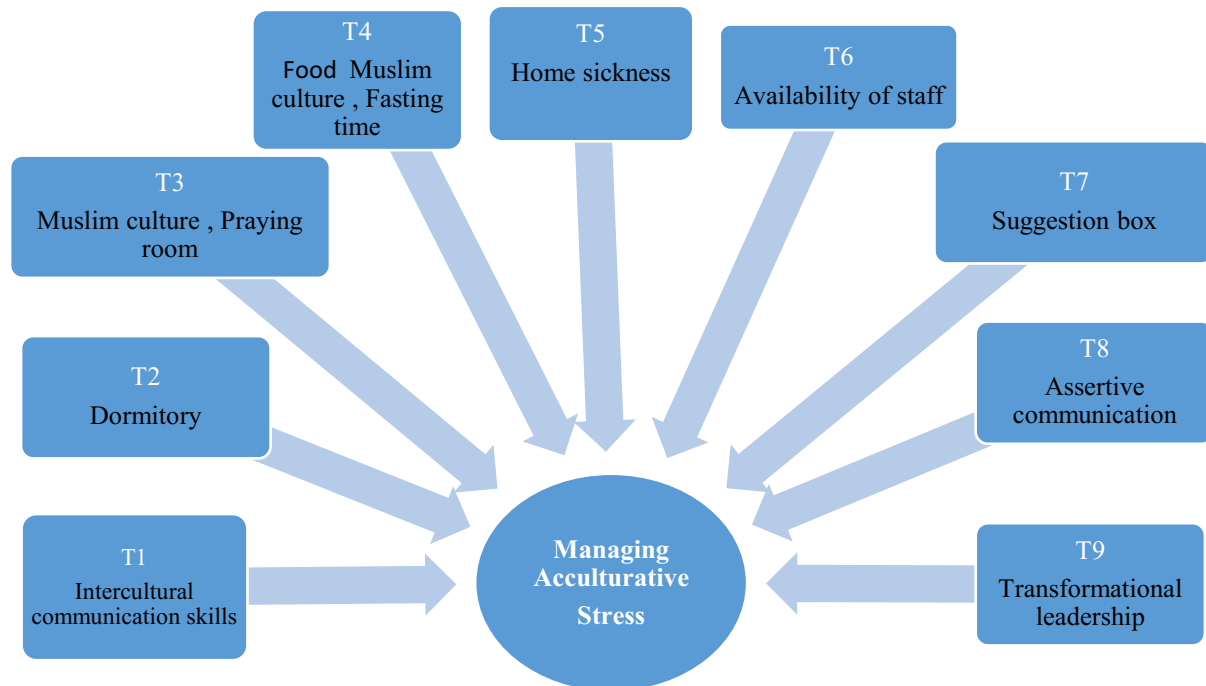
Finally:

**T9. "Transformational leadership and its dimensions have no effect on acculturative stress, indicating that leaders, such as professors, require additional support from organizational management in order to manage acculturative stress and improve communication skills among international students at Miskolc University, when the personal benefits of the transformational dimension have an effect on managing acculturative stress and communication skills on its dimension, but not when the transformational dimension has an effect on managing acculturative stress and communication skills on its dimension."**

According to my findings, developing social support can decrease the challenges within the organization. As I have already mentioned in Chapter 2, there are different coping strategies for reducing acculturative stress among international students. Such as participation in various activities and psychological support, which management is already holding and looking for in the organization; and finally, social support such as looking for international students' religion, cultural value, or type of eating habitat, which is not a temporary activity and international students require for the duration of their educational period. Therefore, I would like to categorize the main findings and challenges that international students are looking for into five categories, and they can also pose challenges for the university:

1. Better accommodations and dormitory facilities are needed, such as providing a small kettle and some tea bags and coffee inside the rooms. This will help freshmen start their days easily because they are unfamiliar at the beginning of their stay on campus with where to go and buy their needs (starting their days with positive energy).
2. For the majority of international students, eating habitat was the main problem, so, in my opinion, providing at least specific brochures regarding the international restaurants out of the campus can guide them to get there easily. Therefore, they can adjust themselves better to the new environment.
3. Misunderstanding, a shortage of cultural knowledge, and communication skills were also issues for some of them, so developing some workshops is needed for both local employees and international students.
4. According to the population size report, the majority of international students belong to the Arabic culture, and their religion is Islam, so providing a specific room for their prayer is needed (Mukminin et al. 2013). This can show that Miskolc University is considering your basic needs as well.
5. Last but not least, in my opinion, providing a Miskolc map that shows the main restaurants, hospitals, exchanges, shopping malls, and so on inside the campus can provide a positive feeling, which means that the host organization is thinking about you.

