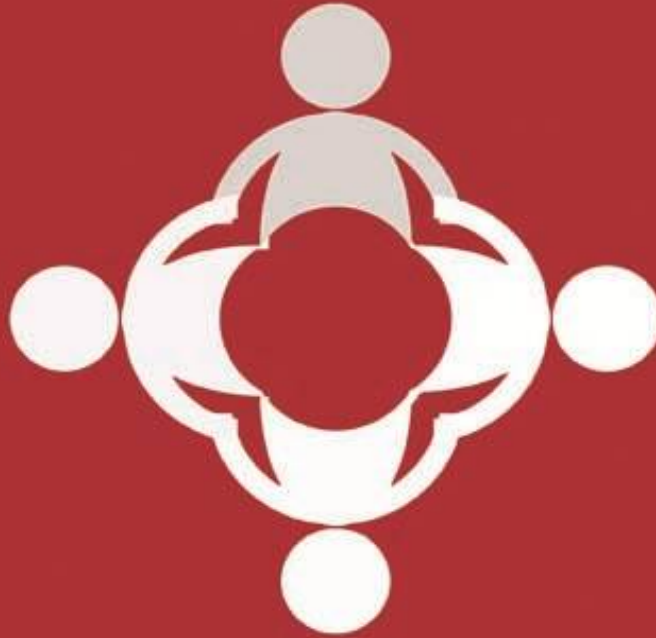


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**Prof. Dr. Ayşegül Ataman  
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Prof. Dr. Nergüz Bulut Serin  
Prof. Dr. Ömer Üre  
Editors**

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## **Message from the Editor**

I am very pleased to publish second issue in 2016. As an editor of Turkish International Journal of Special Education and Guidance & Counselling (TIJSEG) this issue is the success of the reviewers, editorial board and the researchers. In this respect, I would like to thank to all reviewers, researchers and the editorial board. The articles should be original, unpublished, and not in consideration for publication elsewhere at the time of submission to Turkish International Journal of Special Education and Guidance & Counselling (TIJSEG), For any suggestions and comments on TIJSEG, please do not hesitate to send mail.

Prof. Dr. Hakan Sari  
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## SOURCES OF FOREIGN LANGUAGE ANXIETY AMONG EFL STUDENT TEACHERS IN LIBYA

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### ABSTRACT

This study attempts to reveal the sources of foreign language anxiety among EFL student teachers in Libya. The study was conducted to address 1) the level of foreign language anxiety among Libyan student teachers, 2) the sources of foreign language anxiety among Libyan student teachers, and 3) the differences in the sources of FLA between student teachers with different levels of anxiety. The participants were 152 Libyan student teachers (male = 47 and female = 105) studying ELT in Libya. Horwitz's (1996) Teacher Foreign Language Anxiety Scale (TFLAS) was the primary tool and an open-ended questionnaire designed by the researcher was the secondary tool for data collection. Descriptive methods including percentage mean, SD, and t-tests were utilized to analyse the data. The findings showed that student teachers in Libya have a high level of foreign language anxiety. Their classification led to only two levels of anxiety: moderately anxious (averages between 2.50 and 3.49), and highly anxious (averages between 3.50 and 5) groups. Moreover, all the items included in TFLAS were responsible for making these teachers anxious. These sources were generally related to speaking anxiety, teachers' beliefs about teaching and learning, classroom procedures, teaching anxiety and teachers' proficiency level. The degree of sources of anxiety in the moderately anxious and highly anxious groups were found as significantly different suggesting that the more students experience any of the sources of teacher FLA, the more apprehension they experience. The study had useful implications for teachers and practitioners in this field. It was suggested that factors including a friendly learning and teaching atmosphere, having a good proficiency in English, getting enough training in teaching practices, and receiving support from the institution can contribute to the reduction of teacher anxiety.

**Key Words:** Student teacher's Foreign Language anxiety, Libyan Students,

### Introduction

Second language anxiety is a psychological factor inhibiting the language learning of both learners and teachers. During the past decades, much research have been made to know the construct of foreign language anxiety (FLA). Despite considerable research carried out on learner anxiety, language teacher anxiety left almost an unexplored phenomenon until the introduction of Foreign Language Class Anxiety Scale to the field by Horwitz et al. (1986) and later on, by introduction of Teacher Foreign Language Anxiety Scale by Horwitz's (1996) to explore why non-native speaker (NNS) teachers are subject to anxiety. NNS teachers' or student teachers' feelings of anxiety is perceived as a critical issue for many NNS professionals in the field of ELT because it is believed that to be successful, EFL teachers should have a low level of anxiety (Dörnyei, 1994, 2001). Affective filter hypothesis, one of the main five hypotheses proposed by Krashen (1985) is utilized as the main framework in this study. Affective filter hypothesis deals with motivation, self-confidence and anxiety as the most influential factors affecting second language learning. In other words, to be a successful language learner, one should be motivated, self-confident and low-anxious. Krashen (1985) also argues that anxiety is associated to "club membership" (p. 16) suggesting that the affective filter is down when language learner considers himself as a member of the group. For Krashen (1976) also the degree of formality of an environment can contribute to language learning in the sense that learning a language in a formal context like classroom can



produce anxiety in learners compared to informal environments and learning English at an early age. The context of the present study is formal, and thus, anxiety provoking. However, identifying the sources of them can help removing them and empowering both language learners and teachers.

## LITERATURE REVIEW

According to Krashen's (1985) Affective Filter Hypothesis, some affective variables including motivation, personality, self-confidence, self-esteem, and anxiety play a role in foreign and second language learning. Of these variables, anxiety is the topic of the present study. Spielberger (1966) defines anxiety as "an unpleasant affective state or condition similar to dread or nervousness, with physiological and behavioral manifestation" (p. 9). Some years later, he provides a more recent definition: "Anxiety is the subjective feeling of tension, apprehension, nervousness and worry associated with an arousal of the autonomic nervous system" (Spielberger 1983 cited in Horwitz, Horwitz & Cope 1986, p. 125). For Reber (2000), anxiety is "a vague, unpleasant emotional state with qualities of apprehension, dread, distress, and uneasiness" (p. 43). Dilmac, Hamarta and Arslan (2009) defined anxiety as "the condition of being stimulated that manifests itself with physical, emotional, and mental alterations the individual experiences against a non-objective danger" (p. 144).

More recently, Yoon (2012) described anxiety as "a normal feeling to human beings which can be brought about by any internal or external changes, uncertain situations, or feeling of uncertainty" (p. 1100). Closely related to second language learning, Brown argues that anxiety is "associated with feelings of uneasiness, self-doubt, apprehension, or worry" (p. 106). This and other definitions highlight that anxiety results in the development of negative emotions such as discomfort, stress, insecurity, and even panic within an individual. is regarded as a barrier to language learning because anxiety produces a challenging situation that yields specific reactions like tendency to avoid the situation. So far, much attempt has been made to identify and categorize different types of anxiety as discussed in the next section. According to Scovel, "facilitating anxiety motivates the learner to "fight" the new learning task; it gears the learner emotionally for approval behaviour. Debilitating anxiety, in contrast, motivates the learner to "flee" the new learning task; it stimulates the individual emotionally to adopt avoidance behaviour" (p. 193). In this definition, emphasis is put on performance with debilitating anxiety perceived as an impediment to language learning producing negative feelings in language learners whereas facilitative anxiety be regarded as motivating, producing positive feelings in language learners. These two constructs have been the subject of much research. For example, Bailey (1983) and Horwitz (1990) showed the positive effect of facilitative anxiety on language learning but, in general, language learning is mostly associated with debilitating anxiety. However, some researchers argue that varying degrees of both anxieties may be present in an individual and work together.

The topics and research reviews highlight that anxiety is a concerning issue in different contexts around the world. Though conducted in a variety of contexts, the findings of research, to a large extent, is consistent in supporting the fact that there is a negative correlation between foreign language anxiety and language learning (e.g., Horwitz, 1996; Tum & Kunt, 2013). In other words, as far as foreign language learning is concerned, anxiety has a debilitating effect. Teacher's foreign language anxiety was particularly found as a concerning issue because anxiety may decrease the amount and quality of input teachers provide to students and unintentionally transfer the teachers' uneasiness in using the target language to their students (Horwitz, 1996). The findings suggested that teachers try not to get involved in practices that requires high degree of target language use because of their poor language proficiency. Overall, anxiety can diminish the overall performance of teachers and hinders student learning. This





situation is also exacerbated by the fact that “in addition to learning the target language, student teachers must also acquire the skills of teaching” (Tum &Kunt, 2013, p. 386).

Given that extensive research has been carried out on the relationship between foreign language anxieties among language learners in contrast to the limited research administered to non-native, it is important to address this gap in literature. Some researchers have called a need to support non-native EFL teachers and alleviate their feelings of foreign language anxiety (Horwitz, 1996). The potential negative outcomes of non-native teacher’s anxiety and their destructive effect on language learners’ make this topic worthy of further inquiry. The first step to bridge this gap is the careful examination of the level and sources of FL anxiety among student teachers that is addressed in this research project. Another scarcely investigated domain is the investigation of sources of FLA between low- and highly anxious student teachers that is addressed in this research project. Moreover, to the best of my knowledge, no studies have explored these questions in the context of Libya. So, this project was set out to address the above-mentioned gaps in the existing literature.

## METHODOLOGY

This study adopted a mixed-method design, that is, both quantitative and qualitative approaches are used to collect data. To elaborate, whereas close-ended questionnaire provides quantitative data on sources of FLA, the close-ended questionnaire is also utilized so more comprehensive data can be obtained from the student teachers to allow confirming the quantitative data collected. These mixed method approaches have been proved as being useful because it allows for triangulation of data that approaches the problem under investigation from different vantage points. The present study was administered in four colleges in Al ZZaytuna University, one of the major universities in Libya. Both colleges are located in Tarhuna city. At this university students are taught majorly by Libyan teachers and by a few Indians and Iraqi teachers.

Participants of the study were 152 male (N = 47, 30.9%) and female (N = 105, 69.1%) Libyan student teachers at a major university in Libya. The participants’ age ranged from 20-24 (N = 140, 92.1%), 25-29 (N= 10, 6%), and 30-35 (N = 2, 1.3%). So, the majority of the participants were between 20-24 years of age. These participants were selected by convenience sampling. All the participants were native speakers of Arabic and were learning English as a foreign language. These student teachers were enrolled in the junior and senior year of a four-year foreign language teacher education program, thus considered as novice non-native EFL teachers.

Horwitz’s (1996) Teacher Foreign Language Anxiety Scale is the primary data collection tool in this study (Appendix I). Horwitz was the first one to realize that student teachers suffer from a high level of FLA and thus designed this scale to identify and measure teachers’ feeling of anxiety. This 18-item questionnaire measures the participants’ degree of FLA on a five-point Likert scale of strongly agree, agree, neither agree nor disagree, disagree, and strongly disagree. The questionnaire had two parts: the demographic part and the main part containing the 18 items. The English version of the questionnaire was used to collect data because it was assumed that the participants would not have any difficulty understanding the questionnaire content.

An open-ended questionnaire was also designed as the secondary source of data collection by the researcher containing three more general questions to elicit more in-depth information about sources of FLA among Libyan student teachers. In other words, not only the data obtained from the open-ended questionnaire can be used to confirm or reject the data obtained by the close-ended questionnaire but also



it is used to see whether other new sources peculiar to Libyan students can be identified. Data obtained from the TFLAS was calculated by SPSS software (version .16). In order to answer the first research question, i.e., identifying the level of FLA of Libyan student teachers, the data obtained from TFLAS was subjected to descriptive statistics so Median, Mean and Standard Deviation of average responses was calculated. Afterwards, student teachers were divided based on their average scores on the TFLAS. Descriptive statistics was performed to determine frequency and percentage, Median, Mean and Standard Deviation of average responses. In order to answer the second research question, i.e., identifying the sources of FLA of Libyan student teachers, descriptive statistics was performed to determine the percentage of answers to different choices in a given item along with Mean, and SD. In order to answer the third research question, i.e., identifying the sources of FLA among Libyan student teachers with different levels of anxiety, eighteen (the number of items in TFLAS) independent t-tests were performed to identify the mean difference between the moderately-anxious and highly-anxious groups.

## RESULTS AND DISCUSSION

This section provides answer to the first research question: What is the level of foreign language anxiety among student teachers in Libya? The Teacher Foreign Language Anxiety Scale (TFLAS) was used to measure the extent to which student teachers were affected by FLA. The TFLAS has 18 items so the highest score that could be obtained from the questionnaire is 90 and half of this score, i.e. 45, is the middle score signifying a moderate score. The student teachers' average score was used in this study to determine the level of anxiety. The questionnaire was scored on a five-point Likert scale, ranging from one "strongly disagree" to five "strongly agree". Some of the items were negatively worded (items 1, 3, 5, 6, 7, 9, 13 & 15), thus, they were scored reversely.

It is evident from the results that the total mean scores of all the student teachers were a little more than half of the highest possible score ( $M: 47.78 > 45$ ), which indicated rather moderate level of foreign language anxiety.

*Table 1 Descriptive statistics for the TFLAS, average responses*

Measure	No.	Minimum	Maximum	Median	Mean	Std. Deviation
Average responses	152	2.76	4.39	3.72	3.72	.33

Table 1 shows the descriptive statistics of the average responses to the items of the TFLAS. As can be seen, the mean and the median scores (Mean & Mdn 3.72) which are the same were more than half of the possible average response ( $3.72 > 5.00/2$ ) suggesting a high level of foreign language speaking among the NN student teachers (the score between 3.5 and 5 is considered as the high rate of anxiety).

In order to identify the anxiety level, the participants were also needed to be categorized according to their level of anxiety based on their average scores on the TFLAS. Another purpose is to see whether sources of anxiety change according to the level of anxiety. In doing so, the participants whose average fell between the scores 1.00 and 2.49 (i.e., choices considered to be closer to disagree or strongly disagree) were considered as slightly anxious, those with averages between 2.50 and 3.49 (i.e., choices considered to be as neither agree or nor disagree) were classified as moderately anxious, and those who scored between 3.50 and 5.00 (i.e., choices considered to be closer to strongly agree or agree) were grouped as highly anxious.



Interestingly, no instances of slightly anxious student teachers were found in this study based on average scores. Table 4.2 shows the descriptive statistics for the classification of the participants into slightly anxious, moderately anxious, and highly anxious groups.

*Table 2 Descriptive statistics for classifying student teachers into different anxiety level groups based on their average responses*

<b>Anxiety level</b>	<b>frequency &amp; percentage</b>	<b>Minimum</b>	<b>Maximum</b>	<b>Median</b>	<b>Mean</b>	<b>Std. Deviation</b>
<b>Moderate anxiety</b>	39 (8%)	2.76	3.47	3.30	3.29	.15
<b>High anxiety</b>	113 (92%)	3.50	4.39	3.88	3.88	.22

As Table 2 shows, the minimum average response was 2.50 indicating that no participant's average falls within the slightly anxious category (mean between 1-2.49) on the basis of the divisions made and explained above.

The majority of the participants (N = 113 out of 152, 92%) fell into the highly anxious category (Mdn: 3.88), suggesting that Libyan NN student teachers suffer from a high level of foreign language anxiety. A smaller proportion of participants (N = 39, 8%) fell into the moderately anxious category (Mdn: 3.30). Hence, it can be concluded that the level of foreign language speaking anxiety is generally high in the Libyan EFL context.

Unfortunately, in most educational contexts, the emphasis has always been placed on students' learning and anxiety. Teachers should most of the time be anxious about their student's performance, pave the way for their second language learning, provide them with a good learning environment and encourage them to proceed; yet, it has not been taken into account how the pressure and load of the teaching profession can be anxiety-provoking for language teachers, themselves. The results of this and other studies highlights that language teachers experience a great deal of stress. In fact, just completing a language teaching program and being granted a certificate to teach does not guarantee qualification to teach a language specifically for non-native speaker teachers (Horwitz, 1996). As soon as these teachers start their profession, they realize that in order to survive in this profession they need to have a high language proficiency, teaching ability, classroom-management and good communication skills, etc. usually student teachers are weak in all or some of these aspects and may even feel panic in the classroom.

When the level of anxiety is high, students can feel their teacher's unrest and this negative feeling are transferred to them as well, or as Horwitz (1996) put it, it is "a perception not likely to foster their own feelings of target language confidence" (p. 4).

### **Sources of foreign language anxiety**

This section provides answer to the first research question: 2- What are the sources of foreign language anxiety among student teachers in Libya? In order to investigate factor or sources that contribute to teacher foreign language anxiety, TFLAS was administered and data was subjected to statistical procedures. Based on the results of the TFLAS questionnaire and the open-ended questionnaire, there were different sources of anxiety among student teachers. As it was explained earlier, since almost all participants of this study were found as anxious, the anxiety level classification ended up with two



moderately anxious and highly anxious groups only. Similar results can be seen in terms of the second research question. To elaborate, the majority of the items in TFLAS has a mean which is considered as high (above 3.5), only three items fall in the moderate category, and no item is considered as low in terms of its contribution to the feeling of anxiety.

There are different factors contributing to the feeling of anxiety in language teachers. These factors, among the other things, include speaking anxiety, teaching anxiety, teachers' beliefs, and teachers' proficiency level, etc. (Bailey, 1983; Horwitz et al. 1986; Young 1991). For discussion purposes, the combination of percentages of agree and strongly agree responses will be used under the title of agree, and disagree and strongly disagree responses are also merged to talk about the percentage of disagreement.

On the other hand, the lowest mean of all items belongs to item 11 ( $M = 3.04$ ) which is placed in the moderate level of anxiety. 33.6% of the responses showed disagreement with this statement, 20.4% showed neutrality, and 19.6% showed agreement. These percentages generally suggest that most student teachers are afraid of making mistakes and do not consider it as part of the language learning process itself. The fear of making mistakes has also other negative consequences. It makes student less participatory specially in speaking and would delay their learning process. However, as the information in the open-ended questionnaire highlighted, anxiety stimulated from making mistakes is not only related to student teachers' beliefs themselves but is also rooted in the emphasis that the educational systems in general and professors in particular place on this process. One of the student teachers explained that:

*...my teacher is very serious about even small mistakes like grammar mistakes.*

Another student also mentioned that:

*I don't like my teachers interrupting and correcting me whenever I'm speaking. I feel bad and cannot continue.*

The problem of correcting all mistakes or avoiding mistakes characterizes traditional methods of foreign language teaching and learning still popular in some contexts such as Libya. These examples also show that, when student teachers have a wrong perception of making mistakes and consider it as a sign of failure rather than a necessary step in acquiring a new language, making mistakes can turn into a quite anxiety-provoking situation. Similar to the findings of this study, İpek (2007) also found that making mistakes was one of the major six sources of anxiety in his study.

This and similar concerns are related to a sort of anxiety referred to as classroom procedure by Young (1991). Other concerned mentioned by the student teachers in the open-ended questionnaire shed more light on this type of anxiety. One of the student teachers asserted that:

*I feel anxious when I have to do something that I will be graded for. If I speak to my teacher or to my friends in a casual speech I am ok, but if I have to speak for an oral exam I get very anxious.*

According to another student teacher:

*I feel anxious when I have to speak or do something in front of the class. I start thinking about many things like my appearance and my English. I look at my close friends who tell me what's wrong by signs.*

Likewise, another student teacher remarked that:

*I always feel anxious when I speak or write on the board in front of my teachers and colleagues. Sometimes even if I know the answer I don't tell it to my teacher because I will get anxious. Even my spelling will be effected and even my hand writing become very bad when I write on the board.*



These examples highlight that classroom procedure in the context of Libya is traditional. Classes are teacher-centered and traditional teaching procedures are employed. For instance, students are called to the board and have to speak in front of the class, they are interrupted and corrected by the teachers as soon as they make a mistake, they are expected to speak the language proficiently and they are graded for their performance and product. Most of these activities are anxiety-producing as it was also perceived by most NNS student teachers in this study.

One of the student teachers confirmed it by telling that:

*Learning English is very difficult. You should always worry about your listening and speaking problems. You don't know many vocabularies. You cannot write well and it takes a lot of time to improve. Sometimes, you get discouraged, you feel you cannot learn it any more.*

Another contributory factor to anxiety is lack of self-confidence. According to one of the student teachers:

*Actually, I think I am anxious when I speak in front of my professors. I know my English is not perfect and they are very good. But I am all the time trying to stop thinking about it I only want to speak and finish quickly.*

Closely related to self-confidence is another personal and interpersonal human characteristics called competitiveness. People with low self-confidence have a tendency to worry about what other people think about them and consequently strive to satisfy them (Young, 1992). That is why they are usually engaged in comparing their performance with that of others (here, other language teachers). As one of the student teachers explains:

*I all the time feel anxious when I speak English. It is cause I think my colleagues speak it better than me. I compare my speaking with my friends' speaking. They speak fast but I do not. I have to think about my words a lot then I speak.*

Another student teacher adds that, he doesn't like to speak in front of his colleagues because:

*[I feel anxious because] because I think about how my teachers will say about my English and how my friend will say too.*

As can be seen, other colleagues' judgments about one's language proficiency and performance particularly while speaking is a factor producing anxiety in some student teachers. This also results in student teachers feel that their language ability is lower than that of others and other students look down at them. In this line, one of the student teachers asserted that:

*I don't like to speak English], cause I don't want someone to tease me and I want to be the best in the class.*

This result is consistent with those of some other studies. For example, Price (1991) found that the majority of participants of her study rated themselves lower than others in the class, and thus, concluded that students' self-perception as being weaker than others which is rooted in low self-esteem would lead to tension and anxiety in them. Ohata (2005) also found that low self-confidence and competitiveness were two of the major sources of anxiety among the participants in her study. Competitiveness is a form of "interpersonal evaluation in real or imagined social settings" (Leary, 1982, p. 102) also referred to as social anxiety. In this line, Krashen (1985) argues that when learners consider themselves as a member of a community of practice, their affective filter can be lowered and the anxiety would be reduced.



Student teachers' belief about 'native speakers' is another main anxiety-provoking situation. This source of anxiety was also confirmed by one of the students who filled in the open-ended questionnaire. He said that:

*I am always afraid I don't understand what other people say especially native speakers because they talk fast and I feel panic and cannot hear what they say anymore.*

Learners' belief as a major role to play in producing anxiety. Here, the student teachers believe that understanding whatever someone is saying in English, and even what every single word means is important. Some instances of anxiety around 'native speaker' topic was observed in the open-ended interviews. One of the participants mentioned:

*When I see a native speaker, although I know I can learn many things from him/her, I prefer not to speak with them or they will realize that how incorrectly I speak.*

Another participant reflected on one of her failures to communicate with an English tourist in her country:

*I tried to talk to her [the native speaker]. She asked me about an address but I used the language wrongly so she couldn't understand me and asked another person to help her. I feel embarrassed. I know that I should not communicate with them before I have a high language proficiency because they cannot understand me.*

As the above example shows, being understood by native speakers is such important as an idealized self-image of the target language that for some NNS teachers that making mistake in front of them is considered as a sort of weakness or damage to their identity as good language teachers. Ohata (2005) argues that sometimes L2 learners have unrealistic expectations about language learning. As it is observed in the findings presented here the myth of 'native-speakerism' may even avoid them to get close to the native speakers because of the large distance they feel between them and speakers of the target language. Yet, they cannot realize that successful communication should be the ultimate goal of language learning. Such unrealistic goals, that is, to become as proficient as a native speaker, is not only hardly attainable but also lead to frustration.

Proficiency in English is one of the important factors affecting how students feel about a given foreign language. The main reason is that these students do not feel proficient enough to fully understand a course which is in the target language. One of the student teachers reflected more on this issue by asserting that:

*Our teachers tell everything in English and they expect us to understand. We still don't know the meaning of many English vocabularies and our grammar is weak. I think it is better if teachers explain some of the things in the Arabic language.*

However, 27% of the student teachers were neutral and 12.5% agree with it. One of these students justified her agreement by telling that:

*... If classes are held in English, we have more opportunity to learn English because we have more exposure to it.*

Poor proficiency in English which is related to weakness in different language skills, lack of mastery over grammar rules and structure of a language, and insufficient range of vocabulary have been mentioned in some studies as a significant source of FLA. Suleimenova (2013), for instance, found that students feel anxious when they have a low proficiency in English. Therefore, there is a negative relationship between anxiety and language proficiency meaning that the more the students are proficient, the less they feel anxious and also the more confident they are.



Another related source of anxiety is associated to teacher-student interaction as manifested. A very significant reason is that the student teachers are not still proficient learners of English so verbal communication with the students make them anxious. One student teacher remarked that:

*I still have a lot of problems speaking English. I do not know how I can teach my students English after I graduate and start my job as an English teacher. I don't know what I should do if students ask me a question and I cannot answer... how can I talk all the time in English with them?*

Similar findings were observed in other studies. For example, in Çokay's (2014) study, "lack of vocabulary knowledge, being unprepared for the class, unexpected questions from the students, failure of background knowledge about the topic, uninteresting topics, unable to motivate the students, and insufficient pronunciation knowledge" (pp. 40-41) were reported as major sources of speaking with students.

