INTERNATIONAL STUDIES AND EVALUATIONS IN THE FIELD OF

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CHAPTER 1

ORAL COMMUNICATION STRATEGY USE IN ENGLISH LANGUAGE LEARNING

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Introduction

The dynamic field of language learning and teaching has been taking many steps forward in accordance with the pivotal advancements in technology and economical and political situations in the world. Theories, strategies and practices of language teaching and learning in the recent decades are subject to change in a way to focus more on the communicative, functional and individual aspect of language.

These novelties have their roots in Communicative Approach (Communicative Language Teaching). As communicative language teaching (CLT) suggests, in communicative activities there is supposed to be a desire to communicate, a communicative purpose, no teacher intervention, and no materials control. The level of teacher intervention is kept at a minimum level during communicative activities; however, the teacher is to promote the use of communicative language by giving immediate answers to the students in the relatively uncontrolled conversations (Harmer, 2001).

As observed, various theories and practices in the classroom have evolved in recent decades, often supporting each other to some degree. One of the key concepts that has emerged is the use of oral communication strategies, which has sparked considerable debate among scholars due to their complexity in both definition and application. The challenge lies in the difficulty of changing established habits. Both teachers and learners struggle to redefine their roles within the classroom context. Given that much of language learning occurs outside formal education, students are often unaccustomed to taking charge of their own communication strategies. This creates a significant challenge: How aware are students of the role of oral communication strategies and how they use them when speaking English? This question highlights a crucial area for further exploration in language learning.

Definitions of Language Learning Strategies (LLS)

Language Learning Strategies concept was defined and described in various ways by various researchers (Cohen et al., 2023; Lestari & Wahyudin, 2020). There has always been a debate concerning the definition of LLS which has resulted in a great number of perspectives on the definition of the concept. Huang (2004) provided us various earlier definitions for language learning strategies (cited in Atik, 2006, pp. 15-16) as is listed in Table 1 below.

Table 1. *Earlier Definitions of Language Learning Strategies*

Researcher(s)	Definition of LLS
Bialystok (1978)	"optimal means for exploring available information to improve competence in a second language" (p. 71).
Stern (1983)	"… strategy is … for general tendencies or overall characteristics of the approach employed by the language learner, leaving techniques as …. Particular forms of observable learning behaviour" (Ellis, 1994, p. 531).
Tarone (1983)	"an attempt to develop linguistic and sociolinguistic competence in the target language – to incorporate these into one's interlanguage competence" (p. 67).
Seliger (1984)	Strategies – "basic abstract categories of processing by which information perceived in the outside world is organized and categorized into cognitive structures as part of a conceptual network" (p. 4). Tactics – " variable and idiosyncratic learning activities, which learners use to organize a learning situation, respond to the learning environment, or cope with input and output demands" (Ellis, 1994, p. 532).

Weinstein & Mayer (1986)	"behaviours and thoughts that a learner engages in during learning" which are "intended to influence the learner's encoding process" (p. 315).
Mayer (1988)	"behaviours of a learner that are intended to influence how the learner processes information" (p. 11).
Chamot (1987)	"techniques, approaches, or deliberate actions that students take in order to facilitate the learning and recall of both linguistic and content area information" (p. 71).
Rubin (1987)	"strategies which contribute to the development of the language system which the learner constructs and affects learning directly" (p. 22).
Wenden & Rubin (1987)	"… any sets of operations, steps, plans, routines used by the learner to facilitate the obtaining, storage, retrieval, and use of information" (p. 19).
Oxford (1989)	"behaviours or actions which learners use to make language learning more successful, self-directed and enjoyable" (p. 235).
Oxford (1992/1993)	"specific actions, behaviours, steps, or techniques that students (often intentionally) use to improve their progress in developing L2 skills. These strategies can facilitate internalization, storage, retrieval, or use of the new language. Strategies are tools for the self-directed involvement necessary for developing communicative ability" (p. 18).

Oxford (1990)	"specific actions taken by the learner to make learning easier, faster, more enjoyable, more self-directed, more effective, and more transferable to new situations" (p. 8).
O'Malley & Chamot (1990)	"the special thoughts or behaviours that individuals use to help them comprehend, learn, or retain new information" (p. 1).
Carrell, et al. (1989)	"the kinds of cognitive, metacognitive, social, and affective strategies that learners employ" (p. 3).
Richards & Platt (1992)	"intentional behavior or thoughts used by learners during learning so as to better help them understand, learn, or remember new information" (p. 209).
Stern (1992)	"broadly conceived intentional directions and learning techniques" (p. 261).
Green & Oxford (1995)"	"specific actions or techniques that (learners) use, often intentionally, to improve their progress in developing L2 skills" (p. 262).
Weaver & Cohen (1997)	"specific behaviours, steps and actions taken to enhance one's own learning, through the storage, retention, and use of new information about the target language. They are conscious thoughts and behaviours used by the learners with the explicit goals of improving their knowledge and understanding of a target language" (p. vi).
Cohen (2002)	"learners' conscious and semi-conscious thoughts and behaviours, having the explicit goal of improving the learner's knowledge and understanding of the second language (i.e. language learning strategies), as well as strategies for using the language that has been learned or for getting around gaps in language proficiency (i.e., language use strategies)" (p. 51)

Source: Atik, 2006, pp. 15-16

Foreign Language Learning and/or Use Strategies

Language learning and/or use strategies consist of the steps and actions chosen by the learners to take one step further in learning the foreign language (Cohen et al., 2003; Cohen et al., 2023).

In order to facilitate the tasks provided by the instructor the students use several strategies which would personalize the learning process. These language learning strategies have been categorized into four main types (Cohen et al., 1996):

1- Cognitive strategies usually involve the identification, retention, storage, retrieval of words, phrases, and other elements of the target language (e.g. using prior knowledge to comprehend new language material, applying grammar rule to a new context, or classifying vocabulary according to topic).

2. Metacognitive strategies deal with pre-planning and self-assessment, online planning, monitoring and evaluation, as well as post evaluation of language learning activities. (e.g. previewing the language materials for the day's lesson, organizing one' thoughts before speaking, or reflecting on one's performance)

3. Social strategies include the action that learners select for interacting with other learner, a teacher, or with native speakers (e.g. asking questions for clarification, helping a fellow student complete a task, or cooperating with others)

4. Affective strategies serve to regulate learner motivation, emotions, and attitude (e.g. strategies for reducing anxiety, for self-encouragement and for self-reward). (p. 4)

As for language use strategies, they consist of language performance and communication strategies. Performance strategies are strategies for rehearsing target language structures through form-focused practice for instance. As opposed to performance strategies, in

case of communication strategies, the spotlight is on communicating the message in the target language despite gaps in target language knowledge. As opposed to performance strategies, communication strategies are used to communicate an idea (Cohen et al., 1996, p. 4).

Recent research emphasizes the use of strategies in language learning as a crucial component in effective language learning. Particularly noteworthy is the use of metacognitive strategy use since its use has proven especially valuable. The findings suggest that explicit instruction in metacognitive strategy use could significantly enhance EFL learning outcomes (Lestari & Wahyudin, 2020).

Communication Strategies

Selinker (1972) was the first to introduce the notion of communication strategy (p. 229) although not in detail. Dörnyei (1995) summarizes the historical development of the term communication strategies as follows:

In the 1970s, four studies prepared the ground for the study of communication strategies (CSs), a new area of research within applied linguistics: Selinker's (1972) classic article on interlanguage introduced the notion of strategies of L2 communication. Varadi (1973, but published in 1980) and Tarone (1977; also Tarone, Cohen, & Dumas, 1976) elaborated on Selinker's notion by providing a systematic analysis of CS introducing many of the categories and terms used in subsequent CS research. Savignon (1972) reported on a pioneering language teaching experiment involving a communicative approach, which, for the first time, included student training in CSs (or, as she termed them, *coping strategies*). Since these early studies, much research has been done to identify and classify CSs (for reviews, see Bialystok, 1990; Cook, 1993; Poulisse, 1987); however, far le attention has been paid to the question of whether these strategies could be integrated […]. (p. 55)

As is summarized, there has not been a consensus on the definition of the term communication strategy, but a variety of definitions were proposed. However, it is a fact that non-native and native speakers of a given language may struggle to find the right expression or grammatical construction when attempting to communicate their message from time to time (Faucette, 2001).

Faucette describes communication strategy as "the ways in which an individual speaker manages to compensate for this gap between what she wishes to communicate and her immediately available linguistic resources are known as communication strategies (CS)" (2001, p. 2) by also adding that "[a]lthough researchers are still not in complete agreement, one widely accepted definition is that "communication strategies are potentially conscious plans for solving what to an individual presents itself as a problem in reaching a particular communicative goal" (Færch & Kasper, 1983a, p. 36, as cited in Faucette, 2001). In addition to these definitions the following definitions were also proposed various researchers which were compiled by Rababah (2002):

- conscious communication strategies are used by an individual to overcome the crisis which occurs when language structures are inadequate to convey the individual's thought (Tarone, 1977, p. 195).

- they are systematic techniques employed by a speaker to express his meaning when faced with some difficulty (Corder, 1981, 1983, pp. 103-16).

- communication strategies are potentially conscious plans for solving what to an individual presents itself as a problem in reaching a particular communicative goal (Faerch & Kasper, 1983a, p. 36).

- communication strategies predetermine the verbal planning, they serve the function of adjusting the plan to the situation, i.e. each individual utterance is to be seen as strategic. What is specific for IL users is that plans of action cannot be directly converted into verbal

plans, because of gaps in the speaker's (and hearer's) linguistic repertoire. The primary function of function of communication strategies in the speech of IL users is to compensate for this deficit (Wagner, 1983, p. 167).

- communication strategies, i.e., techniques of coping with difficulties in communicating in an imperfectly known second language (Stern, 1983, p. 1983).

- [….] all attempts to manipulate a limited linguistic system in order to promote communication. Should learning result from the exercise, the strategy has also functioned as a learning strategy, but there is no inherent feature of the strategy itself which can determine which of these roles it will serve (Bialystok, 1983, pp. 102-103).

- compensatory strategies are strategies which a language user employs in order to achieve his intended meaning on becoming aware of problems arising during the planning phase of an utterance due to his own linguistic shortcomings (Poulisse, 1990, p. 88).

- communication strategies (CS) have generally been defined as means that speakers use to solve their communicative problems; (Paribakht, 1985, p. 132).

- the means used by a speaker to overcome a difficulty encountered whilst attempting to communicate in the foreign language (Towell, 1987, p. 97).

