

Investigating the Underachievement of University Students in Turkey: Exploring Subscales

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Abstract

This study extends the work of Baslanti and McCoach (2006), which aimed to identify the characteristics of gifted underachievers at the university level and the reasons for their underachievement using the School Attitude Assessment Survey-Revised (SAAS-R). In this study, underachievement refers to a discrepancy between outstanding achievement shown on a standardized test and low performance in school-related tasks compared to students of the same age (Clark, 1997). The present study was conducted with 30 underachievers using a semi-structured interview with 44 questions. The interview questions addressed five factors of underachievement: academic self-perceptions, attitudes toward teachers, attitudes toward school, goal valuation, and motivation/self-regulation. Data were analyzed using content analysis and frequencies were obtained for all items. Results from the interviews indicated that the findings paralleled those obtained in the original study.

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Investigating the Underachievement of University Students

The processes of defining underachievement, identifying underachieving gifted students, and explaining the reasons for this underachievement continue to stir controversy among practitioners, researchers and clinicians (Reis & McCoach, 2000). The characteristic behaviors of underachieving gifted students have been studied extensively since 1950s (Clark, 1997). Some researchers (e.g. Butler-Por, 1993; Clark, 1997) concentrated primarily on three factors associated with underachievement among the gifted: home and parental variables, personality characteristics, and school related factors. This study focuses on factors such as academic self-perceptions, attitudes toward teachers and school, goal valuation, and motivation/self-regulation.

Review of Literature

Rimm (1997) stated that procrastination, incomplete assignments, disorganization, and careless work became typical symptoms that initiated underachievement syndrome. According to Davis and Rimm (1998) poor study habits, peer acceptance problems, poor school concentration and home and school discipline problems supported the pattern of underachievement. It is also evident that if a child does not see a relationship between efforts and outcomes, s/he is not likely to make an effort to achieve (Davis & Rimm, 1998).

Ultimately, underachievement is closely tied to self-concept development. Children who see themselves in terms of failure eventually begin to place self-imposed limits of what is possible (Delisle & Berger, 1990). Butler-Por (1993) also added locus of control, fear of failure, need affiliation, and fear of success to self-concept factors related to underachievement.

Perfectionism is also a crucial attribute of some of the gifted underachievers. Adderholt-Elliot (1989) named five characteristics of perfectionistic students that contribute to underachievement: procrastination, fear of failure, an all-or-nothing mindset, paralyzed perfectionism (if there is a risk of failure, do nothing) and workaholicism (which leads to burnout, depression, and a loss balance among school, family and friends). A related and similar trait in underachievement is low self-esteem. Davis and Rimm (1998) purported these students do not believe they are capable of accomplishing what their family or teachers expect of them or what they should expect of themselves.

Another contributing factor to underachievement among gifted students is competition. The classroom where competition and comparative evaluation are heavily stressed is a serious problem for underachievers (Davis & Rimm, 1998). Rimm (1997) stated that when the curriculum becomes more complex or when students enter the upper grades where peer populations are more intellectually competitive, gifted children may feel as though they are not as intelligent as they believed they were. Davis and Rimm (1998) also noted the underachievement of gifted students may appear even at the college level if students have not learned to function in competition.

Another source of underachievement is the actual school situation (Clark, 1997). Butler-Por (1993) noted that the literature suggests that three factors within the school situation are conducive to the onset of underachievement in gifted students: curriculum and teaching methods, attitudinal factors, and teacher variables. Students who fail to find stimulation in school may opt out of the learning situation, develop anti-school attitudes, and prefer to stay at home (Butler-Por, 1993). Butler-Por (1993) reported two main points from the literature. First, underachievers generally express negative attitudes toward school. Second, teachers may convey values and expectations that antagonize and alienate gifted students and contribute to the underachievement problem (Butler-Por, 1993).