In general, teaching anxiety has a negative influence on student teachers and cause them experience the same feelings of stress and tension experienced by the language learners. These findings of other studies also confirm these results (Cheung & Hui, 2011). It can also affect their instruction in a negative way. As one of the student teachers mentioned, they are not proficient users of language yet; thus, this may result turning to activities which require a low level of language use on the part of them.

## Conclusion

To measure the extent to which student teachers were affected by FLA, the Teacher Foreign Language Anxiety Scale (TFLAS) was employed. The overall mean was 3.72 suggesting a high level of foreign language anxiety. Classifying student teachers to different anxiety levels led to only two levels of anxiety and the student teachers fell into moderately anxious (averages between 2.50 and 3.49), and highly anxious (averages between 3.50 and 5) groups. The high level of anxiety among these teachers indicated that having a teaching certificate does not qualify these teachers for the teaching profession because as soon as they start their job, they realize the real demands and requirements of their teaching profession which includes high proficiency in English, good teaching ability, classroom-management and good communication skills (good speaking and listening ability), etc. Having realized that they do not still possess these capabilities, they become so anxious and cannot perform well enough in the classroom. This finding was confirmed the results of the majority of previous studies (Park & Lee, 2008; Seller, 2000; Suleimenova, 2013; Tasee, 2009; Wilson, 2006); however, contradicted with some other studies in the sense that some other levels of FLA had been reported by some previous studies (Çokay, 2014; Suleimenova, 2013).

In order to investigate sources that contribute to teacher foreign language anxiety, the percentage and mean of responses to items of TFLAS was computed. According to the results, almost all items of the questionnaire caused high level of anxiety in Libyan student teachers except three items (9, 11, 12) that had average means. These sources included speaking anxiety, teaching anxiety, teachers' beliefs, and teachers' proficiency level (Bailey, 1983; Horwitz et al. 1986; Young, 1991) that were explained mainly according to young's (1991) categorization of sources of anxiety.

The highest mean of all belonged to item 1: 'It frightens me when I don't understand what someone is saying in English' (M = 4.48). Concerning speaking anxiety, the anxiety was mainly related to speaking caused by personal beliefs, and lack of self-confidence communicating with native speakers. For example the majority of the student teachers (67.4%) believed that learning English is difficult (item 16). They also

had a negative belief about ‘native speakers’ (items 3, 8, 9, & 13) in a sense that being understood by native speakers was like an idealized self-image of the target language for these teachers and they could not accept making mistake in front of them as it was considered as a damage to their identity as good language teachers.

The student teachers did not feel confident speaking English (item 14), either. Low self-confidence, in turn, resulted in competitiveness (items 5 & 15) and this result was confirmed by the result of previous research (Price, 1991; Ohata, 2005).

Another main source of anxiety was related to classroom procedure; that most student teachers were afraid of making mistakes (item 11). The results obtained from open-ended questionnaire confirmed this results and showed the prevalence of traditional methods of foreign language teaching and learning still popular in some contexts such as Libya which put emphasis on avoidance of mistakes.

Lack of proficiency in English as manifested in items 2 and 7 was another anxiety-provoking situation. In fact, there is a negative relationship between anxiety and language proficiency; with more proficiency, less anxiety is experienced by the teachers.

Finally, as indicated in items 10, 12, and 18, the student teachers experienced teaching anxiety (items 10, 12, & 11) manifested in lack of ability to establish good teacher-student relationship as wells as the feeling of in adequacy to become a language teacher and being proficient enough to become a language teacher. The same findings were found by some other studies (Çokay, 2014).

The third aim of the study was to find the differences in the sources of anxiety between the moderately anxious and highly anxious groups. The results showed that the mean was higher in the highly anxious group regarding all the items in the TFLAS. However, to see if the difference is significant, t-test was run and the results showed that the mean difference between the two groups was significant in all the items except in items 4, 9, and 18. Though the majority of the student teachers had a high degree of anxiety and anxiety was associated roughly to all the sources mentioned in TFLAS in both groups, the degree of each source in both group were found as significantly different. Therefore it can be concluded that, the less students experience any of the sources of teacher FLA, the less anxiety they experience.

One of the least studied areas of research is the teacher foreign language anxiety because even today most studies are focused on learners’ language anxiety. To this end, investigating levels and sources of FLA experienced by student teachers in Libya became a rationale of conducting this study. The findings of this study showed that student teachers are highly anxious and different personal and interpersonal factors, speaking anxiety, and teaching anxiety, among the other things, contributed to this psychological barrier. These findings suggested that having a certificate to teach English does not qualify teachers to teach English. Other factors including a friendly learning and teaching atmosphere, having a good proficiency in English, having enough training in teaching practices, support from the institution, etc. all contribute to the reduction of teacher anxiety. This study generally raised awareness about the existence of the concerning issue of teacher anxiety and drew attention to the need to help teachers to overcome this debilitating barrier by employing appropriate strategies.



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## SERBEST ZAMAN ETKİNLİĞİ OLARAK EGZERSİZ YAPAN ÜNİVERSİTE ÖĞRENCİLERİNDE GÜDÜSEL YÖNELİM VE PSİKOLOJİK İYİ OLUŞ İLİŞKİSİ

### RELATIONSHIP BETWEEN MOTIVATIONAL ORIENTATION AND PSYCHOLOGICAL WELLBEING FOR THE UNIVERSITY STUDENTS PARTICIPATING IN EXERCISE AS A LEISURE TIME ACTIVITY

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#### ÖZET

Bu araştırmada öncelikli olarak, serbest zaman etkinliği olarak egzersiz ile uğraşan üniversite öğrencilerinin güdüsel yönelim ve psikolojik iyi oluş arasındaki ilişkinin incelenmesi amaçlanmıştır. Araştırmaya serbest zaman etkinliği olarak farklı fiziksel aktiviteler katılan 488 üniversite öğrencisi katılmıştır. Katılımcıların serbest zaman etkinliklerine yönelik güdüsel profillerini belirlemek üzere Egzersizde Davranışsal Düzenlemeler Ölçeği-2; Psikolojik iyi oluş düzeylerinin belirleme için ise Psikolojik İyi Oluş Ölçeği kullanılmıştır. Katılımcıların içe atımla düzenleme dışsal düzenleme ve güdülenmemepuanlarında cinsiyete göre farklılık görülmüştür. Kadın katılımcıların içe atımla ve dışsal düzenleme ile güdülenmeme ortalamaları erkek katılımcılardan daha düşük düzeyde bulunmuştur. Katılımcıların içsel düzenleme ve psikolojik iyi oluş düzeyleri arasında ise cinsiyet değişkenine göre istatistiksel açıdan anlamlı bir farklılık bulunmamıştır. Katılımcıların egzersize yönelimleri ile psikolojik iyi oluş düzeyleri arasındaki ilişki incelendiğinde ise, içsel ve içe atımla düzenleme ile psikolojik iyi oluş arasında pozitif, dışsal düzenleme ve güdülenmeme arasında ise negatif ilişki bulunmuştur. Çoklu regresyon analizi sonucunda, psikolojik iyi oluş ile içsel güdülenme, içe atımla güdülenme, dışsal güdülenme ve güdülenmeme arasında anlamlı bir ilişki bulunmuştur. Bulgular, serbest zaman etkinliği olarak egzersiz yapan erkek üniversite öğrencilerinin kadın katılımcılara göre daha çok suçluluk duygusu, utanma, dış kaynaklı güdüler ile veya egzersiz yapmanın nedenlerini düşünmeksizin egzersize katıldıklarını göstermiştir.

**Anahtar Kelimeler:** serbest zaman etkinliği, güdüsel yönelim, psikolojik iyi oluş, hür irade kuramı

#### ABSTRACT

The aim of this study is primarily to analyze the relationship between motivational orientation and psychological wellbeing for the university students participating in exercise as a leisure time activity. There 488 university students in the research who are engaged with different physical activities as leisure time activities. While determining the motivational profiles towards leisure time activities of the participants, Behavioral Regulations in Exercise Questionnaire-2 (BREQ-2) has been used and Psychological Wellbeing Scale has been used in determining the levels of psychological wellbeing. Differences between sexes have been observed in terms of introjected regulation points, extrinsic regulation points and amotivation points. Female participants have lower levels of introjected and extrinsic regulation and amotivation averages compared to male participants. Statistically, no significant difference between intrinsic regulation and psychological wellbeing levels of the participants has been found in terms of sex variable. When the relationship between motivational orientation and psychological wellbeing levels of the participants are considered, there is a positive relationship among intrinsic and introjected regulation and psychological wellbeing; and there is a negative relationship between extrinsic regulation ( $r=0.009$ ;  $p<0.05$ ) and amotivation. As a result of Multiple Regression Analysis, there are significant relationships between psychological wellbeing and intrinsic motivation; and among motivation by introjected, extrinsic regulation and amotivation. The findings shows that male university students engaging in exercise as leisure time activity participate in activities without thinking about guilt, abashment, exterior drives or the reasons why they do exercises when compared to female participants.

**Key Words:** recreation, motivational regulation, psychological well-being, self-determination theory



## GİRİŞ

Serbest zaman etkinliği olarak egzersiz ile uğraşmanın fiziksel ve psikolojik faydaları bilinmesine rağmen birçok insan aktif olmayan bir yaşam tarzını benimsemektedir (Lowther, Mutrie ve Scott, 2007). Genç yetişkin bireyler de sağlıklı olan ve istenmeyen bu yaşam tarzını benimseme yolundadır (Suminski ve ark., 2002). Amerika’ daki üniversite öğrencileri üzerinde yapılan çalışmalar gençlerin sağlıklı bir yaşantı sürmek için gerekli olan fiziksel aktivite düzeyine ulaşmadıklarını göstermektedir (Haase, Steptoe, Sallis ve Wardle, 2004; Sinclair, Hamlin ve Steel, 2005). Benzer bir şekilde Türkiye’ de üniversite öğrencileri üzerinde yapılan kapsamlı bir çalışmada da gençleri istenilen düzeyde aktif olmadıkları gözlenmiştir (Savcı ve ark., 2006). Bu sebeple bu alanda yapılan çalışmalarda, bireyleri sağlıklı olan, aktif bir yaşam tarzına yöneltecek psikolojik süreçleri ortaya koymak önemlidir (Rose, Parfitt ve Williams, 2005).

Egzersizde güdüsel yönelimler, bireylerin düzenli fiziksel aktivite davranışını etkilemektedir (Thogersen-Ntoumani ve Ntoumanis, 2006). Bu alanda pek çok teorik yaklaşım vardır; fakat son yirmi yılda gençlerde spor ve egzersiz söz konusu olduğunda sosyal bilişsel bir perspektifin araştırmalara hâkim olduğu görülmektedir (Spray ve ark., 2006). Örneğin Deci ve Ryan’ ın (1985) “*Hür İrade Kuramı*” bunlardan en sıklıkla kullanılanıdır.

Hür İrade kuramına göre, çeşitli aktivitelerle ilgilenmemize sebep olan dürtüler çok boyutlu bir yapı gösterirler ve çeşitli derecelerin olduğu, içsel güdülenme, dışsal güdülenme (bütünleşmiş düzenleme, özdeşimle düzenleme, içeatımla düzenleme, dışsal düzenleme) ve güdülenme şeklinde bir skala üzerinde varolurlar (Deci ve Ryan, 2000). Hür İrade kuramının en üst düzeyi içsel güdülenmeden kaynaklanır ve bu durumdaki kişinin davranışları maddi ödüller ya da dış zorlamalardan bağımsız gönüllü, içten gelen davranıştır (Deci ve Ryan, 1985). İçsel olarak güdülenildiğinde, bireyler bir aktiviteyle uğraşmaktan zevk alır. Hür İrade skalasına paralel olarak bulunan dışsal güdülenme, bir aktiviteyle aktivitenin kendisinden çok onun aracılığıyla elde edeceğimiz bir şey, ulaşacağımız ya da kaçınacağımız bir sonuç için ilgilendiğimiz durumdur (Vallerand ve Fortier, 1998). Bu güdülenme biçimi önceleri içsel güdülenmenin tam zıddı olarak ele alınmıştır ama bunu öne süren çalışmaların aksine Hür İrade kuramı, dışsal güdülenmeden kaynaklanan eylemlerin yine hür-irade ve kontrol altındaki irade arasında değişen bir skalada kendini gösterdiğini ileri sürmektedir (Deci ve Ryan, 2000). Deci ve Ryan (1985); bütünleşmiş, özdeşimle, içeatımla ve dışsal düzenleme şeklinde dört farklı tipte dışsal güdülenmeden bahsederler: *Bütünleşmiş düzenleme*, içlerinde en özerk olandır ve dışsal güdülenme tarafından en az yönlendirilendir çünkü belli bir aktiviteyle uğraşmak kişinin kendi tercihi olmamakla birlikte, kişi onu kendi bünyesiyle uyumlu bir hale getirebilmiştir. *Özdeşimle düzenleme*, kişinin bir davranışı değerlendirip önemli olduğu sonucuna vardıldıktan sonra o davranışı göstermeye başladığında karşımıza çıkar. *İçeatımla düzenleme*, söz konusu olduğunda ise suçlu hissetmekten ya da endişeden kaçış, gurur gibi egodan kaynaklanan sebeplerle bir davranışı gösterme gereği duyulur. *Dışsal düzenleme* ise Hür İradenin en az etkisini gösterdiği bir güdülenme biçimine işaret eder ve davranışa verilecek olan ödüller yada davranış gerçekleşmediğinde mahrum kalınacak şeyler sebebiyle oluşur (Kingston, Horrocks ve Hanton, 2006).

Bu çalışmada ele alınacak konularda biri de psikolojik iyi oluş kavramıdır. Psikolojik iyi olma kişinin yaşam amaçlarını, potansiyelinin farkında olup olmadığını, diğer insanlarla ilişkisinin niteliğini kapsamaktadır (Ryff ve Keyes, 1995). Başka bir deyişle; kişinin kendini olumlu algılamasını, diğer insanlarla güvenli ve olumlu ilişkiler geliştirmesini, bireysel gereksinim ve isteklerini karşılayacak şekilde çevreyi şekillendirmesini, özerk ve bağımsız hareket edebilmesini, yaşama amacının ve anlamının olmasını, kapasitesinin farkında olmasını ve bu kapasitesini geliştirmeye çalışmasını yansıtmaktadır (Keyes, Shmotkin ve Ryff, 2002). Psikolojik iyi oluş düzeyleri yüksek olan bireylerin fiziksel, duygusal, bilişsel ve ruhsal iyilik hallerinin en yüksek düzeyde olduğu bilinmektedir (Shank ve Coyle, 2002). Üniversite yaşantısı öğrencilerin meslekleriyle ilgili çeşitli girişimleri yaptıkları stresli bir dönemdir çünkü gençlerin gelecekle bu dönemde şekillenmektedir. Bu dönemde gençler



kendilerini çok büyük stres altında hissederler (El Ansari ve Stock, 2010). Bu dönemde öğrencilerin olgunlaşmaya ihtiyacı vardır. Psikolojik iyi oluş kavramı üniversite öğrencilerinin yaşam kalitelerinin iyi olması açısından bu dönemde önemlidir. Ryff ve Singer (1996) psikolojik iyi oluş, kişilerin ilişkilerini yönetmesi, kendilerini algılamaları, kişilerin tüm yaşantılarını etkilediği için önemli olduğunu belirtmiştir. Hür İrade Kuramına göre bireylerin kararlarını kendi kişisel inançlarıyla ve değer yargılarıyla belirlenmesi (özzerk davranma) onların iyi olma düzeylerini yükseltmektedir (Williams ve ark., 2000; Deci ve Ryan, 2000).

Bu bilgiler ışığında, düzenli egzersiz yapan bireylerin sayısını arttırmak, insanlarda fiziksel olarak aktif bir yaşam tarzı oluşturmak egzersizde etkili olan psikolojik faktörleri belirlemek büyük önem taşımaktadır. Sağlık için yararlı fiziksel aktivite içinde bulunma konusunda egzersizde güdüsel yönelimler ile psikolojik iyi oluş kavramlarını anlamak, bir hayat biçimine ait bu davranışın hastalıklarla mücadele ve hayat kalitesini artırma rolü göz önüne alındığında çok önemlidir (Biddle, Fox ve Boutcher, 2000). Bu bağlamda araştırmanın amacı üniversite öğrencilerinde psikolojik iyi oluş ve egzersizde güdüsel yönelimlerin ilişkisini ortaya koymak ve ele alınan bu kavramların cinsiyet farklılığını incelenmesidir.

## YÖNTEM

### Katılımcılar

Araştırmanın örneklemini, Celal Bayar Üniversitesi (n=196), Ege Üniversitesi (n=183) ve Dokuz Eylül Üniversitesi (n=109) 2015-2016 eğitim öğretim yılında öğrenim gören, serbest zaman etkinliği olarak düzenli egzersiz yapan, 17-30 yaş aralığında 228 (%47) kadın, 260 (%53) erkek olmak üzere toplam 488 öğrenci oluşturmaktadır. Çalışmaya katılan öğrencilerin yaş ortalamaları 21.96 ( $\pm 2.65$ ) yıl olarak hesaplanmıştır. Kadın öğrencilerin yaş ortalaması 21.61 ( $\pm 2.57$ ), erkek öğrencilerin yaş ortalamaları ise 22.26 ( $\pm 2.68$ ) yıldır. Katılımcılara ait haftalık egzersiz yapma sıklığı 3.65 ( $\pm 2.47$ ) gün, egzersize katılım süreleri 51.69 ( $\pm 43.19$ ) ay olarak hesaplanmıştır.

### Veri Toplama Araçları

Katılımcıların demografik özelliklerini ortaya koymak için kişisel bilgi formu; egzersizde güdüsel yönelimlerini belirlemek için Egzersizde Davranışsal Düzenlemeler Ölçeği-2; Psikolojik iyi oluş düzeylerinin belirleme için ise Psikolojik İyi Oluş Ölçeği kullanılmıştır.

### Egzersizde Davranışsal Düzenlemeler Ölçeği-2 (EDDÖ-2)

Egzersiz yapan bireylerin Hür İrade Kuramı kapsamında güdüsel yönelimlerini belirlemek üzere, İngilizce adı “Behavioural Regulations in Exercise Questionnaire-2 (BREQ-2)” olan EDDÖ-2 kullanılmıştır. Ölçeğin ilk versiyonu olan EDDÖ, Mullan, Markland ve Ingledew (1997) tarafından geliştirilmiş olup Markland ve Tobin (2004) tarafından revize edilerek “EDDÖ-2” adını almıştır. EDDÖ-2, EDDÖ’nin uzantısıdır ve güdülenmeme alt ölçeğini de içerir. Ölçek 14 yaşından itibaren uygulanabilmektedir. EDDÖ-2 19 madde ve beş alt ölçekten oluşmaktadır. Bunlar: dışsal düzenleme, içe atımla düzenleme, özdeşimle düzenleme, içsel düzenleme ve güdülenmeme alt ölçekleridir. Dışsal düzenleme (örn: Başkaları egzersiz yapmam gerektiğini söyledikleri için egzersiz yaparım) ve içsel düzenleme (örn: Eğlenceli olduğu için egzersiz yaparım) alt ölçekleri dört maddeden, içe atımla düzenleme (örn: Egzersiz yapmadığımda kendimi suçlu hissederim) ve özdeşimle düzenleme (örn: Egzersiz yapmanın yararlarına önem veririm) alt ölçekleri ise üç maddeden oluşmaktadır. Güdülenmeme (örneğin: Neden egzersiz yapmam gerektiğini anlamıyorum) alt ölçeği ise 4 maddeden oluşmaktadır. EDDÖ-2, “kesinlikle doğru değil”, “bazen doğru” ve “kesinlikle doğru” derecelerinden oluşan 0-4 arasında puanlaması olan 5’li likert tipi bir ölçektir. Mullan ve Markland (1997), Markland ve Tobin (2004), Wilson, Rodgers ve Fraser (2002), Mullan ve Markland (1997) tarafından geçerlilik ve güvenilirliği test edilmiştir. Cronbach Alpha güvenilirlik katsayıları güdülenmeme için ( $\alpha = .83$ ), dışsal düzenleme için ( $\alpha = .79$ ), içe atımla düzenleme için ( $\alpha = .80$ ), özdeşimle düzenleme için ( $\alpha = .73$ ) ve içsel düzenleme için ( $\alpha = .86$ ) olarak bulunmuştur. Bu çalışma kapsamında yapılan güvenilirlik



çalışmasında, EDDÖ-2'nin iç tutarlık katsayılarının İçsel düzenleme için .84, içe atımla düzenleme için .61, dışsal düzenleme için .62 ve güdülenmeme için ise .70 olduğu görülmüştür.

### **Psikolojik İyi Oluş Ölçeği (PİÖÖ)**

Sekiz maddeden oluşan Psikolojik İyi Oluş Ölçeği olumlu ilişkilerden yeterlik hislerine, anlamlı ve amaçlı bir yaşama sahip olmaya kadar insan fonksiyonunun önemli öğelerini tanımlamaktadır. Diener ve ark. (2009) tarafından geliştirilen ve Telef (2013) tarafından Türkçe'ye uyarlanan Psikolojik İyi Oluş Ölçeği'nin maddeleri kesinlikle katılmıyorum (1) ile kesinlikle katılıyorum (7) şeklinde 1-7 arasında cevaplanmaktadır. Bütün maddeler olumlu şekilde ifade edilmektedir. Puanlar 8 (tüm maddelere kesinlikle katılmıyorum cevabı verilirse) ile 56 (tüm maddelere kesinlikle katılıyorum cevabı verilirse) arasında değişmektedir. Yüksek puan kişinin birçok psikolojik kaynak ve güce sahip olduğunu gösterir. Üniversite öğrencileri ile yapılan geçerlik çalışması sonucunda ölçeğin tek faktörden oluştuğu ve toplam açıklanan varyansın %53 olduğu saptanmıştır. Ölçek maddelerinin faktör yükleri .61 ile .77 arasında değişmektedir. Ölçeğin Cronbach alfa iç tutarlık katsayısı .87 olarak bulunmuştur. Ölçek psikolojik iyi oluşun yönleri ile ilgili ayrı ayrı ölçümler sağlamasa da, o önemli olduğuna inandığımız farklı alanlarda olumlu işlevler ile ilgili genel bir bakış sağlamaktadır (Diener ve ark., 2010). Bu çalışmada, Psikolojik İyi Oluş Ölçeği'nin Cronbach alfa iç tutarlık katsayısı .93 olarak bulunmuştur.

### **Verilerin Analizi**

Araştırmada elde edilen veriler SPSS 18.0 programına aktarılmıştır. Verilerin analizine ve bulguların yorumlanmasına geçilmeden önce normallik, doğrusallık, çoklu ve varyans-kovaryans matrislerinin homojenlik varsayımların karşılanıp karşılanmadığı incelenmiştir (Tabachnick ve Fidell, 2001). Bağımlı değişkenler arasında ilişkilerin doğrusal olup olmadığı saçılım grafikleri aracılığı ile incelenmiş ve her bağımlı değişken arasında doğrusallık varsayımının karşılandığı görülmüştür. Verilerin analizinde araştırma grubunun özelliklerinin tanımlanması için betimsel istatistik analizi (ortalama ve standart sapma) yapılmıştır. Araştırmada ele alınan değişkenlerin cinsiyete göre farklılığını ortaya koymak amacıyla bağımsız gruplar için t testi istatistik analiz yöntemi kullanılmıştır. Katılımcıların güdüsel yönelimleri ile psikolojik iyi oluş düzeyleri arasındaki ilişkiyi analiz etmek için pearson momentler çarpımı korelasyon analizi kullanılmıştır. Araştırmada yer alan bireylerin egzersizde güdüsel yönelimlerinin psikolojik iyi oluşlarını yordayıp yordamadığı çoklu regresyon analizi ile sınanmıştır.