- the conscious employment by verbal or non-verbal mechanisms for communicating an idea when precise linguistic forms are for some reasons not available to the learner at that point in communication (Brown, 1987, p.180).

After Rababah (2001) cites these definitions, it is also stated in the article that "the key defining criteria for [communication strategies] are "problemacity" and "consciousness." All the previously mentioned definitions support the claim that CSs are employed when L2 learners encounter a problem in communication. These "problems" and "difficulties" are diverse. The speakers may not communicate the message due to lack of second or foreign language linguistic knowledge which would lead the speaker to apply different strategies to compensate for it. Another problem might be that the speech may not be clear and intelligible enough.

At this point, the speakers must make themselves understood, which requires the use of alternate strategies while speaking. These and similar problems lead speakers to use various ways to express themselves while establishing communication. These strategies may vary when they are evaluated under the name of communication strategies. For instance, Tarone (1977) suggests using some strategies such as paraphrasing, conscious transfer, avoidance while Dörnyei and Scott (1997) suggests strategies such as message abandonment, message reduction, message replacement, circumlocution, use of all-purpose words, word-coinage, restructuring, literal translation, code switching, use of similar sounding words, mumbling, and omission. Additionally, strategies such as self-rephrasing, self-repair, the use of fillers, and repetition are recommended for use during speaking.

With regard to the necessity of these strategies, Bialystok (1990) provides several definitions of communication strategies, stating that they are employed when the speaker encounters a "difficulty" Corder, 1977, as cited in Bialystok, 1990, p. 3) or "a problem" (Faerch & Kasper, 1983a, as cited in Bialystok, 1990, p. 3) in communication.

As communication strategies are claimed to be used to cope with these problems or difficulties in question, it can be claimed that studies conducted in the area also investigate the applicability of any kind of strategy to cope with problems of speaking in a foreign or second language. Several studies were conducted to establish a direct

association between apparent use of learner strategies and second language proficiency (O'Malley & Chamot, 1990; Oxford, 1996). Oxford (1996) claims that students with advanced language proficiency have reported higher levels of overall strategy use and frequent use of a greater number of categories of strategies.

Another similar study was conducted by Zhang (2007) with an aim to investigate the reasons and solutions concerning the inefficiency of the students' while they communicate in English. The study was conducted at a Chinese Secondary Vocational School. Zhang (2007) describes the student profile as follows: "most students have no intention of communicating in English, nor do they feel the need to do so. Even though English is a key course for students in Hotel Management and Tour Guiding, teachers can seldom find them speaking in English on campus or even in classrooms. The reason for this may contribute to their limited acquisition of the language and their limited interest in it. […] A large majority of students have no idea about how to cope themselves when they are confronted with some words they do not know" (p. 44). With an aim to investigate the problems those EFL learners face, Zhang (2007) concludes that EFL teachers teach learners communication strategies to make English language learning more meaningful and influential. In addition to that, an English-speaking environment needs to be created because by continual exposure to natural conversation students may learn through opportunities both by hearing more of the target language and by producing new utterances to test their knowledge (Wenden & Rubin, 1987, p. 26, as cited in Zhang, 2007).

With regard to autonomy and use of strategies, Simmons (1996) started conducting a study in 1991 via Independent Language Program as a part of the government-funded Adult Migrant English Program. There were 18 participants, and they expressed their willingness to work independently. During the first week it was found that most of the participants were unsuccessful in negotiating their own signed learning contract, in an effective way. Instead, they wanted the teacher to direct them to apply for the contract and handle their

studies. It was a longitudinal study where diaries as well as questionnaires were conducted in order to find out the corresponding learning activities in relation to strategies used. Following the training sessions, an increase in the use of strategies was recorded. At the end of the study, it was concluded that the aim of the study, which was whether strategy training would help the students to be more independent owners of their own learning process and their programs, was achieved in that the students proved to manage their learning by applying the strategies that suited them the best.

A more specific and relevant study conducted in the area belongs to Voller and Pickard (1996). The study was conducted at the University of Hong Kong following the decision to set up a self-access center. The students were encouraged to register for the conversation exchange program in which the students came from nearly eight different language background. They would meet several times a week to speak English. However, an important point here is that the partners could not speak the native language of the other partner. This ensures that English would be only medium for communication. Another point deserving attention is that the students were just directed at the initial stage of helping them to meet. They were given a conversation exchange form to create a record of all students' profile, and the consultation desk found a partner in accordance with the priorities and the profile of the students. To put it differently, apart from helping the students to find the best partner to practice, self-access center leaves each other detail of meetings and practice hours at the students' own discretion. At this very point, the difference between autonomous learners and others became more obvious. The researcher concludes that the conversion exchange program had been successful in proving that "autonomous learning is possible and is already being practiced by some" (p.126). The study demonstrates that learner autonomy and speaking skills have a mutual development sequence. When one develops the other one shows a similar development, as well.

Language learning strategies and use issues are not easy to handle with a few headings. There are many aspects of the concept; however, in the present study, learner autonomy and strategies for coping with speaking problems are handled to melt in the same pot. Therefore, the researcher only dealt with the related points by establishing dynamic relevance.

The learners who are aware of the best ways they can learn would most probably be more autonomous, which would lead to students who are more successful and aware of their own learning process. Faucette (2001) summarizes the relationship between communication strategy instruction and learner autonomy as follows "The connection between a learner autonomy approach and communication strategy instruction should be clear." Using the common metaphor of 'bridge', Færch and Kasper (1983a) argue that "by learning how to use communication strategies appropriately, learners will be more able to bridge the gap between pedagogic and non-pedagogic communicative situations" (p. 56, as cited in Faucette, 2001) by also adding that "learner autonomy can be thought of as the ability to bridge that gap, instruction can be thought of as the means to develop that ability." As is highlighted, communication strategies and learner autonomy are interrelated, so acquiring our students with communication strategies would promote learner autonomy in students. Faucette (2001) supports this view by summarizing the issue in the best way:

If one of the goals of language teaching is to produce independent, skillful L2 strategy users, and if we think it is important for our learners to be able to participate in real communication outside the classroom, then how can we ignore communication strategies in our L2 lessons? Perhaps learner autonomy is one of the most significant goals of communication strategy training. The two approaches go hand in hand and would help teachers develop independent, strategically competent language learners. (p. 10)

As is summed up briefly, teaching coping strategies in establishing communication in a foreign language would be of great benefit for the students. By employing strategies such as self-rephrasing, self-repair, fillers, and repetition, learners can overcome challenges they face during speaking. These strategies not only help maintain communication flow but also foster learner autonomy and confidence in real-world interactions. Understanding and applying these strategies can significantly enhance learners' speaking abilities, making them more adaptable and effective in diverse communicative situations. Ultimately, integrating communication strategies into language learning enables students to navigate the complexities of language use with greater ease and proficiency.

REFERENCES

Atik, B. B. (2006). *The Effect of strategies-based instruction on speaking skills of high school students.* (Unpublished Master's Thesis). Cukurova University, Adana.

Bialystok, E. (1990). *Communication strategies: A psychological analysis of second language use.* London: Blackwell.

Cohen, A. D. (2003). Strategy training for second language learners. Center for advanced research on language acquisition, University of Minnesota.

Cohen, A. D., Gu, P. Y., Nyikos, M., Plonsky, L., Harris, V., Gunning, P., … Gao, X. (andy). (2023). Tangible insights on the strategizing of language learners and users. *Language Teaching, 56*(3), 313–332. doi:10.1017/s0261444823000046

Cohen, A.D., Weaver, S. J., & Li, T. Y. (1996). The Impact of Strategies-Based Instruction on Speaking a Foreign Language. CARLA working paper series #4 https://archive.carla.umn.edu/resources/working-papers/documents/ImpactOfStrategiesBasedInstruction.pdf

Dörnyei, Z. (1995). On the teachability of communication strategies. *TESOL Quarterly*, 29, 55-85.

Dörnyei, Z., & Scott, M. L. (1997). Communication strategies in a second language: Definitions and taxonomies. *Language Learning, 47*(1), 173–210. doi:10.1111/0023-8333.51997005

Faucette, P. (2001). A pedagogical perspective on communication strategies: Benefits of training and an analysis of English language teaching materials. *Second Language Studies*, 19, 2, 1-40.

15

Harmer, J. (2001) *The practice of English Language Teaching*, Longman Pearson. Education Ltd. England.

Lestari, M., & Wahyudin, A. Y. (2020). Language Learning strategies of undergraduate EFL students. *Journal of English Language Teaching and Learning*, *1*(1), 25–30. doi:10.33365/jeltl.v1i1.242

O'Malley, J. M., & Chamot, A. (1990). *Learning Strategies in Second Language Acquisition.* Cambridge: CUP.

Oxford, R. L. (1996). Employing a questionnaire to assess the use of language learning strategies. Applied Language Learning, 7, 25-45.

Rababah, G. (2002). Second language communication strategies: Definitions, taxonomies, Data Elicitation Methodology and Teachability Issues: A review article. ERIC ED472698.

Selinker, L. (1972). Interlanguage. *International Review of Applied Linguistics*, 10, 209-230.

Simmons, D. (1996). A study of strategy use in independent learners. In R. Pemberton, et al. (Eds.) *Taking Control: Autonomy in Language Learning* (pp. 61-75). Hong Kong: Hong Kong University Press.

Tarone, E. (1977). Conscious communication strategies in interlanguage: A progress report. In H. D. Brown, C.A. Yorio, & R.C. Crymes (Eds.), TESOL (pp. 194-203). Washington: TESOL.

Voller, P. & Pickard, V. (1996). Conversation exchange. In R. Pemberton, et al. (Eds.) *Taking Control: Autonomy in Language Learning* (pp. 115-132). Hong Kong: Hong Kong University Press.

Zhang, Y. (2007). Communication Strategies and Foreign Language Learning. US-China Foreign Language, ISSN1539-8080, USA. Apr. 2007, Volume 5, No.4 (Serial No.43), pp. 43-48.

CHAPTER 2

UTILIZATION OF TEACHING METHODS IN CLASSROOM MANAGEMENT IN PRIMARY SCHOOL[1]

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INTRODUCTION

The fact that there are great individual differences among the students in the classrooms, but that it is now considered a necessity that education should appeal to every individual, has led to the necessity that the teaching methods to be used in the lessons should also be diverse and inclusive. For this reason, all countries are trying to design their education systems in line with their educational goals and are taking all necessary measures for a better and successful education.

