# When a Campus Becomes Threatening: Social Identity Threat due to Socioeconomic Status and the Moderating Role of Implicit Theories

by

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## STATEMENT OF AUTHORSHIP

This thesis contains no material which has been accepted for any award or any other degree or diploma in any university or other institution. It is affirmed by the candidate that, to the best of her knowledge, the thesis contains no material previously published or written by another person, except where due reference is made in the text of the thesis.

Signed Nur Soylu

## ABSTRACT

Socioeconomic status can become a source of threat for people in certain settings. Social identity threat evoked by upper SES cues in a university environment leads to detrimental effects on high school students from lower socioeconomic status families, who are preparing to become university students. This paper examines how this threat manifests in the evaluations of the threatening university environment by these students, in terms of their anticipated sense of social, academic and overall fit. Moreover, the buffering role of incremental theories of intelligence, personality, social identities, and groups, which highlight the malleable and improvable nature of personal attributes and social identities, is investigated. Analyses of covariance show that participants in the threat group score lower in anticipated sense of overall fit and social fit in the university environment than participants in the control group when self-esteem, confidence in social interactions, confidence in physical appearance, and general self-confidence are controlled for. Participants in the threat group also score lower in anticipated sense of academic fit in the university environment than participants in the control group when academic self-efficacy and general self-confidence are controlled for. However, implicit theories do not show the predicted role as moderators. The results are discussed in terms of possible research directions and applications.



**Keywords**: Social identity threat, academic achievement, sense of belonging, implicit theories, socioeconomic status

# ÖZET

Sosyoekonomik statü, bazı ortamlarda insanlar için bir tehdit unsuru haline gelebilmektedir. Bir üniversite ortamında yüksek sosyoekonomik statünün yaygın olduğunu gösteren işaretler, daha düşük sosyoekonomik statüdeki ailelerden gelen ve üniversiteye hazırlanan lise öğrencileri üzerinde olumsuz etkiler gösterebilmektedir. Bu çalışma, bu tehdit hissinin, öğrencilerin tehdit unsuru içeren üniversite ortamıyla ilgili değerlendirmelerine nasıl yansıdığını, öğrencilerin üniversitede hissetmeyi bekledikleri sosyal, akademik ve genel uyum hissi üzerinden araştırmaktadır. Ayrıca, insanların özelliklerinin ve kimliklerinin zaman içinde değişip gelişebileceğine olan inançla ilgili örtük zeka, kişilik, sosyal kimlik ve grup kuramlarının bu tehdit karşısındaki koruyucu rolü incelenmektedir. Kovaryans analizleri kullanılarak, özdeğer, sosyal becerilerle ilgili özgüven, fiziksel görünüm ile ilgili özgüven ve genel özgüven değişkenleri kontrol edildiğinde, tehdit grubundaki katılımcıların, kontrol grubundaki katılımcılara göre üniversitede hissetmeyi bekledikleri sosyal ve genel uyum hissini daha düşük rapor ettikleri bulunmuştur. Akademik özyeterlik ve genel özgüven değişkenleri kontrol edildiğinde de tehdit grubundaki katılımcıların üniversitede hissetmeyi bekledikleri akademik uyum hissini kontrol grubundaki katılımcılara gore daha düşük rapor ettikleri görülmüştür. Ancak, örtük kuramlar beklenen ortalayıcı değişken rolünü göstermemiştir. Sonuçlar, gelecek araştırmalar ve muhtemel uygulamalar çerçevesinde tartışılmıştır.



**Anahtar Sözcükler:** Sosyal kimlik tehditi, akademik başarı, aidiyet hissi, örtük kuramlar, sosyoekonomik statü

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Nur Soylu

**TABLE OF CONTENTS**

## LIST OF TABLES

## LIST OF FIGURES

# CHAPTER 1

## INTRODUCTION

Socioeconomic status as an identity which can lead to threat in various contexts has not received much research attention (Spencer & Castano, 2007), presenting a stark contrast with the plethora of research conducted on threat due to identities such as race and gender (Nguyen & Ryan, 2008). Socioeconomic status is different from these identities, as it is less easily discernible and more open to change. Still, it can become a psychological liability in certain settings, much like race or gender, given that in every society, certain social identities are considered to fit in well in particular contexts, whereas some other identities are devalued or marginalized in these same settings (Steele, Spencer & Aronson, 2002).

Low socioeconomic status can become an obstacle against the academic achievement of students, for reasons such as the lack of financial resources of their families, and lack of available role models (Croizet & Claire, 1998). In addition, the way their identities are perceived in the society can also hinder the achievement of these students (Croizet & Claire, 1998). We suggest that the social identity threat they experience due to their socioeconomic status can have important consequences for lower SES students in a competitive education system. Social identity threat refers to the devaluation or marginalization faced in particular environments by people who have stigmatized identities (Steele, Spencer & Aronson, 2002). This paper examines the effects of expecting to face social identity threat in a university environment with upper SES cues on the anticipated sense of fit in the university, as reported by senior high school students from lower SES families in Turkey. Moreover, the buffering role of incremental implicit theories, which refer to beliefs in the improvability of personal attributes (Dweck & Legget, 1988; Dweck, Chiu & Hong, 1995), in this process is also investigated.

Social identity threat does not only affect people who currently are in a threatening environment; it can also have negative consequences for those who expect to enter a threatening setting. Although this is demonstrated in a few studies (e.g. Purdie-Vaughns, Steele, Davies, Ditlmann, & Crosby, 2008), the majority of the research on social identity threat actually misses a whole population of group members who experience threat due to cues in a setting that they have not yet entered. In the case of Turkey, focusing on the population of students who never grasp the opportunity to go to college is all the more important, as only a selection of high school students can pursue higher education. According to 2011 statistics, about 759 thousand of over 1.6 million students who took the university entrance examination were admitted to higher education institutions (OSYM, 2011). The university entrance examination scores determine students' chances of entering a university. The preparation phase of this test is very rigorous, as a spot in a university is very competitive. In this competition, students from upper SES families are advantaged, as they go to better high schools, can afford to have tutors and to attend courses specifically designed to provide training for this test. 2011 statistics show that only 20 percent of the senior students who go to regular state high schools succeeded to enter an undergraduate program, while this percentage is 47 and 62 for private high schools and private high schools which have education in a foreign language of instruction, respectively (TUIK, 2011). High school students from lower SES families, who are thus disadvantaged in this competition, might also be experiencing feelings of threat due to upper SES cues in the university environments, and give up the goal of university entrance. We therefore focus on senior high school students to demonstrate how they are influenced by an anticipation of social identity threat.

Moreover, we expect the influence of social identity threat on anticipated sense of fit to be moderated by implicit theories of students. "Implicit theories" is a generic term that may include any belief about the malleability of intelligence, personality, morality (Dweck,

Chiu & Hong, 1995), and other attributes. Specifically, an incremental theory refers to a belief in the malleable or improvable nature of these attributes, whereas an entity theory refers to a belief in the fixed and permanent nature of them (Dweck, Chiu & Hong, 1995). We focus on incremental theories of intelligence, personality (Dweck, Chiu & Hong, 1995), groups (Rydell, Hugenberg, Ray & Mackie, 2007), and social identities (Group Entity Beliefs; Tong & Chang, 2008) as buffers of social identity threat.

In the following sections, we will review previous research on stereotype and social identity threat, and how implicit theories come into the picture in this process. We will finally present the current study.

# CHAPTER 2

# LITERATURE REVIEW

## 2.1 Stereotype Threat and Social Identity Threat

Stereotype threat occurs when a member of a group which is negatively stereotyped in a certain domain worries about being evaluated on the basis of this negative stereotype and possibly confirming it (Steele & Aronson, 1995). For the possibility of confirming a negative stereotype about one's group to be threatening, the person should identify with the domain in which her group is negatively stereotyped, and should engage in a challenging task that is relevant to this domain (Aronson, Fried & Good, 2002). The threat can then have two important consequences: In the short run, it directly interferes with and leads to a decrease in task performance, and in the long run, it may result in disidentification from the specific domain, or psychological disengagement from achievement in it (Steele, 1997; Aronson, Fried & Good, 2002). Several influential studies, starting with the seminal work of Steele and Aronson (1995), have shown how minor manipulations that trigger stereotype threat, such as having participants indicate their race before a test (Steele and Aronson, 1995), can decrease the academic performance of negatively stereotyped group members and create significant academic achievement gaps between groups. Research on the mechanisms of this process suggests a number of possible mediators. Increased anxiety due to threat provides one explanation, as demonstrated in several studies through self-report and physiological measures (Steele, Spencer & Aronson, 2002). Other possible mediators include reduction in effort due to threat, and activation of the stereotype in mind, although evidence regarding these processes is inconclusive (Steele, Spencer & Aronson, 2002).

Although an abundance of research exists on stereotype threat due to identities such as race and gender, stereotype threat due to SES has only recently begun to be investigated (Johnson, Richeson & Finkel, 2011). A study by Cozzarelli and colleagues (Cozzarelli,

Wilkinson & Tagler, 2001) has uncovered a negative cultural stereotype about the inferior intellectual and academic capabilities of people from low SES backgrounds in the US by examining the cognitive aspect of the attitudes toward the poor. They presented the respondents with a list of adjectives and asked them to indicate to what extent those characteristics describe poor and rich people. They have found that participants were more likely to associate negative characteristics with poor people than with rich people. Specifically, poor people were rated as less hardworking, less intelligent, more lazy and more unmotivated than rich people. This research indicates the existence of a cultural stereotype about people from low SES backgrounds in the case of the US. This negative stereotype has been the focus of a study conducted by Regner, Huguet and Monteil (2002). The researchers have shown that low SES students used a negative stereotype when making inferences about the intellectual abilities of low SES people based on their performance. In one of the earliest studies focusing specifically on the experience of stereotype threat due to low SES, Croizet and Claire (1998) investigated whether framing a task as diagnostic of intellectual ability would lead to a decrease in the performance of students with low SES backgrounds, with a French sample. The researchers have found that in the ability diagnostic condition, low SES participants performed worse than high SES participants, and also worse than low SES participants who were in the ability nondiagnostic condition, thereby demonstrating the detrimental effect of stereotype threat on performance. Another finding of the study is worth mentioning: Asking participants about their parents' education level and occupation failed to intensify stereotype threat effects. The authors suggest that either the students' were already highly aware of their lower class standing, or asking about parents was not an effective way of increasing social class awareness for them.

A more recent study by Spencer and Castano (2007) has shown similar stereotype threat effects with an American sample. When SES was made salient before a GRE test or

when the test was framed as ability-diagnostic, low SES participants performed worse than they did in the absence of a manipulation. However, the same gap did not occur in a proofreading task, which is easier compared to the GRE. The authors report that despite the American ideology presenting the US as a "classless" society, SES can be made salient for American participants and lead to threat (Spencer and Castano, 2007). Another study conducted in the US around the same period of time also yielded similar results, showing that low SES students perform worse than both high and middle SES students when under stereotype threat (Harrison, Stevens, Monty & Coakley, 2006).