Reis and McCoach (2000) listed general traits that contribute to underachievement among the gifted:

- Low self-esteem, low self-concept, low self-efficacy,
- Alienation or withdrawn; distrustful, or pessimistic,
- Depression,
- Dependent, less resilient than high achievers,
- Fear of failure; gifted underachievers may avoid competition or challenging situations to protect their self-image or their ability,
- Fear of success,
- Negative attitude toward school,
- Perform less well on tasks that require detail-oriented or convergent thinking skills than their achieving counterparts,
- Lack goal-directed behavior; fail to set realistic goals for themselves,
- Possess poor self-regulation strategies, low tolerance for frustration, lack perseverance, lack self-control.

Unfortunately, there is scant literature on gifted underachievers in post-secondary educational settings and those who do not stay in college (Peterson, 2000). Davis (1998) reported from Borow (1946) that predicting achievement of college students had more to do with time management, study habits, extracurricular activities, employment, and health than intelligence. Davis (1998) summarized Diener's (1960) study, which compared seventy-four achieving and sixty-four underachieving students on grade point average (GPA), aptitude, reading skill, verbal expression, high school GPA, age, weekly study hours, attendance, and residential accommodations. In this study Diener found that overachievers, in comparison to underachievers, reported better study habits and organization.

McCoach and Siegle's (2003) study examined the differences between gifted high achievers and underachievers in terms of their general academic self-perceptions, attitudes toward school, attitudes toward teachers, motivation and self-regulation, and goal-valuation using the *SAAS-R*. The results indicated that gifted achievers and gifted underachievers differed in their attitudes toward school, attitudes toward teachers, motivation/self-regulation, and goal valuation, but not their academic self-perceptions. In addition, over 44% of the sample could be correctly classified as either gifted achievers or gifted underachievers using their scores on two subscales: motivation/self-regulation and goal valuation.

The results of the antecedent study (Baslanti & McCoach, 2006) using the SAAS-R also indicated that underachievers had lower scores on the SAAS-R than did the comparison students. There were moderate to large differences between the means of comparison students and the means of the underachievers on each of the five subscales of the SAAS-R. Among the five sub-scales, the motivation/self-regulation subscale was the best predictor of underachievement. However, the study also showed underachieving students exhibited high scores on the academic self-perception subscale in contrast to the findings from McCoach and Siegle (2003). Hence, the concept of self-perception needs further study in gifted underachievers.

Purpose

The purpose of this study was to determine whether gifted underachievers' responses to interview questions yielded similar results in terms of academic self-perception, attitudes toward school, attitudes toward teachers and classes, motivation/self-regulation, and goal valuation when compared to findings obtained from the antecedent study (Baslanti & McCoach, 2006). This research study extends that study by conducting interviews with underachievers after the administration of the SAAS-R instrument to identify the characteristics of underachieving gifted students and the reasons for their underachievement.

Methods

Participants

Thirty underachievers from Bogazici University were contacted to participate in an interview. All 30 students also participated in the previous study (Baslanti & McCoach, 2006), in which 91 students were administered the SAAS-R instrument. Bogazici University usually accepts students among the top-ranking high school graduates (upper 5%) who are selected through a nationwide external entrance examination called the Student Selection and Placement Examination (OSYS). The OSYS exam is taken by nearly 1.5 million students each year. Because students at Bogazici University represent the top students in Turkey, for the purposes of the study they will be defined as academically gifted (Baslanti & McCoach, 2006).

The participants for this study are selected according to the following criteria: all underachievers entered the university at the 95th percentile or above on the OSYS exam in their year of entry, completed at least four complete semesters at the university, had GPAs below 2.0 out of 4.0 for both of the preceding two semesters, and had at least one failing grade (F) on their transcripts. A total of 614 students fell into this category of underachievers, and 91 of those students participated in the previous study (Baslanti & McCoach, 2006). The researcher contacted these students to participate in an interview. Thirty students (33%) agreed to participate.

Interview

Interviews were conducted in a seminar room at Bogazici University and were audio-taped. In addition to the audiotaping, the researcher took notes during the interviews. He also wrote short field notes after each interview in case some points in the responses were not clear. The interview environment was quiet, and participants

seemed very confident. The interview was semi-structured and included 44 questions employing five categories: academic self-perceptions, attitudes toward teachers, attitudes toward school, goal valuation, and motivation/self-regulation. Tables 1 through 5 show the interview questions in each of the five categories used in the study. These categories, that were present in the *SAAS-R*, were used in order to triangulate results between the instrument and interviews. Each interview question was derived from the literature and finalized after feedback from an expert in gifted education. Each interview lasted approximately two hours. During the interviews the researcher encouraged students to elaborate their yes/no type of answers to the questions.