One of the pillars of a successful education is effective classroom management. Without working with a rational-scientific-accurate method in line with educational goals in classroom management, the educational goal cannot be expected to be realized. There are many factors affecting success in classroom management. One of the most important of these factors is undoubtedly the teaching methods used in lessons.

One of the most important factors affecting classroom management is teaching activities. A planned and correctly implemented teaching process will positively affect the learning of the whole class. Teaching methods that will keep students active in the teaching process should be chosen. Otherwise, classroom discipline may be disrupted and learning will not take place. For example, in a classroom where the lecture method is generally used and students are not given enough say, students may become disinterested in the lesson and the teacher may have difficulty in classroom management.

Teachers' practices, experiences and perspectives on this issue are important for classroom management. Considering the importance of asking questions and knowing, the effect of teaching methods on classroom management should be known by teachers. Teachers' understanding of classroom management is important for both teaching and classroom management.

In order to be successful in classroom management, it can be said that the correct selection and application of teaching methods is very important, methods will increase the quality of teaching and positively affect the quality

of classroom management. There are many teaching techniques that can be used in classroom management. Some of these techniques are as follows:

1. Aquarium Technique
2. Card Showing Technique
3. Circle Discussion Technique
4. Rotating Circle (Bearing) Technique
5. Talking Hat Technique
6. Dull Image (Sculpture) Technique
7. Mind Games
8. Hot Chair Technique
9. Know-Want-Learn Technique
10. Dictation Technique
11. Technique of Saying the Unsaid
12. 5N1K Technique
13. Newspaper Preparation Technique
14. Speaking Ring Technique
15. Micro Teaching Technique

Aquarium Technique

Aquarium is a teaching technique in which students are arranged in a big circle and those who want to speak come to the center of the circle and discuss. In this technique, only the students who come to the center of the circle can speak. The others can only watch the discussion or they can also enter the circle and participate in the discussion (Sönmez, 2008). Students in the big circle cannot intervene in the discussion in any way. Two, three or four students can come to the center of the circle and talk to each other, or only one student can come, express his/her opinion and return to his/her place in the circle.

In the fishbowl technique, only those inside the circle can speak, while the others can watch silently, which will mean a successful application in terms of classroom management. The fact that those in the big circle are not involved in the conversations requires them to remain silent. This prevents talking without asking for a word, which is an undesirable behavior in the classroom.

Such a practice in the lesson will prevent unwanted conversations in the classroom, as it will mean that not everyone can intervene, that is, only those inside the circle can speak. The rule that you can only come into the circle and speak will also help students to understand that they should not speak without taking the floor in later lessons.

Card Showing Technique

The card showing technique is a technique in which students show their opinions about a text read or explained by the teacher in the lesson by means of colored cards. According to Açıkgöz (2009), in the card showing technique, the teacher gives the students the colored cards prepared before the lesson and explains the meaning of these cards to them. As the sentences related to the lesson topic are read, students show their opinions about the sentences they hear with cards.

Cards prepared for different purposes (Taşkaya, 2021: 356)

Card showing technique can be utilized in many lessons for different purposes. Card showing, which is a teaching technique, enables students to express their opinions without speaking in classroom management. In this way, the noise that will occur during asking for the floor in the classroom will be prevented. When applying this technique, all students will have to listen carefully to the teacher in order to raise the correct card. When students'

attention is on the text being read, undesirable behaviors in the classroom will decrease.

Circle Discussion Technique

Circle discussion is a discussion technique in which people standing side by side in a circle take turns in expressing their opinions on the topic at hand. In addition to discussion, this technique can be used to develop students' speaking, listening and thinking skills. In this technique, those in the circle take turns to express their opinions on the subject of discussion. It is a teaching technique that can be applied at every grade level. When the class is too crowded or if the physical conditions of the classroom do not allow for forming a circle, the application can be done in the garden.

The circle technique allows each student in the class to actively participate in the discussion at least once to express his/her opinion. Students in the circle will have to listen to what is said before them in order to participate in the discussion. This will result in a less noisy classroom environment.

Rotating Circle (Bearing) Technique

The spinning circle is a teaching technique used to ensure the active participation of every student in the class. The rotating circle technique is also called a bearing. In this technique, students forming two concentric circles look at each other. Each student talks to the other student. One of the circles is fixed and one is moving. All students discuss the topic given to them with the other student. The students in the moving circle match with the student next to them on the command given by the teacher. Thus, the student who moves to the side at each command will discuss the topic discussed in pairs with everyone in the opposite circle (Açıkgöz, 2009).

The circle technique allows all students to express their thoughts and encourages them to listen to and respect each other. It can be used especially in lessons that require discussion and exchange of ideas. Before the application, students are warned that they should only speak in a whisper so that the other person can hear them. Thus, when it is necessary to speak in similar activities in the lesson, students will be taught to speak without making noise or shouting thanks to the spinning circle.

Talking Hat Technique

It is a teaching technique in which only the student wearing a hat can speak during the lesson. In this technique, at the beginning of the lesson, the students are told that as a rule, the one with the hat on his/her head can speak. In the meantime, the other students only listen to the person speaking. They cannot ask questions or ask for the floor. In order to get the desired efficiency from the application, the teacher should choose the person who will speak.

"The teacher puts the hat on the student he/she wants to speak while searching for an answer to a question or taking the opinions of the students on the subject being taught, and takes the hat off the student's head when the student finishes speaking. This technique can also be used for effective classroom management as it prevents students from speaking without taking the floor" (Taşkaya, 2021: 405).

Dull Image (Sculpture) Technique

In the frozen image technique, which is one of the drama techniques, students create a scene given to them in a motionless way. In other words, with this technique, a moment of the play is photographed. The technique also allows a concrete subject to be presented concretely to the audience (Adıgüzel, 2017). This technique can also be used to bring a new perspective to events.

When it is observed that unwanted conversations increase or motivation decreases in the classroom, the attention of the whole class can be drawn to the subject by telling the students that the frozen image technique will be applied. In this way, the disrupted classroom order can be quickly brought back under control.

A command is given to one or a group of students to do something on a given topic, and then the students carry out the task according to this command as if they were posing for a photograph. In the meantime, a person (usually the teacher) takes a photograph of these students. This technique will provide the teacher with great convenience in classroom management. The

frozen image can also be used in psychomotor activities such as physical education to see how students perform movement.

Mind Games

It is seen that the interest in mind games in the field of education is gradually increasing. Especially at the primary school level, mind games have started to be used more frequently in lessons. The fact that they support children mentally, physically and emotionally encourages teachers to play these games in their classes. Mind games also contribute greatly to making lessons fun and help students gain the ability to focus their attention on a subject. Mind games also teach students to be patient, tolerant, empathetic and humble.

There are many different types of mind games. Some of these games are also used in education, teaching or leisure time activities. Some of the mind games used for educational purposes in schools are as follows:

 1. Anagram

 2. Apartment

 3. Resourceful Structures

 4. Checkers

5. Rectangles

6. Wall

7. Missing letters

8. Equilibrio

9. Lanterns

10. Groups

11. Process table

12. Corridor

13. Kulami

14. Sphere game

15. Meta Forms

16. Mangala

17. Pentago

18. Pyramid

19. Qbitz

20. Colorful frames

21. Reversi

22. Chess

23. Number puzzle

24. Word type

25. Sudoku

A quiet environment is needed for this game where thinking and strategizing is a necessity. In a classroom where mind and intelligence games are played, it will be easier for students to pay attention to the subject. Visible improvements were found in the classes that played mind and intelligence games in making students listen to the lesson without making noise. Students will learn to focus on the lesson more easily during the games and will continue to do so in the following lessons.

Hot Chair Technique

In drama, it is a drama technique in which a group of students sitting in a U-arrangement ask questions to a student sitting at the open end and the seated person responds to these questions with the mouth of the character he/she is playing (Adıgüzel, 2017). The character sitting in the hot chair will be fully understood with the help of questions. Since there is an application in the form of question-answer, it can be used in lessons even when drama is not practiced. "Since it includes activities such as problem solving and questioning, it contributes to the development of creativity and self-expression" (Kara, 2010: 101).

This technique improves students' ability to prepare questions appropriate to the text. Care should be taken to ensure that the questions do not force the character. In addition, the answers given by the character sitting in the chair should not be criticized (Adıgüzel, 2017). It is useful for the teacher to explain this technique before applying it and to explain the rules clearly to the students. It should not be forgotten that this application is a technique used in a psychodrama.

A student who volunteers to sit in the hot chair is selected in the class. This student answers questions as one of the characters in the text being read. The other students are asked to direct questions to their friends sitting in the hot chair as if the character in the text was sitting opposite them. It is emphasized that the questions are directed to the character, not to the student. The students who wish to do so direct their questions to the character in a mutual and non-consecutive manner. The practice continues until the questions are finished.

Know-Want-Learn Technique

Developed by Donna M. Ogle from the USA, Know-Want-Learn is a technique for reading comprehension. The aim of this technique is to ensure full comprehension of the text read. The other name of the Know-Want-Learn

technique is KWL. The Turkish meanings of the letters in KWL, which is an acronym produced from the initials of some words in English, are as follows:

Know: What do I know?

Want: What do I want to learn?

Learned: What have I learned?

Know-Want-Learn cards (Taşkaya, 2021: 356)

In this technique, at the beginning of the lesson, students write what they know about the topic in the relevant box. Then they write what they want to know about the topic. At the end of the lesson, they write what they have learned. Thanks to the Know-Want-Learn technique, students will actively participate in the subject from the beginning of the lesson.

Students who do not listen attentively during the lesson will have difficulty in filling in the Tick-to-Learn cards distributed to them at the beginning of the lesson. Since this situation requires students to focus only on the subject during the lesson, undesirable student behaviors will be prevented. For this reason, the Know-Want-Learn technique can be used as a teaching technique to help classroom management.

Dictation Technique

Dictation is one of the frequently used techniques in writing instruction. "Dictation is the process of writing down what is read to them at regular intervals in the most accurate way possible. Dictation is one of the

most widely used techniques to improve writing skills" (Richards & Schmidt, 2002: 157). This technique improves both listening and writing skills of students.

In order to transcribe the text read by the teacher in the same way, students need to listen carefully. Therefore, a quiet environment will be created in the classroom. This technique will contribute to classroom management as unwanted student behaviors will decrease during dictation.

Saying the Unsaid Technique

At the end of the lesson, when students say a sentence that is related to the topic of the day, it is called the technique of saying the unsaid. It is a teaching technique that requires students to listen carefully to the lesson (Açıkgöz, 2009). The teacher states at the beginning of the lesson that this technique will be applied and asks all students to make an unspoken sentence at the end of the lesson.