Recently, research on stereotype threat has been extended with the construct of social identity threat (Steele, Spencer & Aronson, 2002). Social identity threat has been elegantly summarized by Steele and his colleagues as "the setting hold[ing] an animus toward one's group" (Steele, Spencer & Aronson, 2002, p.416). This sense of "animus" can be stemming from an identity having low or marginalized status in a context (Steele, Spencer & Aronson, 2002), a person's background being discrepant from the majority's (Johnson, Richeson & Finkel, 2011) or simply from a sense of not fitting in or belonging in a certain setting due to one's identity (Walton & Cohen, 2007), among other reasons. Social identity threat is not inherent in an identity itself, but emerges out of the encounter of a certain identity and a certain context (Major & O'Brien, 2005) where the person perceives cues that his or her identity might be devalued, unaccepted or marginalized (Inzlicht & Good, 2006).

While the literature on stereotype threat exclusively focuses on evaluative settings and manipulation through task instructions (Logel, Spencer, Iserman, Walton, Hippel & Bell, 2009), research on social identity threat has demonstrated the threat-evoking potential of various "seemingly innocuous" cues (Steele, Spencer & Aronson, 2002, p. 422). These may include situational cues such as the existence of stereotypical objects in a setting (Cheryan, Plaut, Davies, & Steele, 2009), being the only woman in a group made up of males (Inzlicht

& Ben-Zeev, 2000), low numerical representation of a particular identity in an environment, the setting being culturally centered or favoring a particular identity, a colorblind or diversity-valuing ideology being endorsed, among many other features of the environment such as the styles and values recognized or favored (Steele, Spencer & Aronson, 2002). Moreover, interpersonal cues, such as the mere suggestion of sexism in an instruction setting (Adams et al., 2006), or interacting with men who show sexist behaviors (Logel, Walton, Spencer, Iserman, von Hippel & Bell, 2009), can also trigger threat. Importantly, the influence of social identity threat on stigmatized individuals may even take place outside of their awareness, as the possibility of being devalued creates automatic vigilance to threatening cues in an environment (Kaiser, Vick & Major, 2006).

Walton and Cohen (2007) put forth the idea of a working hypothesis such as "people like me do not belong here" (p. 83) as residing behind the emergence of social identity threat. What they call "belonging uncertainty" (Walton & Cohen 2007, p. 82), or being uncertain about one's social connectedness in a setting, make members of devalued groups highly vigilant about cues that may be taken to confirm this hypothesis in their minds. The researchers have found that when minority students were led to believe they had few friends in a field of study, their race became salient for them and they tended to discourage members of their group from entering the field. However, concerns about the racial stereotype were not activated in their minds, showing that the identity threat stemming from feelings of misfit in a setting is not necessarily or directly tied to a negative stereotype (Walton & Cohen, 2007).

The broad perspective of social identity threat is particularly suitable to investigate how SES as an identity influences people in academic contexts. Similar to the case of African Americans who report lower levels of sense of belonging than their White peers, and show a decline in their grades at predominantly White universities due to experiencing status-based rejection sensitivity (Mendoza-Denton, Downey, Purdie, Davis & Pietrzak, 2002), the college

experiences of students from lower SES or working class families also differ from those of their upper class peers in a negative way, in terms of their sense of belonging, achievement and educational aspirations (eg. Ostrove & Long, 2007; Bufton, 2003; Walpole, 2003; Ostrove, 2003). These stem not directly from the threatening effects of a negative stereotype. They arise from general concerns about being different from others because of one's background and not measuring up to the valued style or identity in a setting (Johnson, Richeson & Finkel, 2011), or an expectation of general hostility (Adams, Garcia, Purdie-Vaughns & Steele, 2006). Indeed, Ostrove and Long (2007) have found that students' social class standing affect their college outcomes through the mediation of their sense of belonging at college.

Recent research has shown how even students from middle SES families, who are not stigmatized in the larger society, come to experience social identity threat in a predominantly upper class or elite university environment (Johnson, Richeson & Finkel, 2011). The researchers have found that students from middle class families tend to feel different than their peers in an elite university environment where most of the students come from upper class families. In turn, their concerns about academic competency, which is most central to that environment, increase significantly. Moreover, trying to manage these concerns during situations of self-presentation on an academic topic leads to ego-depletion. This research is among the few studies explicitly focusing on SES as a source of social identity threat, and demonstrating its influence independently of the SES stereotype.

In our investigation, we adopt the broad perspective of social identity threat to identify the ways in which threat arising from one's socioeconomic status can be triggered and manifested. Stereotypes make up only one potential source of threat. No study to date that we could find has investigated the existence of a well-established negative stereotype about the inferior capabilities of people from low SES in the Turkish context. Negative stereotypes

about the poor mostly stem from attributions of poverty: American participants tend to attribute the reasons of individuals' poverty to their own characteristics such as laziness, which provides a basis for negative stereotypes to emerge (e.g. Feagin, 1972; Smith & Stone, 1989). However, in a Turkish sample, reasons of poverty were mostly attributed to system-level problems rather than to personal characteristics of poor people (Morçöl, 1997). This suggests that a uniformly negative stereotype about the poor is more likely to exist in individualistic cultures. Moreover, negative stereotypes are only part of the story in the case of socioeconomic status. We propose that a peek at the university environment they hope to enter soon can evoke social identity threat through cues that signal possible social and academic ill-fitting (Walton & Cohen, 2007) for lower SES senior high school students, above and beyond the pejorative implications of a possible stereotype about the inferior intellectual and academic capabilities associated with their group.

One line of research that differs from the bulk of the research on social identity threat focuses not on the current setting, but on an anticipated sense of threat to be faced in a setting not yet entered. Murphy, Steele and Gross (2007) have presented math, science and engineering (MSE) majors who are highly identified with their domain of study with a video of an MSE conference which depicted either a balanced or unbalanced gender representation. The results reflected social identity threat, as female MSE students reported lower anticipated sense of belonging at and lower desire to participate in an upcoming MSE conference with an unbalanced (dominated by males) rather than a balanced gender representation. In a similar vein, Purdie-Vaughns and her colleagues (Purdie-Vaughns, Steele, Davies, Ditlmann & Crosby, 2008) have shown how expecting to face devaluation of one's race in an organization can affect people's evaluations of this potentially threatening setting before entering it. In their studies, they provided African American participants with the brochure of an ostensible company, which included photographs depicting either high or low minority representation,

and a description of the company philosophy as either colorblind or diversity- valuing. The findings showed that when low-minority-representing photographs were matched with a colorblind philosophy, participants scored significantly lower on a measure of trust and comfort toward the setting, as they inferred from the information that minority identities may not be valued in this context.

We will be building upon these studies in terms of investigating the effects of an *expectation* of threat on people. Our first aim is to document the triggers and consequences of social identity threat. The cues that may convey a threatening message to lower SES students have not yet been well-investigated. Sense of social ill-fitting (Walton & Cohen, 2007) in the upper-SES university environment may stem from concerns of being different from others in many aspects, including clothing styles, hobbies, or engagement in an elite social life. We further propose that concerns about academic ill-fitting (Walton & Cohen, 2007) may occur in the Turkish context, as students from upper-SES families usually graduate from more reputable high schools than their lower SES peers. Social identity threat evoked by cues relating to these aspects will be manifested in anticipated sense of social and academic fit of participants in an upper SES university environment (Walton & Cohen, 2007), in the absence of an evaluative context (Purdie-Vaughns, et al.,2008).

Hypothesis 1a: Lower SES high school students who are exposed to upper SES cues from a university environment will report lower anticipated sense of social fit than participants who are not exposed to these cues.

Hypothesis 1b: Lower SES high school students who are exposed to upper SES cues from a university environment will report lower anticipated sense of academic fit than participants who are not exposed to these cues.

## 2.2 Implicit Theories

Previous research has focused on ways of alleviating the detrimental effects of identity threat, including but not limited to relational strategies such as forming friendships and tutoring (Steele, Spencer & Aronson, 2002), conveying cues of identity safety (Davies, Spencer & Steele, 2005), increasing sense of belonging through attributional interventions (Walton & Cohen, 2007), and self-affrmation strategies (Cohen, Garcia, Purdie-Vaughns, Apfel, &Brzustoski, 2009). One effective strategy to overcome the effects of identity threat is the use of implicit theories. Dweck and her colleagues (Dweck & Legget, 1988; Dweck, Chiu & Hong, 1995; Chiu, Hong & Dweck, 1997) have proposed that people hold implicit theories, or lay beliefs, regarding the malleability of personal attributes, intelligence, morality and the world. Entity theorists believe things to be fixed and unchangeable. People who hold an entity theory of intelligence, for instance, believe that it is a fixed trait, whereas incremental theorists believe that it can be substantially improved through effort. Entity theorists respond negatively to failure, as it implies lack of ability or intelligence on their part (Dweck, Chiu & Hong, 1995). In contrast, holding incremental theories can have a buffering function in the face of threat caused by stereotypes implying fixed and inferior ability in a domain (e.g. Aronson, Fried & Good, 2002; Good, Aronson & Inzlicht, 2003).

The implications of holding different implicit person theories for group processes, intergroup relations, stereotyping and prejudice is well-documented (eg. Levy, Stroessner and Dweck, 1998; Plaks, Stroessner, Dweck & Sherman, 2001). In an early study, Dweck, Chiu and Hong (1995) have shown that people who hold an entity view of the self tend to attribute the reasons behind other people's behaviors to their stable attributes, and they reach such trait-based conclusions on the basis of relatively few behaviors. This tendency also extends to beliefs at the group level, and translates into greater endorsement of stereotypes by entity theorists (Levy, Stroessner and Dweck, 1998). Entity theorists believe that stereotypic traits

reflect innate or inherent group differences (Levy, Stroessner and Dweck, 1998). By manipulating participants' implicit theories, the researchers have also demonstrated that holding an entity theory of personality leads to greater endorsement of stereotypes than holding an incremental theory (Levy, Stroessner and Dweck, 1998).

Hong and colleagues (Hong et al., 2003) have recently investigated how implicit person theories moderate the effects of social identification on intergroup relations. Of interest for the purposes of the present study, they suggest that people who endorse an entity theory of personality also view social identities as fixed, real entities, and are more likely to ascribe the characteristics associated with their groups to themselves. They tend to believe that certain dispositions define a group, and are possessed by all the members of the group as fixed characteristics, whereas incremental theorists perceive social groups as permeable to change in terms of their composition and characteristics. Viewing groups as having a fixed essence is akin to perceiving them as highly entitative, or having a real existence (Crawford, Sherman & Hamilton, 2002). Perceiving groups as highly entitative leads people to ascribe the traits of members to the group as a whole, and resulting in high levels of stereotyping (Crawford, Sherman & Hamilton, 2002).