Data Analysis and Procedures

Responses were analyzed using a content-analytic procedure (Weber, 1990) that allowed frequencies to be generated. Interviews were transcribed verbatim the same day to prevent forgetting important details that might be helpful to analyze participants' responses to interview questions. The researcher read all of the transcripts several times to gain insight into students' responses.

Content analysis is a research method that uses a set of procedures to make valid inferences from text (Weber, 1990, p.8), including open-ended responses to a question in a survey and comments from in-depth interviews (List, 2005). Content analysis is used to determine the presence of certain words or concepts within texts; to quantify and analyze the presence, meanings, and relationships of such words and concepts; and to make inferences about the messages within the texts (Busch, et al., 2005). In content analysis, data are usually coded to report existence or frequency. In this study, students' responses to each item produced large volumes of data, and content analysis helped the researcher break down the content of responses into meaningful and pertinent units of information. The purpose of the analysis was to narrow students' comments down to meaningful units. Words, sentences, and paragraphs were all considered the units of analysis. These units, then, were coded into meaningful categories. Because of the sheer volume of data generated, content analysis was conducted for each individual question. The content-analytic procedure used in the study was exploratory in nature for two reasons. First, it employed a priori coding strategy, in which the categories were established prior to the analysis based upon theory. Second, students' responses to each particular item guided the categorization of inferences made. For instance, students' responses (words and/or sentences) to whether they had fear of failure or not were categorized into two sets of responses: having fear of failure or not having a fear of failure. Because the literature indicates that gifted underachievers exhibit fear of failure, the researcher' purpose was to investigate the distribution of the participants of the study between the two. For example, 60.7% of underachievers stated that they had fear of failure, whereas 39.3% stated that they did not have fear of failure. Another example of utilizing students' responses to form some categories, is in regard to the question whether or not they displayed failure in certain subjects or an overall failure. For this question, students' responses yielded these categories: mathematics, physics, social sciences, and courses in which using presentation skills are important. This dual approach to analysis was helpful in the sense that it resulted in some findings that were not evident in the existing literature and in the previous study where the *SAAS-R* instrument was used.

As with all quantitative and qualitative studies, there are validity and reliability issues in content analysis. A content analysis variable is valid to the extent that it measures the construct the investigator intends to measure (Weber, 1990, p.15). In this study, the researcher attempted to address validity issue by using a semi-structured interview instead of an in-depth interview that yields more open-ended, diverse sets of categories. Codes and their classifications, the content analysis variables in the present study, were structured in a way as to answer each particular question derived from the literature. This strategy helped reduce the ambiguity of the responses that leads to validity and reliability problems. Such problems, according to Weber (1990, p.15), grow out of the ambiguity of word meanings, category definitions, or other coding rules.

Other strategies to enhance the validity of the study were also used. The researcher used verbatim language of the participants for the analysis and mechanically recorded data, and used field notes as a method of triangulation. Such strategies are reported to increase validity of qualitative studies (McMillan & Schumacher, 2006, p.324). The data and codes were also validated by another expert in the field for consistency to increase the reliability of the study. The researcher and the expert agreed on all interpretations and categorizations. The researcher did not, however, use any quantitative inter-rater or intra-rater reliability measures, such as Cohen's Kappa, to report reliability.

Results were expressed in terms of categories and their respective frequencies to identify the characteristics of gifted underachievers at the university level and the reasons for their underachievement. The findings were compared with those obtained from the previous quantitative study, which employed the *SAAS-R* instrument. Results from the content analysis follow. The total number of answers may exceed or fall below 30, due to students' multiple responses to an item or non-responses to an item.