## **BULGULAR**

**Tablo 1: Katılımcıların Güdüsel Yönelim Ve Psikolojik İyi Oluş Düzeylerinden Elde Edilen Betimsel İstatistikler**

<b>Değişkenler</b>	<b>Kadın (n=228) Ort±Ss</b>	<b>Erkek (n=260) Ort±Ss</b>	<b>Tüm katılımcılar (n=488) Ort±Ss</b>
<b><i>Güdüsel yönelim</i></b>			
İçsel düzenleme	2.96±0.74	3.00±0.73	2.98±0.73
İçeatımla düzenleme	2.09±0.74	2.23±0.77	2.17±0.76
Dışsal düzenleme	1.19±0.36	1.42±0.61	1.31±0.52
Güdülenmeme	1.37±0.57	1.64±0.75	1.52±0.69
<b><i>Psikolojik iyi oluş</i></b>	44.64±8.76	44.82±11.18	44.74±10.11



Tablo 1’de çalışmada ele alınan tüm psikolojik kavramlara ilişkin ortalamalar ve standart sapma değerleri verilmiştir. Bu değerlere göre katılımcıların güdüsel yönelimlerinde en yüksek değeri içsel ve içe atımla düzenleme alt ölçekleri alırken; en düşük değerleri dışsal düzenleme ve güdülenmeme alt ölçeklerinin aldığı belirlenmiştir. Bunlara ek olarak katılımcıların psikolojik iyi oluş düzeyi incelendiğinde ortalamanın yüksek olduğu gözlemlenmektedir.

**Tablo 2. Katılımcıların Güdüsel Yönelimleri Ve Psikolojik İyi Oluş Düzeylerinin Cinsiyet Farklılığına İlişkin Sonuçlar**

Boyutlar	Cinsiyet	N	Ort	Ss	t-testi		
					t	sd	p
İçsel düzenleme	Kadın	228	2.96	0.74	-0.546	486	0.59
	Erkek	260	3.00	0.73			
İçe atımla düzenleme	Kadın	228	2.09	0.74	-2.088	486	0.04*
	Erkek	260	2.23	0.77			
Dışsal düzenleme	Kadın	228	1.19	0.36	-4.907	486	0.000***
	Erkek	260	1.42	0.61			
Güdülenmeme	Kadın	228	1.37	0.57	-4.366	486	0.000***
	Erkek	260	1.64	0.75			
Psikolojik iyi oluş	Kadın	228	44.64	8.76	-0.194	486	0.85
	Erkek	260	44.82	11.18			

\*p<0.05 \*\*\* p<0.001

Katılımcıların güdüsel yönelimleri alt ölçeklerinin ortalamaları ve psikolojik iyi oluş düzeyleri ortalamalarının cinsiyete göre farklılığı incelendiğinde (Tablo 2), kadınlar ve erkekler arasında içe atım ve dışsal düzenleme ile güdülenmeme puanları arasındaki fark istatistiksel yönden anlamlı bulunurken; içsel düzenleme ve psikolojik iyi oluş alt boyutlarında istatistiksel yönden anlamlı fark bulunmamıştır (p>0.05). İçe atım ve dışsal düzenleme ile güdülenmeme konusunda kadınlar erkeklere göre daha düşük puanlar elde etmişlerdir.

**Tablo 3 : EDDÖ-2’ Nin Alt Boyutları İle Psikolojik İyi Oluş Arasındaki İlişki**

Alt Boyutlar	1	2	3	4
1 İçsel düzenleme				
2 İçe atımla düzenleme	.44**			
3 Dışsal düzenleme	-.20**	.34**		
4 Güdülenmeme	-.045**	.12**	.75**	
5 Psikolojik iyi oluş	.44**	.28**	-.09*	-.35**

\*\* : p< 0.01, \* : p< 0.05

Katılımcıların güdüsel yönelimleri ile psikolojik iyi oluş düzeyleri arasındaki ilişki incelendiğinde içsel (r=0.44; p<0.01) ve içe atımla düzenleme (r=0.28; p<0.01) ile psikolojik iyi oluş arasında pozitif; dışsal düzenleme (r=-0.09; p<0.05) ve güdülenmeme (r=-0.35; p<0.01) arasında ise negatif ilişki bulunmuştur.



**Tablo 4. Katılımcıların Psikolojik İyi Oluşlarını EDDÖ-2' nin Alt Boyutlarının Ne Derece Yordadığına İlişkin Çoklu Regresyon Analizi Bulguları**

	$\beta$	t	p	VİF	R	R <sup>2</sup>	F
<b>Psikolojik İyi Oluş</b>							
İçsel düzenleme	0.22	4.23	0.000***	1.81			
İçe atımla düzenleme	0.16	3.22	0.001**	1.62	0.52	0.22	45.08
Dışsal düzenleme	0.22	-3.53	0.000***	2.67			
Güdülenmeme	-0.44	-6.58	0.000***	2.91			

\*\* p<0.01 \*\*\*p<0.001

Tablo 4 incelendiğinde, çoklu regresyon analizi sonuçlarına göre, egzersizde güdüsöl yönelimleri alt ölçeklerinin üniversite öğrencilerinin Psikolojik iyi oluş düzeylerini anlamlı ve önemli düzeyde açıkladığı görülmektedir ( $F_{(4,483)}= 45.08$ ;  $p < 0.001$ ). EDDÖ-2' nin içsel, içe atımla, dışsöl düzenleme ve güdülenmeme alt ölçeklerinin katılımcıların psikolojik iyi oluş düzeylerinin % 22'sini yordamaktadır. Psikolojik iyi oluş puanları ile içsel düzenleme ( $\beta= .22$ ,  $p<.0001$ ); içe atımla düzenleme ( $\beta= .16$ ,  $p<.01$ ) ve dışsöl düzenleme ( $\beta= .22$ ,  $p<.0001$ ) arasında pozitif yönde; güdülenmeme ( $\beta= -.44$ ,  $p<.0001$ ) ile ise negatif yönde anlamlı ilişki bulunmuştur.

## TARTIŞMA

Bu çalışmanın öncelikli amacı Hür İrade Kuramı perspektifinden serbest zaman etkinliği olarak egzersize katılan üniversite öğrencilerinin psikolojik iyi oluş düzeylerini yordamak üzere egzersizde güdüsöl yönelimlerin rolünü incelemektir. Bu araştırmanın diğeri bir amacı ise, katılımcıların egzersizde güdüsöl yönelimler ile psikolojik iyi oluş düzeylerinin cinsiyet farklılığı araştırmak ve ele alınan psikolojik olgular arasındaki ilişkiye incelemektir.

Araştırmadan elde edilen bulgulara göre, kadınlar erkeklere göre içe atımla ve dışsöl düzenleme ile güdülenmeme konusunda daha düşük puanlar elde etmişler; içsel düzenleme ve psikolojik iyi oluş konusunda ise cinsiyetler arası farklılığa rastlanmamıştır. Egzersizde güdüsöl yönelimlerin cinsiyete göre farklılaşıp farklılaşmadığını araştıran çalışmalar, kadınların daha az hür iradeli, fiziksel görünüm ve sosyal ilişki gibi dışsöl sebeplerle; erkeklerin ise kadınlardan farklı olarak hür iradeli güdülenmeyle, rekabet ve yeterlilik gibi içsel sebeple, egzersiz yaptığını belirtmektedir (Brunet ve Sabiston, 2009; Daley ve Duda, 2006; Frederick ve Ryan, 1993). Bu bulguların tam tersi olarak, kadınların erkeklere göre hür iradeli olarak egzersize güdülendiklerini (Landry ve Solmon, 2004; Wilson ve Rodgers, 2004); ve erkeklerin de daha az hür iradeli veya tamamen dışsöl sebeplerle egzersiz yaptığını ortaya koyan birçok çalışma bulunmaktadır (Annesi, 2006; Frederick, Morrison ve Manning, 1996). Bu bağlamda, kadın ve erkek katılımcıların egzersiz güdülenmeleri arasında fark olduğunu belirten araştırma sonuçları bu çalışmanın bulgusu ile örtüşmemektedir. Kadın ve erkeklerde bulunan fizyolojik ve psikolojik farklılıkların bireylerin temel ihtiyaçlarına da yansıtacağı tahmin edilerek egzersizde güdüsöl yönelimlerin bu iki grupta değişmesi beklenmekte ve araştırmanın bulguları bu düşüncüyü destekler niteliktedir. Önceki çalışmaların aksine araştırmadan elde edilen bulgular kadınlar ve erkekler arasında içsel güdülenme açısından farklılık bulamamıştır. Hür İrade Kuramı bireylerin temel ihtiyaçlarında cinsiyetler arası farklılık olmadığı görüşünü belirtmektedir (Deci ve Ryan, 2002). Benzer şekilde, yazılı kaynaklarda eğlence, yeterlilik ve sosyal güdülerin cinsiyetler arasında farklılık göstermediğini ileri süren çalışmalarda elde edilen sonucu destekler niteliktedir (Frederick, Morrison ve Manning, 1996; Frederick ve Ryan, 1993).

Egzersizde güdüsöl yönelimler ile psikolojik iyi oluş arasındaki ilişkiyi araştıran çalışmalar hür iradeli (özzerk) güdüsöl yönelimler ile psikolojik iyi oluş arasında olumlu ilişki bulurken, hür iradeli olmayan (kontrollü) güdüsöl yönelimler ile negatif ilişki gözlemlenmiştir (Deci & Ryan, 1985; Ryan & Deci, 2000; Standage ve ark., 2012). Araştırmadan elde edilen bulgulara göre psikolojik iyi oluş ile içsel ve





İçerik atımla düzenleme arasında pozitif ilişki; dışsal düzenleme ve güdülenmeme arasında negatif ilişki gözlemlenmiştir. Elde edilen bu sonuçlar Hür İrade Kuramı' nı kısmen desteklemektedir. İçerik atımla düzenleme hür iradeli davranış skalasında dışsal güdülenme içinde ve sonlarda yer almaktadır. Bu bağlamda beklenen sonuç psikolojik iyi oluş ile negatif ilişki göstermesidir. Bu araştırmada beklenenin aksine bir bulguya erişilmesi Hür İrade Kuramı' nın bir alt kuramı olan Organizmaya Yönelik Bütünleşme Teorisinde yer alan içselleştirme ve bütünleştirme kavramları ile açıklanabilir. İçselleştirme, insanların değerlerini kabul etmelerini, bütünleşme ise kişinin kendi kendine daha ileri bir düzeyde değeri benimseyip benliğine katmasını içermektedir. İçerik yansıtılmış diğer bir deyişle, kontrollü bir davranışın, içsel ve özerk davranışa dönüşmesinde, çevre önemli rol oynayabilmektedir (Ryan ve Deci, 2000). İçerik yansıtılmış düzenlemede de çevre etkili bir faktördür. Bireyler egzersiz yapmadıkları takdirde hissedecekleri suçluluk duygusu veya kendilerini başarısız hissedecekleri için egzersiz davranışında bulunmuş ve sonrasında bu davranışı içselleştirip benimsemiş olabilirler. Bu durum da psikolojik iyi oluş düzeylerine olumlu bir etki sağlamış olabilir. Araştırmadan elde edilen dışsal düzenleme ve güdülenmeme ile psikolojik iyi oluş arasındaki negatif ilişki hem Hür İrade Kuramı hem de önceki çalışmalar tarafından desteklenmektedir (Deci & Ryan, 1985; Ryan & Deci, 2000).

## SONUÇ

Sonuç olarak, bu çalışmada egzersiz katılımcılarında cinsiyet farklılığının bireylerin egzersize katılım nedenlerini etkilediğini, erkek katılımcıların kadınlara göre daha kontrollü (daha az hür iradeli) yönelim ile egzersize katıldıkları ortaya konulmuştur. Başka bir deyişle serbest zaman etkinliği olarak egzersiz yapan erkek üniversite öğrencilerinin kadın katılımcılara göre daha çok suçluluk duygusu, utanma, dışsal güdülemlerle veya egzersiz yapmanın nedenlerini düşünmeksizin egzersize katıldıklarını göstermiştir. Ayrıca egzersiz etkinliğine eğlence, zevk ve suçluluk duygusu ile katıldığında psikolojik iyi oluş düzeyinin arttığı; dışsal nedenler veya egzersiz yapmayı anlamsız bularak bu etkinlikler yapıldığında psikolojik iyi oluş düzeyinin azaldığı görülmüştür. Son olarak, psikolojik iyi oluş düzeyinin belirlenmesinde egzersizde güdüsel yönelimlerin etken olduğu sonucuna varılmıştır. Egzersize zevk ve eğlence amaçlı katılan veya egzersiz yapmadıkları zaman utanç ve suçluluk duyan bireylerin psikolojik iyi oluş düzeyleri yüksek bulunurken, neden egzersiz yaptıkları konusunda herhangi bir yargısı olmayan ve dışsal faktörler için egzersiz yapan bireylerin psikolojik iyi oluş düzeyleri düşük bulunmuştur. Bu çalışmanın farklı örneklem gruplarında ve uzun zamanlı çalışmalara ışık tutacağını ve katkı sağlayacağını düşünmekteyiz.

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## Extended Abstract

Although the events such as industrialization and mass production which occurred in the 20<sup>th</sup> century societies due to the rapid development of technology (e.g. computer, nuclear energy resources, petroleum products etc.) provided with gaining more time for leisure time activities, the individuals are generally in tendency to adapt a life style in which activities are decreasing day by day. Despite the fact that the human body is formed to move and it is capable of participating in physical activities, the concept of physical activity cannot mostly take place in the daily activities of individuals. It is important to remove the tension regularly, which arises as a result of the energy consumed by individuals who constantly have to adapt to the life style caused by this situation, in terms of protecting the psychological balances (Açıl, 2006; Yan, 2007). Recently, the relationship between physical activity and health has been approached and analyzed by many researchers from various fields. Encouraging the participation in physical activity and sports has increased the number of children and young people doing exercise especially in the industrialized societies. However, this number hasn't reached the intended level, yet; because many children misguided by their families and the people in their environment adapt a sedentary life style. The increase in the time spent desk-bound by using computer or watching television causes physical inactivity; and thusly, the problems such as obesity and psychosocial disorders (Dükancı, 2008). Previous studies have clearly revealed (Miçoğulları et.al., 2010) that regular physical activity has an important role in living a healthy life and ameliorating and eliminating high blood pressure (Mainous et.al., 2007), some cancer types, risks of heart attack obesity, osteoporosis, back pain and psychological problems such as stress and mental disturbances (People, 2010). Exercise balances an individual's physical and physiological health and increases self-perception and self-respect. Increased endorphin leads to a positive state of mood; therefore, it affects psychological health in a positive way (Daley, 2002). In the direction of the positive effects of exercise, stimulating people to participate in regular physical activity is among the primary aims of community health care in many industrialized countries (Cengiz, Aşçı and İnce, 2008). Realizing these aims is only possible by increasing the participation in physical activities and in that sense, it is important to determine the effective psychological facts in order to maintain the



behavior of physical activity (Biddle, Fox and Boutcher, 2000). The aim of this study is primarily to analyze the relationship between motivational orientation and psychological wellbeing for the university students participating in exercise as a leisure time activity. In addition to that, the relationship between approached psychological facts and the differences between sexes are revealed. There 488 university students in the research who are engaged with different physical activities as leisure time activities ( $n_{\text{male}}= 260$ ;  $X_{\text{age}}= 22.26\pm 2.68$  and  $n_{\text{female}}= 228$ ;  $X_{\text{age}}=21.61\pm 2.57$ ). While determining the motivational profiles towards leisure time activities of the participants, Behavioral Regulations in Exercise Questionnaire-2 (BREQ-2) has been used and Psychological Wellbeing Scale has been used in determining the levels of psychological wellbeing. Before analyzing the data and evaluating the findings, it has been analyzed if normalcy, linearity, multiple and variance-covariance matrix's homogeneity hypotheses are met or not (Tabachnick and Fidell, 2001). The averages and standard deviations of the data have been determined and t test has been calculated for independent groups in order to reveal the differences between sexes. The method of Pearson Product-Moment Correlation Coefficient has been used in determining the relationship between motivational orientations and psychological wellbeing of the participants. Multiple Regression Analysis has been applied in order to present in what level sub-dimensions of motivational orientations in exercise predicts the psychological wellbeing of the participants. Differences between sexes have been observed in terms of introjected regulation points ( $p<0.05$ ), extrinsic regulation points ( $p<0.001$ ) and amotivation points ( $p<0.001$ ). Female participants have lower levels of introjected and extrinsic regulation and amotivation averages compared to male participants. Statistically, no significant difference between intrinsic regulation and psychological wellbeing levels of the participants has been found in terms of sex variable ( $p>0.05$ ). When the relationship between motivational orientation and psychological wellbeing levels of the participants are considered, there is a positive relationship among intrinsic ( $r=0.44$ ;  $p<0.01$ ) and introjected regulation ( $r=0.28$ ;  $p<0.01$ ) and psychological wellbeing; and there is a negative relationship between extrinsic regulation ( $r=0.009$ ;  $p<0.05$ ) and amotivation ( $r=0.35$ ;  $p<0.01$ ). As a result of Multiple Regression Analysis, there are significant relationships between psychological wellbeing and intrinsic motivation; and among motivation by introjected, extrinsic regulation and amotivation. The findings shows that male university students engaging in exercise as leisure time activity participate in activities without thinking about guilt, abashment, exterior drives or the reasons why they do exercises when compared to female participants. Also, it is revealed that when a person participates in activities with the feelings of fun, pleasure and guilt, the psychological wellbeing level rises; whereas, the psychological wellbeing decreases when the person thinks that there are exterior reasons to do exercises or when the person accepts exercise as a nonsense act. Finally, it is concluded that motivational orientations in exercise are effective in terms of determining the psychological wellbeing level.



## ACADEMIC ACHIEVEMENT OF STUDENTS WITH MATH LEARNING DIFFICULTIES IN DILLA PRIMARY SCHOOL, GEDEO ZONE, ETHIOPIA

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### Abstract

The objective of this study was to explore the academic achievement of grade four students with Math learning difficulties in Dilla primary school, Gedo Zone of SNNPR. The study used descriptive survey type of mixed method design with both quantitative and qualitative methods. For the purpose of quantitative data, screening and assessment process of 30 students with math learning difficulties, the last three years mathematics achievement results from the school record, regional math achievement exam and BANUCA test are used. To obtain qualitative data 5 students with math learning difficulties, 4 math teachers and 4 parents are selected through simple random and purposive sampling techniques. The findings show that, the mean value of four years math performance of the participants are 41.4, which is poor or below their overall average achievements 54.70. When their current mathematics performance is evaluated by regional achievement exam the result shows below average with mean value 24.91. Regarding the factors of their poor performance, it is categorized under problems related to attitude, pedagogical, social and economic aspects. And also the result indicates that positive relationship between math and overall achievement in the current grade four and the previous three grade levels. Moreover, the  $t$ -test comparison value shows that poor math performance has its own and reasonable effect in overall achievement of students with math learning difficulty. Finally, to ameliorate the identified problems and for overall findings possible recommendation are given accordingly.

**Key Words:** Academic Achievement, Math Learning Difficulties, Primary School

### Introduction

In the rapidly changing world and in the development of science and technology Mathematics plays a vital role. In daily life and in most human activities the knowledge of Mathematics is important. To understand the computerized world and match with the newly developing information technology knowledge in Mathematics is critical. Emphasizing this Krulteskii (1976) as cited in Brain (2002) stated that the development of sciences has been recently characterized by a tendency for them to become more mathematical. According to Lerner and Johanson (2009) Mathematics is a symbolic language that enables human beings to think about, record, and communicate ideas about the elements and relationships of quantity. This universal language which encompasses numbers, form, chance, algorithm and change is meaningful to all people as quantitative information and events are present in all natural environments (Van De Walle, 2004).

In addition, Mathematics is a form of reasoning. Thinking mathematically consists of thinking in a logical manner, formulating and testing conjecture, making sense of things, and forming and justifying judgments, inferences, and conclusions. We demonstrate mathematical behavior when we recognize and describe patterns, construct physical and conceptual models of phenomena, create symbol systems to help us represent, manipulate, and reflect on ideas, and invent procedures to solve problems (Bird, 2009).

However, for many children Mathematics is an inherently difficult subject to learn (Geary, 2004). Researchers in the cognitive sciences are studying this deficiency under the name dyscalculia, a disorder in which normally intelligent children demonstrate specific disabilities in learning mathematics (Ansari & Karmiloff-Smith, 2002). Children with developmental Dyscalculia may have deficits in one or more of the elementary skills necessary for arithmetical performance, or may even have impairments understanding



and carrying out the actual principles and procedures of Mathematics (Geary, Hamson & Hord, 2000, Hanich, Jordan, Kaplan, & Dick, 2001). The nature of these abilities and their impairments may have varying development trajectories, and furthermore may differ between adults and children (Mazzocco, 2007).

Math learning difficulties/Dyscalculia is a learning difficulty which affects a child's grasp of basic number concepts and hinders the understanding and application of number facts and procedures. Since international research reports that 5 - 8% of school-age children experience difficulties that interfere with their acquisition of mathematical concepts or procedures, (Geary, 2004) reported that an average of 3.6 – 6.5% have severe difficulties with acquiring numeracy and mathematics (Lewis, Hitch, & Walker, 1994). The difficulty lies in the reception, comprehension, or production of quantitative and spatial information. Learning difficulties related to mathematics may have greater implications on children's everyday life and on the workplace than literacy difficulties (Brynnner & Parsons, 1997).

Currently, Mathematical disability is an academic discourse and considered as one reason for the low achievement of students and some researches has begun to be done in that area. It is known that Mathematics achievement in almost all Ethiopian schools is very low but this problem has never been associated with the problem of Mathematical learning disability. There is general consensus among professionals in the field that Mathematical disability is widespread in young children and that it has serious educational consequences (Bryant, 2000; Jordan & Hanich, 2000 as cited by Zeleke (2004).

On the basis of this reality and from the researchers close observation and experience in learning & teaching mathematics at primary and secondary schools, it was a common incident to see most students consider mathematics as a subject which cannot be easily understood. Due to this reason, their interest towards Mathematics was low and consequently their overall achievement was unsatisfactory. When this happened in a researchers learning and teaching career it was common to ask questions like what are the main problems related to the learning/teaching of Mathematics? Why do most students achieve low in Math results? What can be done to improve their achievements? and the like. To answer this and other related questions for themselves and to suggest possible solutions for the problem, the researchers intended to conduct study on the academic achievement of grade four students with Math learning difficulty in Dilla government primary School, Gedeo Zone, SNNPR, Ethiopia.

### **Statement of the Problem**

Problems with underachievement in mathematics are particularly pronounced for students with learning disabilities (Geary, 2003). Studies suggest that 5 to 10% of all school-age children have some type of serious deficit in mathematics and that difficulties in mathematics are common among children with learning disabilities (Geary, 2003; Rivera, 1997). Difficulties experienced by these children span all three areas (basic facts, computation procedures and problem solving). Mathematics learning difficulties are often major obstacles in the academic paths of students with learning disability and frequently continue to cause problems throughout high school. Mastery of fundamental quantitative concepts is vital to learning more abstract and complex mathematics, a requirement for youth with learning disabilities who are seeking to complete high school and attend colleges or universities (Chin, S. and Ashcroft, R. (2006)).

In almost all Ethiopian schools considering Mathematics as a challenging subject which cannot be understood is a common phenomenon among students, teachers and parents. But, this is true in many countries too. Mathematics is considered by many individuals as a difficult subject to learn (Fennema & Sherman, 1976). This kind of outlook has a direct relation with achievement. Children with negative



attitudes towards Mathematics have performance problems because they develop anxiety (Hembree, 1990).

A number of factors do influence student's Mathematics achievement positively or negatively. One among these factors is student's attitude towards Mathematics. The direct relationship between Mathematics achievements and attitudes as well as their reciprocal influence are well documented ( Tsai & Walberg, 1983). One of the reasons that students attitude towards Mathematics is negative is that students are not able to see its relevance in daily life or in relation to other sciences, and hence the feeling that why learn if it has no use prevails among most students (Fennema & Sherman, 1976).

Most of the above mentioned problems have their roots in the lower elementary schools. This makes the assessment of the problems and the proposing of possible solutions at this stage essential. In Ethiopian education system, grade four is the end of the first cycle (lower elementary), hence this study gives a general overview of the problems related to the academic achievement of those identified students with Mathematics learning difficulties at Dilla primary school who enrolled grade four in 2007 academic year. Therefore, this study attempts to seek answers for the following basic research questions.

1. What does the academic performance of SWMLD look like?
2. What factors affect the academic achievements of SWMLD?
3. How dose math achievement influence overall achievement of SWMLD?
4. What interventions can be used to overcome the problem?

## Methods

For the purpose of this study the researcher carried out a descriptive - survey type of both quantitative and qualitative research methods. It was implemented to get a quantitative and qualitative description of trends, attitudes or opinions of a population by studying sampled participants of the study. In relation to the quantitative design school assessment record and achievement tests were used to collect information from participant students. As part of the qualitative design, the researcher had conducted interview with students, parents and teachers who are currently teaching in grade four.