The students' effort to say something new will both keep them interested in the lesson and improve their vocabulary. This technique will also ensure that students listen carefully to the lesson (Taşkaya, 2021). This technique also supports students' creative and critical thinking skills. It also creates an opportunity for students to express their thoughts freely.

When it is announced at the beginning of the lesson that this technique will be used, students listen carefully to the lesson. They need to understand the topic in order to make an unspoken but relevant sentence. This requires them to focus only on the lesson. This technique will reduce unwanted student behaviors in the lesson.

5N1K Technique

5N1K is a teaching technique that aims to reveal the answers to 6 basic questions for a full understanding of all situations related to an event. This technique is frequently used especially for writing news texts. In this technique, the answers to the questions "what, where, when, why and who"

are sought. According to Cohen (1983), these types of questions can be used especially for primary school students to understand short stories in depth.

During the implementation of this technique, the teacher asks the students to write down the questions related to the event before the end of the narration. The students write the answers to the questions on their papers and the teacher checks these answers at the end of the lesson. Correct answers require the student to pay attention to the subject.

Newspaper Preparation Technique

The newspaper technique is the preparation of a newspaper by the students about a topic covered in the lesson. In this technique, students prepare a newspaper page about the topic at the end of the lesson, either individually or in groups. The teacher distributes a blank newspaper template to the students at the beginning of the lesson and asks them to write what they have understood according to this template at the end of the lesson. Newspaper preparation can also be assigned as homework
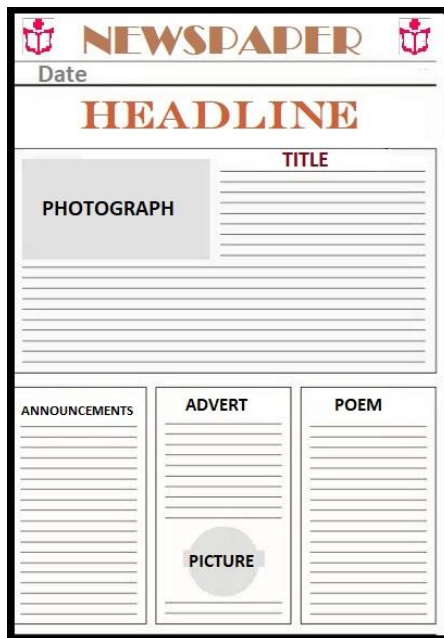
Students will need to listen carefully to the lesson in order to be able to prepare the newspaper at the end of the lesson. Since the newspaper will be the subject of the lesson, students will have to listen to the activities appropriate to the newspaper by taking notes. This will reduce unwanted student behaviors in the classroom. Because the newspaper technique makes students listen to the lesson more carefully.

The newspaper template can have many sections. The teacher can determine these sections according to the level of the class and the subject. Some of the sections that can be included in the newspaper are as follows:

- ✓ Image
- ✓ Poetry
- ✓ News text
- ✓ Announcement
- ✓ Photo
- ✓ Quote of the day
- ✓ Headline
- ✓ Cartoon
- ✓ Column
- ✓ Poem of the day
- ✓ Headline news
- ✓ Ad text
- ✓ Slogan

Speaking Ring Technique

Students arranged in a circle and taking turns to express their opinions on a topic is called the talking circle technique. "The talking circle enables students to understand and respect different opinions" (Sagnak, 2019: 224). This technique allows each student to speak at least once.

Since only the next person will speak in the speech circle, a quiet environment will be provided in the classroom. On the other hand, since

everyone will listen to the speaker, the subject will be learned in every aspect. During the speech, no one should interrupt the speaker and criticize what is said. Since it will be difficult to apply this technique in a crowded classroom, it can be done in a gym or garden.

Micro Teaching Technique

Micro-teaching is a teaching technique in which a skill is recorded by the student and then an evaluation is made based on this recording. Micro-teaching is one of the most utilized techniques especially in teacher training.

Micro-teaching technique can also be used outside the field of teacher training (Meral et al., 1998). How a job is done can be recorded and then the employees can watch what they do. Thus, the difficulties encountered in the work and where mistakes were made can be seen. Watching the recording afterwards is also useful for self-criticism.

Micro-teaching is important for students to see for themselves how they behave in lessons. The teacher records what the whole class is doing at a certain point in the lesson and then the whole class watches the recording again. Thus, all students see themselves in the recording. On a piece of paper, they write down the undesirable behaviors they notice. They then present to the teacher in writing or orally how they will fix it.

OUTCOME

The methods and techniques used by teachers to engage their students during lessons are important in many ways. Because the teaching methods used in lessons also facilitate classroom management by affecting students' motivation, interest in the lesson, active participation, social skills and empathy skills.

Students who are able to learn, do, skill and feel useful will be happy. Correctly selected teaching methods contribute to the student easily acquiring the desired skills. Methods and techniques in lessons also enable students to learn by having fun. Thus, a suitable classroom atmosphere will be created for learning in the lesson. Only in a classroom where students are active and different methods and techniques are used in a planned manner can we talk about successful classroom management.

The teaching method chosen affects many teaching activities such as student motivation, active participation in the lesson, the degree of interest in learning, the discipline of the class, the communication style in the classroom, whether they will like the lesson and the teacher, and their active participation in the lesson.

Teaching activities are one of the dimensions of classroom management. Because teaching activities to be carried out in the classroom also show how classroom management will work. Classroom management ensures the creation of a suitable environment for learning. The methods used in lessons make the class active and increase student participation. Therefore, the teaching methods and techniques to be selected will both increase academic success and change students' perspectives on education.

REFERENCES

Açıkgöz, K. Ü. (2009). *Aktif Öğrenme.* (11th Edt.). İzmir: Kanyılmaz.

Adıgüzel, Ö. (2017). *Eğitimde Yaratıcı Drama.* (10th Edt.). Ankara: Pegem Akademi.

Cohen, R. (1983). Self-generated questions as an aid to reading comprehension. *The Reading Teacher,* 36(8), 770-775.

Kara, Ö. T. (2010). *Dramayla Öykü Oluşturma Yönteminin İlköğretim İkinci Kademe Türkçe Öğretimine Etkisi.* Doctoral Thesis. Konya: Selcuk University. YÖK: 278535.

Meral, M., Zereyak, E., Baba, F. and Baba, Y. (1998). Teknik öğretmenlerin öğretme davranışları ve mikro öğretim. *VII. Ulusal Eğitim Bilimleri Kongresi.* Vol-II. September 9-11, Konya: Selcuk University. 759-762.

Richards, J. C. and Schmidt R. (2002). *Longman Dictionary of Language Teaching and Applied Linguistic. (3th Ed.).* UK London: Pearson Education Limited.

Sagnak, H. Ç. (2019). Öğretim yöntem ve teknikleri. *Öğretim İlke ve Yöntemleri.* (Ed.: Duman, T. and Peker Ünal, D.). Ankara: Pegem Akademi. 200-236.

Sönmez, V. (2008). *Öğretim İlke ve Yöntemleri.* (2th Edt.). Ankara: Anı.

Taşkaya, S. M. (2021). *Öğretmenin Yöntemleri.* Ankara: Gazi.

IMAGES
AI: https://designer.microsoft.com/image-creator (15.12.2024)

TRANSLATİON
https://www.deepl.com (17.12.2024)

CHAPTER 3

PRESERVICE BIOLOGY TEACHERS' OPINIONS ON THE USE OF MOBILE PHONE IN LABORATORY COURSES

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Introduction

Creating environments in biology teaching where students love learning and understand the subject will positively affect students' attitudes towards the course and increase their motivation and success in the course (Gürbüzoğlu Yalmancı, 2016). In general, experiments, observations, excursions, etc. methods are frequently included in science courses in addition to theoretical explanation. Laboratory studies are a helpful tool in making sense of the scientific process (Uluçınar, Cansaran, & Karaca, 2004). When these practices are implemented correctly, they support the learning-teaching process. In addition, activities should be selected and planned in accordance with the changes made in the program, class level, current information, and the environment. The courses should also be tried to be made more efficient with the materials to be used in the course. With today's developing technology, the accessibility of course materials and tools, computer programs, web-2 tools, mobile applications, etc. have increased in variety.

Technology is the creation of new products by using existing tools or instruments in order to increase the quality of daily life (Gök & Erdoğan, 2010). Computers have made images in virtual environments or disks more accessible (Keskin, Özbek, Ulaş, & Müdok, 2015). Today, mobile phones (smart phones) are among the most used technological devices. With smartphones, it is possible to easily do tasks that could only be done with computers in the past (Şenel, 2016). Students can learn the use of technological resources not only as hardware but also as software, and the time needed to plan, develop, organize and evaluate multimedia (İşcan, 2005).

Mobile phone technology has been one of the important developments that facilitate communication and daily life. Although it was used only for communication purposes at first, the features of mobile phones have increased and diversified as developments have increased (Aydoğdu Karaaslan & Budak, 2012). Examples of these include camera quality, memory, current applications and screen size. Technological developments are also reflected in

the classroom environment and microscopes used in laboratories in schools. Mobile phones are useful technological tools for learning because they are portable, affordable, easily accessible and usable (Kafyulilo, 2012). The increasing prevalence of mobile devices such as smartphones on university campuses enables the development of new teaching strategies for higher education students (Gikas & Grant, 2013).

The microscope is an important tool that facilitates learning biology concepts and subjects and enables observation of organisms and events that cannot be seen with the naked eye (Ekici, 2016). Although there are various microscopes, the most commonly used one in schools is the light microscope (Çetin, Bayboz, & Harman, 2014). Some of the microscope types according to their intended use are light microscope, stereomicroscope, polarization microscope, and electron microscope (Uzel, 2016). Students often need microscope images, especially in some laboratory courses. According to Morrison and Gardner (2015), using a mobile phone can be a very good method for students to capture an image under the microscope. To do this, students hold the camera lens of their phones over the eyepiece lens of the microscope and try to capture a clear image. However, in this technique, it can be quite difficult to properly align the focal point of the phone's camera lens with the eyepiece lens of the microscope. For this, students need practice, patience, and a steady hand.

Microscopes are the most commonly used tools in laboratory courses, which are the application areas of biology courses. Photographing the images obtained by students with microscopes is very important in terms of providing many benefits such as concretizing their knowledge, supporting permanent learning, and ensuring easy learning. This study aims to determine the opinions of preservice biology teachers regarding the use of mobile phones in laboratory courses.