Acculturative stress may also be associated with the development of emotional support, such as social support (Thomas & Choi, 2006). Therefore, without supporting the students' needs, organizations can not be successful in reducing acculturative stress. According to Mucsi (2021), "international students who knew more about the differences in teaching styles between their home country and Hungary, were more likely to reach higher levels of acculturation" (p. 147). Figure 5.1 present my finding and theseses:



**Figure 5.1: My Findings and Theseses**  
Source: Own Compilation

### 5.3 PEEMI and Satisfaction Theory

I finished my teaching activity for personality development by applying the transformational leadership skill to managing students' acculturative stress and improving their intercultural communication skills based on cultural diversity (Hofstede model, 1980) between the 2019 and 2022 academic years. I also finished my work on the integration project for the foreign students about the methods to develop intercultural communication skills among the international students at the University of Miskolc. Also, after analyzing the statistical data for the last question in my questionnaire (What kind of management style(s) do you prefer at the University of Miskolc? , I find out that the majority of the international students are looking for managers who have the capability of leadership skills such as guiding and helping them with their problems at the University of Miskolc. Then, I had a feeling that this theoretical way of reducing acculturative stress, promoting personality development and self-awareness, improving multicultural awareness and establishing intercultural communication both in verbal and written modes, could be implemented in such a way that it could be used for improving multicultural teamwork also. In my thought process, I considered the basic process and structure of a multicultural team. Ideally, the leader of the team and the team are working towards the same goal, and in the end, they will achieve this specific result on time. They will then restart the process toward another goal. The emphasis is on "ideally": from the beginning of the process, or even before appointing its leader, multicultural teams face challenges that are

unique to their structure. These challenges are numerous and can be very hazardous in their very nature. The best way to counter them is to analyze the process of multicultural teamwork thoroughly by dismantling it into smaller phases and searching for the problem, phase by phase; after finding them, eliminate the ones that can be eliminated and examine the reasons behind the ones that cannot be neutralized. Also, I considered satisfaction as a gravitational point for the process as a whole and assumed that the individual team members were trying to optimize their satisfaction in the process. That's why I reached the point in my model, and the five stages of teamwork for maximum satisfaction are P (Positivity), E (Encouragement), E (Empathy), M (Mediation), and I (Ideal Performance), which are presented in this model. In the next part, I will discuss the five stages of PEEMI and satisfaction theory. According to Erikson, 2021, the perfect manager doesn't mean they have to be experts or specialists; the perfect manager should have the best leadership skills. I hope that this theoretical model will help both international students deal with stress and develop their intercultural communication skills, as well helps employers improve organizational performance. This model includes four main stages and one central factor, which is called satisfaction. Here I present my theory and model.

- The first stage: Positivity: "I can do it."

The leader sets the guidelines for success and induces the team to do their jobs/tasks etc. better with his/her enthusiasm and positivity. He/she provides the goal and the way. Preparing the guidelines for implementation of the set goal and the way to achieve it.

- The second stage: Encouragement: "You can do it."

By the leader's example, the team is set on solving the assignments and tasks. They have the goal and the way. Ideally, this phase is the main stage of the implementation of the leader's vision. The team members must follow the guidelines which were presented to them.

- The third stage: Empathy: "Why can't do it?"

Most likely, part of the team will face problems either with the goal or the way. The leader has to understand the root cause of the problem and how to act upon it. This phase is the beginning of the correction, the leader identifies the problem(s) with the available tools and skills.

- The fourth stage: Mediation "How we can do it anyway?"

After finding the problem, the leader must participate in the mediation process between multiple parties to reach consensus on how to achieve the goal and the way. This is the main correction phase: the leader makes corrections to either the goal or the way (or, in rare cases, both) based on the facts gathered and the tools at his or her disposal. The process is corrected.

- The fifth stage: Ideal Performance "Win or lose, we will find a new way".

Ideal Performance leads us back to the beginning. If the process is successful, after a time, the leader has to find a new goal and way. If it has not been successful, he/ she has to set new goals immediately after the first process's failure.

After the success, the central factors will appear: Satisfaction and a positive experience that encourages participants to "trust in your ability".