## Sample Population and Sampling Technique

The target population of the study included grade four students with Math learning difficulties, parents, and their teachers of Dilla primary school. Before presenting the sample population of the study the researchers preferred to show the screening process of students with Math learning difficulties. In order to select the sample students, first the researchers used the last three years (grade 1 up to 3) school assessment recorded results and identified 58 students (out of 492 grade four students) who had scored below average and near average results in mathematics achievements (See Appendix-1). Then, the screened out students were invited to regional math achievement examination. Through this grade four regional exam 36 students who have very low results were identified for further assessment by Basic Numerical and Calculation Abilities (BANUCA) test (See Appendix-2). Finally, a localized version of BANUCA test battery was administered based on the instruction in the user's guide of the test booklet and by using percentile table 30 (10 male & 20 female) students who have low results were identified (See Appendix-3.)

As Geary & Hoard (2001) reported if students had performance in the below average to low average on standardized arithmetic tests categorized under mathematics leaning difficulty. Based on this reality, it is possible to see math achievement level of students in the above three screening process, finally 30 students were identified, categorized under math learning difficulties and took as sampled students of the study. In supporting this idea Gear, Hanson & Hord (2000) stated that, those students who score lower



than the 20th or 25th percentile on a mathematics achievement test takes as student with Mathematics Learning Difficulties. In addition, Karin, Anna & Brian ( 2003), said that use the term “arithmetic learning disabilities” and include children below the 25th percentile on the Test of Basic Skills. Therefore, from the above screening process those 30 students with math learning difficulty were selected through Simple random and purposive sampling techniques. Likewise, 4 teachers and 4 parents were selected in similar technique by considering the subject they teach and having children with very low performance respectively.

## **Instruments**

### **Regional Math Achievement and BANUCA Tests**

These tools were help to identify students with math learning difficulties and to measure their level of mathematics achievement. The regional achievement math test has forty (40) questions and developed by SNNPR Education Bureau in collaboration with Addis Ababa University research team to study on the learning assessment of grade four students across the region. It was prepared in Amharic language based on the curriculum of grade 4 mathematics for Ethiopian students (See Appendix – 5). On the other hand, the Basic Numerical and Calculation Abilities (BANUCA) test battery was prepared by Ministry of Education were administered for the selected students. This test battery helps for assessing basic numerical and calculation abilities of grade 1 to 4 students and it has 9 tasks: comparison dots, correspondence, single-digit addition, single-digit subtraction, writing numbers number line, comparison numbers, matching spoken and written numbers, calculation multi-digit numbers and arithmetic reasoning with 79 questions (See Appendix- 7).

### **Document /Record Analysis**

In order to get detail information about the current (2007 first semester ) performance and the last three academic years (2004 -2006) over all educational achievement of students with math learning difficulties, documentary analysis of the school assessment record /roster were done by the researcher. The data collected through this technique also used to compare the average mathematics performance with the average performance of other subjects.

### **Interview**

In order to improve the trustworthiness of data, researcher used multiple data-collection methods or what they called “triangulation” process (Gall et al., 2007; Bogdan & Biklen, 2007). The interview were carried out with 5 (2 male & 3 female) students with Math Learning difficulties (the students were selected based on their ability to respond the interview questions and to make clear and to get appropriate response clues were given by the researcher), 4 (1 male & 3 female) teachers and 4 (2 male & 2 female) parents (to get the most essential data the literate parents were selected). For doing this interview session the researcher organized the setting and semi- structured interview guide questions related to students over all academic achievement (See Appendix -8).

### **Data Collection Procedure**

At the very beginning research participants; students with Math Learning Difficulties, their teachers and parents were verbally briefed by the researcher on the objectives, ethical requirements and rules for their involvement in the study. Then, the last three years students school assessment recorded and other related documents which shown their academic performance was examined to check their level of previous academic achievement and to identify those students who have Math learning difficulty. The Regional math achievement tests and the test battery of Basic Numerical and Calculation Abilities were administered by the researcher in the students’ usual classroom environments to maximize ecological validity and reduce possible cautious and defensive responding.





Finally, the interviews were conducted to students with math learning difficulty, their teachers and parents based on the interview guide questions. For students and teachers it was delivered in school and for parents it carried around their home and other convenient area. In each activity of data collection process the researcher properly had short notes and recorded in well organized manner.

### Data Analysis

Both quantitative and qualitative methods of data analysis were employed in the study. The quantitative data obtained from regional achievement/BANUCA tests and school assessment documents were analyzed by using statistical package for the Social Sciences (SPSS - 16.0) computer software and showed frequency distribution, percentages, mean values, standard deviations. Mathematics and other subjects' average achievement were correlated and compared through one sample t-test. Qualitative data that was obtained through interview of learners with Math Learning Difficulties, teachers and parents were substantially analyzed qualitatively using words and sentences.

### Ethical Considerations

Appropriate permission was requested from Dilla University, Department of Special Needs and Inclusive Education and asked to write a letter of cooperation to the study area (see-App 9). Dilla town Administration Education office and Dilla Primary school principal were asked to give permission and made clear about the objective of the study and also aware on the expected cooperation from the office and school. The teachers, students and parents who were participated in this research got appropriate information about the aim of the research initially and their consent was obtained. The selected students with different academic achievement level and background were confidential and also tried to make clear to all respondents the collected information remain confidential in this study.

### Results

In this chapter, results of the study are presented. In doing so, the demographic information of respondents and the academic achievement extent of SWMLD were presented. Results are offered with the help of tables, bar graphs and the comparison of math and average academic achievement of participants also indicated by correlation and one sample t-test. These results are complemented by data obtained from qualitative methods through interview of Math learning difficulties students, their teachers and parents.

### Background Information of the Respondents

Table 1  
*Profile of Respondents According to Gender, Age and Educational Qualification*

Respondents	Characteristics/Items	No	%	
Students with Math learning difficulties	Sex	Male	10	33.3
		Female	20	66.7
	Total	30	100	
	Age	9-10	13	43.3
		11-12	13	43.3
		13-14	4	13.3
Total	30	100		
Parents	Sex	Male	2	50
		Female	2	50



Respondents	Characteristics/Items	No	%		
Students with Math learning difficulties	Sex	Male	10	33.3	
		Female	20	66.7	
		Total	4	100	
	Age	30- 40	2	50	
		41- 50	1	25	
		>50	1	25	
		Total	4	100	
		Sex	Male	1	25
			Female	3	78
	Total		4	100	
Teachers	Age	30- 40	1	25	
		41- 50	2	50	
		>50	1	25	
	Educational Qualification	Total	4	100	
		Certificate	1	25	
		Diploma	3	75	
Total	4	100			

As shown in table 1, 33.3 % males and 66.7 % females students with math learning difficulties participated in the study. On the other hand, 43.3% of these students were in the range of 9 -10 years age, again 43.3% were 11 - 12 years old and the rest 13.3% were in the age range of 13 - 14 years old. Regarding the interviewed parent respondents, 50% were males and the remaining 50% were females. As stated their age, 50% were in the range of 30 to 40 years, 25% were 41 to 50 and again 25% were above 50 years old. Four teachers participated in the interview, out of whom 3 are females and 1 was male. 25 % of them were in the age range of 30 - 40 years, 50% were 41-50 years and the rest 25% had more than 50 years. In terms of qualification status, 25% of the respondent teacher obtained Teacher Training Certificate and the remaining 75% college Diploma. From this we can infer that majority of the sampled respondent students and teachers were females. Equal sex ratio of parents was participated, the majority of teachers were diploma holder and 86.6% of students were 9 to 12 years age range.

Table 2

*Weekly Allocated Period of Each Subject from Grade 1 - 4*

Subject	Grades			
	1	2	3	4
Gedeuffa	5	5	5	5
Amharic	4	4	3	3
English	5	5	5	5
Mathematics	5	5	6	6
Environmental Science	6	6	7	7
Aesthetics	5	5	4	4
Total periods for a week	30	30	30	30



As indicated in table 2, six subjects were given in the school from grade one up to four with different weekly period. Except English and the local language Geduffa the other subject were taught in Amharic language. In grade 3 and 4 Mathematics and Environmental science subjects take the highest period 6 and 7 per week respectively. It implies that, in the school due attention were given to science and mathematics subjects.

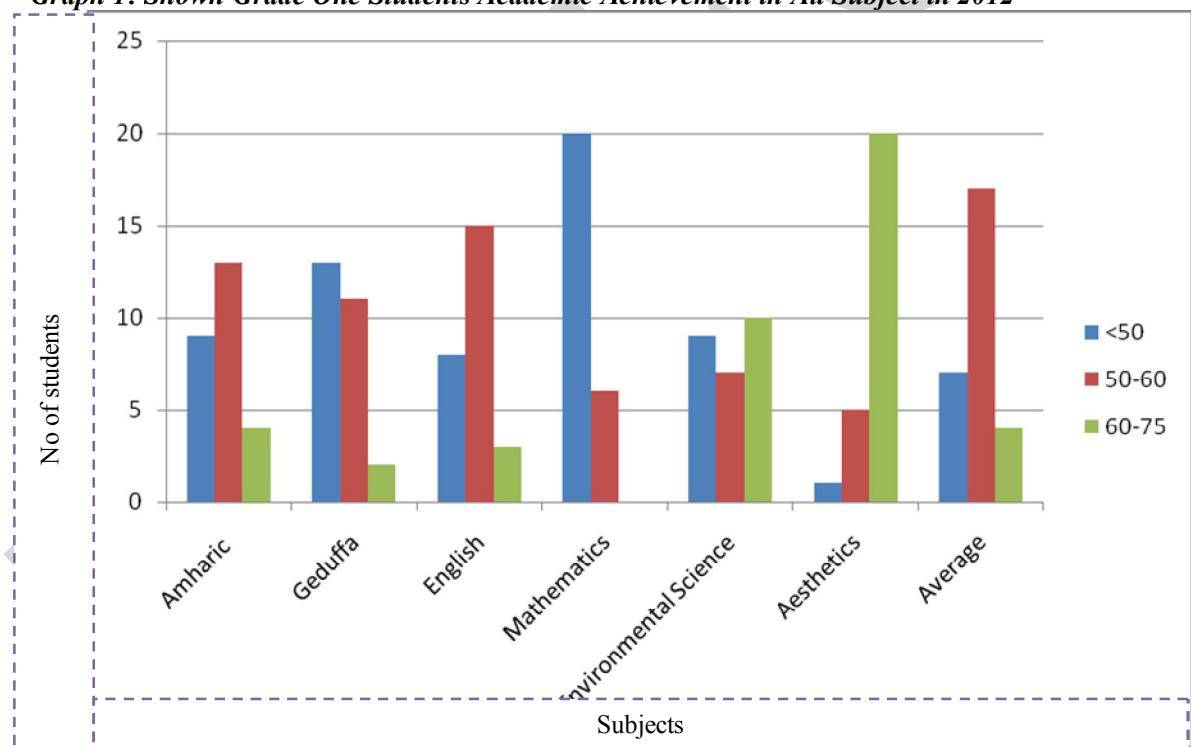
### Results of Math and Average Achievement

Table 3

*Average Academic Results of Grade One Students in 2012*

Result range	No	%	M	SD
<50	7	26.9	53.5308	5.76019
50-60	17	65.4		
60-75	2	7.7		
Total	26	100		

**Graph 1: Shown Grade One Students Academic Achievement in All Subject in 2012**



*M= Mean, SD= Standard Deviation and the average result is graded out of 100%.*

As can be seen the performance of students when they were in grade one, table 3 revealed that 26.9 % were below 50, 65.4 % were in the range of 50 - 60 and the rest 7.7 % of students were categorized in the range of 60 to75. It also shown that, their results in all subjects has average/mean value of 53.53 with a standard deviation of 5.76. Besides the table, when we see math performance from the bar graph 20 students (76.9%) was below 50 and the rest 23.1% students were in the range of 50 - 60. Therefore, this



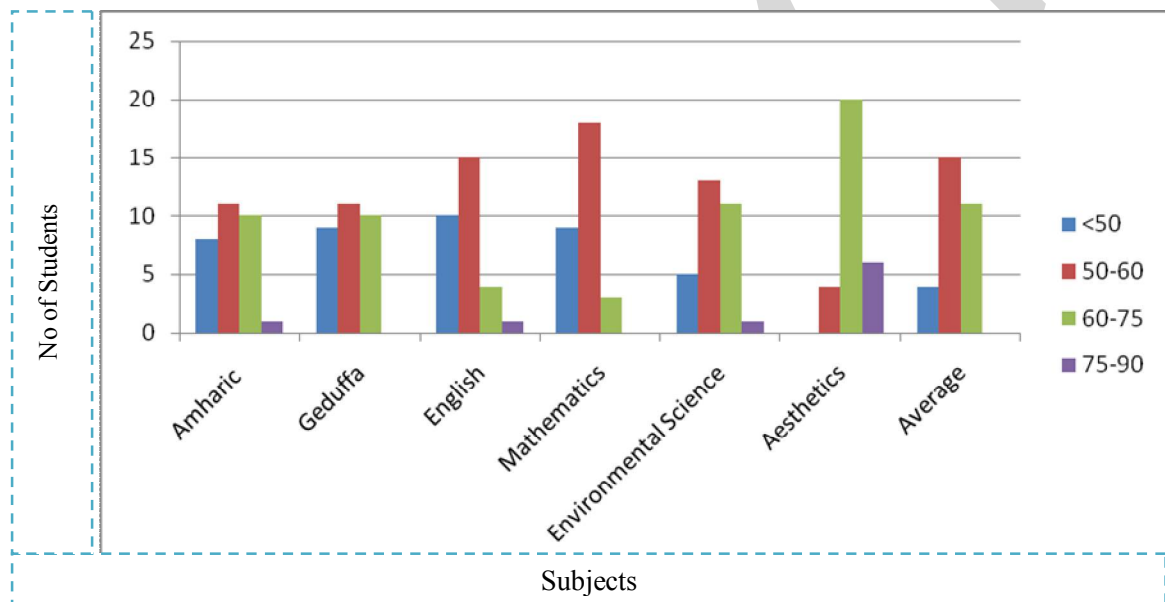
indicates that the majority of grade one students (65.4%) were in the range of result from 50 to 60, 76.9 % of participants were below 50 in math performance and their overall achievement were categorized in medium achievement level that is 53.53. Specifically, in mathematics achievement they were below average 48.0.

Table 4

*Average Academic Result of Grade Two Students in 2013*

Result range	No	%	M	SD
<50	4	13.3		
50-60	15	50.0	57.1033	6.49305
60-75	11	36.7		
Total	30	100.0		

**Graph 2: Shown Grade Two Students Academic Achievement in All Subject in 2013**

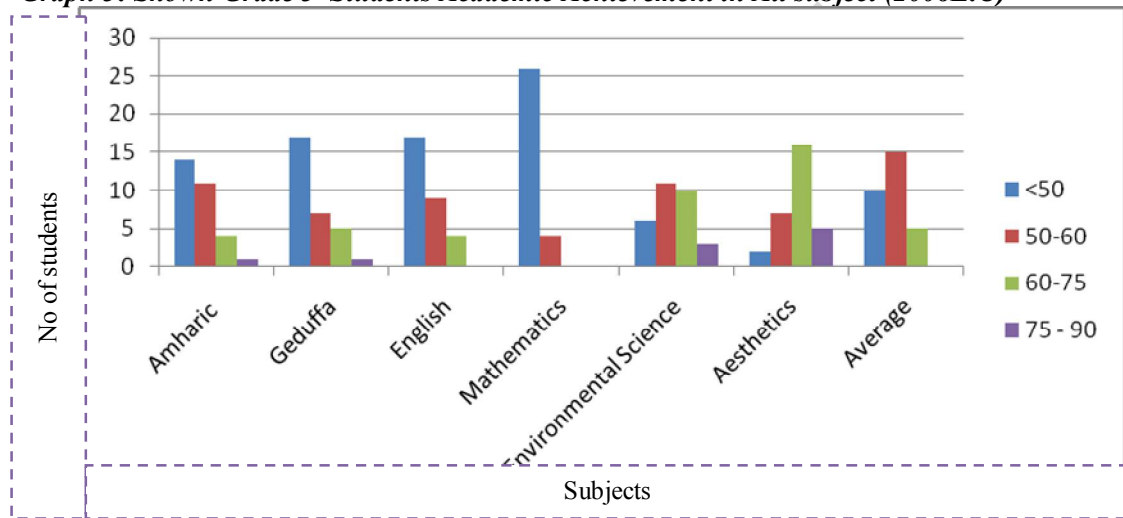


*M= Mean, SD= Standard Deviation and the average result is graded out of 100%.*

As shown in table 4, when participants were in grade two, 13.3 % were below 50, 50 % were in the performance range of 50 - 60 and the rest 36.7 % of students were categorized in the range of result 60 to 75. It also shown as, their results in all subjects were average value of 57.1 with a standard deviation of 6.49. And also when we see their mathematics performance from the bar graph nine students (30.0%) were below 50, 60% were 50 to 60 and the remaining 10% students were in the range of 60 to 75. Hence, in grade two half of the respondent students were in the range of result from 50 to 60, the sum 90 % of participants were below 60 in math performance & their overall achievement were categorized again in medium achievement level that is 57.1. Specifically, their math average result in this grade level was 52.1, which is categorized average achievement level.

**Table 5****Average Academic Result of Grade Three Students in 2014**

Result range	No	%	M	SD
<50	10	33.3		
50-60	15	50.0	53.2400	6.91827
60-75	5	16.7		
Total	30	100.0		

**Graph 3: Shown Grade 3 Students Academic Achievement in All subject (2006E.C)**

*M= Mean, SD= Standard Deviation and the average result is graded out of 100%.*

The results in Table 5 revealed that 33.3 % were below 50 performances, majority of students (50 %) were in the performance range of 50 - 60, and the rest 16.7 % students were categorized in the range of result 60 to 75. As illustrated, the average academic achievement in this grade level was 53.24 with a standard deviation of 6.91. In addition to this, the bar graph shown that, when participants were in grade three; 26 students (86.7%) were below 50, and the remaining 13.3 % were in the range of 50 – 60 math performance they had. On the bases of this result, the majority (50 %) of students had the average achievement result from 50 to 60, unlike from the previous two grade levels 86.7 % of participants had below 50 in math performance and their overall achievement were 53.24, still categorized in medium achievement level. Regarding their math achievement also shown, 44.6 which is poor performance.

**Table 6****First Semester Average Academic Result of Grade Four Students in 2007E.C**

Result range	No	%	M	SD
<50	7	23.3		
50-60	17	56.7	54.7300	6.67616
60-75	6	20.0		
Total	30	100.0		

**Graph 4: 1<sup>st</sup> Semester Grade 4 Students Academic Achievement in all subject (2007E.C)**

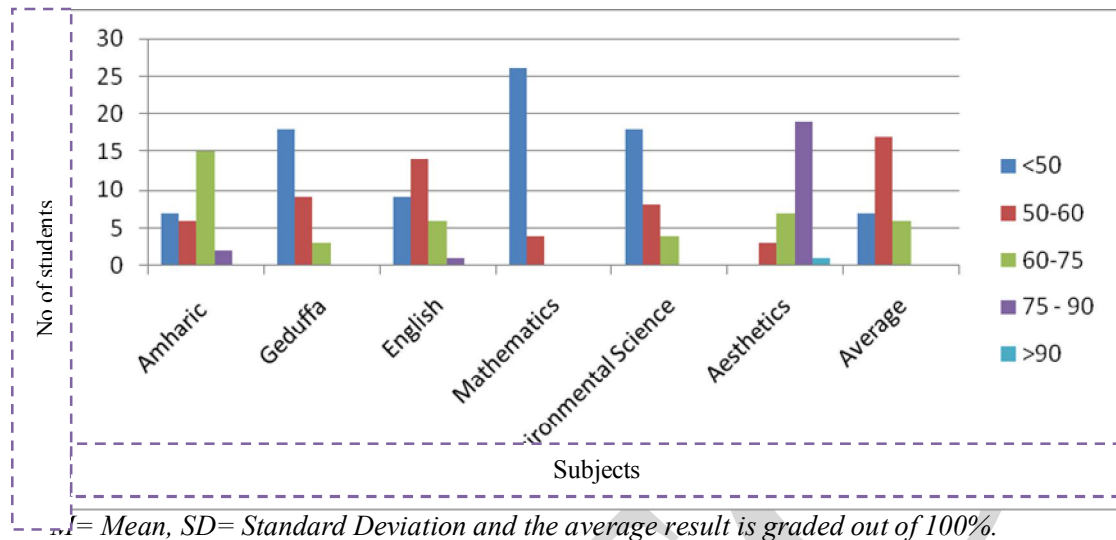


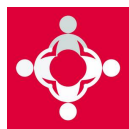
Table 6 shown that, the first semester grade four participants performance, it indicates 23.3 % students were below 50, whereas 56.7% were result 50 to 60 and 20 % of them were in the range of 60 to75. In the other columns of the table, the average value 54.73 with standard deviation 6.67 was indicated. Furthermore, when we see their math performance from the graph, 86.7 % or 26 students were below 50 and the other 13.3% were in the range of 50 to 60. Here in this grade level, more than half of students (56.7%) achieved 50 to 60 and their average result were achieved on the medium level with 54.73 values. Math achievement range result is similar to the previous grade level and their achievement was very low with 34.9 average values.

As shown in table 4 above , participants average achievement in the past three years (from grade one up to three) and the current performance of grade four first semester results, we can conclude that, their majority (76.7%) results were in the range of 50 to 60, 16.7% were below 50 and very few (6.6%) were 60 to 75. In their average achievement, at the very beginning 53.5, then 57.1, in grade three 53.2 and in their current performance they were 54.73. This implies that their cumulative achievement level were 54.6, which is categorized under average achievement level. Regarding their average math achievement in the last four years bar graphs and appendix – 4, at the beginning school career 48.0, in grade two 52.1, then 44.6, and finally in 2014/15 their first semester results was 34.9. This shows that their cumulative math performance of sampled students was 41.6, which is below average and poor academic performance.

To substantiate their poor achievement in mathematics let us see the result of regional math achievement and BANUCA tests result in the next tables 7 and 8. Moreover, their overall academic and math achievement result were complemented by using the interviewed data.

Table 7  
*Result of Regional Math Achievement Exam*

Result boundary	No	%	M	SD
15 - 20	11	36.7		
20 -25	5	16.7		
25 - 30	9	30	24.9167	6.27953
30 - 35	5	16.6		
<b>Total</b>	<b>30</b>	<b>100</b>		



*M= Mean, SD= Standard Deviation and the exam result is graded out of 100%.*

Table 7 result revealed that, all participants were below the average (50%) with very low achievement values range from 15 to 35 and mean value of 24.91 with standard deviation 6.27. From this we can infer that, their math performance of participants in regional achievement exam was categorized under very low achievement level with very low average mean value.

Table 8

*Result of Basic Numerical and Calculation Abilities Test*

Characteristics /items		No	%	M	SD
<b>Number Skill</b>	<18	9	30.0		
	18-23	7	23.3		
	23-27	7	23.3	21.0333	7.81900
	27-32	7	23.3		
	Total	30	100.0		
<b>Arithmetic Skill</b>	<18	12	40.0		
	18-23	5	16.7		
	23-27	13	43.3	19.1333	6.96659
	Total	30	100.0		
<b>Total Score</b>	<39	14	46.7		
	39-47	7	23.3		
	47-59	9	30.0	39.2333	13.67526
	Total	30	100.0		

*M= Mean, SD= Standard Deviation, Number and Arithmetic skills were graded from 36%. & total score from 79%*

The table 8 indicated that the result of basic numerical and calculation ability test. Based on percentile table their total average score 39.2 indicated below average/low performance with the range of values from 6 to 56. Specifically, it shows about arithmetic and number skill of participants. As can be seen students achievement, in a number skill test 30% were below 18, 23.3 % were in the range of 18 to 23, 23.3 % were again in the range of 23-27 and for third time 23.3% students had a number skill 27 to 32. Likewise, in arithmetic skill test the majority (40%) students were below 18, 16.7% results were from 18 - 23 and the rest 43.3% were in the range of result 23 to 27. As shown the average achievement in this two mathematics skills the mean value of number and arithmetic skills were 21.0 and 19.1 respectively. Based on this value, from the percentiles table of BANUCA it is possible to infer that, students had low performance in number as well as in arithmetic skills. But, when we compared with in two skills achievement their number skill was better than arithmetic skill.

### **Factors Affecting Academic Performance of SWMLD**

During interview, five students with math learning difficulties, four teachers and four students parents answered the questions that were raised related to their attitudes towards the subject mathematics and their awareness on the meaning of math learning difficulties: most of the respondent students answer showed



that, perceiving the nature of mathematics as a subject that hard to understand easily, from other subjects they hate to learn and to discuss about math, not interested to learning and to show their math exercise book to parents. One student said “I like to learn math but it is difficult to understand and no one can closely help me at school or home.” The teachers also add that the identified students particularly some of grade four students were not interested to learn and to participate in math class come without appropriate readiness and were careless in using practical tasks. In contrast to this, one parent said that my child was good in math and lost interest because of lack of attention in exam and class activities. On the other hand, all respondents said they did not know what math learning difficulties mean so far and not assumed pupil with this difficulty as special need group. But, they simply attributed the problem as the nature and difficulty of the subject matter.