Results

Academic Self-Perceptions

The interview employed 10 questions for the academic self-perceptions category (see Table 1). The questions examined underachievers' self-perceptions in terms of fear of failure, dependency, competition, and intelligence. Frequency reports in this category indicated that students felt alone (45%); withdrawn and invaluable (15%); and unhappy, depressed, isolated, argumentative, and lazy (5%). Some (35%) felt bored and described lessons as not being interesting enough to attract their attention. The majority of students (70%) could manage to learn and do the required tasks on their own, while 23.3% expressed dependency on their friends. Two students stated that their dependency depended on the situation.

Table 1
Questions from the Semi-Structured Interview Related to Academic Self-Perception Category

Item no	Questions
1	What feelings do you have for yourself during classes/at school?
2	Are you dependent on your friends' help in order to understand your lessons, assignments, etc. or can you manage to learn and do the required tasks on your own?
3	Do you have fear of failure?
4	Do you withdraw from a course if you feel that you will fail or you take the course anyway?
5	Do you think your friends/teachers/social environment appreciate your skills?
6	Do you escape from competitive environments? How do you interpret the University environment in terms of competition?
7	Do you display failure on certain subjects or do experience an overall failure?
8	Do you think you get what you deserve based on your hard work and efforts?
9	How are your examination results in general? What does getting A's mean to you?
10	Do you describe yourself as intelligent as your friends at this university?

Results showed 60.7% of students had fear of failure. Their responses produced varying answers to the fourth item, which collected evidence of perfectionist and non-perfectionist attitudes toward selecting a course. Some of the students (14.8%) emphasized the importance of getting the most out of a course rather than getting a passing grade. Eighteen percent expressed non-perfectionist attitudes toward selecting a course. For instance, one student stated, "if my GPA were good, I could act as perfectionist in selecting a course, but now a passing grade is enough for me. This is what I can do for the time being." More than half of the underachievers (53.6%) thought getting an A was difficult. However, 46.4% thought getting a passing grade rather than an A was enough for them. These were students who had just a few A's in their transcripts and usually got low scores such as D, C, and C+.

The respondents provided diverse opinions about competitive learning. Twenty-two students (73%) complained about the extreme competitive environment whereas 17% had positive feelings about the school's competitive atmosphere. Some students described competition in the university as "excessive", "unnecessary", "annoying", and "destroying friendships."

Results indicated that the majority of the students (67%) failed certain subjects: mathematics (35%), physics (30%), social sciences (30%), and courses

where using presentation skills were important (5%). The rest (33%) of the students exhibited failure on all subject areas. On the other hand, 13% of students rejected the idea that they were underachievers. They noted that failure occurred when they do not enjoy the course content.

Most of the students (83%) stated they deserved a low grade because they did not put enough effort into courses. The rest (17%), however, believed they did not deserve many of the low grades they obtained. These students blamed teachers' grading practices. The majority of the underachievers (83%) described themselves as intelligent as their classmates while 17% did not. Some of the comments about their perceptions of their intelligence included:

In terms of social skills and analytical reasoning I feel better than most of my friends, but especially in mathematics lessons at this university I feel stupid when compared to others.

I thought I was very clever, but I have doubt for the time being when I look at my grades.

I used to consider myself very intelligent, but after attending to this university I met the ones who are better than me.

My current situation at this university gave me the impression that I am not intelligent.

Everyone around me say that I am very intelligent, but I do not think so when I look at others at this school.

Attitudes Toward Teachers

Attitudes toward teachers were the thrust of 12 questions (see Table 2). The questions examined what underachievers thought of their teachers and the teachers' grading practices, teachers' strengths and weaknesses, and expectations of their students. Frequency reports in this category indicated 60% of the students had negative feelings about their teachers and 13% had similar feelings toward lessons. The latter group found the course content boring and uninteresting.

Table 2
Questions from the Semi-Structured Interview Related to Attitudes Toward Teachers Category

Item no	Questions
11	How is your attitude toward your teachers and lessons?
12	How do you evaluate your teachers' attitudes toward you?
13	What do you think of teachers' grading practices and course passing regulations at the University?
14	How much do you enjoy the way the courses are taught?