Figure 5.2 presents my theory in graphic form:



**Figure 5.2: PEEMI & Satisfaction**  
Source: Own Compilation

There is a strong relationship between job satisfaction and job performance in any organization. According to Judge et al (2001, p.378) "this is probably the oldest specification of the relationship and is often attributed to the human relations movement". As Strauss (1968, p. 264) commented, "Early human relationship viewed the morale-productivity relationship quite simply: higher morale would lead to improved productivity". So, I believe that without satisfaction, no one will be successful in their performance. By applying one example, I would like to conclude my theory (PEEMI and Satisfaction):

- ❖ **Positivity:** For instance, you are a leader/teacher at a university that has ten international students. Your goal is the same: to make them succeed by obtaining their degrees; you also know how to guide them in the right direction. You set the goal and show them how to get there.
- ❖ **Encouragement:** With your guidance, they are starting to implement your theories, modus operandi, and ways, with varying levels of success.
- ❖ **Empathy:** Because implementation is not always perfect, if you experience lower success rates, you should try to understand the true reason(s) for the low success and quantify it/them. This is especially true when you have students from different cultures.
- ❖ **Mediation:** If you find the quantifiable sources for lower success, you will determine whether or not they are manageable or in need of management. Try to reach out on a personal level and make sure you are impartial.
- ❖ **Ideal Performance:** After correction, the ideals are either reached or not. If you reach it, it is time for a new goal and way and you will reach the satisfaction part; if not, you have to adjust the direction and try again.

In other words, PEEMI starts with a simple smile (Positivity), and this simple smile will get bigger as we reach the final stage of this theory (Ideal Performance). So, by bringing these smiles together, we will arrive at a simple form, like a container. But what about satisfaction?

Satisfaction will play the role of container handle (divided S into two parts). It may be difficult to move the container without the handles, but with the handles, this will be done easily.

Figure 5.3 presents my idea:



**Figure 5.3: PEEMI & Satisfaction**  
Source: Own Compilation

- Gray: Positivity
- Blue: Encouragement
- Red: Empathy
- Green: Mediation
- Pink: Ideal Performance
- Rainbow handles: Satisfaction

I hope that this simple model, which I envisioned after a lot of research concerning the impact of transformational and transactional leadership on multicultural organizations and getting various experiences concerning my teaching activities for personality development, managing acculturative stress, and improving intercultural communication skills at the University of Miskolc, could be useful for the management of the University of Miskolc and other researchers.

### 5.3.1 Application of PEEMI and the Satisfaction Model

Given the negative result of transformational leadership's effectiveness and its dimension on the acculturative stress, I conclude that leadership cannot be successful in solving problems within any organizations without the support of organizational managers. For example, after four semesters of personality development and a few workshops, it shows that international students have tried to cope with their acculturative stress by improving their knowledge of stress management, but unfortunately, they haven't been successful. Also, regarding improving intercultural communication skills based on Figure 4.3, the personal benefits dimension of leadership also showed that leaders such as professors and supervisors were successful in improving intercultural communication skills, but they still needed quite a bit of support from the management for developing communication skills at the organization. Therefore, I believe that cooperative the leader and manager any organization is needed. According to Ford (2016), finding innovation and developing new strategies is a cognitive ability rather than an enterprise skill. Graduate students in leadership are an important part of the development and advancement of natural science professionals (Cooke et al., 2021; Giles et al., 2020; Mogk & Goodwin, 2012). Also, Hayes et al., 2022, argue that "it follows that the skills necessary to

complete fieldwork successfully need to be explicitly developed, supported, and rewarded by both the student and their institutions, societies, and mentors." (p.9). Satisfaction with faculty and staff support can play a very essential role in international students' decisions to either continue or not continue their studies at the same educational institution (Gill et al., 2009). Therefore, it is important to apply or modify the strategies for improving international students' satisfaction. Transformational leadership can serve as a new strategy for the organization. It can encourage open communication with international students and try to find a simple solution for their needs within the educational field. Nischan (1997), found a positive and strong relationship between transformational leadership and student satisfaction. That is why I created PEEMI and satisfaction, which are based on transformational leadership abilities, in order to obtain assistance and support from organizational management for developing specific strategies within a higher educational institute such as the University of Miskolc. International students can better find and guide their goals to achieve their performance in the educational field, better manage their acculturative stress, and develop their communication skills with others. Also, during my educational learning, I learned that even the main subjects for my PhD require improving communication skills such as project management, strategic management, and marketing strategies, so I decided to develop PEEMI and satisfaction theory. In conclusion, it is believed that the new theories of PEEMI and Satisfaction can be applied to various types of organizations and can improve their performance. According to my knowledge this theory has some benefits for any organization such as;