Regarding the factors contributed to poor performance in mathematics and over all achievements, most students responded attributed pretentious as the subject hard to understand, negative attitude towards the subject, lack of attention and interest when teachers taught, not giving due attention to their education in general and Mathematics in particular, not acquiring the necessary skill and knowledge in the previous three grade levels, easily forgetting the way of doing tasks, not enough support from parents in fulfilling learning materials, being distractive and disturbed by other classmate, lack of a study or work habit to read what is learnt in a class, lack of interest and motivation to do class and home tasks, difficulty of reading and writing .

Teachers and parents also addressed the problems with large class size, awareness gap on the identification of problems and inappropriate remediation, lack of professionals to identify and intervene in the difficulty, resist doing their class and home work activities, not understanding Mathematical application in day to day activities, engaging household activities, most come from illiterate families limitation of support, poor relationship with classmates and family members, teachers lack of updating their skills, lack of teaching aids, miss match between the teachers support and the nature of the subject as well as the difficulty were raised as reason to students why they had poor performance in mathematics as well as in their overall achievement.

### Comparison of Math and Average Achievement

In this section, students’ math and overall achievement correlation and comparison result are presented. The correlated and compared academic result was the data obtained from school assessment record in different grade level.

Table 9  
*Correlation of Math and Average Performance in Different Grade Level*

Variables	Math achievement in Grade 4	Math achievement in Grade3	Math achievement in Grade 2	Math achievement in Grade 1	Average achievement in Grade 4	Average achievement in Grade3	Average achievement in Grade 2	Average achievement in Grade 1
Math achievement in Grade 4	1.00	.099	-.280	.285	.813**	.118	-.143	.398





Math achievement in Grade3	-	1.00	-.304	-.153	.244	.718**	-.271	.128
Math achievement in Grade 2	-	-	1.00	-.077	-.356	-.346	.753**	-.226
Math achievement in Grade 1	-	-	-	1.00	.372	.052	-.096	.392*

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

\**. Correlation is significant at the 0.05 level (2-tailed)*

As shown in table 9, there was no statistically significant relationship between math achievement and the average achievement in different grade levels. However, math grade one and average of the same grade achievement was found to have statistically significant positive relationship ( $r= 0.392$  at  $P= 0.005$ ). In addition, math and average of grade two have also significant positive relationship ( $r= 0.753$  at  $P= 0.001$ ). Likewise, math grade three and average of the same grade level achievement have statistically significant positive relationship ( $r= 0.718$  at  $P= 0.001$ ), eventually, math and average of grade four have a significant positive relationship ( $r= 0.813$  at  $P= 0.001$ ). As we can see all the correlated variables, there were positive correlations in each case. Therefore, we infer that, math performance of students with math learning difficulties have strong relationship with their overall achievement.

Based on the correlation above, in the next table the identified variables which had significant relationship were compared through one of the inferential statistics, one sample t-test. The two grade levels math and overall achievement one sample t -test comparisons were presented below.

Table 10

*T-test Comparison of Math and Average Achievement in Grade 3 and 4*

Educational Level	Variable	T	Df	Sig. (2-tailed)	Mean Difference	95% Confidence Interval of the Difference	
						Lower	Upper
Grade 4	Math performance	17.954	29	0.000	1.13333	1.0042	1.2624
	Average performance	16.109	29	0.000	1.96667	1.7170	2.2164
Grade 3	Math performance	17.954	29	0.000	1.13333	1.0042	1.2624
	Average performance	14.367	29	0.000	1.83333	1.5723	2.0943

*The value of t-table =2.045, P<0.01, t= t-test and df= degree of freedom*

The t-test comparison has been used to see whether there was a statistically significant difference or not in a given two variable. In table 10, the t-calculated of grade four was found for math 17.954 and average 16.109 which is greater than the value of t – table, 2.045 with 29 degree of freedom and the p-value was 0.000 which is below 0.01 (the level of significance). This implies, all the statistical data confirmed there



is statistically significant difference or variation between math and overall average performance of students with math learning difficulties.

In similar procedure the comparison of correlated statistical data when students were in grade three, again there was statistically significant difference or variation between math and overall average performance of participants. Therefore, it is possible to say that, poor mathematics performance of the identified students with math learning difficulty were significantly put its reasonable effect on their overall school academic achievement. Furthermore, as the table shown that, in the two grade levels t-value of mathematics performance is greater than t – value of average performance, this indicates math achievement has high effect on the students overall academic achievement.

Interviewed teachers and parents also gave supporting idea on the relationship and influence of mathematics result in the average performance. In their reflection, the nature of the subject mathematics by itself need more time to study and practice at home is importance of math knowledge in day to day activities and they raised the inter relationship between reading and writing skills and mathematic. In respect to academic performance clearly math result is one of the average results in the grade level and has its own influence in increasing and decreasing overall achievement. When they were giving answer, some of the respondent teachers and parents showed the influence of math in overall achievement based on the collected four years achievement result of participant students.

Regarding the remedial solution to students with math learning difficulties the interviewed participants said that:

- To fulfill the awareness gap, the school community must provide awareness raising program on learning disability in general and math learning difficulty in particular.
- Parents should minimize child labor load at home & excel their help in study and time management at home.
- Avoid self containd teaching approach and minimize teachers load (30 period per week).
- Transform and well practice peer tutoring and cooperative learning (1to5 team formation). These techniques will eventually enable the child to have experience of success which will help him/her to increase his/her interest and motivation in mathematics thereby reducing anxiety and phobia.
- Providing individual support and follow up to learner with math difficulty and use positive reinforcement on their progress.
- Improve educational facilities at home and school level.
- Minimize school class size and high student ratio (there is about 87 to 94 students in one class)
- Teachers update their teaching method based on the need of students with math difficulty.
- School should be supplemented with a variety and suitable visual materials and educational technology.
- Teachers should show empathy, understanding and patience to students with different problems and difficulties in learning.

## Discussion

### Students Academic Achievement

One of the main objectives of this study was to see the extent of math and overall achievement of grade four students with math learning difficulties. In this regard, the findings revealed that SWMLD below average in mathematics and average achievement in overall performance were the findings of this study. As the study revealed that the majority (93.4%) of participants' academic performances was in the average



range of 50 to 60 and below 50. In their overall average achievement was 53.5 at the very beginning in grade one, then 57.1, in grade three 53.2 and in the current grade four first semester they were achieved 54.73. Their cumulative average achievement shows 54.70, which is average level achievement. When these students overall knowledge achievement seen by scholars as: students who experience failure in mathematics often have holes in their knowledge base ( Mercer, Mercer, Miller & Mercer,1997).

Specifically, the four years math achievement result shows, at the very beginning of school career they obtained 48.0, in grade two 52.1, in grade three 44.6, and finally in their grade four they obtained 34.9 level of achievement. The cumulative average result of participants was 41.6, when it is compared with other subject and average level of achievement (50%); they performed below average and poor performance in mathematics. Surprisingly, this low achievement result also reflected by the regional math achievement exam by very low average result, that is 24.92. As the BANUCA test result also showed their low-performance in the average value 39.23 and also students' weakness in arithmetic skill than number skill.

In supporting the idea the American Psychiatric Association (1994) stated that these students' mathematical abilities fall substantially below that expected for the individual's age, measured intelligence, and age-appropriate education. When comparing their number skills with their age mates, Geary, Hamson, and Hoard (2000) said that children with learning difficulty are only slightly behind typically achieving peers in terms of development of number concepts. Regarding the importance good performance in math Bynner and Parsons (1997) stated that, good numeracy skills are important for being an effective member of a modern numerate society. Bad numeracy skills are known to be even more of a handicap than poor literacy skills to getting a job, keeping a job and being promoted within employment

### **Factors Attributed for Poor Academic Achievement**

As shown in the result the main reasons to their poor achievement were categorized in three broad themes; factors related to attitude towards the subject and difficulty, the provision of appropriate educational facilities and techniques and parents role and responsibilities.

The first and frequently raised factors of low performance were the attitude of students perceiving mathematics as a subject hard to understand, lack of awareness on the difficulty: identification and giving appropriate intervention for students, negative attitude and lack of attention and interest to their education in general and math in particular were the identified problem. With respect to this MOE (2010) stated that, the image of mathematics in society is that it is a difficult subject and should not be enjoyed. There is also perceived to be no disgrace not being able to do even simple mathematics as a subject and will not enjoy it. They do not see mathematics as a subject that is associated with their everyday lives and that can be challenging and fun but only a dry abstract rote learning activity. In supporting this idea, Heward (1996) said that some students seem to be negatively influenced by the stereotype beliefs held by many people that mathematics is a difficult subject. Considering Mathematics as a subject hard to understand and consequently develop negative attitude towards it is a common phenomenon among students, parents and the society at large. This understanding is not unique in our country students or parents alone. Various educators have written about it. Mathematics is considered by many individuals as a difficult subject to learn (Fennema & Sherman, 1976) and with such preconceived fear of Mathematics it is very possible for students to develop negative attitude towards it which has a direct linkage with their achievement ( Tsai & Walberg, 1983).

The other main factors that were boldly raised in influencing students' academic performance were lack of appropriate educational facilities to learn as well as to teach the group of learner, lack of trained



professionals, lack of handling and use of variety of teaching aids and methods. These factors were directly and indirectly affect the teaching learning process at large and success in their school career.

In this regard the two publications by Butterworth (2003) and Shalev & Gross-Tsur (2001) suggest that ineffective teaching strategies, particularly in the years of early childhood, might promote the development of a mathematical learning disability in vulnerable students. The method convenient for one child may not be convenient for the other. Each child has his own preference and likes of teaching methods. The teacher is expected to adapt the learning environment, so that each learner is able to develop and use different learning strategies and methods that are suitable for him or her (Johnsen, 2001). And also as indicated by Michele & Mazzocco (2005) influencing factors of mathematics difficulties may include numerous absences from school, poor teaching instructions and family illnesses. Still for other students their difficulties seem to be linked to the procedures used in evaluating mathematics learners. According to Brian Butterworth (2003) there are contributing factors to good numeracy attainment - a well - structured curriculum, good teaching matched to the pupil's current level of understanding, an attentive pupil, and so on. Similarly, there will be many reasons for failing to acquire good numeracy skills, just as there are many reasons for low levels of attainment in other school subjects. These include the attitude of the pupil, inappropriate teaching methods, time off school, and so on. In fact, learning arithmetic seems to be more sensitive to these disruptive factors than other subjects

However, initiatives in such mathematics competitions, mathematics clubs, and mathematics fairs and trials can be introduced into schools to make students realize that mathematics can be fun. They can be also given students success and confidence in their ability to do mathematics (MOE, 2010). Supporting teaching with teaching aid materials help students to visualize what they learn and it has great significance to young children in primary schools. It helps them to grasp easily the subject matter and associate it with the experience they have in their daily life. As it is indicated in the findings, factors for poor achievement were also related to parents' responsibilities such as fulfilling educational facilities, providing support and follow up of activities, identifying real problem, engaging them in other home tasks are basically reported problems in this study. On the other hand, literature highly supports the importance of family participation in the education and acquisition of numeracy and mathematics. This finding is consistent with the findings of Young-Loveridge (1989) that children whose mothers were not confident with carrying out mathematical tasks, lacked confidence in carrying out such activities. This also pointed out by Hannell (2005) that... 'home environment promotes a positive attitude towards the learning of mathematics, the necessary skills are developed better'.

Similarly, Anning and Edwards (1999) reported that if children encounter a negative mathematics identity at home, their own identity is influenced by this. Again, Sammons et al. (2002), noted that children who come from low socio-economic backgrounds and are socially disadvantaged also encounter challenges with learning mathematics. Likewise, Anning and Edwards (1999) show that if children encounter a negative mathematics identity at home, their own identity is influenced by this. This finding also consistent with scholars idea that child math learning difficulty who with negative attitude to ward math at home also negative attitude to participate in in math activities.

### **Poor Math Achievement and Overall Academic Achievement**

This study finding revealed that there is a correlation between math and overall average performance. For instance, grade three students math achievement and overall average achievement have a positive relationship ( $r= 0.718$  at  $P= 0.001$ ). Similarly, grade four achievement also have a significant positive relationship ( $r= 0.813$  at  $P= 0.001$ ). These findings illustrate that poor math achievement has its own reasonable effect in overall average performance of students, it is shown in four grades.



As indicated in t-test analysis, there is significant differences between math and average performance of students with math learning difficulties, this puts reasonable effect on their overall school academic achievement. The result also shows that, the poor mathematics performance has great effect in the reading and language achievement of students. This finding is supported by Robert & Torri (2006) assert that the most significant contribution to arithmetic difficulties is the low quality of schooling. The other scholar Kroesbergen & Van Luit (2003) also argues that, poor performance in mathematics might also be attributed to inadequate funding of education which results in fewer teaching/learning resources and low quality of education.

### Conclusion

On the assessment of students with math learning difficulties of academic achievements, the obtained results were analyzed and interpreted in different ways based on the research questions. As it can be seen from the results, their average mathematics achievement was 41.6, which is very poor when compared with other subjects as well as total grade (100%), the figure in each year of 48.0, 52.1, 44.6 and 34.9 from grade one up to four respectively. And also their overall average performance is 54.7, which is near to mid value and categorized in medium achievement level. This finding shows that to improve their academic achievement in mathematics and in other subjects further efforts and teaching techniques will be required in the future.

The correlation and comparison of statistical data of the study shows the statistical relationship and variation between the academic achievement of math and overall performance of students with math learning difficulty across each grade level. As can be seen from the grade four first semester academic achievement, the correlation of math and average achievement have the relationship ( $r= 0.813$  at  $P= 0.001$ ), i.e, math performance has significant positive relationship with their overall achievement. The comparison of statistical data of the t-calculated value of math 17.954 and average 16.109 which is greater than the value of t – table, 2.045 with 29 degree of freedom and the p-value was 0.000 which is below 0.01 is a statistically significant difference between math and overall average performance of SWMLD.

The other focus of the study is to identify the major factors which exist and hinder math and overall academic achievement of students with math learning difficulties. The finding revealed the factors that affect achievement of the learners are the perception toward mathematics. It is a hard subject to understand, lack of interest, negative attitude, and poor study habits, more expectation from teachers are prevalent opinion among the participants.

On the other hand, reasons for SWMLD poor performance in math and other academic areas are lack of early awareness of difficulties, early identification and lack of early intervention, inadequate educational facilities, work load and large class size, and the way of treatment and lack of teaching techniques. Furthermore, the commitment of parents to support their children, poor early childhood care, limitation of supportive school materials and teachers readiness and parents to give ample time to these children are some of the identified problems in this study. Teaching is accompanied by appropriate teaching aid materials as it give the students a chance to visualize what they are learning and to associate it with things in their surroundings. Parent – school collaboration takes the lion share in improving students' academic performance.



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TIJSEG





## UNIVERSITY PREPARATION FOR TEACHERS IN SPECIAL EDUCATIONAL NEEDS IN THE KSA

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### Abstract

The aim of this research is to provide an analysis of the Special Education Diploma Program in Saudi Arabia as offered by the King Abdulaziz University (KAU) in Jeddah. The data utilized for evaluation was comprised of a final sample made up of 50 teachers. Data for the research was gathered using a survey consisting of three Dimensions: Cognitive, attitude and skill. Descriptive figures were also used to define the individual features of members. In addition, inferential tests were utilized to establish whether the individual variables - qualifications, teaching experience, training and age - forecasted the views of the teachers regarding their preparation program. Overall, the outcomes illustrated that their preparation program is efficient, and that the subscales of coursework, as well as the instruction proficiency of professors, are effective. Furthermore, teachers put forward their own proposals for the enhancement of their preparation program. Suggestions for teacher preparation programs and for forthcoming study have been additionally offered.

**Key words:** Special Educational Needs - Special Education Diploma Program - Teacher Preparation Programs

### Literature Review:

Within Saudi Arabia, several special education divisions are available at several universities offering bachelor's and diploma's degrees in Special Educational Needs (SEN). The Diploma Preparation Programs are available to provide a certificate following a bachelor's degree for those desiring to work with children with SEN but who have no degree in special education. Only one analytical study of the undergraduate program in SEN has been carried out by Althabet (2002). His research appraised the teachers' views of the preparation program for mental retardation (MR), however no research has been done to analyse the Diploma Preparation Program. Therefore, the aim of the study is to offer information regarding the efficiency of the Diploma Preparation Program at KAU from the viewpoints of graduates under this program.

This research employs a survey to acquire the views of teachers on the perception program they have undergone at KAU regarding coursework, internships, the teaching proficiencies of professors, classroom applications as well as individual learning experiences. Founded on these outcomes, I will put forward proposals and suggestions which could assist learning planners, regulation formers, and teachers-trainers, in addition to those concerned in the endeavour, to establish, as well as apply better preparation programs for the teachers of the nation.

Numerous teacher education institutions appraise their programs to conform to accountability standards for endorsement. As soon as their programs are endorsed however, they do not print their analysis reports as the main intention of the appraisal is to acquire endorsement (Galluzzo & Craig, 1990). Adams and Craig (1983) outlined that 400 organizations carry out analytical studies, but in actuality few evaluation reports are available in the literature. Comparably, Althabet (2002) sent a letter to 90 special education teacher programs in the US asking for any assessments; he only received three responses. This could signify the severe deficiency of analytical studies within the literature.



Therefore, the present study is an endeavour to close the gap in terms of the harsh lack of evaluation studies in special education teacher preparation programs.

Overall, numerous researches have been carried out in America to establish attrition amid special education teachers, although not many concentrate on burnout. This is most likely a result of the increased availability of optional jobs in the US. Attrition in the US is high in comparison to Arabic nations as the teachers who do not like their jobs may resign and find an alternative occupation. In Arabic nations however, teachers have to keep their jobs whether or not they like them as a result of restricted job opportunities, which can in turn raise the sense of Burnout. This is why attrition is not a significant matter in Arabic nations. In the near future, this could change as a result of the economic crisis, and teachers within the US may have to maintain their jobs whether or not they like them and this could therefore result in more burnout than attrition.

## 6. Research Objectives:

The key aim of this research is to scrutinize the effectiveness of the Diploma Preparation Program as viewed by teachers who are graduates of the Special Education Diploma Program in KAU. The objective of this research is to gain knowledge from the encounters of previous students. Particularly, the study is aimed at comprehending present SEN teachers' views concerning coursework, standard of internship, classroom applications, teaching proficiencies of professors and individual learning knowledge. This will be done by employing survey data, and contrasting the data using gender, and years of teaching experience. The data will therefore offer an appraisal by previous students on the efficiency of the Diploma Preparation Program.

## 7. Research Design and Methodology:

As the main objective of this research is to acquire views, attitudes and outlooks from a great number of teachers, the design of the present research comprised a survey research. A survey will be employed to collect data regarding the efficiency of the SEN teachers' preparation program in Saudi Arabia from the viewpoints of the teachers themselves. McMillan and Schumacher (2006) highlighted that "surveys are employed to learn about the opinions, convictions, principles, demographics, conduct, attitudes, inclinations, concepts and alternative kinds of information about people. They are usually employed in commerce, politics, state, sociology, general health, psychology and learning as precise information may be acquired for considerable amounts of people with a minor sample" (p. 233). Additionally, survey research design has been employed in numerous studies in which the evaluation of the programs was the objective, such as the study by Wasburn-Moses (2005).

Program appraisal is essential to improve, grasp and offer direction for program enhancement. Evaluation can raise the comprehension of a program and the manner in which it functions. It can also show general efficiency and standard (Weiss, 1998). The aim behind the present research is to appraise the SEN teachers' preparation program at KAU, and identify proposals for enhancement. Based on the results, proposals and suggestions may be put forward to assist learning planners, regulation creators and teacher instructors to institute and apply enhanced preparation programs for the teachers of the nation.



## Research Sample and Community

The sample of this study was deliberately chosen from the pool of postgraduate students majoring in special education. Thus, a hardcopy of the questionnaire was distributed once the participants had been identified. In the end only (50) of the questionnaires were valid for analysis. However, the following table shows their distribution according to research demographic variables:

**Table (1)**  
**The distribution of the individuals of the research sample on the specified variables**

No.	Variable	Categories	Frequency	Percentage (%)
1	<b>Qualification</b>	BA.	33	66
		Postgraduate Diploma	17	34
2	<b>Experience</b>	Less than 5 years	7	14
		5 – less than 10 years	13	26
		10 – less than 15 years	20	40
		15 years and above	10	20
3	<b>Training Courses</b>	Less than 5 years	36	72
		5 courses and above	14	28
4	<b>Age</b>	Less than 30 years	7	14
		30 – less than 40 years	37	74
		40 years and above	6	12
5	<b>Did you receive any training at any of the schools or centres of special education?</b>	Yes	24	48
		No	26	52
<b>The total number of the research sample</b>			<b>50</b>	<b>100</b>

As shown in the above table, the individuals making up the sample were distributed based on the variables of the study. However, as for the variable of "qualification" we find that the percentage of the BA students reached 66%, while for the postgraduate students it reached 34%. Moreover, for the "experience" variable we find that the highest percentage is for those who enjoy 10 – less than 15 years with a 40%, while the least percentage was for those who enjoy less than 5 years with a percent of 14%. As for the variable of the "training courses", the highest students' percentage is for those who attended training courses for less than 5 years with a percentage of 72%, while those who attended less than 5 courses came with 28%. In the case of the "age" variable, the highest students' percentage was for those aged from 30 – less than 40 years with 74%, while the lowest students' percentage was for those whose age is 40 years and older with 12%. Lastly, with respect to "getting the training sessions at one of the centres", the highest students' percentage was for those who participated and their percentage was 52%. However, those who did not participate made up 48%.



## Rationing the tool of the study:

The data analysis revealed an appropriate degree of validity for the tool to be applied and that it does measure what it was intended to. However, the values of the phrases correlation coefficient with all its dimensions appeared statistically significant at the level of (0.01) and was restricted between (0.343 – 0.711) for the cognitive dimension, and between (0.483 – 0.782) for the skill dimension. As for the dimension of attitudes, the values of the correlation coefficient were restricted between (0.432 – 0.790). Moreover, the correlation coefficient of the three dimensions with the total degree of the scale appeared to be statistically significant at a level of (0.01) with values of (0.86, 0.94, 0.96) respectively. These are high values which indicate a consistency in the phrase and its dimensions within the questionnaire.

Regarding the stability of the scale, the value of Cronbach's alpha coefficient for the measure as a whole was (0.94), and for the three dimensions representing the perceptions of teachers (cognitive, skill, and attitude) the values were (0.89, 0.89, 0.73), respectively. These are high values which indicate the stability of the scale as well as its validity for application.

- **Order of the availability and the degree of the dimensions of perceptions for the postgraduate students in special education.**

The order of the dimensions of perceptions and the availability degree of each and all dimensions are as follows:

**Table (2)**

**The arithmetic means and standard deviations of the dimensions of perceptions and its overall degrees for the postgraduate students in special education**

Dimension No. with axis	Dimensions	Arithmetic Mean	Standard Deviation	The order of the dimension	The degree of availability
1	Cognitive Dimension	4.03	0.488	1	Big
3	Attitude Dimension	3.93	0.492	2	Big
2	Skill Dimension	3.88	0.583	3	Big
The total of students' perceptions		3.95	0.480	--	Big

The previous table (2) illustrates that the frequency of perceptions for the postgraduate diploma students in special education came with a (large) degree, with an arithmetic mean of (3.95), and a standard deviation of (0.480). The values of the standard deviations of the three dimensions which represent students' perceptions ranged between (0.488 – 0.583) which are low values indicating the homogeneity of the responses of the postgraduate diploma students in special education. The arithmetic means for the three dimensions ranged between (3.88-3 4.0) which is to a large extent in the availability of all dimensions.

This study is in line with the study by Eriks-Brophy, Aliceand Whittingham, and Joanne (2013) who showed that teachers have positive attitudes towards the inclusion of students with hearing loss, this



points towards a high level of confidence among teachers in their ability to deal with and teach those students, and indicates that they are fully aware of the effects of hearing loss on language and learning. They also submitted that the teachers' preparation training programs have sufficiently qualified them to teach those students effectively. The study has also highlighted the need to raise the focus on special teaching needs for students with hearing loss within the programs of teachers' preparation and provide the appropriate support for both students and teachers in order to enhance successful inclusion.

This study contradicts the study by Crawford, Lindy & Almond, Patricia & Tindal, Gerald & Hollenbeck, Keith (2002) which tackled teachers' attitudes towards the inclusion of students with disabilities. Their study put forward the contention that teachers have expressed their concerns about the inclusion of all students, and that very few of them showed great enthusiasm.