- 15 How do you evaluate your teachers whose courses you failed in?
 - 16 How are your relations with your teachers?
 - 17 What do you think your teachers' expectations from you are?
 - 18 How is your interaction with your department and advisor?
 - 19 What kinds of strengths or weaknesses do you think your instructors possess?
 - 20 Do you believe that your teachers differ in terms of their expectations from you as a student?
 - 21 How do you evaluate the difficulty level of the lessons that you fail?
 - 22 Do you believe that your teachers are aware of your capacity?
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About half of the underachievers (43%) thought teachers' attitudes toward them were positive, but 57% thought otherwise. All of the students in the latter group commented they did not have a healthy communication with their teachers. Some of them believed their teachers did not care about their presence, especially in mass courses (41%); just came to class to lecture and then go out (24%); and could not stand underachieving students (6%). The majority of the students (70%) asserted their teachers were never aware of their potential and did not have any attempt to see it. Three students complained that mathematics instructors, in particular, did not want to communicate with students. One of the interviewees noted that although he was considered to be an intelligent student by his mathematics teachers, his failure in mathematics astonished them. He also thought he could have passed those courses if his teachers had not relied on his examination results to assess his performance in mathematics.

Regarding teachers' expectations from students, 55.6% of the students believed teachers did not have any expectations from students with respect to learning and did not care whether the students would pass the course or not. Some students (44.4%), however, cited "to pass the course," "to spend more effort," "to get a high grade," and "attendance" as teachers' expectations of students.

Moreover, 21% of the underachievers criticized the curve system within the university. They believed such a system created a highly competitive environment and this, in turn, destroyed friendships among students; made them selfish. One of these students stated, "for me to pass a course, it is not necessary for some others to get Fs (failure). Everyone should have an equal chance to get an A score." Another student thought such a competitive atmosphere was his motivation and was giving him the impression he is not capable of competing with others. Another underachiever believed no matter how intelligent students were and how well they performed in the nationwide university entrance examination, the students at this university failed because of teachers' being proud of giving low scores to students.

Seventy percent of the underachievers did not enjoy the way courses were taught and 55% found the failed lessons very difficult. These students stated instruction was based on memorization. Other students commented about teachers' strengths and weaknesses. They noted their teachers lacked pedagogical skills (45%),

could not attract students' attention (15%), did not keep current in their content area (13.8%), just copy the book on the board while they lectured (10.3%), could not go beyond content knowledge (6.9%), and did not know the subject matter well (3.4%).

Attitudes Toward the University

The attitudes-toward-school category employed 8 questions (see Table 3). The questions examined what underachievers thought of their school, the academic and social experiences they were going through, and the impact of any school-wide policy on their underachievement. Frequency reports in this category indicated 70% of the students had positive attitudes toward the university. The seven percent who expressed negative feelings pointed out that this was the best school in the country they could attend. Twenty-three percent, on the other hand, believed they could not reach their potential at this university.

Table 3
Questions from the Semi-Structured Interview Related to Attitudes Toward School Category

Item no	Questions
23	How about your attitudes toward school?
24	Do the students have an equal opportunity to contribute to the lessons?
25	What opportunities do you think the University provides you with?
26	Do you think that you learn new academic and social skills at this university?
27	Is your underachievement realized by anybody in the school?
28	<i>Do you face with different school-wide policies? If yes, how does it affect you?</i>
29	Do you think that this school has an established philosophical stance?
30	Can you easily take risk while selecting a course? What kind of courses do you choose? (by means of required and unrestricted elective courses), what is important for you in selecting a course?

The majority of the underachievers (76.7%) found the courses taught at the university very teacher oriented/controlled. Two students, for example, drew a highly authoritarian teacher profile of their teachers. One student expressed his idea that it was the students who determine "the quality of instruction" at the university, not teachers, because the university attracted the best students in the country. Regarding the flexibility in selecting a course, 24.1% of the students criticized not having much of a choice while selecting courses at the university. Almost half of the underachievers (48.3%) stated they do not take risks in selecting their unrestricted elective courses. They prefer the ones believed to be easy to pass and to require less effort in order to increase their GPAs. Only 18.7% reported they take risks because they want to take courses which they will enjoy and learn new things.