1. "In an organization based on theory X or Y McGregor (1960). In this situation, the manager tries to focus mostly on Theory Y in the organization because, according to the PEEMI and Satisfaction Theories, every person has the right to develop, make decisions, and share his or her problems within the organization, and managers and leaders try to assist them in reaching their ideal performance without anxiety, conflict, or stress. Which, finally, everyone will be satisfied to work and try to improve the performance inside the organization."
2. "In an organization with a garbage ban organizational culture, which means that this type of organization doesn't have any transformational or transactional leadership. They are unable to make quick decisions, and they are not aware of how they can solve their problems. By integrating PEEMI and satisfaction model managers with the members, they will learn to share their knowledge while also developing organizational learning. Finally, we can achieve a high contrast in organizational culture in which both types of leadership are active and perform well. Therefore, the PEEMI and satisfaction models could be useful even in strategic management and decision making."
3. "Philip Kotler (2018), the father of marketing strategy, was a firm believer in the CCDVTP (create, communicate, deliver value, and target a market profit). In this case, we require a product manager to develop the product, branding management, for communication, value delivery for customer management, and finally, target market profit. In summary, I can say that for different stages, using the help of PPEMI and satisfaction theory, we can develop the marketing because the manager in this situation knows that by giving a clear goal, monitoring customer needs, communicating with their customers, and finding solutions for their followers' needs, they could be very successful among their competitors. PEEMI and satisfaction theory are based on communication, finding solutions, developing enthusiasm, and reaching "ideal performance."
4. "In higher education institutions, where students come from various countries and have different nationalities, each culture has its own values, beliefs, and attitudes (Tylor, 1871).

Developing communication skills, finding their problem, and coping with their acculturative stress can become an issue for the universities. PEEMI and satisfaction theory try to reduce this type of ambiguity for both international students and management. Students can feel that managers are paying attention to their inquiries. They can manage their stress and develop better educational files. Because PEEMI and satisfaction theory want to provide positive emotion (Kim, 2012) and individuals by developing positive emotion can better cope with their acculturative stress”.

5. “In any organization that is built based on team building, such as project management, Project management includes five main phases: initiation, project planning, project execution (project managing), performance/ monitoring, and project close. The third phase includes team building, therefore managers based on the PEEMI, and satisfaction theories can communicate, monitor the members, and try to solve their team building problems for ideal performance.”

6. “Last but not least, even the most talented person can suffer in an alien environment and not reach the same success that he or she could in his or her own environment. This discrepancy with the new environment can be detrimental to one’s success, and it needs possible solutions. PEEMI and satisfaction theory have the potential to improve intercultural communication by providing managers and employees with new ways to broaden their horizons and reach a common ground”.

According to my knowledge, PEEMI and satisfaction theory, which is derived from transformational leadership (Bass & Avolio, 1993), can be useful for improving organizational culture (Bernard and Bruce, 1994), developing teamwork and communication skills (Keane, 1999), especially in an intercultural environment, improving cultural awareness (Hofstede, 1980), reducing anxiety, acculturative stress (Ward, 1997), and negative conflict, and developing Theory Z, which Ouchi (1980) argued, by providing a friendly environment for employees in the organization to increase employees' commitment and encourage them to stay in the organization for a longer period of time because they are satisfied with the environment . As Strauss (1968, p. 264) commented, "Early human relationships viewed the morale-productivity relationship quite simply: higher morale would lead to improved productivity." At the end, I hope that PEEMI and satisfaction theory can be used by other researchers, and they can develop this simple model in their research.

#### **5.4 Limitations and Future Research Directions**

The findings of the present study carry significant limitations and suggestions that are relevant for future research and are discussed in this section;

1. Concerning the impact of nationality on acculturative stress, there was a big difference between the numbers of international students in the different cultural clusters, so it was not possible to perform a statistical test (ANOVA) to compare the effects of different cultural groups on acculturative stress. Therefore, I was unable to draw any general conclusion with confidence. I recommend that future researchers consider the size of the sample for a cultural cluster as well.