The analysis of Hong and colleagues (Hong et al., 2003) suggest that implicit theories of personality that a person holds directly translate into their implicit theory about groups and social identities. Other researchers have recently identified the latter two types of implicit theories as distinct constructs from implicit theories of personality (Tong and Chang, 2008; Rydell at al., 2007). Rydell and colleagues (Rydell et al., 2007) put forth implicit theories of groups as a distinct construct, referring to a person's beliefs about the possibility that social groups may change or improve over time. These may include beliefs pertaining to change or stability in the members of the group, and the things that group members tend to do, over time. The researchers suggest that not implicit theories of personality, but implicit theories of

groups have consequences in terms of stereotyping, through changing perceptions of group entitativity. Later, Tong and Chang (2008) have proposed group entity beliefs (GEB) as a construct refering specifically to the extent to which people perceive social identities as a fixed and enduring part of one's self. People who score high on the GEB scale think that their social identities are a permanent part of their selves, and also score higher on variables such as identification with, liking of and commitment to their groups (Tong & Chang, 2008).

Tong and Chang (2008) state that implicit theories of groups and social identities are different and not redundant constructs, since the former focuses on the malleability of group characteristics and the latter on that of social identities. However, they also express that the relationship between them are not yet established. These three constructs (implicit theories of personality, groups, and social identities) ought to be related, and all are potentially relevant to stereotyping and intergroup processes.

Following from the similarities between the way entity theorists deal with challenging tasks, and the experience of those threatened by a stereotype in the face of an ability-diagnostic task, recent research has focused on combining implicit theories and the stereotype threat phenomenon (e.g. Aronson, Fried & Good, 2002). As stereotypes imply fixed inferior ability on the part of the members of a certain group, they are in essence based on the same logic as entity theories, and their detrimental influence on performance indeed stems in part from this assumption (Aronson, Fried & Good, 2002). If an environment also supports this assumption of fixed, innate ability about the members of a group, the negative stereotypes become even more pejorative (Inzlicht & Good, 2006). Conversely, a belief in the malleability of abilities can alleviate the threat caused by a negative stereotype (Steele, Spencer & Aronson, 2002).

Research on integrating implicit theories with stereotype threat has exclusively focused on implicit theories of intelligence (Aronson, Fried & Good, 2002; Good, Aronson

and Inzlicht, 2003). Aronson and his colleagues (Aronson, Fried & Good, 2002) carried out a three-session intervention with university students, to show the buffering effect of an incremental theory of intelligence on race-based stereotype threat. Participants watched videos on the malleability of intelligence, and then wrote persuasive letters about the topic for ostensible mentees. As a result of this intervention, African American students reported enjoying and valuing academics more, and earned higher grades at the end of the semester (Aronson, Fried & Good, 2002). Euro-American students also increased their academic performance, but the increase in African-Americans' performance was greater, indicating an additional benefit from the alleviation of stereotype threat effects. However, the study was conducted at Stanford University, with students who were already very high-achieving.

A similar intervention was carried out by Good, Aronson and Inzlicht (2003) with high school students, to reduce the gender gap in standardized test performance. The intervention included three different conditions: In the incremental condition, mentors explained the expandable nature of intelligence; in the attribution condition, mentors explained that all students face academic difficulty during the transition to high school, providing an external attribution for academic difficulty; and for the third group, the two messages were combined. Students were mostly from minority families with low SES backgrounds, which means that they were potentially susceptible to threats stemming from several stereotypes, but the researchers' focus was on gender-based stereotypes. The gap between males' and females' test performance disappeared in all intervention groups, but the combined intervention did not result in additive benefits, because implementing an incremental mindset and providing nonpejorative attributions for academic difficulty actually provide the same helpful perspective (Good, Aronson & Inzlicht, 2003).

These interventions have targeted African-American and female participants, aiming directly at mitigating the implications of negative stereotypes about intellectual capabilities.

An incremental theory of intelligence helps refute a negative stereotype by challenging the idea that members of a certain group have a fixed and inferior level of intelligence. As our focus is on SES-based social identity threat, focusing on people's lay beliefs about the permeability to change of personality, groups and social identities can also provide an effective buffer. Believing that being a member of the lower SES group within the society is not a permanent aspect of one's self, as group membership or the attributes arising from group membership are subject to change throughout one's life, can alleviate both the effect of a negative stereotype, as well as concerns about ill-fitting or marginalization due to this identity. Therefore, the following four kinds of implicit theories are all relevant to social identity threat: implicit theory of intelligence, implicit theory of personality, implicit theory of groups, and implicit theory of social identities (group entity beliefs). We will test the moderating effects of these four variables on the relationship between social identity threat, and anticipated sense of academic and social fit.

Hypothesis 2a: Entity theorists who experience social identity threat will report lower anticipated sense of social fit than incremental theorists.

Hypothesis 2b: Entity theorists who experience social identity threat will report lower anticipated sense of academic fit than incremental theorists.

# CHAPTER 3

# METHOD

## 3.1 Participants

199 senior high school students from lower SES families participated in the study. Participants were recruited from two high schools (Kagithane Lisesi and Ahmet Buhan Lisesi) in Kagithane, a relatively low SES neighborhood of Istanbul. Senior high school students make up a special population in that they arduously prepare for the university entrance examination, which is the only gateway to becoming a university student within the Turkish education system. Being at risk of devaluation because of their lower SES backgrounds, senior high school students are likely to be especially vigilant for cues of identity threat or safety (Murphy, Steele and Gross (2007). Therefore, lower SES senior high school students make up a particularly suitable population to test the consequences of an anticipated social identity threat.

Mean age of participants was 18,2. In total, 71,6% of participants were females. The threat group consisted of 79 females and 36 males, and the control group consisted of 60 females and 19 males. A summary of descriptive statistics is given in Table 1. We measured SES through a number of indices, including number of family and personal possessions. 69,3% of participants gave information on their family's monthly income. Mean family monthly income was 1971,3 Turkish Liras. Participants' answers to our subjective income question indicated that, on average, they think of their family to stand between the 5th and 6th deciles of the Turkish population ($M$ = 5.61, $SD$ = 1.39), where 1 represents the lowest, and 10 represents the highest income group. The correlation between the objective and subjective income measures was .342. The 2010 household disposable income statistics for Turkey show that when the population is divided into ten deciles, mean annual income is 20.723 TL families that fall into the 6$^{th}$ decile, and 24.164 TL for those who fall into the 7$^{th}$ decile

(TUIK, 2010). With a mean annual income level of 23.656, the families in our sample fall between these deciles. When the income statistics for Istanbul are considered, the families in our sample fall between the 5th and 6th deciles of all households in Istanbul (TUIK, 2010).

Table 1

*Means (and Standard Deviations) for Demographic Variables*

| | Threat Group | Control Group |
|---|---|---|
| Age | 18.27 (.51) | 18.17 (.46) |
| Monthly family income (TL) | 1952.41 (1108.17) | 2000.00 (981.68) |
| Number of family possessions (out of 10) | 5.35 (2.38) | 5.42 (2.36) |
| Number of personal possessions (out of 4) | 2.54 (.76) | 2.62 (.85) |
| Subjective SES (out of 10) | 5.69 (1.30) | 5.47 (1.50) |

*Note:* Statistics are presented for all participants (N = 199). The threat and control groups were comparable on all variables before the experimental manipulation.

**3.2 Design and Procedure**

The experiment took place in the selected high schools. Participants were assigned to two conditions: Threat condition (university brochure with upper SES cues) and control condition (university brochure without upper SES cues).

**3.2.1 Threat Group**

Participants in the threat group went through a social identity threat manipulation. As part of the manipulation, at the beginning of the experiment participants were asked questions assessing the subjective and objective socioeconomic status of their families, to make their SES salient to them. Subjective SES questions are included since SES measures based on parents' education and occupations might not be very effective at making their SES-based social salient for high school students, as was the case in Croizet and Claire's study (1998). After the completion of the SES measures, the experimenter explained to the participants that the researchers were interested in the extent to which a university brochure is recalled by students, and how it is evaluated. The experimenter further explained that to this end, excerpts from a university magazine were going to be distributed to them in a brochure

format, and that they were expected to carefully peruse both the texts and pictures, to be able to later answer questions about the details in the brochure. This explanation was presented to ensure that participants carefully examined the brochures, without missing the cues that are included in them.

The brochure was created specifically for the study and pilot-tested. It depicts a well-kept university environment and includes cues signaling the prevalence of a relatively high socioeconomic level, such as cars, phones and computers, food prices, sports commonly played at the university, vacation preferences, social life, hobbies, and educational backgrounds of students. The brochure is presented in Appendix A.

Participants were allowed five minutes to go through the brochure. Afterwards, questions pertaining to the cues in the brochure, and the inventory assessing anticipated sense of fit were distributed. Finally, the implicit theory scales and scales measuring the control variables were presented ostensibly as part of a separate study.

### 3.2.2 Control Group

Participants in the control group went through the same procedure with a different university brochure, which is not expected to evoke threat. The brochure depicts a non-elite, relatively lower SES university environment through cues such as crowded classrooms and older buildings, older computers, no student cars, and sports commonly played at the university, vacation preferences, social life, hobbies, and educational backgrounds of students that do not signal an upper SES lifestyle. The brochure is presented in Appendix B.

## 3.3 Measures

*Objective and Subjective Measures of SES.* Following Adler, Epel, Castellazzo and Ickovicks (2000), objective SES was measured through the education level and occupation of participants' parents and monthly family income; and subjective SES was assessed using a10-step ladder representing the whole society (Adler et al., 2000). Participants were also asked to

indicate whether they and their family possess a list of items, including a computer, personal phone, credit card, and several home appliances. We computed a factor score to use as our measure of socioeconomic status, based on all of these variables.

*Sense of Social and Academic Fit.* The 17-item social fit inventory developed by Walton & Cohen (2007) is adapted to assess anticipated sense of social and academic fit and expected level of belonging at the university on a 5-point Likert-type scale. 4 questions were eliminated and 4 academic fit questions were added to the scale. Cronbach's alpha value for the fit scale in our sample was $\alpha = .90$.

We conducted a factor analysis with the principal components method and varimax rotation to identify the items that fall into the academic and social fit subscales. When forced to two factors, the analysis showed that 10 items made up a factor which can be labeled as "social fit", and the remaining 7 items fell under the "academic fit" factor. Variance explained by the first factor was 40 percent, and the second factor explained an additional 10 percent of the variance.

The 14$^{th}$ item "I could be /act like myself in this university" loaded on the academic fit factor. However, as it is more meaningful to include it in the social fit subscale, we conducted a reliability analysis on the social fit subscale, with this item included as the 11$^{th}$ item. Cronbach's alpha was $\alpha = .90$, and remained the same if this additional item was deleted. We therefore carried out our analysis with these 11 items in the social fit subscale. Other sample items include, "People at this university are a lot like me", and "I would belong at this university".

The 11$^{th}$ item "I would not have a hard time with the courses at this university" loaded on both factors. We included this item in the academic fit subscale and carried out reliability analyses. The 6 items in the sense of academic fit subscale yielded a Cronbach's alpha value of $\alpha = .75$. Item 11 had an item-total correlation of $r = .56$ and the deletion of this item did

not result in an increase in scale reliability. We therefore included it in the academic fit subscale. Other sample items include, "I could be very successful at this university if I wanted to".