Regarding the opportunities provided by the university, 79% of the respondents described the opportunities and facilities as adequate. The ones who mentioned inadequate resources (21%) cited shortage of instructors, crowded classes, old-fashioned computer labs, and little opportunity to receive scholarships. Half of the

students (50%) expressed concerns about the university for having unfair scholarship policies and discrimination within some departments against students from other program areas. Thirty-five percent, on the other hand, complained that all instructors at this university followed their own rules and policies, which enabled them to ignore some students. In terms of the school's philosophical stance, students expressed varying opinions. One third of the students (33.3%) stated the school's main philosophy was liberalism. However, 14.3% thought its aim was to encourage individualism and competition among students. One student noted (and three others expressed a similar opinion), "If you are a hardworking student, school appreciates you. If not, then discrimination starts. Nobody cares about underachieving students and the ones who left behind." Moreover, 70% of the respondents asserted that only their friends were aware of their underachievement at this university. Only 7% thought their advisors realized their underachievement. Fourteen percent, however, believed nobody recognized their underachievement.

Goal Valuation

The goal-valuation category employed 5 questions (see Table 4). This section questioned students' future plans and career direction, their understanding of being an underachiever at the university, and their perceptions of being successful both academically and socially. Results indicated that 28.6% of the respondents wanted to join the work force and earn money, 21.4% wanted to go abroad to study and work, and another 21.4% wanted to work on interest areas other than their majors. However, 29.6% stated they did not have any future plans.

Table 4

Questions from the Semi-Structured Interview Related to Goal Valuation Category

Item no	Questions
31	What are your future plans and career direction?
32	What do you think about "being an underachiever" at this University? What does it mean to you and how it is evaluated within the University?
33	Do you believe that you will increase your GPA? If yes, to what extend?
34	Do you believe that you can be successful? (Academically and socially)
35	How would you describe your aims regarding getting high grades or just passing grades?

All of the students (100%) reported that being an underachiever means getting low grades and obtaining a low GPA to the school community. However, with one exception, they all pointed out that this does not mean they were underachieving. They mentioned personality development and social development (74%) and what is learned at school (26%) as important issues for them. Many of the underachievers (80.8%) believed they could increase their GPAs. Only 7.7% believed they could not increase their GPAs. However, 11.5% stated they did not attempt to increase their GPAs. When asked for their goals related to getting high grades or passing grades, 57% stated they were aiming at getting a passing grade.

Seven percent of the respondents did not think they would be successful graduating from the university. The rest of the students, on the other hand, believed

they would be successful (63%) both academically and socially while 37% believed they would be successful socially, but not academically.

Motivation and Self-Regulation

The final category, which employed 9 questions, was motivation/self-regulation (see Table 5). The questions examined underachievers’ motivation levels, concentration problems, desire to study, and ability to be well organized and planned. Frequency reports in this category showed 67% of the students had low motivation to study for a course/exam. Sixty-nine percent of the respondents said they have problems in concentrating on their schoolwork. Sixty-four percent had problems related to being planned and well organized. Eleven percent, on the other hand, noted they were planned, but disorganized. Seventy-one percent of the participants had poor attendance at the university and their courses. Some students (11%) reported they never attended courses.

Table 5
Questions from the Semi-Structured Interview Related to Motivation/Self-Regulation Category

Item no	Questions
36	Are you motivated to study for your courses or examinations?
37	Do you have any problem in concentrating on your school-related tasks?
38	Do you have any problems related to being planned and well organized?
39	<i>Do you attend your courses regularly?</i>
40	Do you believe that you spend the necessary effort to become successful?
41	How is your persistence and desire to study?
42	Do you do your written assignments to learn or just to pass the course?
43	Do you do your assignments by yourself or tend to get help from your friends?
44	Do you have regular study habits?

Many of the respondents (87.5%) thought they did not spend the necessary effort to become successful. Sixty percent of the students displayed no desire and persistence to study. However, 20% stated they had the desire and persistence to study if they enjoyed the course. Ten percent of the underachievers reported they never did their assignments. Among the remaining 90%, some (53.3%) did their assignments just to pass the course without any intention to learn new things, some (13.3%) did their assignment to learn, and some (23.3%) did their assignments if they enjoyed the course content and the teacher. Students’ responses also indicated that 37.5% of the underachievers did their assignments themselves. Another 37.5% stated they did their assignments if they liked the course and received assistance from their friends if they did not like the course or had little time to submit the assignment. Sixteen point seven percent noted they always received help from their friends to do their assignments.