**- The availability of perceptions at the cognitive dimension for the students at the postgraduate diploma in special education.**

The arithmetic mean and standard deviation for the responses of the students in the postgraduate diploma in special education were calculated on the cognitive dimension and its phrases as follows:

**Table (3)**

**The arithmetic mean for the level of the availability of perceptions within the cognitive dimension for the postgraduate students in special education.**

No.	Phrases	Arithmetic Mean	Standard Deviation	Order of the Phrase	The Availability Degree
8	I understand typical child development.	4.24	0.690	1	Very High
5	I have knowledge regarding various disabling conditions.	4.22	0.910	2	Very High
21	I am aware of my role on the eligibility and placement team.	4.08	0.877	3	High
32	I am able to vary my instructional methods to accommodate students with disabilities.	4.02	0.869	4	High
36	I understand the relationship of self-concept and learning.	3.94	0.610	5	High
12	I have knowledge regarding various disabling conditions.	3.90	0.953	6	High
24	I understand the variety of the program alternatives available to students with disabilities.	3.88	0.824	7	High



2	I know the process required for developing the individualized educational plan.	3.86	0.904	8	High
15	I know the procedures for referring a child with suspected disabilities to be evaluated.	3.74	1.006	9	High
38	I have good knowledge of the alternative reinforcement systems (continuous – intermittent – relative)	3.70	0.974	10	High
30	I am aware of the curriculum of special education for students with disabilities.	3.70	0.974	11	High
18	I am knowledgeable of placement procedures for students who qualify for special education.	3.66	1.002	12	High
27	I understand the relation among multidisciplinary evaluation, selecting instructional activities and evaluating progress.	3.54	0.862	13	High
<b>The overall degree for the cognitive dimension</b>		3.88	0.583	-	High

The previous table (3) illustrates that the degree of the availability of the cognitive dimension as one of the dimensions of students' perceptions of the postgraduate students in special education were (high), with an arithmetic mean of (3.88), and a standard deviation of (0.583), and the values of the standard deviations for the phrases that represent the cognitive dimension being less than integer (1) except for the phrases (15,18) which have a standard deviation value of (1.006,1001) respectively. This is indicative of homogeneity in the responses of the samples to all the statements of the dimension except for these two phrases. The arithmetic mean scores ranged between (3.54- 4.24) with a "high" availability degree, except the four phrases (5, 8) which got a "very high" degree of availability.

This is in agreement with the study of Eriks-Brophy, Alice, Whittingham, and Joanne: (2013) who contended that teachers have confidence in their ability to teach students with hearing loss and that they are fully aware of the effects of hearing loss on language and learning. They went on further to say that the teachers' preparation training programs have sufficiently qualified them to teach those students effectively.

**- The availability of perceptions at the skill dimension for the students at the postgraduate diploma in special education:**

The arithmetic mean and standard deviation for the responses of the students in the postgraduate diploma in special education were calculated on the skill dimension and its phrases as follows:

**Table (4)**

**The arithmetic mean for the level of the availability of perceptions within the skill dimension for the postgraduate students in special education.**

The number of the phrase within the questionnaire	Phrases	Arithmetic Mean	Standard Deviation	Order of the Phrase	The Availability Degree
22	I can change my teaching strategies so that to adapt with students with disabilities.	4.36	0.693	1	Very high
25	I am able to participate as a team member in the individualized instructional program meetings.	4.20	0.756	2	Very high
35	I know how to plan for the benefits of students in cooperation with specialists.	4.16	0.584	3	High
1	I can work with groups as well as individuals within the same classroom.	4.16	0.584	4	High
6	I am able to identify students who need special assistance.	4.14	0.606	5	High
28	I am able to assist in designing the individualized educational plan.	4.10	0.789	6	High
37	I am able to adapt curriculum to meet the needs of students with disabilities in my classroom.	4.08	0.829	7	High
9	I am able to evaluate my students' learning and however can accordingly adapt my strategy in teaching.	4.06	0.652	8	High
19	I am able to exert an effort to coordinate the instructional programs of students with disabilities with the special education teacher.	4.04	0.755	9	High



33	I am able to formulate instructional objectives that can be measured and observed.	3.98	0.742	10	High
16	I am able to make effective use of special education resource room materials.	3.98	1.130	11	High
3	I can facilitate learning among students with low achievements.	3.94	0.767	12	High
13	I am able to provide opportunities for the students with disabilities in my classroom to build upon their strengths as well as addressing their area of difficulties.	3.94	0.956	13	High
31	I am able to formulate instructional objectives that are measurable.	3.80	0.782	14	High
39	I can apply alternative reinforcement systems (continuous – intermittent – relative)	3.80	0.857	15	High
10	I am able to select appropriate materials for the students with disabilities in my classroom.	3.68	1.096	16	High
<b>The overall degree for the skill dimension</b>		4.03	0.488	-	High

The previous table (4) shows that the degree of the availability of the skill dimension as of the dimensions of students' perceptions of the postgraduate students in special education were (high), with an arithmetic mean of (4.03), and a standard deviation of (0.488), and the values of the standard deviations for the phrases that represent the skill dimension ranged between (0.584-0.857) which are relatively average values. This points to homogeneity in the responses of the students of the postgraduate diploma in special education except for the phrases (10, 16) where the standard deviations of their responses were (1.130, 1.096) respectively. The arithmetic mean of phrases ranged from (3.68-4.36) with a high availability degree, except for the phrases (22, 25) which came with a "very high" degree.

This is in agreement with the study of Eriks-Brophy, Alice and Whittingham, Joanne: (2013) who argued that teachers have a great deal of confidence in their ability to teach students with hearing loss and that they are fully aware of the effects of hearing loss on language and learning. They went on further to state that teachers' preparation training programs have sufficiently prepared them to teach those students effectively.





**- The availability of perceptions at the attitude dimension for the students at the postgraduate diploma in special education:**

The arithmetic mean and standard deviation for the responses of the students in the postgraduate diploma in special education were calculated on the attitude dimension and its phrases as follows:

**Table (5)**

**The arithmetic mean for the level of the availability of perceptions within the attitude dimension for the postgraduate students in special education.**

The number of the phrase within the questionnaire	Phrases	Arithmetic Mean	Standard Deviation	Order of the Phrase	The Availability Degree
20	With training and support, I would be able to meet the instructional needs of students with disabilities.	4.54	0.706	1	Very high
23	The needs of students with mild disabilities can be effectively met in a regular classroom.	4.40	0.670	2	Very high
40	It is my own responsibility to communicate with parents of students with disabilities in my class.	4.24	0.938	3	Very high
29	I feel comfortable to discuss the instructional strategies for students with disabilities in general with other teaching staff members.	4.18	0.800	4	High
17	I am comfortable with the thought of implementing individualized instructional programs for students with disabilities in my class.	4.00	0.808	5	High
4	Students with disabilities can benefit from placement in the regular classroom with appropriate support services.	3.94	0.935	6	High



11	I am responsible for the education of students with disabilities placed in my class.	3.84	1.076	7	High
14	My attitude and efforts will determine whether students with disabilities succeed or fail in my classroom.	3.70	1.074	8	High
34	I expect all of my students to achieve the instructional tasks designed for them.	3.66	0.939	9	High
26	I prefer to manage the instructional program of students with disabilities in my classroom.	3.58	1.051	10	High
7	Students with disabilities would not be stigmatized if they were educated solely in regular classroom.	3.12	1.222	11	medium
<b>The overall degree of the attitude dimension</b>		<b>3.92</b>	<b>0.492</b>	-	High

The previous table (5) illustrates that the degree of the availability of the attitude dimension as one of the dimensions of students' perceptions of the postgraduate students in special education were (high), with an arithmetic mean of (3.92), and a standard deviation of (0.492), and the values of the standard deviations for the phrases that signify the cognitive dimension ranged between (0.670-0.939) which are fairly average values. This shows homogeneity in the responses of the students of the postgraduate diploma in special education except for the phrases (11, 14, 26, and 7) which were higher than the integer (1). The arithmetic mean of phrases ranged from (3.58-4.54) with a "high" and "very high" availability degree, except for the phrase (7) which came with a "medium" degree.

This supports the study of Eriks-Brophy, Aliceand Whittingham, and Joanne: (2013) who put forward that teachers have confidence in their ability to teach students with hearing loss and provide adequate support to teachers and learners in order to enhance successful inclusion.

**Table (6)**

**Test results of Mann-Whitney- U Test to reveal the significance differences between the mean levels of the postgraduate students of special education regarding the inclusion of students with disabilities as attributed to the difference in qualification.**

No	Dimension	Qualification	Numbers	The average of the levels	The total of the levels	Mann-Whitney- U Test	The level of significance
1	Cognitive	BA	33	23.00	759.00	198.00	0.091
		PG Dip	17	30.35	516.00		
	Skill	BA	33	22.58	745.00	184.00	*0.048



No	Dimension	Qualification	Numbers	The average of the levels	The total of the levels	Mann-Whitney-U Test	The level of significance
		PG Dip	17	31.18	530.00		
3	Attitude	BA	33	24.76	817.00	256.00	0.615
		PG Dip	17	26.94	458.00		
The overall of teachers'		BA	33	23.44	773.50	212.50	0.164
		PG Dip	17	29.50	501.50		

• significant at the level (0.05)

Table (6) displays statistically important variances at the level of (0.05) between the averages of the views of special education postgraduate students in relation to the inclusion of students with disabilities in public schools. This is attributed to the difference in the qualification variable, but only on the skill dimension, and not the others. It is also shown that there are no statistically important variances at the level of (0.05) between the averages of the views of special education postgraduate students as regards the inclusion of students with disabilities in public schools which is accredited to the difference in the qualification variable on the general perceptions or the three dimensions that represent them (cognitive, skill, attitude).

**Table (7)**

**Test results of Mann-Whitney- U Test to reveal the significance differences between the mean levels of the postgraduate students of special education regarding the inclusion of students with disabilities as attributed to the difference in the number of training courses.**

No	Dimension	Qualification	Numbers	The average of the levels	The total of the levels	Mann-Whitney-U Test	The level of significance
1	cognitive	5 courses and less	36	22.31	803.00	137.00	**0.013
		5 courses and above	14	33.71	472.00		
2	skill	5 courses and less	36	21.63	788.50	112.50	**0.003
		5 courses and above	14	35.46	496.50		
3	attitude	5 courses and less	36	22.24	800.50	134.50	**0.011
		5 courses and above	14	33.89	474.50		



No	Dimension	Qualification	Numbers	The average of the levels	The total of the levels	Mann-Whitney-U Test	The level of significance
	The overall of teachers' perceptions	5 courses and less	36	21.90	788.50	122.55	** 0.005
		5 courses and above	14	34.75	486.50		

\* Significant at the level of (0.05)

\*\* Significant at the level of (0.01)

The previous table (7) shows the following:

- There are statistically important variances at the level of (0.01) among the averages of the perceptions of postgraduate students in special education concerning the presence of students with disabilities at public schools which can be attributed to the difference in the number of training courses in favour of the students who have attended (5) courses and above.
- There are statistically important variances at the level of (0.01) among the averages of the views of postgraduate students in special education with reference to the inclusion of students with disabilities at public schools on the three dimensions (cognitive, skill, and attitude) which can be attributed to the difference in the number of training courses in favour of the teachers who have attended (5) courses and above.

This finding is in line with the study of Eriks-Brophy, Alice and Whittingham, and Joanne(2013) who argued that teachers' preparation programs have adequately equipped teachers with knowledge that enables them to teach those students effectively. In addition, they called for an increased emphasis on the special teaching needs in these programs for students who suffer from hearing loss.

**Table (8)**

**Test results of Mann-Whitney- U Test to reveal the significance differences between the mean levels of the postgraduate students of special education regarding the inclusion of students with disabilities as attributed to receiving training from one of the centres.**

No	Dimension	Qualification	Numbers	The average of the levels	The total of the levels	Mann-Whitney-U Test	The level of significance
1	cognitive	Yes	24	27.88	659.50	264.50	0.355
		No	26	23.67	615.50		
2	skill	Yes	24	27.56	661.50	262.50	0.355
		No	26	23.60	613.50		
3	attitude	Yes	24	28.08	674.00	250.00	0.227
		No	26	23.12	601.00		
The overall of		Yes	24	28.10	674.50	249.50	0.225



No	Dimension	Qualification	Numbers	The average of the levels	The total of the levels	Mann-Whitney-U Test	The level of significance
	teachers' perceptions	No	26	23.10	600.50		

\* Significant at the level of (0.05)

\*\* Significant at the level of (0.01)

The previous table (8) shows the following:

- There are no statistically important variances at the level of (0.05) among the averages of the views of postgraduate students in special education with respect to the inclusion of students with disabilities at public schools which can be attributed to the presence/absence of training whether it includes all the perceptions or only the three dimensions as represented by (cognitive, skill, and attitude).

This study differs from the study of Thompson, Tony (2012) in relation to the pre-service preparation of math teachers for inclusion where the results have shown that field and summer activities have had positive effects on the pre-service visions of math teachers towards inclusion. Unlike those who did not have similar experiences in teaching students with disabilities, these effects were much more prominent than any other topics on teachers ahead of service.

**Table (9)**

**Test results of Kruskal-Wallis Test to reveal the significance differences between the mean levels of the postgraduate students of special education regarding the inclusion of students with disabilities as attributed to age.**

Dimension	Age	Number	Level Average	Chi-Square	Level of Significance
Cognitive	Less than (30)	7	33.29	2.526	0.283
	From 30 –less than 40 years	37	23.84		
	40 years and	6	26.67		
Skill	Less than (30)	7	34.57	3.342	0.188
	From 30 –less than 40 years	37	23.65		
	40 years and	6	26.33		
Attitude	Less than (30)	7	31.29	1.369	0.504
	From 30 –less than 40 years	37	24.81		
	40 years and	6	23.00		
The overall of	Less than (30)	7	33.50	2.601	0.272



<b>teachers' perceptions</b>	From 30 –less than 40 years	<b>37</b>	<b>23.85</b>		
	40 years and	<b>6</b>	<b>26.33</b>		

\* Significant at the level of (0.05)

\*\* Significant at the level of (0.01)

The previous table (9) shows the following:

- There are no statistically important variances at the level of (0.05) among the averages of the views of postgraduate students in special education with respect to the inclusion of students with disabilities at public schools which can be attributed to age whether it includes all the perceptions or only the three dimensions as represented by (cognitive, skill, and attitude).

**Table (10)**

**Test results of Kruskal-Wallis Test to reveal the significance differences between the mean levels of the postgraduate students of special education regarding the inclusion of students with disabilities as attributed to the years of experience.**

Dimension	Age	Number	Level Average	Chi-Square	Level of Significance
<b>Cognitive</b>	<b>Less than (5)</b>	<b>7</b>	<b>22.64</b>	<b>0.500</b>	<b>0.919</b>
	<b>5 to less than 10</b>	<b>13</b>	<b>25.12</b>		
	<b>From 10 – less than 15 years</b>	<b>20</b>	<b>25.68</b>		
	<b>15 years and</b>	<b>10</b>	<b>27.65</b>		
<b>Skill</b>	<b>Less than (5)</b>	<b>7</b>	<b>22.21</b>	<b>1.092</b>	<b>0.779</b>
	<b>5 to less than 10</b>	<b>13</b>	<b>23.35</b>		
	<b>From 10 – less than 15</b>	<b>20</b>	<b>27.58</b>		
	<b>15 years and</b>	<b>10</b>	<b>26.45</b>		
<b>Attitude</b>	<b>Less than (5)</b>	<b>7</b>	<b>27.29</b>	<b>0.298</b>	<b>0.960</b>
	<b>5 to less than 10</b>	<b>13</b>	<b>25.31</b>		
	<b>From 10 – less than 15</b>	<b>20</b>	<b>25.95</b>		
	<b>15 years and</b>	<b>10</b>	<b>23.60</b>		
<b>The overall of teachers' perceptions</b>	<b>Less than (5)</b>	<b>7</b>	<b>23.36</b>	<b>0.314</b>	<b>0.957</b>
	<b>5 to less than 10</b>	<b>13</b>	<b>24.65</b>		
	<b>From 10 – less than 15</b>	<b>20</b>	<b>26.15</b>		
	<b>15 years and</b>	<b>10</b>	<b>26.80</b>		



\* Significant at the level of (0.05)      \*\* Significant at the level of (0.01)

Table (10) shows that there are no statistically important variances at the level of (0.05) among the averages of the views of postgraduate students in special education as regards the inclusion of students with disabilities at public schools which can be attributed to the difference in years of experience whether it includes all the perceptions or only the three dimensions as represented by (cognitive, skill, and attitude).

### Review and discussion for the results of the qualitative research:

Three questions were raised to the students who joined the postgraduate program in special education. There were six students and they responded as follows:

#### **First Question: what is your evaluation of the quality of knowledge that you gained through your study in the postgraduate diploma in special education and how can we improve its quality?**

Students' responses on the subject of the quality of the postgraduate diploma in special education were shown on a five-degree scale with a "high" availability degree reflecting a high quality of knowledge offered by the program compatible with the developments and recent updates in special education. This is also in agreement with the results of the quantitative research with a cognitive dimension coming first with an arithmetic mean of (4.03) and a standard deviation of (0.488) with a "high" availability degree.

As for the strategy of improving the quality of knowledge, they varied in their responses. Table (11) sheds light on this.

**Table (11)**

#### **Special education postgraduate students' answers regarding how the quality of knowledge offered in the diploma program can be improved**

Question	Answer	Frequency
Through your course of study at the special education postgraduate diploma, how can we improve the quality of knowledge?	Understand the aspects and methods of educating students with special needs	3
	a richness of knowledge and an abundance in academic sources	3
	Relate knowledge with reality	2
	Activate the individualized educational plan	2
	Get students involved in this knowledge	1

Table (11) shows that the cognitive aspects of the nature of the disability and the characteristics of the disabled are predominant in special education postgraduate students' answers and responses to



improving the quality of knowledge offered to them. On the other hand students' involvement in this knowledge was the least mentioned.

However, most of the students' answers focused on understanding the aspects and strategies to teaching students with special needs in addition to the importance of enriching knowledge and relating it to reality and providing them with academic resources. One of the students whose name is (Meshal) indicated that "he benefited from the knowledge pertaining to people with special needs on whom it was applied. He also assures the importance of reviewing studies and information pertaining to people with disabilities and activating the individualized educational plan." (Khaled) also referred to "the importance of understanding the nature of people with special needs and the richness of knowledge linking it to reality in the field of special education". Moreover, (Ali) said "it is very important to know the properties of children with special needs, their methods of teaching and the behavioural problems that they face".

This obviously makes the cognitive and knowledge aspects very important to the postgraduate diploma students in special education; particularly in their search for and gaining of knowledge with them raising as many questions as possible to satisfy their curiosity and enthusiasm towards it.

As for students' participation in this knowledge, (Abdulrahman) refers to "the importance of involving all the students themselves with the knowledge offered to them and getting their feedback on it". This in turn reflects the importance of the student responses to the evaluation questionnaire in their courses to get their feedback on them and to take the knowledge, interests and experiences of students into consideration when planning for curriculum development.

**Second Question: what is your evaluation to the skills of dealing with people with special needs through your study in the postgraduate diploma in special education and how can we improve these skills?**

This question was addressed to the students who joined the postgraduate program in special education. There were six students and they responded by expressing their opinions on the quality of communication skills with people with special needs that they gained during their study at the diploma. Their responses were categorised according to a five-degree scale with a "high" frequency degree which indicates an improved quality of the skills of communicating with special needs people. These skills were taught to students in an attempt to keep up with modern updates in the field of special education. This agrees with the results of the qualitative research in which the skill dimension was ranked third with an arithmetic mean of (3.88) and a standard deviation of (0.583) with a "high" frequency degree.

As for how we can improve communication skills with people with special needs, the answers varied as clarified in table (12):

**Table (12)**

Special education postgraduate students' answers regarding how we can improve the skills of communicating with people with special needs

Question	Answer	Frequency
Through your course of study at the special education postgraduate diploma, how can	Courses, seminars and forums	5
	Field training	4
	Visits to the centres of special	4





we improve the skills of communicating with people with special needs	education	
	Communicating with people with special needs	3
	Participation in special needs clubs and associations	2
	Patience in dealing with them	1

Table (12) reveals that seminars and forums came first, while field training came second followed by visits to the special needs centres and communication with people with special needs. Lastly came involvement in special needs clubs and associations together with exercising patience when dealing with their needs.

This illustrates that the process of improving communication with people with special needs happens only through the practical application of the knowledge and information attained by students as well as through actual involvement in whatever might help in improving their ability to remain updated. (Ali) assures "the importance of having a good knowledge about children with special needs", (Meshal) also said that "each student with special needs has his own special communication style as each one represents a unique case that requires patience in communication". It is also extremely crucial for individuals to get involved directly with special needs institutions through visiting their clubs and associations and offering assistance. (Khaled) makes mention of the importance of getting involved with special needs through their clubs and gatherings.

**Third Question: Have your study of the postgraduate diploma in special education changed your attitudes towards students with special needs? How can we then develop the attitudes of students with special needs?**

This question was addressed to the students who joined the postgraduate program in special education. There were six students and they responded by expressing their opinions on changing their attitudes towards people with special needs during their study of the diploma. Their responses were sorted according to a five-degree scale with a "high" frequency degree. This indicated that the quality of the programs that the students attended was high and that they were kept up to date with modern developments in special education which contributed to their development of positive attitudes towards people with special needs. This is in line with the results of the quantitative research in which the attitude dimension was ranked second with an arithmetic mean of (3.93) and a standard deviation of (0.492) with "high" frequency degree.

As for how students' attitudes towards people with special needs can be developed, the answers varied as explained in table (12):

**Table (13)**

Special education postgraduate students' answers regarding how students' attitudes towards people with special needs can be developed

Question	Answer	Frequency
Through your study in the	Raising awareness and	4



postgraduate diploma in special education, how can students' attitudes towards people with special needs be developed	organizing exhibitions.	
	Seminars, meetings and conferences	3
	Strategies for approaching them	2
	The role of mothers in affecting fathers' attitudes. Parents groups and community participation.	2
	Visits to the special education centres.	1

Table (13) illustrates that raising awareness and organizing exhibitions came first, while the seminars, meetings and conferences together with the strategies of dealing with people with special needs came second and the role of mothers and their attitudes and community participation came third. In last place were visits to the special education centres.

This displays that the process of adapting social attitudes in general and students' attitudes in particular towards people with special needs requires the provision of aspects pertaining to knowledge, information and culture to different people through seminars, meetings, conferences and exhibitions. One of the students whose name is (Khaled) said "at the beginning we could not accept them and then later on we started to discover their characteristics and new aspects were made clear at a later stage". (Mesha) also said that "the school community should be familiar with some of the disabilities and how to manage them. We also cannot ignore the pioneering role of the mothers in looking after their disabled children and the effect they have on fathers' attitudes in taking the responsibility and showing the interests, care and attention through making groups for the parents of children with disabilities. (Taher) said that "we should invite parents of the disabled to take their children with them". In addition, we should visit the local community institutions, see their responsibilities towards children with disabilities, and get familiar with the activities and services that they offer.

## Recommendations

### Program Recommendations

Suggestions centred on improving the overall efficiency of student teachers' preparation schemes are provided in line with the present study's findings. Student teachers who have been involved in this study have made suggestions with a view toward enhancing the internships and training, and also expanding the teaching skills of professors.

### Internship and Training

Collaboration between districts and departments in the special education field should be established in an effort to allow students to practice what they have learnt at a university level. Student teachers hold the view that training time spent in actual classrooms is the most critical aspect of a preparation programme, with such initiatives being needed to direct importance to such experiences. It is recognised that the programme, in its early stages, should afford such experiences, which should continue on through to the internship and practicum stages. The internship length should also be



longer, i.e. for a one-year period. Lastly, students should be provided with feedback consistently and regularly in an effort to enhance their teaching abilities.

### **Professors' Teaching Skills**

Professors should provide their students with training through in-classroom practice sessions. Furthermore, there should be a direct connection between the professor and the field, with students benefitting from the presentation of real-life case studies. It is submitted that professors should lecture less, and instead direct their efforts towards helping students to acquire and implement the skills needed in the actual classroom setting. Moreover, it would be valuable for special education departments to give students the opportunity to assess their professors following the conclusion of each semester, where such evaluation would be pivotal in improving in-classroom teaching.

### **Implications for Further Research**

Thus far, there is a lack of research centred on dealing with the competencies possessed by teachers with regard to enabling them to successfully teach those with learning disabilities in the context of Saudi classrooms. However, there have been studies carried out with the view of supporting the idea that student teachers are required to have a certain wealth of skills and knowledge, in addition to positive outlooks, to facilitate themselves in teaching inclusive classrooms—along with preparing for such a task (King-Sears & Cummings, 1996; National Center for Educational Statistics, 1999).