Table 2

*Exploratory Factor Analysis of Anticipated Sense of Fit Items*

| Items | Loadings on Factor 1 | Loadings on Factor 2 |
|---|---|---|
| I would easily join the students of this university. | .79 | .15 |
| I am similar to the kind of people who succeed at this university. | .58 | .26 |
| I would get along well with the students at this university. | .78 | .18 |
| I would sometimes feel excluded at this university. | .51 | .01 |
| I would easily fit in at this university. | .77 | .20 |
| I would feel comfortable in this university environment. | .80 | .26 |
| I would belong at this university. | .73 | .28 |
| Students of this university would like me. | .63 | .29 |
| I could make close friends at this university. | .64 | .27 |
| Students of this university would be a lot like me. | .67 | .24 |
| I would not have a hard time with the courses at this university. | .33 | .36 |
| I would know how to do well at this university. | .22 | .76 |
| If I wanted to, I could potentially do very well at this university. | .04 | .77 |
| I could be / act like myself at this university. | .33 | .50 |
| I would know of whom to ask help in case I have a hard time with a course at this university. | .14 | .70 |
| I could show my potential at the courses at this university. | .20 | .74 |
| I would know what to do to make the professors at this university like me. | .25 | .32 |

None of the items in the fit scale refer to socioeconomic status or financial situation either directly or indirectly. The subscales do not assess an expectation of not measuring up to others *financially* in the university environment, but rather focus strictly on expectations about fit in academic and social aspects. Hence, "social fit" does not refer to comparability with others in financial terms.

*Implicit Theories.* Items selected from implicit theories of intelligence and personality scales (Dweck,1999) based on pretests were used with a 5-point Likert-type scale (more information is presented in the Results section, under Pretest 3). Sample items include "A person can always substantially change how intelligent he or she is", and "People can do

things differently, but the important parts of who they are can't really be changed", respectively. Cronbach's alpha values for the implicit theory of intelligence scale have been found to range between α = .94 and α = .98, and between α = .90 and α = .96 for the implicit theory of personality scale in the literature (Dweck, Chiu & Hong, 1995). Reliabilities for these scales were sufficiently high in our sample, α = .63 and α = .76, respectively. Group Entity Belief scale (Tong & Chang, 2008) was used to assess implicit threories of social identities. Sample items include "The social groups that you feel you belong to tend to be the same over the long term". Reliability of the scale as reported by its developers was α = .67 (Tong & Chang, 2007). Cronbach's alpha for the Group Entity Belief scale in our sample was α = .69. Finally, a selection of items from the implicit theory of groups scale (Rydell et al., 2007) was employed. Sample items include "Every group is a certain type of collection of people, and there is not much that can be done to really change that". Cronbach's alpha for the implicit theory of groups scale was reported as α = .89 by Rydell et al. (2008). However, reliability for this scale was very low in our sample (α = .21), possibly due to the small number of items used and the vagueness of the concept of social groups when translated into Turkish. We therefore did not include this measure in our analyses.

*Control Variables.* We included certain variables that could potentially influence the anticipated sense of academic and social fit in our measures, to be able to control for them in our analyses.

*Self-Esteem.* A higher sense of global self-esteem may lead to more confident expectations about future sense of both social and academic fit in an environment; hence we included self-esteem in our control variables. Rosenberg self-esteem scale (Rosenberg, 1965) was used on a 5-point Likert-type scale. Cronbach's alpha for the self-esteem scale was α = .83, which falls in the range of reliability scores for this measure found in previous studies (Robinson, Shaver & Wrightsman, 1991).

*Academic Self-Efficacy.* The Turkish adaptation of the academic self-efficacy scale, originally developed by Jerusalem and Schwarzer (1981, as cited in Yılmaz, Gürçay & Ekici, 2007) was used on a 5-point Likert-type scale (Yılmaz, Gürçay & Ekici, 2007)*. Academic self-efficacy might influence anticipated sense of academic fit, and was included to control for individual differences in confidence in academic tasks. The Turkish adaptation of the scale had a Cronbach's alpha of .79 (Yılmaz, Gürçay & Ekici, 2007). This value was $\alpha$ = .64 in our sample.

*Confidence in Social Skills, Confidence in Physical Appearance, and General Self-Confidence.* Three out of the seven subscales of the Personal Evaluation Inventory (Shrauger, 1990, as cited in Robinson, Shaver & Wrightsman, 1991), which measures self-confidence, were used on a 5-point Likert-type scale: social interactions, physical appearance, and general confidence. Greater confidence in social skills, as assessed by the Social Interactions subscale, and greater confidence in one's physical appearance, as assessed by the Physical Appearance subscale, and general self-confidence, as assessed by the General Confidence subscale, might positively influence anticipated sense of social fit in any environment one expects to enter. General confidence, but not the other two types of confidence, is also used as a control variable in the analyses on anticipated sense of academic fit, as a general sense of confidence in oneself might include beliefs in one's academic skills, while confidence in social skills or physical appearance should not influence beliefs about academic competency.

Cronbach's alpha values for the Personal Evaluation Inventory range between .67 and .89 (Robinson, Shaver & Wrightsman, 1991). The social interactions, physical appearance, and general confidence subscales had acceptably high reliabilities in our sample ($\alpha$ = .76, $\alpha$ =

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*One item of the scale was not included due to experimenter error.

.72, α = .56, respectively). Each subscale consists of 7 items. Sample items include "I almost never feel uncomfortable at parties or social gatherings", "I wish I could change my physical appearance", and "I lack some important capabilities that keep me from being successful", respectively.

*Manipulation Check.* Participants were asked to compare the income level of the families of the students from the university depicted in the brochures, with that of their own family, as a manipulation check question. They indicated whether their families' income level was lower than, the same as, or higher than that of the families of the students in the university brochure. Participants in the threat group who reported their families' income level to be lower than that of the students in the elite university brochure were accepted as participants on whom the manipulation has been effective. In the control group, we expected participants to report their families as being at the same level or higher than the families of the students in the non-elite university in terms of income. Participants who answered this question differently were excluded from further analyses.

In addition, the four ostensible recall questions about the brochures were used to check whether participants had paid attention to the cues in the brochures.

All participants were fully debriefed after the experiment and dismissed.

# CHAPTER 4

# RESULTS

## 4.1 Pretests

We carried out a series of pretests. Our aim was to pilot-test our measures, test our manipulation, and perfect our procedure.

### 4.1.1 Study 1: Stereotypical Attributions about the Poor

Our aim in this study was to investigate whether adjectives regarding intelligence and industry are differentially associated with the rich and the poor in the Turkish context. No research as we know of has investigated the stereotypes about low SES people in Turkey. The scale used by Cozzarelli et al. (2001) to assess the cognitive component of attitudes toward the poor was adapted for this study. 12 of the 38 characteristics in the original scale were selected for the study; 8 items related to intellectual capabilities and motivation (hardworking, responsible, lazy, successful, stupid, uneducated, intelligent, unmotivated, capable), and four other items as fillers (angry, strong, moral, proud). Three characteristics (pertinacious, successful and clever) that were not included in the original scale were added, as they also relate to a possible stereotype about capabilities. We asked participants to indicate the extent to which each adjective describes poor and rich people, separately, on 5-point scales. The words "poor" and "rich" were used in the instructions instead of "low SES" and "high SES", as the latter phrases sound like academic language, and the former are easier to understand for participants. We avoided asking participants' own opinions and stressed that we were interested in the general public opinion, as we aimed to uncover the existence of a social stereotype about the poor, and not the level of endorsement of this stereotype by participants.

40 participants who were recruited through the internet participated in the study. Mean monthly family income was 7268 TL, and mean age was 25 years. Paired samples t-

tests were employed to assess differences between levels of association of each adjective with the rich and the poor. The analyses revealed that the adjectives "successful", "uneducated", "intelligent", "unmotivated", "capable", "pertinacious", and "clever" were differentially associated with the rich and the poor. Among the adjectives of specific interest for the purposes of the study, "intelligent" was associated with the rich ($M_{rich}$=3.30) more than with the poor ($M_{poor}$=2.50), yielding a significant difference ($t(40)$= 3.524, $p$=.000). Similarly, the rich were considered to be more clever than the poor, $t(40)$=-5.918, $p$=.000; and also more successful, capable and pertinacious; $t(40)$=-7.841, $p$=.000, $t(40)$=-3.329, $p$<.002 and $t(39)$=-2.986, $p$<.005, respectively. On the other hand, the poor were rated as more uneducated and unmotivated than the rich; $t(40)$=5.684, $p$=.000, $t(40)$=5.223, $p$=.000, respectively.

No significant difference between the rich and poor were found for the adjectives "hardworking", "responsible", "lazy" and "stupid" ($p_s$>.05), contradicting the results of Cozzarelli et al. (2001). In addition, the poor were significantly more associated with the positive adjectives "moral" and "proud" than the rich in our study; while the opposite was the case with Cozzarelli et al. (2001)'s results. Therefore, our results do not indicate a general negative attitude toward the poor; but certain adjectives relevant to intellectual capabilities were indeed less associated with the poor than with the rich, signaling the possibility of a stereotype pertaining to this domain specifically.

### 4.1.2 Study 2: Stereotypical Attributions about the Poor by High School Students

To follow up on the findings of Study 1, we conducted another study on stereotypes about the poor with a sample of high school students. The adaptation of Cozarelli et al.'s (2001) scale was used to assess stereotypical attributions made about the poor by senior high school students from lower SES families. 52 students from a high school in Alibeykoy, which is a relatively low SES district in Istanbul, participated in the study. Mean family income was 1638 TL, and mean age was 17.5 years. All of the characteristics, except for

"proud" and "moral", were equally associated with the rich and the poor, $p_s$>.05. Poor people were rated as significantly more moral ($M_{rich}$=2.94, $M_{poor}$=3.87), and more proud ($M_{rich}$=3.08, $M_{poor}$=4.18), than rich people; $t(52)$=4.677, $p$<.001, and $t(50)$=5.323, $p$<.001, respectively. This shows that participants from lower SES backgrounds only indicate positive stereotypical traits to be associated more with the poor than with the rich, and do not rate negative stereotypical traits as being more typical of poor people.

### 4.1.3 Study 3: Implicit Theories, Group Entity Beliefs and Stereotypical Attributions

Our main objective in this study was to assess how the implicit theory scales fare on reliability and validity, as well as assess the correlations between them, which has not been done in previous studies (Tong & Chang, 2008). After a previous pretest we had conducted, we decided to eliminate some of the items in the implicit theory scales, based on the inter-item and item-scale correlations and reliabilities. Usage of shorter versions of implicit theory scales is advised by Dweck and her colleagues (Dweck, Chiu & Hong, 1995), as the items on the scales are very similar to each other and become repetitive. We aimed to pilot-test the shortened versions of the implicit theories of intelligence and personality scales (Dweck, 1999), as well as the implicit theory of groups scale (Rydell et al., 2007), and the Group Entity Beliefs (GEB) scale (Tong & Chang, 2008) in the Turkish context. We also administered the Rosenberg self-esteem scale (1965) for the purposes of establishing discriminant validity. As we also aimed to uncover any relationships the implicit theory scales might have with stereotypical attributions about the poor, we employed the adaptation of the attitudes toward the poor scale (Cozzarelli et al., 2001), with the instructions framed in a way to assess the individual participants' endorsement of stereotypical attributions.