2. I did not mention some specific factors that could be related to culture and personal experience in my research for coping with acculturative stress in the ASSIS questionnaire, such as marriage status, number of children, and the type of religion and its limitations in the host country. According to the international office report, and as I have already mentioned, almost

50% of international students are Muslim, and regarding my demographical analysis, 109 of the 182 responses belong to Muslim countries such as Kazakhstan, Azerbaijan, Egypt, Palestine, Iraq, Jordan, Morocco, Algeria, Syria, Turkey, Tunisia, Uzbekistan, Pakistan, and Iran. According to Mukminin et al. (2013) outcomes and previous literature (Cole & Ahmadi, 2003; Nasir & Al-Amin, 2006), "Muslim students experience many challenges related to their religious beliefs and practices." (p. 43). For example, Zulkifli was one of the male doctoral students in the research, and he said, "This is not a Muslim country, so I have difficulties doing prayers in an appropriate place, particularly during semesters" (Mukminin et al., 2013, p. 38). As a result, I strongly advise a future researcher to consider cultural and religious values as well.

3. I did not consider the impact of emotional intelligence on improving and developing communication skills among the international students at the University of Miskolc. Emotional intelligence is the ability and skill to recognize, motivate, and manage our feelings in our relationships with others. Therefore, emotional intelligence is highly beneficial in the areas of education, work, and mental health. According to Preeti (2013, p.9), "emotionally intelligent people are more likely to succeed in everything they undertake." Teaching and encouraging emotional intelligence and social skills are very important in the educational field, and could affect academic achievement positively. Improving these skills and abilities has also had a long-term positive effect on achievement in our successful lives. In short, emotionally intelligent students would have better academic achievement by managing their acculturative stress and having better communication skills. Emotional intelligence became well known when Daniel Goleman (1995) argued that EI (also called EQ) has more value than IQ. While IQ reflects an ability in verbal, mathematical, or mechanical skills, memory is also improved, which could improve performance in an educational field very well. Goleman (1995) argued that an IQ score could not predict a person's success and happiness in his or her life. The ability of a person to use his or her emotions and identify the emotions of others may be a better predictor of his or her mental and physical health in both personal and social life.

4. The DISC model was developed by Marston in 1920. It includes four basic personality profiles: D, I, S, and C, which refer to dominance, influence, steadiness, and compliance (Bonnstetter & Suiter, 2018). According to the DISC model, each profile has unique behaviors, and there are overlapping preferences within each category. According to Kurz et al. (2021, p.4), "each personality profile has attributes that can benefit clear communication and support productivity." It is argued that "learning the preferences of each profile can assist with improving communication and fostering collaborative teamwork." (p.4). I have also not been able to do research in this area. I recommended future researchers consider the impact of emotional intelligence and the DISC model in their studies. In my opinion, developing emotional intelligence and knowing about the DISC model could act as the main factors for successful relationships and coping with acculturative stress, especially within intercultural organizations.

5. The other limitation of this study is that the sample size was very small for analyzing and determining, what type of organizational culture is applied at the University of Miskolc. Unfortunately, COVID-19 and language barriers didn't allow me to access more information and data. Consequently, with more samples, maybe the type of organizational culture will change.

6. In terms of methodology, the first methodological contribution is that the three email questionnaires were developed for the international students by sending them by WhatsApp



and Messenger, which were used to collect information from them in a short time. The second methodological contribution is that I use the spider's web diagram to assess acculturative stress, as well as the mean for effectiveness on demographic factors in transformational leadership and acculturative stress. The third methodological contribution is measuring the variables through reliability and validity tests, and the fourth methodological contribution is the examination of the developed model using PLS Smart, SEM, ANOVA, and SPSS as methods of analyzing the answers to my questions. By developing larger sample sizes (more than 200), future researchers can notice the difference between AMOS and PLS Smart for statistically analyzing data.

This dissertation is based on my four-year experience teaching MBA students at the University of Miskolc about personality development. When I had the chance to teach workshops about acculturative stress and how we can develop our international communication skills when we are studying in a global environment such as the University of Miskolc, I hoped that these findings and results could bring new ideas to the organization and help international students manage their stress. At the end, I would like to appreciate my dear supervisor, Dr. Kunos István, who gave me these opportunities to teach about personality development and develop my knowledge regarding this research.