### **Conclusions**

In the current study, the student teachers by and large demonstrated positive viewpoints towards teaching students with special needs within their mainstream classrooms. Moreover, their knowledge and skills self-report levels were mostly pleasing. The perceptions of knowledge and skills levels following the completion of teacher education programmes provide valuable insight into how high quality programmes can be delivered in such a way as to ensure teachers are given the tools and skills they deem necessary to teach classrooms including students with special needs. Following the completion of student teaching courses, it would be useful for general education student teachers to recognise that special education knowledge is not adequate in allowing them to successfully work with students with special needs in the classroom.

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## THE RESPONSES ON STUDENTS CREATED BY BEHAVIOURS OF UNIVERSITY LECTURERS IN EDUCATION ENVIRONMENT

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### Abstract

The aim of this research is that evaluating students' opinions about which behaviours of university lecturers, who work at X university situated in the town of Güzelyurt Lefke, win recognition. Qualitative research methods were used in the research to collect data. Survey technique was used for assessing students' opinions. With the aim of assessing students' opinions data were analysed with descriptive analysis and data reduction methods. Students form the universe of the research. The sample of the research has been formed by 20 students who are first grader at X university's Guidance and Psychological Counselling department. As a result of the research, the behaviours like; always doing verbal lessons, giving lectures with slides and not doing active lessons were stated by students as disliked behaviours of lecturers. In addition, it has been identified that encountered problems in the classroom can be solved by informing teachers about classroom management by in-service trainings.

**Key Words:** University Lecturers, University Student

### Introduction

University is an institution of higher education and science which give education in various areas, research and composed of faculties. In these days, formations called university are built and managed in a way to appeal to large masses of people. Firstly, university is not a kindergarten, primary school, secondary school or high school. Therefore all the people who want to go and have education cannot have the chance (while the opportunity of having education at university is high in some countries, it is not same in other countries). There is a certain entry procedure. Anyone who fulfils these conditions can have the opportunity to have education. They get training from high qualified and educated people. Getting training is not about just listening to the teacher and taking notes. It is done by doing homework, doing project, writing essay, doing research on internet and in library, doing experiments at laboratory and doing written and oral formats in scientific debates and communication. One of the duties of university lecturer is doing "scientific research". Doing scientific research takes considerable time of the lecturer. The purpose of the research conducted by lecturer is to make discussions about the nature and the results (Erdem, 2005).

University lecturer is a name given to assistant professors, associate professors and professors work at university. Assistant professor is the lecturer who has completed a PhD and has academic studies. In order to get the title of associate professor some exams should be passed. The ones who will be selected from associate professors are required to have certain characteristics in order to receive the title of professor.

Assistant professors, associate professors and professors who work as university lecturers have to be at university and work at certain times accepted for civil servants. However they can work on their branch not to exceed ten hours per week and by disrupting university jobs. Teacher-student relationship is effective on the efficiency of educational activities. Learning in the classroom depends on what things are taught, why and how as much as students' perception of the teacher. Students have great interest to a loved and respected teacher's lesson, but a teacher-student relationship inspiring fear and anxiety is important in terms of the development of the student's cognitive, emotional and social aspects. For a healthy development, student should be in a sense of trust and classroom atmosphere where love and attention that he needs are shown (Oğuzkan, 1981).

Most people think that students' thoughts about their teacher are indicators of the teachers' efficiency. "Students' evaluation of the teacher's efficiency is about evaluating the students' perceptions about



this” ( Simmons,1996 ). On the other hand educators do not agree about these types of sources about students’ perceptions or reactions.

Learning outcomes can be cognitive, affective, psychomotor and intuitive. Many variables which affect these can work in educational environment. A small change in one of these areas can influence and also change cognitive, affective, psychomotor and intuitive areas. This change can be provided by the interaction between the learner and the teacher. Modeling is important in this interaction. The person who is taken as a model at schools is usually the teacher. Teachers’ consistent behaviors can affect the student who takes the teacher as a model and he can have consistent behaviors. The taken model can be effective on the individual’s character, self-awareness, self-esteem, self-confidence and development of character. If this model is recognized, admired, liked, reinforced and shows similarity, his effect is much more on the learner (Alacapınar, 2005).

By taking model, learning can be embodied, may be supported or blocked, reaction may be facilitated, the emotions can be increased and interest can concentrate. The teacher taken as model may affect the student’s affective characteristics. According to the conducted researches, success of the student is affected by cognitive entry behaviors, affective entry characteristics and quality of education services. In the teaching service quality, there is feedback, correction, reinforcement and student’s effective participation. The person who will perform these is the teacher. Therefore the teacher should use these in the teaching environment. If he uses can be a consistent model and positive affective properties can be developed.

According to the data from the indirect researches it can be said that, love, interest in the course, positive attitude, family, environment, affective styles and strategies affect the student’s interest and attitudes to the courses positively. This kind of positive attention and positive attitudes can be expected to create interest and attitudes in students (Alacapınar, 2005). These positive interest and attitudes can be devoted to the course, the teacher, the school, family or the person concerned. In this research, it has been aimed to determine which behaviours are shown by the teachers in the education environment, how students are influenced by these behaviours and to find a solution to this. Positive and negative teacher behaviours can affect students’ cognitive, affective and psychomotor and intuitive behaviours. If these are determined, more effective learning environment can be provided.

If students gain a consistent and positive affective characteristic, they may a healthy psychological structure. In this research, focus group discussions of quantitative and qualitative research methods were used. At the end of the semester after the final exams the question “which attitudes and behaviours of the lecturer .... who teaches .... course created which senses in you?” was asked before the grades were announced (Alacapınar, 2005).

University students’ general problems can be sorted as; when the problems set forth in some of the research issues that are raised in relation to the students are thought with the development and compliance issues, it can be understood to some extent that they try so hard to continue their efforts to prepare for life and profession. Research conducted abroad and domestic have emphasized that the weight is given to the students’ mind and academic development, physical development, social development, using the leisure time and the provided facilities to meet the individual needs are limited, and the students’ physical, health, social and personal development should be parallel to the mind and academic development (Tan, 1954; Özgüven, 1974; Köknel, 1979; Özgüven,1988).

In several conducted research, as a microcosm of the problems faced by university students were given in some problem areas. In the research generally conducted with problems scanning inventory, the problem areas faced by university students were categorised as (1) future, (2) finding job and financial



life, (3) university life, (4) social and leisure, (5) health, (6) learning and teaching methods, (7) having relation with people, (8) family, (9) the opposite sex relationships, (10) problems associated with religious and moral (Tan, 1954; Kinney, 1958; Özdemir, 1985).

In the research conducted about areas of conflict that students have with family, school and other institutions, (1) girlfriend-boyfriend and social life, (2) family values and generational conflict, (3) conflict with school, (4) conflicts with religious and philosophical thoughts and opinions are determined as conflict subjects that students have with community agencies (Oskay, 1981). “Student evaluations can be due to many factors such as teacher knowledge, willingness, interest in other people, a sense of humor” (Coats,1972).

Another important case is the teacher-student relationship. This relationship can prevent or make easy the learning for student, so it can change student’s perception. “Teacher’s personal behaviours affect not only the students’ behaviours but also form the social and emotional base needed for teacher to reach the mastery of communication and students. Conducted studies show that the quality of the relationship between the teacher and the students is an important determiner for students’ success and behaviours” (Soerjaningsih, 2001).

## Method

Qualitative research methods were used in the research and the questions “which features do you want to see in lecturers?” and “which features are you seeing in lecturers?” were asked to the students. After that it is asked to students to write their thoughts about the lecturers’ behaviours. These were gathered by using open ended data collection tool. Students’ solution suggestions were taken under two titles according to the questions mentioned above. About these problems and appropriateness, ideas were got from ... experts and ... relation was found between these ideas. And this was accepted as a proof for the tools’ validity. Later, these data were analysed with descriptive analysis and data reduction methods. For this, first each student’s given answers devoted to the heading then data reduction methods were used to classify the collected data according to the problem and sub-problems and these data have been studied in depth and expansion then they have been simplified and experienced problems are divided into categories.

## Study Group

The research has been conducted to 20 students who are first graders at European University of Lefke in TRNC, Guidance and Psychological Counselling department in 2013-2014.

## Data Collection Methods

“Survey” was used to get students’ opinions. Before preparing the survey, problem and sub problems were identified. Questions were asked open, understandable and according to the problem and sub problems. Open ended questions were used and it was asked to students to write the behaviours of lecturers which disturb and which do not disturb without writing their names. Students’ answers were put into the research without correction.

## Data Analysis

Which behaviours of lecturer do university first graders love? Which ones they do not love? and what are their solution suggestions? The responses given by students about lecturers’ behaviours were firstly analysed with descriptive analysis and data reduction.

1. *The features of lecturers that students want to see*



The responses taken from the students about the features of lecturers that students want to see were shown in Table 1.

Table 1. The features of lecturers that students want to see

The Features Of Lecturers That Students Want To See	N	%
Mutual communication in the course	4	10
Giving the course without boring the students	2	5
Faculty members should be supportive	1	2
We do not want threat	6	15
Faculty member should have enough knowledge	1	2
To be in dialogue with students	11	27
In the course, faculty member should go beyond the course notes	2	5
Faculty members should be friendly	8	20
Faculty members should be sensitive and insightful	1	2
Efficient processing of lesson	1	2
Faculty members' motivation should be high	4	10
Total	41	100

The data in Table 1 shows number and percentages of answers given about lecturers' behaviours that they want to see. Students' responses about lecturers' behaviours can be collected under 11 titles by using data reduction method. According to this, there are 33 responses given by the students about lecturers behaviours. The behaviours that students want to see most are; to be in dialogue with students (27 %) and faculty members should be friendly (20%). We do not want threat (15%), mutual communication in courses (10%) and giving course without boring students (5%) come next. The least wanted behaviours are lecturers should be supportive (2%), lecturers should be sensitive and insightful (2%) and efficient processing of lesson (2%).

The behaviour of "lecturers should be supportive" has been defined as "lecturers should not push the student into the background in case of failure. On the contrary, they should be supportive to attract the students up".

The behaviour of "faculty members' motivation should be high" has been defined as "In the course we want one to one attention and motivation our teachers to be high. When the motivation of the lecturer is not fine, students' motivation is not good too".

"To be in dialogue with students" behaviour has been defined as "We want our teachers to be in dialogue with us instead of going out of the classroom after finishing the lesson, because we are not math students, we are guidance and psychological counselling students and we want our teachers to be model for us. We should see something from them to apply in our lives. Our department should not be like teaching the subject and get out from the classroom. This should not be what we learn from them and they should always listen to us".





“We do not want threat” behaviour has been defined as “students should never be threatened and he should listen to the lesson not for the grade but for learning something”.

“Mutual communication in the course” has been defined as “Teaching should be mutual with students in general, like a chat and discussion”.

“Faculty members should have enough knowledge” has been defined as “Lecturer should present his knowledge by having enough knowledge, getting students interest and bringing the course into the limelight”.

“In the course, faculty member should go beyond the course notes” has been defined as “Faculty member should not be angry when students ask something which he does not know and he should say ‘I do not know the answer and I will share later, after I search for it. He should not use the course notes as a shield, go beyond the notes and add something to the course from their own knowledge, not always only slides.”

“Faculty members should be friendly” has been defined as “faculty members should be friendly even in difficult circumstances. Whatever he lives in his private life, there should be a smile on his face”.

“Faculty members should be sensitive and insightful” has been defined as “lecturers should be more interested, more sensitive, and more insightful and they should not reprehend the students like they are children. They are wanted to be more sensitive toward students”.

“Giving the course without boring the students” has been defined as “lecturers should make the lesson more enjoyable. They should not read from the slides all the time. That bores students and the lesson becomes more boring”.

“Efficient processing of lesson” has been defined as “Our new young teachers should be more interested and prepared for the lessons. Visual presentations provide more efficient lessons. We want our teachers to be more motivated to have more efficient lessons”.

## 2. *The features of lecturers that students see*

The answers of twenty students, who were asked questions about lecturers’ behaviours they see, were analysed by descriptive analysis and data reduction. Given answers were presented in Table 2

Table 2. The features of lecturers that students see

The features of lecturers that students see	N	%
Giving verbal course	9	26
They threat	2	6
They are conversable	1	3
Not giving active course	4	11
Being insightful	1	3
They do not behave equally	5	14
Giving too much weight to examination	5	14
They do not talk like a friend	1	3
They are open-minded	2	6
They have difficulty to empathize	3	9
Their lecture format is not true	1	3



They are friendly	1	3
Total	35	98

Number of answers and percentages about behaviours of lecturers that you see are shown by data in table 2. Students' answers about behaviours of lecturers can be gathered under 12 titles by using data reduction method. According to this, students have given 35 answers about faculty members' behaviours. The most seen behaviour of the faculty members are "giving verbal courses" (26%), "they do not behave equally" (14%) and "giving too much weight to examination" (14%) among the given answers.

"Not giving active courses" (11%) and "having difficulty to empathize with students" (9%) come next. The behaviours which are seen least are; "to be open-minded" and "threatening" (6%), "being friendly" and "being insightful" (3%), "their lecture format is not true", "they do not talk with students a friend", and "they are conversable" (3%).

"They are friendly" has been defined as "Our teachers are friendly because of being young. We can find them whenever we want and they listen to our problems. There is not any our teachers who are not like a friend."

"Their lecture format is not true" has been defined as "I do not like lecture format of some lecturers because they only read from the book all the time. I do not think that this kind of lecture is efficient and true."

"Not giving active course" has been defined as "Reading from the slides and not adding something from themselves causes non-active course."

"Giving verbal course" has been defined as "because our lessons are verbal, all of our lecturers give the courses in a way of mutual expression."

"They threat" has been defined as "some of our teachers threat us with homework or about grades. I think this is not an appropriate behaviour."

"Being insightful" has been defined as "being insightful and friendly of faculty members towards students touches me."

"Having difficulty to empathize" has been defined as "I think it is normal to have difficulty to empathize and to be excited of some teachers who are new and young."

"They do not behave equally" has been defined as "I think some students cringe to the teachers to have a few extra points and the teachers allow for this behaviour which is an annoying situation."

"They do not talk like a friend" has been defined as "some teachers make us to feel that they are teachers and they precede us."

"They are conversable" has been defined as "some of our teachers are so conversable. They are like a brother or sister to us. They do not have communication problem with us and they are very conversable. They do their best to help us."

"Giving too weight to examination" has been defined as "generally because of lecturers' attitudes but some lecturers' behaviour of giving too much weight to examination, students feel too much pressure."



“Being open-minded” has been defined as “some of our teachers draw attention because of being too open-minded. They do their best to prepare their students to the job and life.”

## Conclusion and Recommendations

Students have problems about their teachers’ lecture format which they give courses verbally and by using slides and not giving the course actively. One of the reasons of these problems is that lecturers are young and unexperienced. Giving the courses verbally stems from the fact that their course contents are verbal.

The reason of not giving the course actively has been determined as giving the course based on only the slides and they do not add anything form themselves. Another important problem has emerged as “I do not like some lecturers’ course format. They read from the book all the time. I do not think that this kind of format is efficient and true”. For the solution of the problem about not giving the course actively, students have suggested “to give the course in a way of mutual communication and with discussion”.

Another important problem has emerged as “some of our teachers threat us with homework or about grades. I think this is not an appropriate behaviour. Also generally because of lecturers’ attitudes but some lecturers’ behaviour of giving too much weight to examination, students feel too much pressure. I think it is normal to have difficulty to empathize and to be excited of most faculty members who are new and young but another annoying situation is some students cringe to the teachers to have a few extra points and I think the teachers do not behave equally by allowing for this behaviour.

Students’ solution suggestion for this problem is; “students told that threatening the students with grades is a wrong behaviour and to understand the student they should do their best by stooping students’ level. Also a lecturer should know that those students are university students. Their goal should be teaching more that examination and they should behave fair”.

Students’ solution suggestions for the problems they have with their teachers has been determined as “faculty members should be cheerful and friendly to the students, have high motivation and enough knowledge, be able to have a good communication with students and be well-prepared to give an efficient course”. Besides psychological counselling and guidance, having competent and experienced psychologists in the university may expedite the solutions for these problems. Relationships can be better, if there is a separate department for teachers and manager to have counselling and if there is not discrimination. In addition to this, informing teachers who have problems in the classroom about classroom management via in-service trainings might be a solution for problems encountered.

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## KAYGI BOZUKLUĞUNUN BİR TÜRÜ OLAN PANİK BOZUKLUĞUNA AİLE TERAPİ YÖNTEMLERİYLE BERABER İNCELENMESİ

### AN INVESTIGATION INTO PANIC-DISORDER AS A PART OF ANXIETY-DISORDER REGARDING FAMILY THERAPY METHODS

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#### Özet

Bu çalışmanın amacı; panik bozukluk sebebiyle panik atak yaşayan insanların tedavilerinde dikkate alınabilecek olan aile terapi yöntemleri ile ilgili kısa bir derleme yaparak ilgili literatüre hem katkı sağlamak hem de popüler olmasına rağmen hakkında çok az yayın bulunan bu konuya dikkat çekmektir. Bu sebeple; kaygı bozukluğu ve buna bağlı oluşan panik bozukluk ve panik atak kavramları tanımlanmış ve bu tanımlamalardan elde edilen çıkarımlara bağlı kalarak hangi aile terapi yöntemlerinin uygun olacağı ve nasıl uygulanması gerektiği ile ilgili literatür destekli açıklamalara yer verilmiştir. Buna göre; panik bozukluk kaygı bozukluğunun altında bulunan türlerden sadece biridir. Toplumumuzda panik bozukluğun atağa geçmiş durumu olan panik atak diğer hastalıklarla karıştırılmakta ve Türk Literatüründe fazla bilinmeyen panik bozukluk gelişen teknoloji ve stresli yaşam biçimiyle günümüzde çok fazla yaygınlaşarak devam etmektedir. Toplumumuzda panik bozukluğu olan çoğu insan bu durumu kabullenmek ve tedavi olmak yerine bu durumun kaderleri olduğuna inanır ve bu şekilde yaşamaya çalışarak hem kendilerini hem de ailesinin hayatını zorlaştırırlar. Tedavi sürecinde ise en etkili ve ilaçsız tedavi yöntemi olan BDT'nin kişinin beyin yapısındaki nörolojik ağa etki ettiği Fonksiyonel Manyetik Rezonans Görüntüleme yani fMRI (functional magnetic resonance imaging) olduğu saptanmıştır.

**Anahtar Sözcükler:** Kaygı bozukluğu, panik bozukluk, panik atak, BDT.

#### Abstract

The aim of this study is to conduct a short review of the related literature about panic attack, panic disorder, and anxiety disorder, of which many suffer although little known about them and the family therapy methods, which have been frequently considered for the healing process of the psychological state. For this reason, the first attempt was to define anxiety disorder and panic disorder. Review continued with elaborating on the factors causing panic disorder and panic attack. Following that, the sort of family therapy method, which is needed in regard to the nature of the attack, has been negotiated on the basis of the definitions derived from the related literature. The results of the review yielded that in our culture panic attack syndrome caused by panic disorder is being confused with other types of anxiety disorder since the symptoms are quite similar. The related literature, which defined panic disorder and other anxiety types have been mostly based on Western culture and represent their understanding of the problem. According to western expressions, the best therapy method is the Cognitive Behavioral Therapy formed by family therapy methods and the most contemporary method of detecting panic disorder is the use of Functional Magnetic Resonance Imaging (fMRI), which physically shows evidence regarding the existence of panic disorder.

**Keywords:** Anxiety disorder, panic disorder, panic attack, CBT.

#### Giriş

Panik atak günümüzde hemen hemen herkesin aşına olduğu veya bir yerlerden işittiği bir terim olmasına rağmen aslında hakkında çok az şey bildiğimiz bir duygu durumudur (Köroğlu, 2010). Genç yaşlı bir çok kişinin muzdarip olduğu bu durumun tam olarak ne olduğu, hangi faktörlerden etkilenecek ortaya çıktığı, sebep sonuç ilişkisi içerisinde nasıl çözümleneceği ve nasıl tedavi edileceği ile ilgili çalışmaların eser miktarda olduğunu görmekteyiz. Panik atağın, özellikle bizim kültürümüzde tecrübe edenler tarafından nasıl tanımlandığını bilmememiz kendi kültürümüze ve insanımıza uygun bir tanım getirme sürecini de uzatmaktadır. Ancak konuya ilişkin yapılmış çalışmalardan yola çıkmaya çalıştığımızda ise yapılan çalışmaların alan yazın içerisinde dağınık olduğu ve bir bütün arz etmedikleri için dikkat çekmedikleri düşünülmüştür (Köroğlu, 2010). Panik atağın tam anlamıyla ne olduğu, nasıl tanımlandığı ve güncel tedavi yöntemlerinin neler olduğu ile ilgili alan yazındaki verilerin dağınık oluşu bu derleme çalışmasının gerekliliğini gündeme getirmiştir. Bahsedilen bu durum dikkate



alındığında bu çalışmanın amacı hem dünya literatürünü hem de Türk literatürünü tarayarak panik atak sendromunun tam olarak ne olduğunu, nasıl geliştiğini, dinamiklerinin ve tetikleyicilerinin neler olabileceğini, nasıl teşhis edileceğini ve tedavi yöntemlerindeki güncel gelişmelerin neler olduğunu derleyerek açıklamaktır.

## Yöntem

Bu çalışması nitel araştırma paradigmasına bağlı olup içerik analizi ve betimsel derleme teknikleri kullanılarak yürütülmüştür. Bu derleme çalışmasının yürütülmesi esnasında dikkate alınacak eserlerin hangileri olacağına çalışmanın amacındaki sınırlılıklara bakılarak karar verilmiş olup, makalelerin analize dahil edilme kriterleri veya analizden çıkartılma kriterleri buna göre geliştirilmiştir (Hsieh ve Shannon, 2005). Dünya literatürü taranırken Thomson Reuters ajansına bağlı Social Science Citation Index (SSCI) kapsamındaki eserler, ERIC ve google scholar veri tabanları araştırmanın temel veri kaynaklarını oluştururken Türk literatüründeki kaynakların taranmasında dikkate alınan veri tabanları TÜBİTAK' a bağlı ULAKBİM Sosyal ve Beşeri Alanlar Araştırma veri tabanı ile google akademik olmuştur. Bu araştırma desenine ek olarak yürütülen kütüphane araştırması sürece kitaplar ve süreli yayınlarla destek vermiştir.

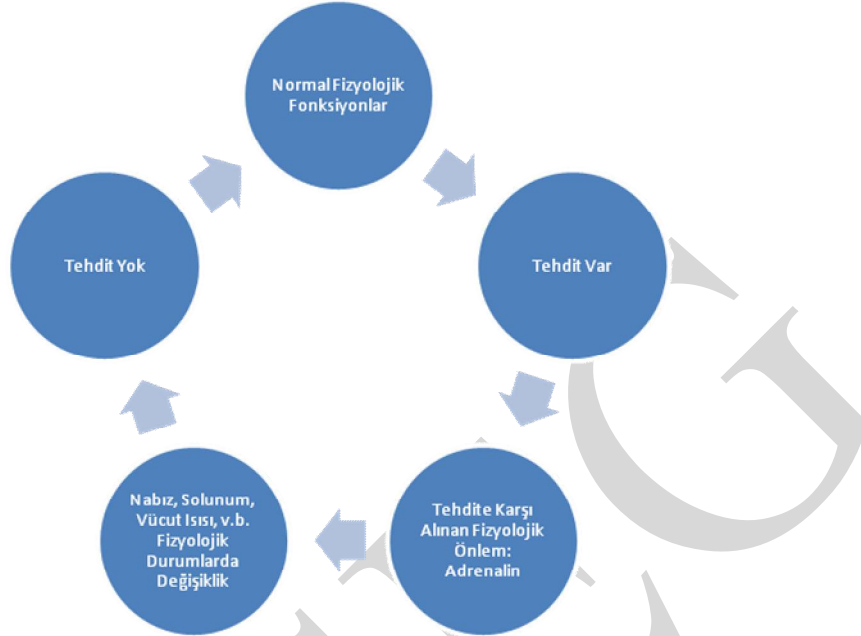
## Kavramlar (Kaygı Bozukluğu, Panik Bozukluk, Panik Atak)

Panik atağın tam olarak ne olduğu ya da kökenin ne olduğunu anlayabilmek için kaygının ne olduğunu bilmemiz gerekmektedir. Kaygı her sağlıklı bireyde var olan ve hayatın devamı için gerekli olan önemli bir insan donanımdır. Kaygı denildiğinde akla ilk gelen her ne kadar olumsuz bir çağrışım olsa da aslında olumsuz olan kaygının hiç olmamasıdır. Kaygı insanın korunma mekanizmasını harekete geçiren bir duygu durumudur (Brown, LeBeau, Liao, Niles, Glenn, & Craske, 2016). Önemli olan kaygı döngüsü adı verilen döngünün başlaması gerektiği yerde başlaması ve bitmesi gereken yerde son bulmasıdır. Brown ve arkadaşlarına göre (2016), kaygı; insanın ani tepki vermesi, kaçması, korunması, saklanması, aşık olması gibi ani duygu durum değişikliği ve herhangi bir koşulda kendini güvence altına alma ihtiyacı duyduğunda ortaya çıkan semptomlar bütünüdür. Kişi bildiğinden değil bilmediğinden korkar ve kaygılanır. Bu durum normal heyecan döngüsü ile tanılanır (Apfeldorf, Shear, Leon, & Portera, 1994). Tanılanan bu heyecan döngüsünde başlangıçta stabil seyreden duygu durumuna içerden veya dışardan bir müdahalenin gelmesiyle tetiklenir (Koroğlu, 2010). Örneğin tanımlanamayan bir merkezden aniden gelen çok yüksek bir sese karşın kişinin aniden nabzının artması, göz bebeklerinin büyümesi, nefes alış verişinin artması ve buna eşlik eden terleme tamamen normaldir. Bunun sebebi insan vücudunun hayatta kalma içgüdüsüyle kaynağını bilmediği bir yerden gelen sese tepki olarak kendini güvence altına almak için önkoşulları hazırlama durumuna bağlıdır (Brown, LeBeau, Liao, Niles, Glenn, & Craske, 2016; Koroğlu, 2010). Yine Koroğluna göre, bu hazırlık vücudun adrenal hormonu salgılamasıyla başlar. Salgılanan adrenal nabzı arttırır, retinayı genişletir (göz bebeği açılır), solunumu arttırır ve vücutta terleme oluşur.