73 Koc University undergraduates participated in the study in exchange for course credit. Cronbach's alpha for the implicit theory of personality was $\alpha$ = .81. For the implicit

theory of intelligence scale, Cronbach's alpha was α = .90. The reliabilities for the two scales are, although slightly lower than what was found in the literature, are acceptably high (Dweck, Chiu & Hong, 1995). The group entity beliefs (GEB) scale had a reliability score of α = .77. Finally, the Cronbach's alpha value for the implicit theory of groups scales was α = .46. All scales except for the implicit theory of groups scale yielded sufficiently high reliability scores. The implicit theory of groups scale items' being vague and difficult to understand might have caused low reliability.

Implicit theory of personality scale was significantly correlated with the implicit theory of intelligence scale (r = .401, $p<.001$), the group entity beliefs scale (r = .461, $p<.001$), and also the implicit theory of groups scale (r = .352, $p<.001$). The implicit theoy of intelligence scale was only significantly correlated with the implicit theory of personality scale. Group entity belief and implicit theory of groups scales were significantly correlated (r = .484, $p<.001$). None of the scale scores correlated significantly with self-esteem. Correlations between the scales are summarized in Table 3.

In Study 3, we once again employed the adaptation of the attitudes toward the poor scale of Cozzarelli et al. (2001). We used the phrase "people who come from poor families" instead of "poor people" in our instructions. We also dropped the adjective "stupid" from our list of adjectives, which obtained low ratings for both groups in our previous study. People might not want to call either group of people stupid, as the word sounds offensive. Instead, we used the phrase "has low academic capability".

Paired samples t-tests were employed to assess the differences between levels of association of each adjective with the rich and the poor. The results indicate that the poor were rated as less responsible ($t(71)= -2.01$, $p<.05$), less successful ($t(71)= -5.69$, $p<.001$, less intelligent ($t(72)= -2.64$, $p<.01$), less capable ($t(72)= -2.69$, $p<.01$), less pertinacious ($t(72)= -3.27$, $p<.005$), less clever ($t(71)= -3.57$, $p=.001$), and less powerful ($t(72)= -3.40$, $p=.001$),

Table 3

*Correlations between the Implicit Theory Scales*

| Variables | Implicit Theory of Personality | Implicit Theory of Intelligence | Group Entity Beliefs |
|---|---|---|---|
| Implicit Theory of Personality | | | |
| Implicit Theory of Intelligence | .461** | | |
| Group Entity Beliefs | .347** | .314** | |
| Implicit Theory of Groups | .231** | .095 | .201** |

*Note*: ** p<.001

than the rich. They were also considered to have lower academic capabilities ($t(72)= 3.06$, $p<.005$), and to be lazier ($t(72)= 2.58$, $p=.01$), more uneducated ($t(71)= 6.36$, $p<.001$), more unmotivated ($t(72)= 5.706$, $p<.001$), more proud ($t(72)= 2.74$, $p<.01$), and more moral ($t(72)= 2.74$, $p<.01$), than the rich. The adjectives "hardworking" and "angry" were not differentially associated with the groups ($p_s>.05$).

Participants were then categorized according to their implicit theory scale scores, to compare the stereotypical attributions of entity and incremental theorists. Participants who scored in the lowest 30 percent were categorized as entity theorists. Participants who scored in the highest 30 percent were categorized as incremental theorists. Those who scored in the middle 40 percent were not included in either category. The paired samples t-tests were then applied for each category. A notable finding across all categories was that while incremental theorists attributed the positive traits "moral" and "proud" more to the poor, entity theorists did not associate the poor more than the rich with these characteristics ($p>.05$), thereby not engaging in positive stereotyping. One exception was entity theorists of intelligence, who did associate the adjective "proud" more with the poor. Moreover, entity theorists of all types rated poor people to be less clever and having lower academic capabilities than rich people.

However, with the exception of incremental theorists of intelligence, incremental theorists of the other three types did not engage in negative stereotyping about the poor on these traits.

The three pretests indicate the possibility of negative stereotyping of the poor in the domains of intelligence and success, although it may not extend to the domain of industry. There is also evidence for positive stereotyping of the poor with regards to morality and pride. These results are in line with previous research on complementary stereotypes, which play a role in system justification (e.g. Kay & Jost, 2003; Lane, 1959 ). Views of younger people from lower SES families tend to differ from the two other samples, indicating that self-stereotyping on negative characteristics might not be taking place among these people, who constitute the population of interest to this study. Moreover, entity and incremental theorists might show differences in terms of the levels and domains of stereotyping about the poor.

#### 4.1.4 Study 4: Manipulation: University Brochures and Anticipated Sense of Fit

We conducted a pilot study to test the effectiveness of our manipulation with 60 junior vocational high school students in Alibeykoy, which is a relatively low SES district in Istanbul. 36 students were assigned to the threat condition, and 25 students were assigned to the control condition. The students filled out the adapted version of the Social Fit Inventory (Walton & Cohen, 2007) after reading the brochures.

The manipulation check question revealed that the manipulation had not worked as expected for 15 of participants in the threat condition. 5 of these participants had incorrectly answered two or more of the recall questions, which indicates that they had not paid attention to the manipulation cues in the brochure. Moreover, an analysis of variance showed that subjective SES scores of participants for which the manipulation had not been effective were significantly higher than the scores of those participants who were affected by the manipulation, $F(1, 59)=6.005$, $p<.05$. No difference was found between the groups in objective SES, measured by monthly family income. The results indicate that not income

levels per se, but the perception of students with regards to their income levels influence the effectiveness of our cues manipulation.

An analysis of covariance revealed that when subjective SES was taken as a covariate, difference between the anticipated sense of fit of students in the threat condition and that of the students in the control condition approached significance, $F(1, 58)=2.98$, $p=.09$. When the students on which the manipulation had not been effective were excluded from the analysis, anticipated sense of fit of the students in the threat condition was significantly lower than the anticipated sense of fit of the students in the control condition, $F(1, 43)= 4.14$, $p<.05$.

An analysis of variance comparing participants on whom the manipulation had worked revealed a gender effect: while the scores of females on the fit inventory did not differ significantly across conditions, the scores of males differed significantly, $F(1,24)=4.017$, $p=.056$. This indicates that males' anticipated sense of fit was more strongly influenced by upper SES cues in the threat condition. This finding may be due to higher academic self-efficacy on the part of female students, which will be included as a control variable in the actual study.

**4.2 Present Study**

Descriptive statistics for the key variables of the present study can be found in Table 4.

Table 4

*Means (and Standard Deviations) for Key Variables*

| | Threat Condition | Control Condition |
|---|---|---|
| Implicit Theory of Personality | 2.20 (.84) | 2.47 (.88) |
| Implicit Theory of Intelligence* | 2.89 (1.33) | 3.31 (1.17) |
| Group Entity Beliefs | 2.85 (.85) | 2.89 (1.08) |
| Self-esteem | 3.98 (.75) | 3.93 (.84) |
| Academic Self-Efficacy | 3.90 (.79) | 3.79 (.73) |
| Social Interactions | 3.53 (.82) | 3.71 (1.00) |
| Physical Appearance | 3.80 (.82) | 3.84 (.86) |
| General Confidence | 3.62 (.74) | 3.47 (.77) |

*Note:* Statistics are presented for participants on whom the manipulation has worked.
*The difference between groups is significant, $F(1, 142) = 4.2$, $p<.05$.

Correlations between the control variables are presented in Table 5.

Table 5

*Correlations Between the Study Variables*

| | 1 | 2 | 3 | 4 | 5 | 6 |
|---|---|---|---|---|---|---|
| 1.Self-esteem | | | | | | |
| 2.Academic Self-Efficacy | .574** | | | | | |
| 3.Confidence in Social Skills | .413** | .410** | | | | |
| 4.Confidence in Physical Appearance | .545** | .360** | .403** | | | |
| 5.General Self-Confidence | .592** | .438** | .553* | .510** | | |
| 6.Sense of Social Fit | .166* | .220** | .266** | .240** | .153 | |
| 7.Sense of Academic Fit | .277** | .369** | .272** | .317** | .329** | .567** |

*p<.05
**p<.01

**4.3 Manipulation Check**

90% of all participants (threat and control groups combined) correctly answered at least 3 of the 4 questions about the brochure, which were framed as memory test questions. This indicates that a large majority of participants carefully perused the brochures. However, our manipulation check question showed that the manipulation worked as expected for 56,7% of participants in the threat group. A one-way analysis of variance comparing participants in the threat condition for whom the manipulation seemed to be effective and those for whom it was not effective on SES scores showed a significant difference between the former ($M$ = -.33, $SD$ = .79) and latter ($M$ = .48, $SD$ = .90) group ($F$ (1, 71) = 16.47, $p$<.001).*

When subjective income levels of those on whom the manipulation worked ($M$ = 5.22, $SD$ = .17) and did not work ($M$ = 6.34, $SD$ = 1.20) were compared, there also existed a difference ($F$(1,116) = 25.7, $p$<.05). Hence we excluded the participants on whom the

*The analysis includes 72 participants because only those indicated their monthly family income levels.

manipulation did not work according to the manipulation question from further analyses.** The remaining sample consisted of 144 participants.

### 4.4 Anticipated Sense of Social Fit

An analysis of covariance on the anticipated sense of social fit scores showed that participants in the threat group scored lower ($M$ = 3.17, $SE$ = .10) than participants in the control group ($M$ = 3.94, $SE$ = .09), when self-esteem, confidence in social skills, confidence in physical appearance and general self-confidence were controlled for, $F$ (1,133) = 31.67, $p$<.001, $\eta_p^2$= .19. Hypothesis 1a was thus supported by the data.