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APPENDIX A: Questionnaires

APPENDIX 1.1: Demographic Questions

SECTION: A GENERAL INFORMATION	Please tick one box for each question
<b>A. Gender</b> 1. Male 2. Female	( ) ( )
<b>B. What is your age</b> 20 years or younger 21-30 31-40 41-50 51 or older	( ) ( ) ( ) ( ) ( )
<b>C. Where are you from?</b>	( )
<b>D. Which educational level are you currently pursuing?</b>  BA or similar degree MA or similar degree PhD	( ) ( ) ( )

APPENDIX 1.2: Acculturative Stress Scale for International Students (ASSIS)

Acculturative stress	Strongly Agree	Agree	Neither Disagree nor Agree	Disagree	Strongly Disagree
<b>Perceived Discrimination:</b> I feel that I receive unequal treatment.					
<b>Social Isolation:</b> I am treated differently in social situations.					
<b>The Threat to Cultural Identity:</b> I am losing my ethnic identity.					
<b>Inferiority:</b> I feel sad living in unfamiliar surroundings here					
<b>Homesickness:</b> I feel sad living in these unfamiliar surroundings.					
<b>Fear:</b> I feel insecure here, I feel intimidated to participate in social activities.					
<b>Anger/Disappointments:</b> I get angry when people use racial slurs and jokes about my culture.					
<b>Mistrust:</b> It is hard for me to make trustworthy friends here					

<b>Communication Problems:</b> I feel nervous to communicate with other students					
<b>Culture Shock:</b> I feel uncomfortable to adjust to new foods.					
<b>Perceived Hatred:</b> Some people show hatred toward me because of different ethnic background.					
<b>Guilt:</b> I feel guilty that I am living a different lifestyle here					

Source: Bai, 2012; and Akhtar & Herwig, 2015, cited by Sandhu, 1994, pp. 437-438.

Please grade the following options based on your personal importance which you would like to upgrade (where 1 is the least important for you and 6 is the most important for you). (Please be advised that only one answer is allowed in each row and each column.)

Items/No	1	2	3	4	5	6
Food						
Communication						
Level of participation						
Availability of staff						
Recreational Abilities						
Accommodation						

Source: Own Compilation

## APPENDIX 1.3

**\*Transformational Leadership**

Statements	Strongly disagree (1)	Disagree (2)	Neutral (3)	Agree (4)	Strongly agree (5)
<b>Idealized Influence Behavior (D)</b>					
Instils pride in me for being associated with him/her					
Goes beyond self-interest for the good of the group					
Acts in ways that build my respect					
Displays a sense of power and confidence					
Provides complete trust					
<b>Idealized Influence Attributed (D)</b>					
Talks about his/her most important values and beliefs					
Specifies the importance of having a strong sense of purpose					
Considers the moral and ethical consequences of decisions					
Emphasizes the importance of having a collective sense of mission					
<b>Inspirational Motivation (D)</b>					
Talks optimistically about the future					
Talks enthusiastically about what needs to be accomplished					
Expresses confidence that goals will be achieved					
<b>Individualized Consideration (D)</b>					
Spends time teaching and coaching					
Treats me as an individual rather than just a member of the group					
Helps me to develop my strengths					
Considers me as having different needs, abilities, and aspirations from others					
<b>Intellectual Stimulation (D)</b>					
Re-examines critical assumptions to question whether they are appropriate					
Seeks differing perspectives when solving problems					
Gets me to look at problems from many different angles					
Suggest new ways of looking at how to complete assignments					
<b>Personal Questions : Personal benefits</b>					
Helps me improve my intercultural communication skills					
Helps to alleviate my acculturative stress					
Represents my interests					
Helps me integrate into the community of the university					

Source: Feldmann (2012, pp. 47) &amp; Own Compilation



**APPENDIX 1.4:**

**Organizational Description Questionnaire (ODQ)**

<b>Transformational Leadership</b>	<b>Strongly Agree</b>	<b>Agree</b>	<b>Neither Disagree nor Agree</b>	<b>Disagree</b>	<b>Strongly Disagree</b>
L1: Talks about his/her most important values and beliefs					
L1: Specifies the importance of having a strong sense of purpose					
L1: Considers the moral and ethical consequences of decisions					
L1: Emphasizes the importance of having a collective sense of mission					
L2: Talks optimistically about the future					
L2: Talks enthusiastically about what needs to be accomplished					
L2: Expresses confidence that goals will be achieved					
L3: Spends time teaching and coaching					
L3: Treats me as an individual rather than just a member of the group					
L3: Helps me to develop my strengths					
L3: Considers me as having different needs, abilities, and aspirations from others					
L4: Re-examines critical assumptions to question whether they are appropriate					
L4: Seeks differing perspectives when solving problems					
L4: Gets me to look at problems from many different angles					
L4: Suggest new ways of looking at how to complete assignments					

Source: Allen (2010, pp.56-60).