Method

Research Model

Qualitative research method was used to determine the opinions of preservice biology teachers regarding the use of mobile phones in laboratory courses. In qualitative research, it is a research method in which the findings are obtained by analyzing the data obtained from sources such as observation, interview, and document and placing them in appropriate categories (Büyüköztürk, Kılıç Çakmak, Akgün, Karadeniz, & Demirel, 2020).

Study Group

The study group of the research consists of a total of 77 preservice biology teachers studying in the 1st, 2nd, 3rd, and 4th grades of the Biology Education Department of a state university. The gender and grade levels of the preservice teachers participating in the research are given in Table 1.

Table 1. Distribution of demographic information of the study group

Demographic characteristics		f	%
Gender	Female	61	79.2
	Male	16	20.8
Class level	1st grade	19	24.7
	2nd grade	20	25.9
	3rd grade	22	28.6
	4th grade	16	20.8

Among the pre-service biology teachers participating in the study, 16 were male and 61 were female. In order to ensure the confidentiality of the identity information of the preservice teachers participating in the study, the numbering was carried out independently of the study. For this reason, the first teacher candidate was named as PT1 …… and the 77th preservice teacher was named as PT77.

Data Collection Tool

The Student Opinion Form on Photographing Microscope Images with Mobile Phones, which was prepared by the researchers after scanning the

necessary literature and finalized after receiving expert opinion, was used as the data collection tool. In this measurement tool, 7 open-ended questions were asked to determine the opinions of preservice teachers regarding the use of mobile phones in laboratory courses. During the data collection phase, preservice teachers were asked to answer the prepared open-ended questions.

Data Analysis

The content analysis method was used in the analysis of data obtained from the Student Opinion Form on Photographing Microscope Images with Mobile Phones. In content analysis, similar data are grouped within the framework of certain concepts and themes and interpreted by making them understandable (Yıldırım & Şimşek, 2013). Frequency and percentage values were used in the presentation of the data. In addition, the data were supported with sample teacher candidate opinions. The obtained data were analyzed by two researchers. Miles and Huberman (1994) reliability formula was used for the reliability of the data. The agreement between the coders was calculated as 90%. It is recommended in the literature that this rate should be 85% and above (Miles et al., 2020).

Findings

First of all, the research sought an answer to the question, "Have you ever used your mobile phone to take microscope images in laboratory classes? If your answer is 'Yes', please write in which laboratory classes you used it" and the findings are given in Table 2 and Table 3.

Table 2. Responses to the question "Have you ever used your mobile phone to take microscope images in laboratory classes?"

Responses	f	%

Yes	73	94.8
No	4	5.2

Table 2 shows that 94.8% (f=73) of the participating preservice teachers stated that they had previously used their mobile phones to take microscope images in laboratory classes, while 5.2% (f=4) stated that they had not used their mobile phones to take microscope images in laboratory classes.

Table 3. Laboratory courses where preservice teachers used mobile phones to take microscope images

Laboratory Courses	f	%
General Zoology Laboratory	45	8.3
General Botany Laboratory	45	8.3
Laboratory and Experimental Technique	35	6.5
Cytology Laboratory	45	8.3
Seedless Plants Laboratory	53	9.8
Invertebrate Animals Laboratory	42	7.7
Histology Laboratory	51	9.4
Seed Plants Laboratory	39	7.2
Vertebrate Animals Laboratory	31	5.7
Biochemistry Laboratory	28	5.2
Plant Morphology and Anatomy Laboratory	29	5.4
Plant Physiology Laboratory	23	4.2
Animal Physiology Laboratory	32	5.9
Embryology Laboratory	15	2.8
Microbiology Laboratory	13	2.4
General Biology Laboratory	16	3

When Table 3 is examined, it is seen that preservice biology teachers stated that they recorded microscope images with their mobile phones mostly in the General Zoology Laboratory (f=45) and General Botany Laboratory (f=45) courses.

Secondly, the research sought an answer to the question "What are the advantages of photographing microscope images with your mobile phone in laboratory courses? Explain." and the findings are given in Table 4.

Table 4. Responses to the question "What are the advantages of photographing microscope images with your mobile phone in laboratory classes? Please explain."

Codes	f	%	Sample Expressions
Permanent learning	58	40.5	PT63: Since we have the image, it allows us to look at the theoretical part more holistically while studying. We understand the subject better.
Reuse	50	34.9	PT8: After the lesson, I was able to look back at the parts that I was confused about.
Convenience	25	17.4	PT9: Since my eyes are bad, I can take a photo of the image and enlarge it.
Time saving	6	4.1	PT22: It saves time.
Motivation	4	2.7	PT17: It increased my motivation.

Table 4 shows that preservice biology teachers think that taking microscope images provides advantages such as permanent learning (f=58), reuse (f=50), convenience (f=25), saving time (f=6), and motivation (f=4).

The third question in the research was "What are the disadvantages of photographing microscope images with your mobile phone in laboratory lessons? Please explain." and the findings are given in Table 5.

Table 5. Responses to the question "What are the disadvantages of photographing microscope images with your mobile phone in laboratory classes? Please explain."

Codes	f	%	Sample Expressions
Time consuming	39	32.5	*PT15: Sometimes it can take a long time to capture a clear image.*
Rote knowledge	33	27.5	*PT33: Since we are taking photos, we cannot examine them carefully.*
No disadvantages	20	16.7	*PT37: I think not.*
Technical issues	18	15	*PT41: My phone's memory fills up quickly.*
Distraction	10	8.3	*PT10: If I receive a message or notification on my phone, I get distracted.*

Table 5 shows that pre-service biology teachers stated that photographing microscope images has disadvantages such as time consuming (f=39), rote knowledge (f=33), technical issues (f=18), distraction (f=10). 20 people said that there were no disadvantages.

The fourth question in the research was "Which subjects did photographing microscope images with your mobile phone in laboratory lessons help you learn better? Explain why?" and the findings obtained are given in Table 6.

Table 6. Answers to the question "Which subjects did photographing microscope images with your mobile phone in laboratory lessons help you learn better? Explain why."

Codes	f	%	Sample Expressions
Cell and cell divisions	51	44.8	*PT71: It made it easier to understand the structures in cells.*
Tissues	48	42.2	*PT68: Taking photos of tissues made it easier for me to understand.*
Microscopic organisms	10	8.7	*PT13: It is good for examining microscopic organisms.*
All topics	5	4.3	*PT52: I think it is useful in all subjects.*

In Table 6, preservice teachers stated that photographing microscope images helped in learning about cells and cell divisions (f=51), tissues (f=48), microscopic organisms (f=10) and all subjects (f=5).

The fifth question in the research was "How did you later evaluate the microscope images you photographed with your mobile phone in laboratory lessons?" and the findings obtained are given in Table 7.

Table 7. Answers to the question "How did you later evaluate the microscope images you photographed with your mobile phone in laboratory lessons?"

Codes	f	%	Sample Expressions
Preparing for exams	55	35.5	*PT53: I used it while preparing for the exam.*
Course material	41	26.5	*PT25: I am saving the photos I took. I will use them in my class presentations.*
Sharing with others	39	25.1	*PT12: I shared it on my social media.*
Preparing reports	20	12.9	*PT75: I use it while preparing my lab reports.*

As can be seen from Table 7, the microscope images photographed are used by the preservice teachers for exam preparation (f=55), course material (f=41), sharing with others (f=39) and preparing reports (f=20).

The sixth question in the research was "Did photographing microscope images with your mobile phone change your perspective on laboratory lessons? Explain why?" and the findings are given in Table 8.

Table 8. Answers to the question "Did photographing microscope images with your mobile phone change your perspective on laboratory lessons? Explain why."

Responses	Codes	f	%	Sample Expressions
Yes (f=66)	Permanent learning	46	38	*PT39: It increased my memorability.*
	Motivation	26	21.4	*PT27: It provided me with better motivation to take photos.*
	Interesting	18	14.8	*PT56: Taking photos also provided me with an artistic perspective.*
	Reuse	17	14	*PT29: It provided me with the opportunity to look back on the parts I could not understand.*
	Time saving	14	11.5	*PT11: Now I take photos quickly and easily.*
No (f=11)				

Table 8 shows that they think that microscope images create a different perspective in permanent learning (f=46), motivation (f=26), interesting (f=18), reuse (f=17) and saving time (f=14). 11 preservice teachers stated that it did not create a different perspective.

The seventh question in the research was "What are your suggestions to make photographing microscope images with mobile phones in laboratory lessons more effective? Please explain." and the findings are given in Table 9.

Table 9. Answers to the question "What are your suggestions to make photographing microscope images with mobile phones in laboratory lessons more effective? Please explain."

Codes	f	%	Sample Expressions
Technological innovation	34	29	*PT57: Devices that take photos from a microscope can be used.*
Teacher should take	18	15.3	*PT44: Only the teacher can take photos.*
Image should be projected	16	13.6	*PT35: The best photo should be projected on the screen and discussed.*
Extra time should be given	15	12.8	*PT18: A special time should be given for taking photos.*
Photos should be shared	12	10.2	*PT23: The best photos should be shared in the WhatsApp group.*
Training should be received	10	8.5	*PT5: Special lessons and training can be taken for taking photos.*
Extra points should be given	6	5.1	*PT49: Extra points should be given to those who find beautiful images.*
Use in exam	6	5.1	*PT40: The teacher should ask about the photos in the exam.*

Table 9 shows that preservice teachers have suggestions to make photographing microscope images more effective, such as technological innovation (f=34), teacher should take photos (f=18), image should be projected (f=16), extra time should be given (f=15), photos should be shared (f=12), training should be received (f=10), extra points should be given (f=6) and using in exam (f=6).

Discussion and Conclusion

It was found that preservice biology teachers stated that they recorded microscope images mostly with mobile phones in General Zoology Laboratory and General Botany Laboratory courses. In addition, preservice teachers stated that photographing microscope images helped in learning about cell and cell divisions, tissues, microscopic organisms and all subjects. The widespread use of mobile phones and technology by students provides an opportunity for schools and educators to use these devices for teaching purposes (Kiger & Herro, 2015). Ostrin and Dushenkov (2016) found in their study that using mobile phones in anatomy and physiology laboratories increased students' participation and motivation in the laboratory course. In addition, Harper, Burrows, Moroni, and Quinnell (2015) found in their study that students using mobile phones to take photographs of microscope specimens in botany courses increased student participation and that students taking the images themselves helped them make better connections with what they were learning. Ürey and Aydın (2014), in their study using the bio-lab-web method, asked about the positive aspects of this method and coded the answers they received from preservice teachers in a similar way, as recording, examining, comparing, archiving, sharing and environment. The answers given by the preservice teachers to another question asking about the negative aspects of this method were grouped under mechanical problems experienced in tools and equipment and individual problems.