Not surprisingly, 90% of the underachievers reported they did not have regular study habits. Interestingly, 25 out of 30 students asserted they had such study habits before coming to this university. Some students, on the other hand, commented they had regular study habits once the exam date was near.

Discussion

The goal of the study was to identify characteristics of gifted underachievers at the university level and to explore potential factors contributing to underachievement by interviewing gifted underachievers using a semi-structured interview. The results of the study pointed out motivational factors as the most evident factor of underachievement. This result supported related findings on motivational factors in the literature (McCoach & Siegle, 2003; Peterson, 2000; Reis & McCoach, 2000; Rimm, 1997) that underscore low motivation as one of the reasons for underachievement among gifted students. The previous study (Baslanti & McCoach, 2006) in which 72.5 percent of underachievers fell in this category, also showed similar results.

Interestingly, in addition to the results in the interview, even though not solicited, all of the students stated they were very successful in their primary, secondary and high school years. Underachievement problems were encountered after attending the university. Three of these students noted they participated in National Science and Mathematics Olympiads during their high school years.

Generally speaking, according to the frequency analysis of the students' responses to 44 interview questions, it was evident that the 30 underachievers who participated in the interview had characteristics such as feeling alone, withdrawn, bored in the lessons, unhappy, and not valuable. They also had fear of failure, problems with the highly competitive environment within the university, and negative feelings about their teachers and their grading practices. The underachievers also mentioned having communication problems with their teachers and believed their teachers were not aware of their capacities. Many of these underachievers described themselves as being as intelligent as their friends at the university and did not accept that they were underachieving in regard to the importance attributed to earning a high GPA within the university. They also believed they would be able to increase their GPAs to a certain extent and would be successful both academically and socially. These results supported those of the previous study (Baslanti & McCoach, 2006). Interestingly, the participants in that study also expressed positive attitudes toward the university. Moreover, the participants of the study stated they had very low motivation to study, did not display persistence and desire to study, did not have regular study habits, and had problems related to being planned and well organized.

It is important to note that during the interview sessions with the 30 underachievers the researcher observed that each underachiever displayed varied and unique characteristics and indicating various reasons for their underachievement. This observation is parallel to the statements of Butler-Por (1993), who stated that one cannot expect all underachievers to have the same characteristics.

The results from the interview also seem to support these explanations on the impact of low motivation to the underachievement of gifted students at Bogazici University. Namely, students' responses to the interview questions indicated that most of the 30 underachievers perceived themselves as feeling alone, withdrawn, and bored in the classes. They felt depressed, isolated, unhappy, shy, felt argumentative, and lazy. These factors were also noted by Clark (1997), Peterson (2000), and Reis and McCoach (2000), as possible reasons for underachievement of gifted students. These

students also perceived themselves to have a fear of failure. This factor was also considered important in underachievement by an extensive literature base (Butler-Por, 1993; Addlerholt-Elliot, 1998 in Davis & Rimm, 1998; Reis & McCoach, 2000). On the other hand, these students had serious problems with the highly competitive environment within the University. This is another reason that contributed to underachievement (Davis & Rimm, 1998).

The majority of the 30 underachievers explained that their aim was to get a passing grade in their courses. They have very low motivation to study, which has been suggested as an important contributing factor for underachievement in the literature (Rimm, 1997; Reis & McCoach, 2000; Peterson, 2000). They also stated they have problems in being planned and well organized (a conclusion that is in line with Reis & McCoach, 2000) and have low attendance to their courses. They believe they do not spend the required effort to become successful nor display a persistence and desire to study. They do their written assignments just to pass the course. Moreover, they perceive themselves to have no regular study habits, which is another source of underachievement stated in the literature by Rimm (1997), Borow (1946 in Davis, 1998) and Diener (1960 in Davis, 1998). As also noted by Reis and McCoach (2000), another reason of underachievement is that underachievers may feel anxious in social situations such as social relationships and examinations. The underachievers' responses indicated they were sometimes aggressive and nervous, which is another characteristic of underachievers as also addressed in the literature by Reis and McCoach (2000).