<b>Transactional Leadership</b>	<b>Strongly Agree</b>	<b>Agree</b>	<b>Neither Disagree nor Agree</b>	<b>Disagree</b>	<b>Strongly Disagree</b>
* My manager concentrates his/her full attention on dealing with mistakes, complaints, and providing strategy					
** My manager fails to interfere until problems become serious					
*** Managers give rewards for innovation Ideas					
*** Provides me with assistance in exchange for my efforts					

Source: Allen (2010, pp. 53-55).

\*Management by Expectation Active

\*\*Management by Expectation Passive

\*\*\*Contingent Rewards

## Appendix B

## Normality

Tests of Normality

gender		Kolmogorov-Smirnov <sup>a</sup>			Shapiro-Wilk		
		Statistic	df	Sig.	Statistic	df	Sig.
ASSIS	Male	.067	119	.200 <sup>*</sup>	.978	119	.048
	Female	.113	62	.048	.971	62	.155

\*. This is a lower bound of the true significance.

a. Lilliefors Significance Correction

Tests of Normality

age2		Kolmogorov-Smirnov <sup>a</sup>			Shapiro-Wilk		
		Statistic	df	Sig.	Statistic	df	Sig.
ASSIS	21-30	.079	117	.068	.968	117	.007
	>=31	.083	65	.200 <sup>*</sup>	.974	65	.193

\*. This is a lower bound of the true significance.

a. Lilliefors Significance Correction

Tests of Normality

edu2		Kolmogorov-Smirnov <sup>a</sup>			Shapiro-Wilk		
		Statistic	df	Sig.	Statistic	df	Sig.
ASSIS	B&M	.073	116	.179	.966	116	.005
	PhD	.089	66	.200 <sup>*</sup>	.977	66	.245

\*. This is a lower bound of the true significance.

a. Lilliefors Significance Correction

## Tests of Normality

	gender	Kolmogorov-Smirnov <sup>a</sup>			Shapiro-Wilk		
		Statistic	df	Sig.	Statistic	df	Sig.
Idealized_influence_behavior	0	.105	119	.003	.976	119	.031
	Female	.101	62	.183	.966	62	.079
Idealized_influence_attributed	0	.144	119	.000	.963	119	.003
	Female	.136	62	.006	.951	62	.015
Inspirational_motivation	0	.178	119	.000	.916	119	.000
	Female	.178	62	.000	.929	62	.001
Individualized_consideration	0	.142	119	.000	.963	119	.002
	Female	.123	62	.020	.960	62	.042
Intellectual_stimulation	0	.142	119	.000	.950	119	.000
	Female	.164	62	.000	.930	62	.002
Personal_benefit	0	.136	119	.000	.961	119	.002
	Female	.136	62	.006	.961	62	.049
Leadership	0	.107	119	.002	.965	119	.004
	Female	.154	62	.001	.947	62	.010

a. Lilliefors Significance Correction

## Tests of Normality

	age2	Kolmogorov-Smirnov <sup>a</sup>			Shapiro-Wilk		
		Statistic	df	Sig.	Statistic	df	Sig.
Idealized_influence_behavior	21-30	.085	116	.038	.978	116	.052
	>=31	.127	65	.011	.953	65	.014
Idealized_influence_attributed	21-30	.129	116	.000	.963	116	.003
	>=31	.178	65	.000	.954	65	.018
Inspirational_motivation	21-30	.186	116	.000	.916	116	.000
	>=31	.164	65	.000	.936	65	.002
Individualized_consideration	21-30	.135	116	.000	.961	116	.002
	>=31	.113	65	.037	.962	65	.045
Intellectual_stimulation	21-30	.145	116	.000	.949	116	.000
	>=31	.161	65	.000	.941	65	.004
Personal_benefit	21-30	.129	116	.000	.956	116	.001
	>=31	.161	65	.000	.963	65	.048
Leadership	21-30	.120	116	.000	.959	116	.001
	>=31	.139	65	.003	.952	65	.013