Preservice biology teachers stated that taking microscope images has advantages such as permanent learning, reuse, convenience, time saving, and motivation; while taking photographs of microscope images has disadvantages such as time-consuming, memorized knowledge, technical problems, and distraction. Similarly, Kafyulilo (2012) found that most students felt comfortable learning using mobile phones and thought that using them in the classroom could simplify learning and save time. In addition, it was understood that most students stated that they believed that using their smartphones as a learning tool helped increase their participation in laboratory classes and made it easier to work for laboratory practices. Brown,

Thomas, and Thomas (2014) determined in their study that students wanted to use technologies such as smartphones in their learning environments and found them motivating in increasing their participation in classes.

Creating learning environments with different teaching methods that interact with digital devices such as mobile phones, computers and tablets for students born into the age of technology is effective in increasing students' motivation and success (Elmas & Geban, 2012). Knowing the features of the microscope, which is one of the main tools in biology laboratories, and being able to make the right adjustments according to the material being examined is very important in reaching a result (Uzel, Diken, Yılmaz, & Gül, 2011). Çetin, Bayboz and Harman (2014) stated that in their research, preservice biology teachers were asked whether they had any difficulties in learning the parts of the microscope and if they had any problems, what they were; they received the answers of 'coarse adjustment knob/macrovision', 'fine adjustment knob/microvision', 'revolver', 'objective', 'condenser' and 'diaphragm' from the preservice teachers. In their study, Uzel, Diken, Yılmaz and Gül (2011) asked preservice teachers which of the steps they had the most difficulty in obtaining a clear image with a microscope and they stated that they had the most difficulty in sharpening the image with the fine adjustment knob/microwave. When the results of both research questions are examined, it can be said that sharpening the image will also affect the clarity of the photograph to be taken. When the functions of these parts of the microscope are considered, their effectiveness in sharpening the image and subsequently improving the quality of the image taken from the mobile phone supports the research findings.

Gül and Özay Köse (2019), in their study investigating preservice biology teachers' knowledge of microscope usage, determined that preservice teachers answered the image finding and examination steps correctly at a rate of 29.7%; however, they knew the functions of macroscrew and microscrew but confused their names. While preservice teachers were working in groups in laboratories, the images they found could cause problems in sharing them

between groups during the lesson. For this reason, this interaction is attempted to be achieved by using technology. One of these is to record the images in the microscope and transfer them to the web environment (Ürey & Aydın, 2014). Saraç (2019) reached 50 different metaphors in his study aiming to determine the opinions of middle school students about the concept of mobile phone, which is a technological material, through metaphors. It was determined that the metaphors developed for the concept of mobile phone were mostly gathered in the categories of a tool that changes according to the purpose of use and an indispensable tool for life. Şenel (2016) identified 69 different metaphors for the concept of mobile phone in his study. In the study, it was understood that the students generally had positive views and approaches about mobile phones. However, some students expressed that mobile phones were dangerous and a source of addiction.

References

Aydoğdu Karaaslan, İ., & Budak, L. (2012). Üniversite öğrencilerinin cep telefonu özelliklerini kullanımlarının ve gündelik iletişimlerine etkisinin araştırılması. *Journal of Yasar University*, 26(7), 4548-4525.

Brown, E. A., Thomas, N. J., & Thomas, L. Y. (2014). Students' willingness to use response and engagement technology in the classroom. *Journal of Hospitality, Leisure, Sport and Tourism Education, 15*(1), 80-85.

Büyüköztürk, Ş., Kılıç Çakmak, E., Akgün, Ö. E., Karadeniz, Ş., & Demirel, F. (2020). *Nitel araştırmalar. Eğitimde bilimsel araştırma yöntemleri* (s.251-290). Pegem Akademi.

Çetin, G., Bayboz, Ö., & Harman, Ö. (2014). Biyoloji öğretmen adaylarının mikroskop kısımları ve kullanımı hakkındaki görüşleri. *Eğitim ve Öğretim Araştırmaları Dergisi, 3*(3), 201-208.

Çolak Yazıcı, S. (2023). Technology Integration in Chemistry Education. In: Akpınar, A. (ed.), Research on Mathematics and Science. Özgür Publications. DOI: https://doi.org/10.58830/ozgur.pub81.c471

Ekici, G. (2016). Biyoloji öğretmeni adaylarının mikroskop kavramına ilişkin algılarının belirlenmesi: bir metafor analizi çalışması. *Ahi Evran Üniversitesi Kırşehir Eğitim Fakültesi Dergisi, 17*(1), 615-636.

Elmas, R., & Geban, Ö. (2012). 21. Yüzyıl Öğretmenleri için Web 2.0 Araçları. *Uluslararası Çevrimiçi Eğitim Bilimleri Dergisi, 4*(1), 243-254.

Gikas, J., & Grant, M. M. (2013). Mobile computing devices in higher education: Student perspectives on learning with cellphones, smartphones & social media. *Internet and Higher Education, 19*, 18-26.

Gül, Ş., & Özay Köse, E. (2019). Biyoloji öğretmen adaylarının mikroskop kullanım bilgilerinin belirlenmesi. *Uluslararası Eğitim Bilim ve Teknoloji Dergisi, 5*(3) , 136-150.

Gürbüzoğlu Yalmancı S. (2016). *Fen öğretiminde biyolojinin yeri ve önemi*. S. Aydın ve S. Gürbüzoğlu Yalmancı (Ed.), *Fen bilimleri öğretmen ve öğretmen adayları için biyoloji öğretimi* (s. 1-12). Pegem Akademi.

Harper, J. D. I., Burrows, G. E., Moroni, J. S., & Quinnell, R. (2015). Mobile botany: Smart phone photography in laboratory classes enhances student engagement. *The American Biology Teacher, 77*(9), 699-702.

Kafyulilo, A. (2012). Access, use and perceptions of teachers and students towards mobile phones as a tool for teaching and learning in Tanzania. *Education and Information Technologies, 19*(1), 115-127.

Keskin, İ., Özbek, H., Ulaş, N., & Müdok, T. (2015). Geleneksel mikroskop eğitiminden dijital mikroskop eğitimine geçiş. *Tıp Eğitimi Dünyası, 14*(42), 27-32.

Kiger, D., & Herro, D. (2015). Bring your own device: Parental guidance (PG) suggested. *TechTrends, 59*(5), 51-61.

Miles, M. B., & Huberman, A. M. (1994). *Qualitative data analysis: An expanded sourcebook.* C.A: Sage press.

Miles, M. B., Huberman, A. M., & Saldaña, J. (2020). *Qualitative data analysis: A methods sourcebook (4th Edition).* Thousand Oaks, CA: SAGE Publications Inc.

Morrison, A. O., & Gardner, J. M. (2015). Microscopic image photography techniques of the past, present, and future. *Archives of Pathology & Laboratory Medicine, 139*(12), 1558-1564.

Ostrin, Z., & Dushenkov, V. (2016). The pedagogical value of mobile devices and content-specific application software in the A&P laboratory. *HAPS Educator 20*(4), 97-103.

Saraç, H. (2019). Ortaokul 8. sınıf öğrencilerinin akıllı tahta ve cep telefonu hakkında görüşleri: Metafor analizi çalışması. *Pamukkale Üniversitesi Eğitim Fakültesi Dergisi, 45*, 99-115.

Şenel, M. (2016). İngilizce öğretmenliği bölümü öğrencilerinin cep telefonu ile ilgili algılarının metaforlar aracılığıyla analizi. *Kastamonu Üniversitesi Kastamonu Eğitim Dergisi, 24*(4), 1749-1764.

Uluçınar, Ş., Cansaran, A., & Karaca, A. (2004). Fen bilimleri laboratuvar uygulamalarının değerlendirilmesi. *Türk Eğitim Bilimleri Dergisi*, *2*(4), 465-475.

Uzel, N. (2016). *Biyoloji öğretiminde laboratuvar çalışmaları.* S. Aydın ve S. Gürbüzoğlu Yalmancı (Ed.), *Fen bilimleri öğretmen ve öğretmen adayları için biyoloji öğretimi* (s. 203-239). Pegem Akademi.

Uzel, N., Diken, E. H., Yılmaz, M., & Gül, A. (2011). Fen ve teknoloji ile biyoloji öğretmen adaylarının mikroskop kullanımında karşılaştıkları sorunlar ve bu

sorunların nedenlerinin belirlenmesi. *2nd International Conference on New Trends in Education and Their Implications,* Antalya.

Ürey, M., & Aydın, M. (2014). Genel biyoloji laboratuvarı kapsamında geliştirilen biyo-lab-web (blw) yönteminin etkililiği ve öğretmen adaylarının görüşleri. *Dicle Üniversitesi Ziya Gökalp Eğitim Fakültesi Dergisi*, *22*, 150-167.

Yıldırım, A., & Şimşek, H. (2013). *Sosyal bilimlerde nitel araştırma yöntemleri.* Ankara: Seçkin Yayınevi.

CHAPTER 4

THE DYNAMICS OF PLAY: IMPACT ON HUMAN DEVELOPMENT AND CULTURAL EVOLUTION

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Introduction

Play is strongly related to engagement, which greatly enhances problem-solving skills. Play has been regarded as a manifestation reserved for children, according to Jean Piaget's developmental theory children need to perform pretend play and role-taking activities to develop certain competences (Pellegrini, 2009). Problem-solving through play not only makes the process fun but also makes the child resilient and adaptive-learning to learn to learn to approach real-world challenges with confidence and creativity.

Play tends to be one of the active stimulants of creativity and imagination, operating as a unique medium for exploration and trying out new ideas. Arguably, pretend play develops requisite cognitive and affective processes, which are core elements in the development of creativity (Russ, 2003). In imaginary situations, children take different roles involving different settings with varied outcomes. This kind of process opens up broader aspects of thinking creatively and innovatively. According to scholars, children's play not only reflects the status of their imagination but also stirs further creative pursuits (Aljarrah, 2017). This interaction between play and creativity reveals the role of creative activities in cognitive development and cultural evolution.