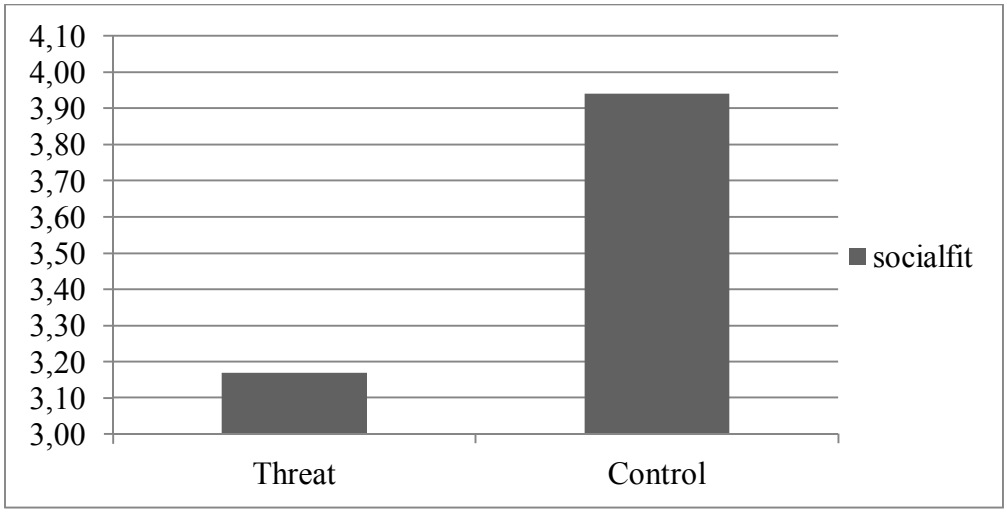


*Figure 1.* Estimated marginal means of anticipated sense of social fit

### 4.5 Anticipated Sense of Academic Fit

An analysis of covariance on anticipated sense of academic fit scores showed that participants in the threat group scored lower ($M$ = 3.78, $SE$ = .09) than participants in the

** When all participants were included in the analyses, the average anticipated fit scores (combined score for social and academic fit items) still differed between the threat and control conditions ($F$(1,197) = 9.68, $p$<.05), as well as the social fit scores ($F$(1,197) = 13.77, $p$<.01), indicating that the threat condition did create the intended social identity threat effect on the dependent variable, although answers to the manipulation check question did not indicate so. However, the difference between groups in academic fit scores was not significant ($F$ (1, 197) = .20, *ns*).)

control group ($M$ = 4.08, $SE$ = .08), when self-esteem, general self-confidence and academic self-efficacy were controlled for, $F$ (1,134) = 6.47, $p$<.05, $\eta_p^2$= .05. Main effects of general self-confidence and academic self-efficacy were significant when all variables were entered into the analyses, $F$ (1,134) = 6.35, $p$<.05, $\eta_p^2$= .04, and $F$ (1,134) = 8.89, $p$<.05, $\eta_p^2$= .06, respectively. Hypothesis 1b was thus supported by the data.

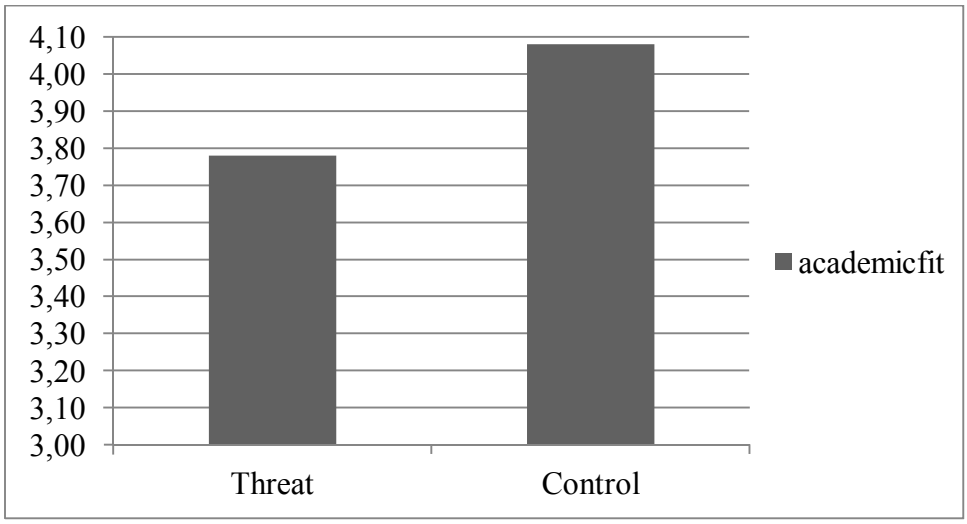


*Figure 2.* Estimated marginal means of anticipated sense of academic fit

**4.6 Implicit Theories**

We categorized participants into incremental and entity theorists based on their scores on the implicit theory scales. Dweck and colleagues (Dweck, Chiu & Hong, 1995) recommend the omission of participants who score between 3 and 4 on implicit theory scales on a 6-point scale from further analyses, as they do not have clear theories. This corresponds to the omission of participants whose scores fall in the middle 15 percent (Dweck, Chiu & Hong, 1995). Following this method, we labeled participants who scored in the lowest 42.5 percent as entity theorists. Participants who scored in the highest 42.5 percent were categorized as incremental theorists. We therefore ensured that only participants with clear

incremental or entity theories were included in our analyses, without compromising the even distribution of participants in each category. We then conducted 2 (group: threat or control) X 2 (implicit theory: incremental or entity) ANOVAs on fit scores.

The interaction effects of group and implicit theory of intelligence ($F$ (1, 128) = .858, *ns*), group and implicit theory of personality ($F$ (1, 134) = .121, *ns*), and group and group entity beliefs ($F$ (1, 128) = .148, *ns*) on anticipated sense of social fit were not significant. Hypothesis 2a was not supported by the data.

The interaction effects of group and implicit theory of intelligence ($F$ (1, 128) = .088, *ns*), group and implicit theory of personality ($F$ (1, 134) = .552, *ns*), and group and group entity beliefs ($F$ (1, 128) = .002, *ns*) on anticipated sense of academic fit were not significant. Hypothesis 2b was not supported by the data.

# CHAPTER 5

# DISCUSSION

In our study, we investigated the social identity threat experienced by senior high school students from relatively low SES families due to the anticipation of entering a university setting with cues signaling the dominance of high SES. By assigning participants to threat and control groups, we compared the influence of perusing a university brochure with high SES cues and a university brochure without high SES cues, on their anticipated sense of social and academic fit. Our results suggest that students from lower SES families are indeed differentially influenced by these university brochures, as reflected in their self-reported anticipated sense of social and academic fit. Although participants who reported higher monthly family income levels indicated that they did not think of their families as having lower income levels than the families of the students in the elite university when answering the manipulation check question, analyses of variance including all participants showed that their anticipated fit scores were still affected by the manipulation. This suggests that high SES cues in a university environment may be affecting students in a subtle way, even though they might not directly report having perceived the difference between their families' SES levels and the dominant SES level at the university.

Still, we carried out our analyses with only those students who have correctly answered the manipulation check question. Our analyses indicate that high SES cues influence anticipated sense of both social and academic fit. The difference between groups in the anticipated sense of social fit scores remained significant when scores on self-esteem, social interactions, physical appearance, and general confidence were controlled for. This suggests that high SES cues lead students to doubt the extent to which they could socially fit in a university environment, when differences in self-esteem and general or domain-specific self-confidence levels are controlled for.

In the case of academic fit, the difference between groups was significant only when academic self-efficacy, self-esteem and general self-confidence were controlled for. This shows that students who believe in their academic competence, or have high levels of global self-esteem and self-confidence may not be influenced by the high SES cues as strongly as those who score low on these attributes. Enhancing academic self-efficacy, global self-esteem or general self-confidence might buffer students against the negative effects of social identity threat due to SES on sense of academic fit. Interventions designed to this end can protect students from insecurities regarding academic success during higher education.

Our hypotheses regarding the moderating role of four types of implicit theories were not supported by the data. Our pretests have shown that implicit theories are related with people's tendency to engage in positive and negative stereotyping about the poor. However, in Pretest 2, we have found evidence only for positive stereotyping among people with lower family income levels; hence negative self-stereotyping might not be taking place among our participants. When these results and the findings of our study are considered, we can conclude that the influence of high SES cues on the anticipated sense of fit of participants result from general concerns of ill-fitting or not belonging (Walton & Cohen, 2007), in line with the concept of social identity threat, rather than operating through the activation of a negative stereotype. Since stereotypes may not be relevant in the evoking of the threat that we have documented, incremental implicit theories might not be effective at buffering against this threat, as specific types of implicit theories (i.e. implicit theory of intelligence) have been shown to be effective in challenging a directly related stereotype (e.g. Aronson, Fried, &Good, 2002; Good, Aronson & Inzlicht, 2003).

Considering that threat occurs through concerns about belonging (Walton & Cohen, 2007), and that we conducted our study with students who are about two months away from graduating from high school, the amount of time they have before entering the threatening

university environment may become especially relevant. Believing in the possibility of gradual change and improvement for people over time may not be an effective strategy in protecting themselves against threat when they expect to become part of a threatening environment in only a few months. Even incremental theorists might tend to think that neither themselves and their social group, nor the university environment and the people in it would go over a significant change in the course of only a few months. Holding incremental implicit theories may become an effective buffer against threat in a case in which participants envision entering a setting with threatening cues a long while later, such as a few years. Therefore, implicit theories might be more likely to play a moderating role in the anticipation of threat experienced by sophomore or junior high school students. Future research could investigate this possibility.

Moreover, the period when the study was conducted, which was about one month before the first phase of the university examination, is a particularly stressful period for senior high school students. As they are likely to be under high levels of anxiety, and be very sensitive to stimuli related to university life, they might be especially prone to feeling threat in an intense way in this period. This might have also hindered a possible buffering function of implicit theories in the face of threat.

The threat and control groups were comparable on all study variables except for the implicit theory of intelligence scale. Although implicit theories can be manipulated through interventions designed to this end, (e.g. Aronson, Fried, &Good, 2002), they are relatively stable (Burns & Isbell, 2007); hence we did not expect them to be influenced by our manipulation. Still, as the implicit theory scales were administered after the manipulation, this possibility could be further investigated in future research.

In our study, we have not focused on task performance as an outcome variable, which is the classic measure of stereotype threat effects (Steele, Spencer & Aronson, 2002), due to

difficulties in carrying out long studies in high school settings. Because the university entrance examination is the only gateway to becoming a university student in Turkey, a task composed of sample university entrance examination questions could potentially be affected by a social identity threat manipulation. Further research could investigate whether an anticipation of facing threat in a setting one aspires to enter can affect current performance on a task that is highly relevant, through concerns about ill-fitting or not belonging.

Another limitation of our study is that we have recruited our participants only from two high schools in a selected district of Istanbul, thereby limiting the generalizability of our results to Turkey or even to Istanbul as a whole. Evidence based on a randomly selected sample of students from a greater selection of high schools throughout the country could better represent the experiences of students from lower SES families within the Turkish society.

In addition, monthly family income levels reported by participants in our study show that, our sample falls between the 6th and 7th deciles of the Turkish population, and between the 5th and 6th deciles of the population living in Istanbul (1st decile being the lowest income group and 10the decile being the highest income group) in terms of mean annual family income, according to 2010 statistics on household disposable income in Turkey (TUIK, 2010). Our manipulation intended to create threat through depicting an environment where people are from higher SES than our participants. If we had recruited participants from families with lower income levels, our manipulation would have worked as expected on a greater percentage of them, and would have had a greater effect on their self-reported anticipated sense of social and academic fit. Still, we have shown that a discrepancy in SES levels between oneself and those in an environment one expects to enter is enough to trigger a sense of threat on people, even if they are not considered to fall in the lowest SES group in the society based on objective income measures. Our findings are in line with the research

conducted by Johnson, Richeson and Finkel (2011) with middle class university students. Similar to their findings, we have shown that perceiving oneself as coming from lower social standing than the majority in an environment is sufficient to create a sense of threat; hence coming from *low* social standing per se is not a prerequisite for this type of a threat to occur.