a. Lilliefors Significance Correction

## Tests of Normality

edu2		Kolmogorov-Smirnov <sup>a</sup>			Shapiro-Wilk		
		Statistic	df	Sig.	Statistic	df	Sig.
Idealized_influence_behavior	B&M	.102	115	.005	.972	115	.017
	PhD	.100	66	.099	.972	66	.143
Idealized_influence_attributed	B&M	.132	115	.000	.956	115	.001
	PhD	.135	66	.004	.961	66	.037
Inspirational_motivation	B&M	.190	115	.000	.910	115	.000
	PhD	.157	66	.000	.938	66	.003
Individualized_consideration	B&M	.131	115	.000	.967	115	.006
	PhD	.138	66	.003	.952	66	.012
Intellectual_stimulation	B&M	.153	115	.000	.944	115	.000
	PhD	.170	66	.000	.948	66	.008
Personal_benefit	B&M	.159	115	.000	.954	115	.001
	PhD	.097	66	.200 <sup>*</sup>	.974	66	.172
Leadership	B&M	.139	115	.000	.947	115	.000
	PhD	.131	66	.007	.972	66	.135

\*. This is a lower bound of the true significance.

a. Lilliefors Significance Correction

## Tests of Normality

National2code		Kolmogorov-Smirnov <sup>a</sup>			Shapiro-Wilk		
		Statistic	df	Sig.	Statistic	df	Sig.
Idealized_influence_behavior	Africa and the Middle East	.101	106	.010	.972	106	.026
	other	.102	75	.053	.973	75	.111
Idealized_influence_attributed	Africa and the Middle East	.139	106	.000	.966	106	.008
	other	.158	75	.000	.941	75	.002
Inspirational_motivation	Africa and the Middle East	.160	106	.000	.929	106	.000
	other	.201	75	.000	.911	75	.000
Individualized_consideration	Africa and the Middle East	.112	106	.002	.968	106	.012
	other	.149	75	.000	.952	75	.006
Intellectual_stimulation	Africa and the Middle East	.120	106	.001	.960	106	.003
	other	.190	75	.000	.911	75	.000
Personal_benefit	Africa and the Middle East	.118	106	.001	.970	106	.017
	other	.161	75	.000	.948	75	.004
Leadership	Africa and the Middle East	.077	106	.136	.976	106	.050
	other	.186	75	.000	.907	75	.000

a. Lilliefors Significance Correction

## Tests of Normality

National2code		Kolmogorov-Smirnov <sup>a</sup>			Shapiro-Wilk		
		Statistic	df	Sig.	Statistic	df	Sig.
ASSIS	Africa and the Middle East	.063	106	.200 <sup>*</sup>	.975	106	.039
	other	.091	75	.200 <sup>*</sup>	.979	75	.243

\*. This is a lower bound of the true significance.

a. Lilliefors Significance Correction

## Appendix C

**Tests of Between-Subjects Effects**

Dependent Variable: ASSIS

Source	Type III Sum of Squares	df	Mean Square	F	Sig.
Corrected Model	1.897 <sup>a</sup>	1	1.897	2.444	.120
Intercept	999.715	1	999.715	1287.912	.000
gender	1.897	1	1.897	2.444	.120
Error	138.945	179	.776		
Total	1281.278	181			
Corrected Total	140.843	180			

a. R Squared = .013 (Adjusted R Squared = .008)

**Tests of Between-Subjects Effects**

Dependent Variable: ASSIS

Source	Type III Sum of Squares	df	Mean Square	F	Sig.
Corrected Model	.010 <sup>a</sup>	1	.010	.013	.909
Intercept	1064.268	1	1064.268	1357.956	.000
edu2	.010	1	.010	.013	.909
Error	141.071	180	.784		
Total	1290.278	182			
Corrected Total	141.081	181			

a. R Squared = .000 (Adjusted R Squared = -.005)

**Tests of Between-Subjects Effects**

Dependent Variable: ASSIS

Source	Type III Sum of Squares	df	Mean Square	F	Sig.
Corrected Model	1.346 <sup>a</sup>	1	1.346	1.734	.190
Intercept	1077.033	1	1077.033	1387.382	.000
age2	1.346	1	1.346	1.734	.190
Error	139.735	180	.776		
Total	1290.278	182			
Corrected Total	141.081	181			

a. R Squared = .010 (Adjusted R Squared = .004)

**Tests of Between-Subjects Effects**

Dependent Variable: Leadership

Source	Type III Sum of Squares	df	Mean Square	F	Sig.
Corrected Model	.037 <sup>a</sup>	1	.037	.088	.767
Intercept	2214.216	1	2214.216	5282.067	.000
gender	.037	1	.037	.088	.767
Error	75.036	179	.419		
Total	2539.374	181			
Corrected Total	75.073	180			

a. R Squared = .000 (Adjusted R Squared = -.005)