The connection between play experiences and the development of critical thinking skills is highly correlated. A cultural perspective, such as critical thinking underlies identity construction, not only as individual processes of reflection but also communication in social contexts and cultural frameworks (Grosser& Lombard 2008). In other words, play offers the child opportunities to question, analyze, and assess various situations thus developing his/her critical thinking abilities. Therefore, various materials and environments children come into contact with during play support this process of enhancing their cognitive openness and disposition for critical thinking (Riede et al., 2018). In maneuvering through the intricacies of playing, a child learns to appreciate the reality that exists adjacent to him; hence, he equips himself with the tools that are essential for decision-making and problem-solving within various contexts.

Social and Emotional Benefits of Play

Play is one of the basic channels through which a child constructs empathy and acquires a sense for appropriate social signals. By joining in playful activities, a child can well place himself in the shoes of others and thus begin appreciating the feelings of others and also start responding to others' emotions well (Milter et al., 2012). This process is very important for their social development in the sense that it helps them to work out and adjust their behavior in various complex social situations. In playing, children learn how to read such non-verbal cues such as facial expressions and body language, which constitute the major part of effective communication. Such skills, though very important during childhood, can become great basic builders of empathetic communication in adult life.

The playful dynamics also highly create the communication and collaboration skills of children. So, children are not just playing to have fun but actually actively honing those skills for good communication and collaboration (Zosh et al., 2017). Activities can be team sports or group games through which they have to put forth their matter clearly, listen to what others say and work collectively towards a common goal. This act catalyzes the emergence of verbal communication skill-namely negotiation and resolution of conflicts, very urgent in personal and professional circumstances. Moreover, in a group game, children are already ready to learn from the variety of opinions and ready to create a successful collaboration with other people who have different interests.

Play also has a large role in human development by promoting emotional competence and resilience. Because play creates a low-stress environment for children to ventilate different feelings, it is a very important requirement for nurturing emotional competence and resilience (Ahmed et al., 2023). For instance, through play, a child may lose some games or may not do whatever he/she wanted to achieve, and thus learns how to adapt to the situation and manage disappointment. Overcoming challenges during the play situation, therefore, helps in attaining resilience since the child can weather the situation

and regulate emotion in real-life situations. As a result, play actively places itself as a central tool for such a function that the child will use in navigating through life confidently.

Play as a Tool for Physical Development

Play is the basic act that leads the children to the development of motor ability and coordination (Sutapa et al., 2021). Running, jumping, and catching a ball thus become some activities through which the child learns or grooms himself to perform better in gross and fine motor skills that are very important for the development of the physical ability of a child. These activities pull or push in the direction of getting children to coordinate with the different muscle groups of their body, developing enhanced physicality and agility. Exploring different movements and actions is also a result of playing and leads to better motor coordination and creativity in children (Pellegrini, 2009). In the process of playing, and especially while pretending, children learn to control their bodies very specifically (Goldstein&Lernerscience, 2018). Therefore they can become confident in physical activities. Motor skills are the building blocks upon which more complex physical activities rest, and these are developed through regular play.

Another important advantage of play is that it supports the promotion of active lifestyles and fitness at an early age. Habitual engagement in physical play by children will most probably instill a culture of movement in them and thus embrace an active lifestyle as they grow up. This can be very crucial in reducing sedentary behaviors that have predisposed many young people to increasing rates of obesity (Yogman et al., 2018). In addition, through play, children try to include exercise as a part of the daily routine, which is an exciting element to do and hence helps the cardiovascular being healthy and strong muscles. Play at the basic level also gives other forms of physical development, including endurance, flexibility, and aerobic capacity, hence making sure that pursuit of fun and intrinsic value in keeping active remains a very key lifestyle choice for pursuit of health and well-being in life (Granero-Jiménez et al., 2022).

The spatial sense and balancing are also derived as highly critical aspects of play contributing immensely toward physical development. In activities such as climbing, balancing the body while walking on a beam or going through the obstacle course, children develop their spatial awareness by understanding how their body relates to space around them (Hedges, 2013). This sense is very important for safe and effective navigation through space because it allows children to judge distance, make movement adjustments, and keep their balance.

The Evolutionary Significance of Play

The survival-adaptation function of play has been among the oldest, perennially interesting theoretical concepts to scholars in many fields of study (Jensen, 2021). The role of this process of development assumes significance in that the skills relevant for a livelihood, like hunting, gathering, and socializing, are perfected. Moreover, play is also a site of safety where individuals can carry out and practice activities without the real and immediate consequences of failure. This inherent quality of being able to simulate various situations from the given situation at hand enhances decision-making and further development of assessing and taking risks. Next, play is also introduced as the forerunner to creativity because it enhances exploration and the combination of elements. All of these components collectively point toward the fact that not all types of play can be trivial—some have to be deemed basic and intrinsic to the very process of survival and adaptation.

The importance of play in human brain development therefore speaks to its evolutionary value. Play behaviors made a major contribution to the development of cognitive and socioemotional skills during early human development (Nijhof et al., 2018). The involvement of play during early life initiated complex neural connections in the process of problem-solving abilities and flexibility. In addition, human children have such long childhoods because they are so very behaviorally plastic over this extended period-the better to respond to rapidly changing environmental conditions (Jensen, 2021). The fact

that humans have extended childhoods means that sensorimotor play during early childhood in real terms constituted a mere training ground for the more complex cognitive processing involved in making cultural and technological innovations. Play was important not only for the individual developmental process of the brain but also for the collective progress of mankind by educating the minds of the youngest members of the species.

The scope of play within evolutionary biology and the development of species involves wider trends of evolution. The following paper discusses play from an evolutionary perspective, as the ultimate force behind social and cultural evolution (Vandenberg et al., 1982). Especially, the frame within which play provides the social interaction and cooperation required for large social structures and cultural practices; it allows the acquisition of knowledge and skills to preserve and generate culture. In addition, it remains possible that playful handling of materials and environments set material culture innovations in motion, which are crucial to human evolution (Riede et al., 2018). These innovations are brought about at the advent of playing activities and have immensely set species development on its path, making the role of play relevant in evolutionary biology.

Cultural Variations in Play Practices

The differences in playing also show what rich history the human has concerning creativity and interaction. In most, playfulness is the human quality of behavior, though it shows differences in expressions in every society (van Oers, 2012). he most interesting difference between the two societies is that one has structured and organized play, very much entailing specific rules and rituals, while the other is more free and spontaneous, children create with free forms. All these differences reflect the various cultural and environmental conditions under which one grows up. While for some, it may be more that the children are expected to engage in cooperative play, hence sharing and working in teams, some others may expect competitive play, single achievements, and leadership qualities. Such insights into the cultural complexity of games are important

simple indicators of the ways in which societies nurture and socialize their young members.

Cultural beliefs and values influence the type of games children play as well as the role children assume during play. Culture permeates and is shaped by children's play through creative assimilation and interpretive reproduction processes (Gosso & Almeida, 2013). For instance, in such a cultural heritage where storytelling is salient in the fabric of society's day-to-day living, then children's play may be seen in the reenactment of traditional stories or in making up new ones for the transmission and preservation of cultural knowledge. Additional, parents vary greatly in their beliefs about the importance and purpose of play, which has implications for the amount of time their children spend playing and the specific activities they engage in. Some cultures view play as crucial to cognitive and social development, while others may see it as a trivial activity far removed from academic pursuits (Roopnarine, 2011). These instances of the cultural contexts regarding play surface the dynamic relationship that exists between culture and individual development.

Other than this, there are interesting blends between cultural interaction and hybridization resulting from the influences of globalization on traditional play activities. The information introduced by globalization to children worldwide has diversified the types of play available and in practice. Most often, these new types of play are predominantly hybrids between traditional games and modern influences (Tuncer, 2023). The above cultural hybridization can be evidenced from the modifications or the addition of game elements made in traditional games to borrow fun from other cultures, representing a more interconnected world in its essence. Though there are internationally popular digital games, most use local cultural themes and narratives to infuse uniqueness into a play that resonates across diverse backgrounds. The delivery in itself enhances the experience of play but hence presents abstractness in the protection of traditional play. That, indeed, would characterize the very essence worldwide, full of life but lively, one that would only ensure responsible engagement with its changing face.

The Influence of Technology on Modern Play

The digital- and virtual-play environments are revolutionary in the play patterns of individuals, especially children. The programs would be filled with video games, interactive applications, and experiences in virtual reality introducing dimensions of play that are gripping and immersive. This has not only been a change within the patterns of existing playful activities but a change at the level of cultural practice where technology prompts change (Jensen, 2021). The rate of cultural change, unlike biological evolution, is faster, and thus, behavior shows an open potential for new, previously unimaginable forms of play to develop. The digital and virtual play environments have unique abilities of creativity and innovation: they open make-believe worlds and situations limited only by the frontiers of advances in technology. It has since resulted in a redefinition of what constitutes play, sans the requirement for physical presence, with the ever-waning borderline that separates reality from fantasy.

The cause and effect relationship that screen time shares with trampling traditional patterns of play has earned concern from teachers and parents in equal measure. As digital devices multiply and their prevalence heightens, kids pour more time into activities displayed on screens and less into traditional play, including outdoor games and pretendin (Muppalla et al., 2023). This has implications for different developmental domains such as cognitive, social, and physical development. Research evidence on the other hand proved that excessive screen time could potentially impede the development of key social skills since it reduces face-to-face interaction and collaborative play experiences (Muppalla et al., 2023). On another note, sedentary screen-based play concerns the physical aspect that may give rise to childhood obesity with its attendant problems. Hence, the relationship between screen and traditional play has to be well understood in the pursuit of an all-around child development. The difficulty is making digital play serve to enhance, not substitute traditional patterns of play while managing children's access so that they appreciate the best of both worlds.

Balancing the digital play with physical play and social activities gives space for the development of the whole child. There are very many merits that come with allowing the child to engage in digital play, such as improved problem-solving skills and the likelihood of coming into contact with diverse learning experiences. However, this digital play must be balanced with physical play if the lifestyle of the child is to be wholesome (Sanne et al., 2018). Additionally, through physical play activities, children begin to develop motor skills, coordination, and general physical well-being—all essential elements for their growth and welfare. Social activities also enforce the interaction of communication skills, empathy, and cooperation that are necessary to go through real relationships. The imposed structure of the environment by parents and teachers will work for and against the strengths and weaknesses of each type of play—providing rich experiences for the children. A balanced approach will hold its place in ensuring that digital play forms one part of a multi-faceted play of children, enriching them in every domain.