The findings of our research have implications for settings other than the academic setting, as well. Similar experiences of anticipated threat may influence people in organizational settings. Especially in the process of applying for jobs, the company atmosphere, including cues about socioeconomic status of the employees, can become a source of threat for applicants. Further research could also examine what kind of SES cues are perceived as threatening by applicants in company settings, and how this threat influences their motivation to work for specific companies as well as performance in the selection process.

Furthermore, even though we found a gender effect in Pretest 4 as males were more strongly influenced by our manipulation, we did not find any difference between males and females in our actual study. This could be due to the uneven number of males and females in our study. Future research could look into possible gender differences in the experience of an anticipation of threat due to SES.

Overall, we have shown that socioeconomic status can indeed become a source of threat for people even before they enter the actual threatening environment, which could possibly have a detrimental influence on the flow of their lives. The *discrepancy* between their own socioeconomic status and that of the majority in the environment they aspire to become a part of can evoke concerns in students' minds and decrease the sense of fit they anticipate feeling. Importantly, we have shown the threatening effect of this discrepancy in a real life setting, using a minor manipulation through situational cues. The documented threat can indeed have important consequences in academic contexts, given that many university

brochures and videos are disseminated, and that student groups often visit university campuses before the university entrance examination. An unpredicted negative influence of such activities may be decreasing students' anticipated sense of fit in elite-looking university environments, which are actually likely to have higher quality of education than most other universities due to hiring select faculty members and providing greater learning resources. Following this decrease, students' long-term motivation to study hard for the entrance exam and performance might also be negatively affected. As students' academic aspirations and motivation depend to some extent on their motivation to become part of an environment that they will feel like an accepted member of, both socially and academically, the upper SES cues they encounter can hamper their preparation process and consequently, performance, in the long run. The documented threat might thus add a psychological obstacle to the already existing disadvantage of lower SES students in the university entrance process due to lack of financial resources. Consequently, the chances of students from lower SES families to enter most high quality universities may be hampered, affecting their future careers, and indeed their whole lives.

Therefore, it is important to identify the "seemingly innocuous" cues (Steele, Spencer & Aronson, 2002, p. 422) which can become sources of threat for students from lower SES families before becoming part of the threatening environment. Identifying these cues and their effects will make it possible to determine ways of alleviating this threat. Our study provides an initial step in this investigation, and will hopefully foster further research in this direction.

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**APPENDICES**

Appendix A

## Aramıza yeni arkadaşlarımız katıldı...

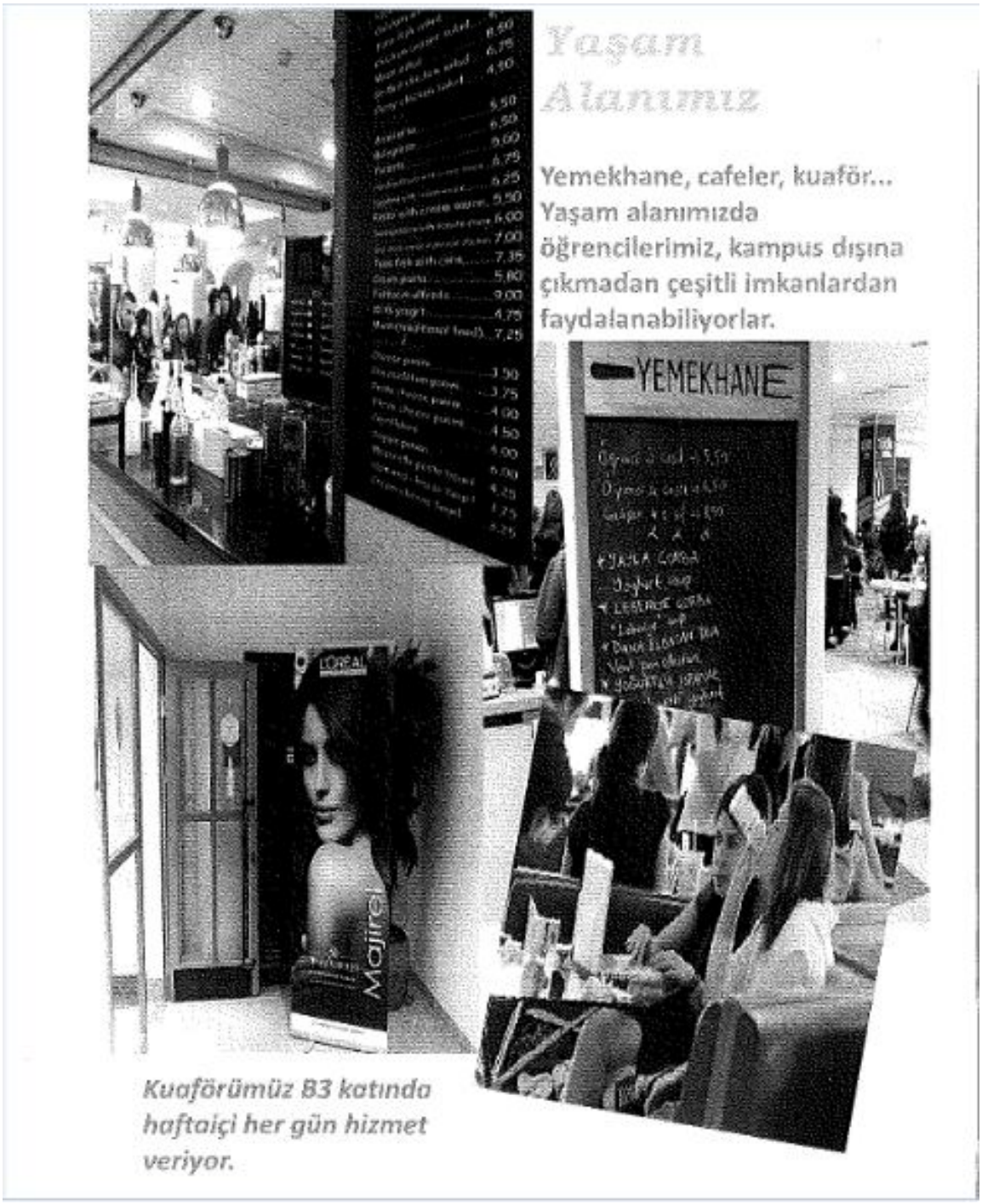
**Okulumuzu bu yıl kazanan Melis, düşüncelerini bizimle paylaştı.**

*Ekonomi bölümü 1. sınıf öğrencisiyim. Anadolu Lisesi mezunu olduğum için derslerde çok zorlanmıyorum.*

*Evime arabayla gidip geldiğim için yurtta kalmayı tercih etmedim, ama yurtlar gerçekten çok güzel.*

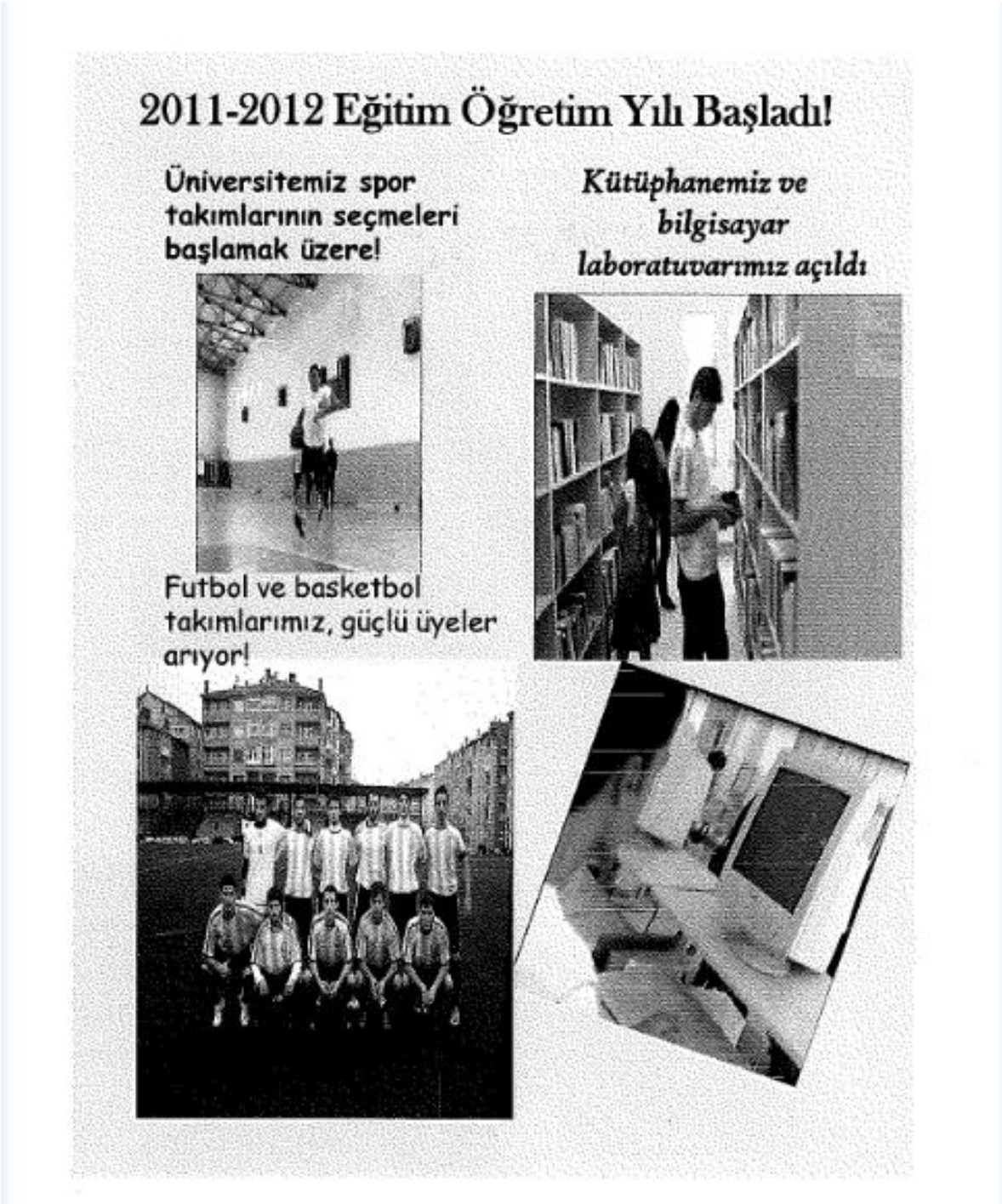
*Liseden beri uğraştığım hobilerime burada da devam edeceğim. Müzik odası kemanımı getirip çalışmam için çok uygun. Arkadaşlarla bir trekking kulübü de kurmak istiyoruz.*

**Okulumuzu bu yıl kazanıp aramıza katılan öğrencilerin yüzde 47'si Fen ve Anadolu liselerinden, yüzde 23'ü özel liselerden geliyor.**


Yaşam Alanımız
Yemekhane, cafeler, kuaför... Yaşam alanımızda öğrencilerimiz, kampus dışına çıkmadan çeşitli imkanlardan faydalanabiliyorlar.
YEMEKHANE
L'ORÉAL
Majirel
Kuaförümüz B3 katında haftaiçi her gün hizmet veriyor.