Bu durumların ortaya çıkması tesadüf değildir. Ortada kaynağı belirsiz bir tehlike olabilir ve insan hayatta kalmak için bu tehlikeden kaçmalıdır. Tehlikeden kaçabilmesi ani hareket edebilmesine bağlıdır (Barlow, 2002). Sıcakkanlı bir yapıya sahip olan insan tehlikeden aniden uzaklaşabilmesi için ani hareket etmesi gerekir ve bu yüzden bu ani hareketi destekleyecek tüm vücut kaslarının kana ihtiyacı vardır. Salgılanan adrenaline artan nabız kasları bu açıdan doyurmuştur, kişi ani fiziksel hareketler yapabilir. Gözbebekleri normalden fazla açılmıştır çünkü ani hareketler esnasında koordinasyonu sağlayabilmesi için daha fazla ışığa ve netliğe ihtiyacı vardır. Artan solunum bu olaylar olurken vücudun gereğinden fazla ihtiyaç duyacağı oksijenikarşılacaktır. Bütün bu olaylar olurken vücut ısınacağı için soğuması gerekecek ve önceden terlemeye başlamış vücut ısı dengesini koruyacaktır (Brown, LeBeau, Liao, Niles, Glenn, & Craske, 2016; Koroğlu, 2010). Ancak, tehlike geçtikten sonra veya gelen sesin kaynağı çözümlendikten ve herhangi bir tehlike olmadığı anlaşıldıktan sonra kaygı durumunun etkisini hızlıca kaybetmesi ve duygu durumunun tekrar stabil bir



hal alması beklenir. Her sağlıklı insanda bu ve türevleri ile var olan kaygı durumunun fizyolojik döngüsü aşağıdaki figürde gösterildiği gibidir (Bknz, Figür 1.1.).



**Figür 1.1. Kaygı Durum Döngüsü**

Kaygı bozukluğu normal kaygı döngüsünün bozulduğu, sekteye uğradığı veya çalışmaması gerektiği yerde çalışması durumlarında ortaya çıkar ve kendini çok farklı formlarda gösterir (Carleton, Duranceau, Freeston, Boelen, McCabe, & Antony, 2014; Mahoney, & McEvoy, 2012b). Bunlar DSM 5’te de öngörüldüğü gibi ‘Ayrılma Kaygısı Bozukluğu, Seçici Konuşmazlık (Mutizm), Toplumsal Kaygı Bozukluğu (Sosyal Fobi), Panik Bozukluğu, Agorafobi, Yaygın Kaygı Bozukluğu, Maddenin/İlacın Yol Açtığı Kaygı Bozukluğu, Başka Bir Sağlık Durumuna Bağlı Kaygı Bozukluğu, Tanımlanmış Diğer Bir Kaygı Bozukluğu, Tanımlanmamış Kaygı Bozukluğu’ dur (American Psychiatric Association, 2014). DSM 5 bu açıdan incelendiğinde, kişide bu formlardan sadece bir tanesi olabileceği gibi birden fazla kaygı bozukluğu formu da olabileceği anlaşılmaktadır.

Örneğin; kaygı bozukluğuna bağlı panik bozukluk yaşayan kişi aynı zamanda agorafobi de yaşayabilir. DSM 5’e göre kaygı döngüsünün nasıl bozulduğu veya neden bozulduğu tam olarak bilinmemese de, literatür bazı varsayımlardan bahsetmektedir. Bir grup araştırmacı bu durumu taşıyamadığımız, bize bir bakıma ağır gelen duygularımızın, bedenimiz aracılığıyla dışa vurumu olarak nitelendirirken (Fentz, Arandt, O’Toole, Hoffart, & Hougaard, 2014; Fentz, Hoffart, Jensen, Arandt, O’Toole, Rosenberg, & Hougaard, 2013) bir diğer grup araştırmacı ise bireylerin çocukluk ve ergenlik dönemlerinde maruz kaldıkları bazı durumlara karşı geliştirdikleri ani heyecan dalgalanması sonucu olarak tanımlamaktadırlar (Austin, & Sierra, 2015; Yang, Kircher, & Straube, 2014). Kaygı bozukluğunun sebebi tam olarak bilinmemese de yukarıdaki kaygı bozukluğu durumları ve ilgili semptomatik özellikleri DSM 5’de tanımlanmıştır.

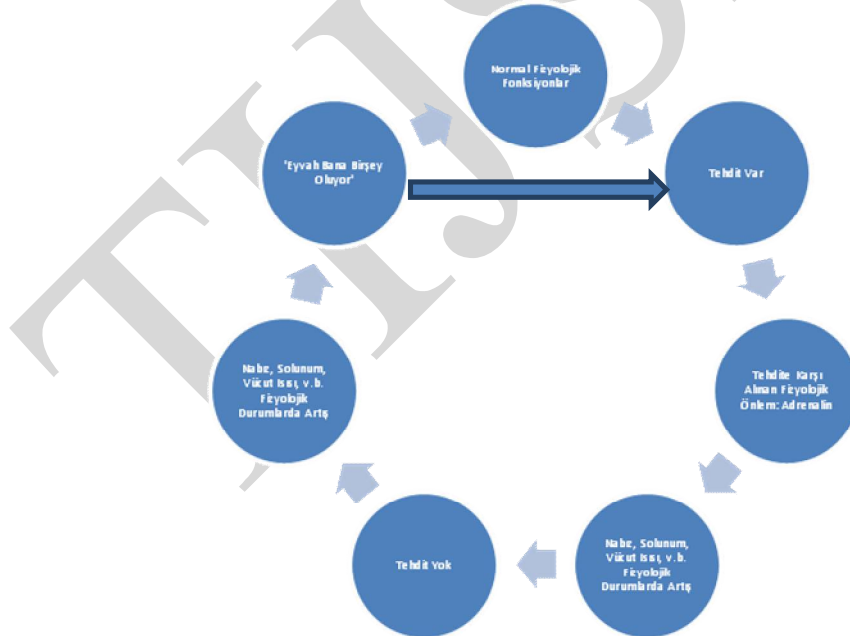
Bu çalışma kapsamında ele alınacak olan kavram kaygı bozukluğunun bir formu olan panik bozukluğu ve buna bağlı ortaya çıkan panik atak durumudur. Bu yüzden tanımlanacak bir diğer kavram panik bozukluktur. Panik bozukluk teknik ve fizyolojik olarak kaygı durumunun kısır döngüye girmesiyle tanılanır. Taranan literatüre göre, kaygı bozukluğunun bu formunda kişi normal kaygı semptomlarını yaşamaması gerektiği yerlerde yaşar veya var olan bir kaygı durumundan çıkamayıp normal kaygı durumunu bir kısır döngüye sokar (Köroğlu, 2010). Örneğin; kişinin tehlikenin var olmadığını fark



etmesine rağmen vücudunun adrenalin salgılamaya devam etmesi ve normal heyecan semptomlarını tekrar tekrar tecrübe etmesi panik bozukluğun var olduğunu gösterir. Bu semptomların ortaya çıkması ve kısır döngüye girme anı paniğin bozulduğu ve atak yaptığı anlamına gelir. Takip eden figürde panik bozukluğa bağlı kısır döngüye girmiş panik atak döngüsü gösterilmektedir (Bknz, Figür 1.2.).

Dolayısıyla bu durum panik atak durumu olarak adlandırılır. Kaygı bozukluğunun bir formu olan panik bozukluğa bağlı olarak ortaya çıkan panik atak durumu ve bu durumda kişinin yaşadıkları semptomlarıyla birlikte DSM 5’de detaylı olarak verilmiştir. Aşağıdaki tablo bu semptomların kısa özeti niteliğindedir.

1. Çarpıntı, kalbin küt küt atması ya da kalp hızının artması.
2. Terleme
3. Titreme ya da sarsılma.
4. Soluğun daraldığı ya da boğuluyor gibi olma duygusu.
5. Soluğun tıkanıldığı duygusu.
6. Göğüs ağrısı ya da göğüste sıkışma.
7. Bulantı ya da karın ağrısı.
8. Baş dönmesi, ayakta duramama, sersemlik ya da bayılacak gibi olma duygusu.
9. Titreme, üşüme, ürperme ya da ateş basması duygusu.
10. Uyuşmalar (duyumsuzluk ya da karıncalanma duyguları).
11. Gerçekdışılık (‘derealizasyon’, gerçekdışı olma duygusu) ya da kendine yabancılaşma (‘depersonalizasyon’, kendinden kopma duygusu).
12. Denetimi yitirme ya da çıldırma korkusu.
13. Ölüm korkusu. (American Psychiatric Association., 2014)



Figür 1.2. Kaygı Bozukluğuna Bağlı Panik Atak Döngüsü

## Tanı Koyma ve Terapi Süreci

Panik atak semptomları kaygının bozulmasına bağlı olarak ortaya çıkabildiği gibi depresyon, madde kullanımı ve bir takım organik sağlık durumlarında meydana gelen bozulmalar sonrası da ortaya





çıkabildiğini vurgulanmaktadır (Başaran, & Sütçü, 2016; Mahoney, & McEvoy, 2012a). Dolayısıyla tanı koyma aşamasında diğer faktörleri elemek için kişinin tam bir tıbbi taramadan geçmesi ve organik herhangi bir bozukluğa sahip olmadığı teşhisinin konması gereklidir. Yukarıdaki semptomlar organik veya kaygı bozukluğu dışındaki diğer duygu durum bozukluklarından ortaya çıkmıyorsa panik bozukluktan dolayı ortaya çıkıyordur ve bu tanıyla birlikte tedaviye başlanır.

Terapi süreci; panik bozukluk tedavisiaile bireylerini de dikkate alan bir süreçtir. Problem bireyseldir ancak tedavisi aile bireylerinin anlamlı desteğiyle mümkündür. Aile bireyleriyle bir arada gerçekleştirilecek olan oturumların yanı sıra aile bireylerinin ayrı ayrı dikkate alınacağı oturumlarda olmalıdır. Aile bireyleri panik bozukluk rahatsızlığı olan kişiye nasıl davranacakları konusunda ve panik bozukluğun ne olduğuna ilişkin bilgilendirici terapi alırlar (Corey, 2008; Özabacı & Erkan, 2014)

İlk oturumda temel amaç, ortaya çıkan problemin ne olduğunu kabaca belirlemek panik atak ve panik bozuklukla ilgili genel bilgiler vererek ailenin katılımını ve görüşmenin paylaşılmasını sağlamaktır (Sungur, 2003). Yine Sungur'a göre; ilk görüşmede ailedeki her üyenin terapi sürecinin bir parçası olduğunu ve ailedeki bir sorunun hiçbir zaman ailedeki bir tek kişinin problemi olmadığını en az birkaç aile üyesini ilgilendirdiğini ve aile bireylerinin davranışlarının sorunu yaratmış olabileceği ve bu nedenle de sorunları ailenin bütünlüğü içinde birlikte ele alacaklarını belirtir. Aile terapisti, hangi tekniği ve yaklaşımı kullanırsa kullansın, aile üyelerinden birinin bir sorununu, tüm ailenin bir sorunu olarak kabul eder ve bu sorunun üstesinden gelebilmek için, 'aile sisteminin' tüm üyelerini değiştirmeye çalışır (Sungur, 2003).

Kaygı bozukluğuna bağlı panik bozukluktan dolayı panik atak yaşayan bireylerin tedavilerinde aile terapi yaklaşımı Bilişsel- Davranışçı Terapi ile sentezlenir (Barlow, Allen, & Choate, 2004). Bilişsel- Davranışçı Terapi, panik bozukluğun tedavisinde etkinliği en iyi araştırılmış yöntem olup, sıklıkla tercih edilir (Başaran & Sütçü, 2016; Sungur, 2003). Başaran ve Sütçüye göre bilişsel kuramda panik bozukluk, stres ile tetiklenen korku sisteminin oluşturduğu bedensel belirti ve duyumlara yönelik, korkudan korkma hali olarak kabul edilir. Yani, panik bozuklukta beden duyumlarının yanlış yorumlanması söz konusudur. Tedavi içinde yorum hatalarının düzeltilmesi gerekir. Burada yorum hatasıyla aslında akılcı olmayan irrasyonel bir inanca işaret edilmektedir (Carleton, Duranceau, Freeston, Boelen, McCabe, & Antony, 2014; Yang, Kircher, & Straube, 2014). Kişinin kalp krizi geçiriyor olduğuna inanması irrasyonel bir inançtır. Panik atak döngüsünün kırılması için bu irrasyonel inancın rasyonel olanla yer değiştirmesi gerekir. Bu duruma hizmet edecek en iyi yöntem Bilişsel- Davranışçı Terapidir (Barlow, Gorman, Shear, & Woods, 2000).

Terapist, terapi boyunca güven verici bir iletişim ortamı sağlayarak aile üyelerinin hem kendilerini, hem de birbirlerini tanımalarına, birbirleri ile açık iletişim kurarak sorunlarına birlikte çözüm bulmalarına yardımcı olur (Özgüven, 2000).

Terapi ortamında terapist, aile bireylerinin hiç birinin yandaşı olmamaya özel bir titizlik gösterir. Aile terapisinde, terapist aile üyeleri ile tek tek bireysel olarak, aile üyelerinin bir kaç ile birlikte, veya hepsi ile birlikte topluca görüşülebilir. Temel fark, ailenin bireysel ve ortak yaşantıları olan üyelerden oluşmasıdır. Farklı yaşam örüntülerinin neler olduğunu bilmek yani aile bireylerini ayrı ayrı tanımak her aile bireyinin panik atak yaşayan kişiye olumlu veya olumsuz ne gibi etkilerinin olacağı böylelikle kestirilebilir. Bu sebeple, aile terapisi ailenin bütününe kapsar. Ancak sözel iletişimi başarı ile sürdürmelerindeki zorluktan dolayı 9 yaşından, bazılarında göre de 4 yaşından küçük çocukların katılımı sınırlı tutulur ya da gruba alınmaz (Austin & Scierra, 2015; Fentz, Arandt, O'Toole, Hoffart, & Hougaard, 2014; Fentz, Hoffart, Jensen, Arandt, O'Toole, Rosenberg, & Hougaard, 2013; Köroğlu, 2010; Özgüven, 2000).



Aile terapisinde her aile üyesi panik atak döngüsü hakkında bilgilendirilir ve panik atak yaşayan aile bireyine nasıl davranmaları ve nasıl davranmamaları gerektiği ile ilgili eğitim verilir. Danışmanın amacı; panik atak yaşayan kişiye aile üyeleri vasıtasıyla ulaşmak ve durumu kontrol altına almasını sağlamaya çalışmaktır (Köroğlu, 2010; Özgüven, 2000). Bu nedenle aile bireylerinin duruma ilişkin tutumu çok önemlidir. Dolayısıyla, Bilişsel- davranışçı terapi ile panik bozukluğu tedavisinde aileye verilecek olan psiko-eğitim, bilişsel yeniden yapılandırma, bedensel denetim kazanmaya yönelik solunum egzersizleri ve kas gevşetme teknikleri, iç ve dış uyaranlara yönelik alıştırmalar uygulanmaktadır (Carleton, Collimore, & Asmundson, 2010).

Aile üyeleri bu bakımdan donanım kazandıklarında panik atak yaşayan aile bireyine nasıl davranmaları gerektiğini de öğrenmiş olacaklardır. Daha öncede vurgulandığı gibi burada amaç panik atak kısır döngüsünü kırmaktır ve bu da akılcı olmayan irrasyonel düşünceyi rasyonel olanla değiştirmekle mümkündür. Bilişsel terapi düşünceyi kontrol altına alırken hem kişiyi hem de aile üyelerini işe koşar. Panik atak yaşayan kişinin düşüncelerini kontrol altına alırken ve kısır döngüyü kırmaya çalışırken aile bireyleri kişideki bedensel belirtileri kişinin algılama şeklini değiştirmesine, daha çok paniğe sürükleyecek düşünceler yerine, ‘gerçekçi’ ve pozitif düşünceler koymasına yardımcı olurken aşağıdaki inanç durumlarını kullanmayı öğrenir (Brown, LeBeau, Liao, Niles, Glenn, & Craske, 2016; Carleton, Duranceau, Freeston, Boelen, McCabe, & Antony, 2014).

- ‘Bu yaşadığın bir panik atak’.
- ‘Bunu daha önce de yaşadın ve baş ettin’.
- ‘Birazdan geçecek’.
- ‘Bu bir kalp krizi değil, sana daha kötü bir şey olmayacak’.
- ‘Şimdi rahatlamak için derin nefesler alacaksın ve sakinleşeceksin’.

Bu baş etme biçimini aile ortamında gerçekleşen her panik atakta aile bireylerinden biri sergileyerek akılcı davranışı pekiştirme yoluna gitmelidir (Deacon, & Abramowitz, 2006). Panik atak tedavisinde ailenin terapiye dahil olduğu durumlarda terapistin asli görevi aile bireylerini panik atak ile ilgili bilinçlendirmek ve panik atak durumunda doğru davranışları sergileyerek akılcı olmayan inançların yerine akılcı inançların geçişi sürecine destek olmalarını sağlamaktır (Özgüven, 2000). Aynı süreç birey için ayrıca işletilir. Özgüven’e göre etkili olduğu bilinen bir diğer yol ise; odaklanmayı durdurmayı öğretmektir. Aile bireylerine panik atak geçiren kişinin odağını nasıl değiştirecekleri öğretilir. Kişinin odağının değiştirilmesi panik atak kısır döngüsünün kırılmasında etkin rol oynar. Panik atak yaşayan kişinin bunu kendi başına yapması zor olduğundan aile bireylerini işe koşan aile terapisi bu durumda etkilidir (Carleton, 2012; Dugas, Buhr, & Ladouceur, 2004).

Aile bireylerinin dışında panik atak yaşayan kişiye nefes ve rahatlama egzersizleri ve düşüncesini kontrol etme gibi panik atak durumuyla baş etme yolları öğretilerek destek verilir. Örneğin, panik esnasında nefes alma kontrol altına alınır, panik atak belirtileri azaltılabilir ve tanımlanan kısır döngü kırılabilir (Maller, & Reiss, 1992). Alarm zillerinin susmasında sakin ve yavaşça 3 dakika boyunca alınan nefeslerin etkili olduğu belirtilmektedir (Özabacı & Erkan, 2014).

## Sonuç ve Öneriler

Deneyim kazanan aile bireyleri artık panik atak yaşayan kişiye nasıl davranmaları gerektiğini ve nasıl davranmamaları gerektiğini bilmektedirler. Panik atak yaşayan kişiye verilecek birçok ödevin yanı sıra aile bireylerine de verilecek ödevler vardır. Ancak belki de en önemlisi aile işe koşmanın öncesinde terapiyi gerçekleştirecek olan kişinin aile terapisi eğitimi almış uzman bir kişi olmasıdır. Özabacıya (2014) göre, aile terapisi yöntemine özgü bir çok durum, aile bireylerinin bireysel özelliklerini nerde nasıl kullanacağını bilme, tecrübe ve eğitimle sabit bir olgudur.



Panik atağı olan hastaların aile terapisi ve bilişsel tekniklerle 5 yıl içinde yeni atak geçirmeme oranlarının %80'leri aştığı vurgulanmıştır (Fentz, Hoffart, Jensen, Arandt, O'Toole, Rosenberg, & Hougaard, 2013). Bu durum panik bozukluğu tedavisinde bilişsel terapinin aile terapisi ile sentezlenmesiyle etkili olduğunu ve ilaç tedavisine iyi bir alternatif olduğunu göstermektedir.

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## Extended Abstract

The aim of this study is to conduct a short review of the related literature about panic attack, panic disorder, and anxiety disorder, of which many suffer although little known about them and the family therapy methods, which have been frequently considered for the healing process of the psychological state. For this reason, the first attempt was to define anxiety disorder and panic disorder. Review continued with elaborating on the factors causing panic disorder and panic attack. Following that, the sort of family therapy method, which is needed in regard to the nature of the attack, has been negotiated on the basis of the definitions derived from the related literature. One must know what anxiety is in order to get to know what panic attack is. Anxiety is actually a healthy human characteristic for survival. Although people tend to think of negative when they hear the term, it actually is not a negative thing. It is actually something that one must have in order to protect him/herself from danger. In other words, anxiety is the mechanism that starts protection system of human being from outside or inside threats (Brown, LeBeau, Liao, Niles, Glenn, & Craske, 2016). What is important is the cycle of anxiety. The cycle should start wherever and whenever needed and should end when necessary. According to Brown and his colleagues (2016) anxiety is a reflective state of emotion created by the human body as a result of some hormones towards any dangerous situation a person faces in daily life. A person is scared of unknown not of known. When a person realizes that the threat has gone or there is actually no threat then as a reflection to the new situation the cycle of anxiety is broken and all body functions are eventually getting its normal state in a very short time (Apfeldorf, Shear, Leon, & Portera, 1994). The psychological state, which is normal at the beginning, is being interrupted by an internal (from inside of the body) or force external (from outside of the body). This is the point that starts the anxiety cycle work (Köroğlu, 2010). For example, a person's reactions to an instantly generated unknown sound by high pulse, over breathing, and sweating are normal and this is what we expected to happen. This process is working to make the body ready as a whole to protect itself from an unknown threat (Brown, LeBeau, Liao, Niles, Glenn, & Craske, 2016; Köroğlu, 2010). Köroğlu also states that this process begins with adrenalin hormone, which increases the pulse so that all of the muscles are fed by blood and ready for sudden movements, opens up the retina for more light to come in so that vision quality is increased, and increases breathing so that blood gets the necessary oxygen and the whole system gets ready for any sudden reaction required for escaping from the unknown threat. Anxiety disorder occurs when the normal anxiety cycle is not broken when it actually needs to be broken or when it is not necessary to start at the first place and shows it-self in different forms (Carleton, Duranceau, Freeston, Boelen, McCabe, & Antony, 2014; Mahoney, & McEvoy, 2012b). According to DSM 5 these are separation anxiety disorder, selective non-talking, social anxiety disorder, panic disorder, agoraphobia, common anxiety disorder, drug oriented anxiety disorder, a health problem oriented disorder, defined anxiety disorder, and undefined anxiety disorder (American Psychiatric Association, 2014). DSM 5 also states that one can either possess only one of these or more than one of them at the same time. Therefore, diagnosis is not as easy as it sounds. For that reason, DSM 5 creates a criterion for shortening the diagnosis time for people who suffer from anxiety disorder to let them begin to have the necessary psychological treatment in the shortest period of time. The results of the review also yielded that in our culture panic attack syndrome caused by panic disorder is being confused with other types of anxiety disorder since the symptoms are quite similar. The related literature, which defined panic disorder and other anxiety types have been mostly based on Western culture and represent their understanding of the problem. According to western expressions, the best therapy method is the Cognitive Behavioral Therapy formed by family therapy methods and the most contemporary method of detecting panic disorder is the use of Functional Magnetic Resonance Imaging (fMRI), which physically shows evidence regarding panic disorder.