Although the underachievers expressed positive attitudes toward the university, their attitudes toward instructors at Bogazici University were relatively low when considering results from the SAAS-R instrument. This tendency can be seen more closely in their responses to interview questions. The majority of the students expressed negative feelings about their instructors and criticized their teaching. They were also critical of their teachers' grading practices, and course passing regulations at the University. They also stated that they did not enjoy the way courses were taught. This is also noted as a contributing factor to underachievement in the literature by Butler-Por (1993) and Boyce (1998). The underachievers also said they had communication problems with their teachers and had no interaction with their departments, especially with their advisors. They also taught their instructors had no expectations from them and their instructors were not aware of their capacities. As also pointed out by Butler-Por (1993), one of the reasons of underachievement is the teachers' being unaware of underachievers' capacities. In addition, the underachievers taught that lessons were teacher-oriented and they found lessons failed difficult. They believed their teachers had weaknesses in certain teaching skills, which Butler-Por (1993) suggested as an important source of underachievement. All of these perceptions might indicate that the interviewed underachievers at Bogazici University had negative attitudes toward their instructors and this might be one of the factors that contribute to their low motivation.

Limitations

The current study has certain limitations. The participants of the study were not randomly selected, and data were obtained from university-level students. The interviews were conducted with only 30 students and therefore cannot be generalized

to all underachievers at the university. Another limitation is the diverse characteristics exhibited by gifted underachievers. Gifted underachievers are comprising a diverse group, and each might have different needs and might demonstrate different personality traits. Especially within a university system, this diversification increases and thus each underachiever should be treated individually because all underachievers may not exhibit the same characteristics (Butler-Por, 1993). This study indicates that some underachievers might have psychological problems, some might have adaptation problems, and some might have problems only with their teachers and suffer from school-related factors. Therefore, in our attempts to help gifted underachievers in a highly dynamic university environment, these individual differences should be taken into consideration. As the literature indicates, the identification of giftedness (Cline, 1999) and underachievement (Reis & McCoach, 2000) is somewhat problematic and controversial (Butler-Por, 1993; Reis & McCoach, 2000). Therefore, this sample may not match other researchers' definitions or identification criteria for gifted underachievement. In addition, the interview questions were limited to five factors related to underachievement as in the *SAAS-R* instrument. Surely there are many other unexamined factors that are related to underachievement.

Implications

Very little research has focused specifically on the study of underachievement among the gifted students at the university level (Peterson, 2000). This study contributes to these few studies by demonstrating that underachievers may exhibit problems in academic self-concept, attitudes toward teachers, attitudes toward school, goal valuation, and motivation/self-regulation. Hence, more research on the underachievement of gifted students is needed. More in-depth interviews, which include more factors, such as family-related factors, personality traits such as low self-esteem, self-regulation strategies, procrastination, perfectionism, and critical thinking ability, should be developed.

It appears in this study that many of the gifted underachievers have low motivation and poor self-regulation to study and concentrate on their schoolwork. They also have low class attendance because they feel bored and do not enjoy the way courses are taught. Some find their classes difficult. Many of them hold negative feelings toward their teachers. Given these findings, the results of this may be utilized for possible interventions to overcome underachievement among these students. First off the university and its counselling center should address these issues to reach out to underachievers. Teacher training to increase awareness about the existence and needs of gifted underachievers within the university is critical to helping underachievers. Each department is supposed to assign an advisor to students at the university; however, many of the underachievers that participated in this study mentioned they did not have any communication with their advisors. Given the fact that these students felt alone and withdrawn at the university, the role of advisors emerges as a critical one in the academic life of these students. The results of the present study pinpoint the need to train teachers not only to be aware of the existence and needs of gifted students at the university, but also to improve their teaching styles to better serve a gifted population. Many of the underachievers in the study seemed to have low motivation to study and low interest in coursework due to teacher's poor teaching strategies (based on underachievers' perception). This is an important issue that needs

to be addressed by the university to handle the underachievement problem with efficiency and integrity.

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