MİNİ ANKET KÖŞESİ
Bu ay üniversitemiz öğrencilerine mini anketler yapıp, sosyal hayatlarından, teknolojik tercihlerine, tatil planlarına kadar
Blackberry mi, iPhone mu?
%53 iPhone
%40 Blackberry
%7 Kararsız
En sevdiğiniz restoran/cafe neresidir?
% 32 Bebek
Starbucks
% 24 Nişantaşı Midpoint
% 16 Etiler Friday's
Yaz tatilinde nereye gitmeyi tercih ediyorsun?
•%33 Bodrum
•%27 Çeşme
•%17 Yurtdışı
•%12 Antalya
Sömestr tatilinde nereye gitmeyi tercih ediyorsun?
•% 27 Uludağ
•% 18 Avrupa
•% 11 Kartalkaya

Appendix B


2011-2012 Eğitim Öğretim Yılı Başladı!
Üniversitemiz spor takımlarının seçmeleri başlamak üzere!
Futbol ve basketbol takımlarımız, güçlü üyeler arıyor!
Kütüphanemiz ve bilgisayar laboratuvarımız açıldı

## Aramıza yeni arkadaşlarımız katıldı...

**Okulumuzu bu yıl kazanan Emine ilk izlenimlerini bizimle paylaştı.**

**Devlet lisesi mezunuyum. Ekonomi bölümü 1. sınıf öğrencisiyim.**

**Yurda yerleştim, 6 kişilik odada arkadaşlarımla kalıyorum.**

**Liseden beri uğraştığım hobilerime burada da devam edeceğim. Saz çalıyor ve folklor ile ilgileniyorum.**

Okulumuzu bu yıl kazanıp aramıza katılan öğrencilerin yüzde 37'si düz liselerden, yüzde 21'i Anadolu liselerinden geliyor.


Yaşam Alanımız
Yemekhane, bahçe, müzik odası... Yaşam alanımızda öğrencilerimiz, kampus dışına çıkmadan çeşitli imkanlardan faydalanabiliyorlar.

## MİNİ ANKET KÖŞESİ

Bu ay üniversitemiz öğrencilerine mini anketler yapıp, hayatlarını ayrıntılarıyla araştırdık! İşte eğlenceli mini anketlerimiz.

**En sevdiğiniz restoran/cafe neresidir?**

- % 32 Simit Sarayı
- % 24 Uzman Kebap
- % 16 Kampus Çay Bahçesi

**Bilgisayarın var mı?**
%53 Kardeşimle/ev arkadaşımla paylaşıyorum
%34 Hayır
%8 Evet

**Yaz tatilinde ne yapmayı tercih ediyorsun?**
·%33 Çalışıyorum/staj yapıyorum
·%27 Memleketime gidiyorum
·%7 Tatile gidiyorum

**Bahar tatilinde ne yapmayı tercih ediyorsun?**
·% 37 Ailemin yanına gidiyorum
·% 29 Arkadaşlarımla vakit geçiriyorum

## Appendix C

### Adapted Version of the Social Fit Inventory Items

(Walton & Cohen, 2007)

1. Bu üniversitedeki öğrencilerin arasına rahatlıkla katılırdım.
2. Bu üniversitede başarılı olan öğrenciler bana benzer kişilerdir.
3. Bu üniversitedeki öğrencilerle iyi anlaşırdım.
4. Bu üniversitede bazen kendimi dışlanmış hissederdim.
5. Bu üniversiteye kolay uyum sağlardım.
6. Bu üniversitedeki derslerde başarılı olmak için ne yapmam gerektiğini bilirdim.
7. Kendimi bu üniversiteye ait hissederdim.
8. Bu üniversitedeki öğrenciler beni severdi.
9. Bu üniversitedeki öğrenciler bana çok benzeyen kişilerdir.
10. Bu üniversite ortamında kendimi rahat hissederdim
11. Bu üniversitede kendim gibi olabilirdim / davranabilirdim.
12. Bu üniversitedeki hocaların beni sevmesi için ne yapmam gerektiğini bilemezdim.
13. Bu üniversitedeki derslerde başarılı olmak için ne yapmam gerektiğini bilirdim.
14. Eğer istersem, bu üniversitede çok başarılı olabilirdim.
15. Bu üniversitedeki derslerde zorlandığımda kimden destek alabileceğimi bilirdim.
16. Bu üniversitedeki derslerde kendimi gösterebilirdim.
17. Bu üniversitedeki derslerde zorlanmazdım.

## Appendix D

### Implicit Theory of Personality Scale

(Dweck,1999)

1. Birinin nasıl bir insan olduğu, o kişiyle ilgili çok temel bir şeydir ve pek değiştirilemez.
2. Bir insan zaman içinde bir şeyleri farklı şekillerde yapabilir, ama kişiliğinin önemli parçaları pek değişemez.
3. Herkes belli bir karaktere sahiptir ve bunu değiştirmek için yapabileceği pek bir şey yoktur.
4. İnsan yedisinde neyse yetmişinde de odur. İnsanlar en derin özelliklerini pek de değiştiremezler.
5. İnsanlar kendilerini her zaman büyük ölçüde değiştirebilirler.

AppendixE

Implicit Theory of Intelligence Scale

(Dweck,1999)

1. Herkesin belli bir zeka seviyesi vardır ve bunu değiştirmek için pek bir şey yapılamaz.
2. Zeka bir insanın pek değiştiremeyeceği bir özelliğidir.
3. Bir insan yeni şeyler öğrenebilir, ama zeka seviyesini pek değiştiremez.
4. Bir insan ne kadar zekaya sahip olursa olsun, bunu her zaman oldukça değiştirebilir.

## Appendix F

### Group Entity Beliefs Scale

(Tong &Chang, 2008)

1. Bir insan kendini ait olduğu gruplar üzerinden tanımlayabilir. Bu tanım hayat boyu aynı kalır.
2. Bir insan kendini ait olduğu gruplar üzerinden tanımladığında, bu tanım uzun zaman boyunca çok az değişir.
3. Bir insanın aidiyet hissettiği gruplar (kişinin sosyal kimliğini oluşturan gruplar) zaman içerisinde pek değişmez.
4. Bir insanın şu an aidiyet hissettiği gruplarla yıllar sonra aidiyet hissedeceği gruplar çok büyük ihtimalle aynı olur.
5. Bir insanın şimdi ve eskiden ait olduğu gruplar, her zaman kendisinin bir parçası olarak kalacaktır.

## Appendix G

### Implicit Theory of Groups Scale

(Rydell et al., 2007)

1. Bir grubun, ne tür bir grup olursa olsun, üyeleri her zaman büyük ölçüde değişebilir.
2. Her grup, kimlerden oluşursa oluşsun, temel karakteristiklerini büyük ölçüde değiştirebilir.
3. Her grup belli türde insanlardan oluşur ve bunu değiştirmek için yapılacak pek bir şey yoktur.

## Appendix H

### Self-Esteem Scale

(Rosenberg, 1965)

1. Genel olarak kendimden memnunum.
2. Bazen yetersiz bir insan olduğumu düşünüyorum.
3. Birçok olumlu özelliğe sahip olduğumu düşünüyorum.
4. Bir şeyleri en az diğer insanlar kadar iyi yapabilirim.
5. Kendimde gurur duyacak fazla bir şey bulamıyorum.
6. Bazen kendimi kesinlikle işe yaramaz hissediyorum.
7. Kendimi en az diğer insanlar kadar değerli buluyorum.
8. Kendime daha fazla saygı duyabilmeyi isterdim.
9. Genelde kendimi başarısız bir kişi olarak görme eğilimindeyim.
10. Kendime karşı olumlu bir tutum içindeyim.

## Appendix I

### Self-Efficacy Scale

(Yılmaz, Gürçay & Ekici, 2007)

1. Öğrenimimde her zaman yapılması gereken işleri başarabilecek durumdayım.
2. Yeterince hazırlandığım zaman sınavlarda daima yüksek başarı elde ederim.
3. İyi not almak için ne yapmam gerektiğini çok iyi biliyorum.
4. Bir yazılı sınav çok zor olsa bile, onu başaracağımı biliyorum.
5. Başarısız olacağım herhangi bir sınav düşünemiyorum.
6. Sınav ortamlarında rahat bir tavır sergilerim, çünkü zekama güveniyorum.
7. Sınavlara hazırlanırken öğrenmem gereken konularla nasıl başa çıkmam gerektiğini genellikle bilemem.

## Appendix J

### Personal Evaluation Inventory

(Shrauger, 1990, as cited in Robinson, Shaver & Wrightsman, 1991)

### Social Interactions Subscale

1. İnsanlarla kolay kaynaşırım.
2. Daha çok insan tanımak isterdim, ama dışarı çıkıp insanlarla tanışmaktan çekiniyorum.
3. Yeni insanlarla tanışmak zevk aldığım bir deneyimdir.
4. Parti veya toplu buluşmalarda neredeyse hiçbir zaman kendimi rahatsız hissetmem.
5. Toplu buluşmalara gittiğimde sık sık kendimi garip ya da rahatsız hissederim.
6. Grupların içindeyken kendimi çoğu insan kadar rahat hissetmem.
7. Yeni insanlarla tanışma konusunda insanların çoğundan daha iyiyimdir.

### Physical Appearance Subscale

1. Daha güzel/yakışıklı olmamak beni rahatsız ediyor.
2. Fiziksel görünümümden memnunum.
3. Ortalama bir insandan daha güzelim/yakışıklıyım.
4. Bu kadar iyi bir fiziksel görünüme sahip olduğum için şanslıyım.
5. Fiziksel görünümümü değiştirebilmeyi isterdim.
6. Çoğu insan beni büyük ihtimalle fizisel olarak çekici bulmaz.
7. Daha güzel/yakışıklı olsaydım erkek/kız arkadaş bulmakta daha başarılı olurdum.

### General Confidence Subscale

1. Geçmişte atlatmayı başardığım durumlarla tekrar karşılaştığımda kendimden emin hissetmediğim sık olur.
2. Sahip olmadığım önemli yetkinlikler benim başarılı olmamı engelliyor.
3. Çoğu zaman kendimi çevremdeki birçok insan kadar yetkin hissetmem.

4. Yeteneklerimle ilgili birçok insana göre daha az şüphem vardır.
5. İşler yolunda gitmediğinde bu durumla baş edebileceğime dair kendime güvenirim.
6. Tanıdığım birçok insana göre kendime güvenim daha yüksektir.
7. Kendime daha çok güvenseydim daha iyi bir hayatım olurdu.