Play in Educational Settings

The incorporation of play-based learning into curricula has increasingly become one of the modalities expected to bring about comprehensive development among children. Research has proven that children show excellent performance in various aspects given a playing learning environment, especially in ECCE institutions (Ndlovu et al., 2023). Curricula integrate play as a tool for activity that involves creativity, critical thought, and social interaction, thus constituting fundamental requirements for subsequent academic and personal achievements. Infusing the play within educational frameworks makes the learning situation even more dynamic, involving the fulfillment of specific needs by children. It also facilitates the development of cognitive skills that lead to proper understanding of the teaching requirements and further the social and emotional dimensions of learning, thus providing a sound base for lifelong learning.

The benefits of play on improving scholastic performance are well-founded, hence its role in the educative process is important. Indeed, research and studies assert that students who undergo play-related learning experiences tend to show vast improvement concerning language, problem-solving skills, and executive functions (Yee et al., 2022). These improvements emanate from the fact that play is interactive and experiential based on their concept that the child has an opportunity for hands-on activities. The child can retain better learning information when engaged in playful activities and may apply this information in several instances, thus enhancing his scholastic performance. In addition, play-based learning can always create a positive attitude towards school as it makes the learning process fun and meaningful.

The educator is a prime conduit towards productive play within education and is a way to make play-based learning effective and purposeful. Therefore, by intentionally constructing some play activities that meet the aims of the curriculum, teachers will steer the children towards specific learning while still allowing free scope for the children's creativity and exploration (Nicholson & Dominguez, 2021). The educators have to strike a balance between freedom and structure, giving some of the choices and chances to make decisions that will instill a feeling of autonomy and self-assurance in the children. By observing sensibly and smartly, the teachers will realize how the child has developed and then direct the play session for that individual child. This will make sure that play is integrated into lessons, giving ultimate success and development to the children..

Play and the Development of Identity

Play acts as a very important mechanism through which children are exploring their self-concept and personal interests; thus, they can meet these different identities in an activity of very low risk. In play, the child performs various imaginary roles and situations to his likes and dislikes. This does not only mean trying out different things but during the deep phenomenological analysis of what playing is at its most fundamental level, personal preferences

and identity elements may surface (Hols, 2017). In play, there is freedom and creativity that allows the children to explore themselves and the environment toward building a healthier self-concept. While playing, children do not only amuse themselves but find out about their likes, dislikes, and interests, which play a critical role in the formation of their identity.

The effect of play on gender identity and social roles is extremely profound, for it is through play that children navigate and come to understand the norms and expectations of each gender. The children may usually undertake roles in their playing that reflect the existing norms in society, such as playing house or pretend occupations, activities through which the children solidify their understanding of gender roles. But play presents a golden opportunity for challenging and redefining those roles. An enhanced comprehension of the linkage between play and childhood, as discussed by Holst (2017), reveals that it goes beyond the mere imitation of norm imageries; rather, it enables the child to discover and experience a number of identities and roles (Holst, 2017). Such an exploration gives a keen perception of the fluidity characterizing gender and social roles and enables the individual to work out a more individualized understanding of his gender identity. It is through play that children can experiment with roles that fall outside traditional gender boundaries, leading to a more general approach to social roles.

Play creates cultural and personal narratives in a sense that it is a framework that people use to make sense out of their experience and shared lives. People do this by telling stories and acting out roles in narrative creation that reflects cultural values and personal experiences. The construction of narratives through play is both an innovation of culture and development. This further elucidates the biology-culture interplay where play serves as a channel for the transmission of culture in terms of a person's storytelling (Pellegrini, 2009). It enables individuals to reinterpret and recreate cultural narratives, allowing room for a dynamic and evolving cultural identity. The play-created narratives thus become the cornerstone upon which one can build their place

within a cultural context, which becomes a contribution to the personal and cultural building up of information.

Therapeutic Applications of Play

The play in therapy has been widely used for mental health and trauma because it speaks volumes when it comes to healthy feelings and emotions. The Therapeutic Play will create an implicit assurance of a nonjudgmental articulation within the safety and support given by the environment. The general approach is especially salutary with children who are not yet able to articulate their emotions verbally. For example, the expression of feelings and emotions in creative play experiences in their service fosters creativity. Hence, they become expressive in working through complicated feelings (Chauhan et al., 2024). Because it is non-threatening, play therapy can facilitate the formation of a strong therapeutic alliance, an important aspect in building the trust of child clients with their therapist, and thus the healing process as well (Stewart&Echterling 2016).

Benefits of play therapy can be both for children and adults, proving to be an approach with resilience against different psychological tribulations. For children, play therapy can boost cognitive, social, and emotional skills that contribute to flexibility in coping with stressors (Sanne et al., 2018). Such flexibility is most important in the enhancement of resilience and coping resources that would enhance good mental health on a general note. For the adults, participation in play therapy activities can enhance emotional intelligence as well as resilience, as proved by the impacts of plays on resilience (Ho, 2022). Through play, there can be a psychological readjustment for people of all ages to attain higher psychological functions and emotional stability (Pellegrini, 2009).

Different techniques and strategies are utilized within the play therapy arena for maximum benefits to be accrued. They are individualized to the special needs of each person to assure a unique and rewarding therapeutic experience. For instance, one might engage in role-playing with the client to see

different perspectives and develop problem-solving skills. Sensory play, too, could be integrated for emotion regulation and self-awareness building. Such strategies help create a lively and interesting healing environment for further growth and healing. The dynamism in these techniques points to the many psychological concerns that play therapy can help alleviate, as it fosters long-term wellness.

Future Trends in Play and Development

One of the forces that have continuously reshaped the nature of play for children and adults is the innovation of play materials and play environments. For instance, the integration of technology related innovations has brought about smart toys and interactive playgrounds of action, which adjust to the learner and consequently turns it into a dynamic learning surrounding. Further development includes the provision of challenges to improve cognitive and physical development, challenges that will now vary according to the ability level of the player. Augmented Reality and Virtual Reality are such technologies that have provided an entirely new plane wherein playing is immersive, with actual physical limitations transcended (Hamad&Jia, 2022). The current trend in environmentally conscious actions is another factor encouraging sustainable play materials since such toys and play sets are manufactured from either biodegradable or recycled products. Herein, these innovations are ability-based changes that blend the traditional form of play with modern technological advancements, which depicts traditional play forms alongside modern technological developments (Riede et al., 2021).

Looking into how play might further evolve in society, it would be in finding that digital and physical play spaces will increasingly merge in ways that make the boundaries between the real world and virtual experience even more porous. With technology advancing at an even greater pace, customizing and evolving play into personalized and adaptive experiences can open new and rather promising avenues for individual learning and development. It may lead to changes in interactions between individuals, influences such things as online

multiplayer gaming, and creates virtual communities. Rather optimistically, it can be argued that the role of play in cultural evolution will be instrumental in expressing core cultural values that enable adaptation to changing social and other human conditions. This dynamic aspect of the theory on cultural evolution is well explained through cultural evolutionary theory, where culture itself is an information-transfer system; therefore, play is a catalyst for innovation and the progression of culture (Riede et al., 2021).

Conclusion

Playing impinges on a rather wholesome and diversified route of human growth and culture, portraying the strong effects across cognitive, social, emotional, physical or even domains of therapy. Play served an essential role in reasoning operations and encouraged creativity, critical thinking, and problem-solving skills; also, it allowed empathy and communication abilities within a social context. Its contribution to physical development is very important because it enhances motor skills and encourages active living. Play also has biological relevance tracing the survival mechanisms engraved in human history as well as the development of the brain at the time. From the variety of cultures about play activities, it can be seen how cultural forces, as well as technological advancements that produce newer opportunities and challenges regarding play in modern settings, affect behavioral play. When there is education, identity development gets enhanced through playing; thus, its therapeutic applications then become even more essential in giving psychological healing support. Looking ahead, the future of play promises innovations and adaptations. There is a need for further exploration into its complexities and potential for fun to ensure and where necessary manage the dynamics that we have to appreciate play as a source of wholesome development and the uniting fabric for a long time to come.

References

Ahmed, S., Khan, D. S., & Mehmood, A. S. (2023). Let Them Play: A Systematic Review Investigating the Benefits of Free Play in Emotional Development of Children. *Academy of Education and Social Sciences Review*, 3(4), 509–520. https://doi.org/10.48112/aessr.v3i4.660

Aljarrah, A. (2017). Play as a Manifestation of Children's Imagination and Creativity. *Journal for the Education of Gifted Young Scientists*, 5(1), 23-36.

Bruner, Jerome. 1976. Nature and uses of Immaturity. In Play: Its Role in Development and Evolution. Edited by Jerome Seymour Bruner,Alison Jolly and Kathy Sylva. New York: Basic Books, pp. 28–64

Goldstein, T. R., & Lerner, M. D. (2018). Dramatic pretend play games uniquely improve emotional control in young children. *Developmental science*, 21(4), e12603. https://doi.org/10.1111/desc.12603

Gosso, Y., & Almeida Carvalho, A. M. (2013). Play and cultural context. Encyclopedia on Early Childhood Development. https://www.child-encyclopedia.com/pdf/expert/play/ according-experts/play-and-cultural-context

Granero-Jiménez, J., López-Rodríguez, M. M., Dobarrio-Sanz, I., & Cortés-Rodríguez, A. E. (2022). Influence of Physical Exercise on Psychological Well-Being of Young Adults: A Quantitative Study. *International journal of environmental research and public health*, 19(7), 4282. https://doi.org/10.3390/ijerph19074282

Grosser, M.M., & Lombard, B.J. J. (2008). The relationship between culture and the develop-ment of critical thinking abilities of prospective teachers. *Teaching and Teacher Education: An International Journal of Research and Studies*, 24(5), 1364–1375. https://doi.org/10.1016/j.tate.2007.10.001

Hamad, A., & Jia, B. (2022). How Virtual Reality Technology Has Changed Our Lives: An Overview of the Current and Potential Applications and Limitations. *International journal of environmental research and public health*, 19(18), 11278. https://doi.org/10.3390/ijerph191811278

Hedges, J. H., Adolph, K. E., Amso, D., Bavelier, D., Fiez, J. A., Krubitzer, L., McAuley, J. D., Newcombe, N. S., Fitzpatrick, S. M., & Ghajar, J. (2013). Play, attention, and learning: how do play and timing shape the development of attention and influence classroom learning?. Annals of the New York Academy of Sciences, 1292(1), 1–20. https://doi.org/10.1111/nyas.12154

Ho W. W. Y. (2022). Influence of play on positive psychological development in emerging adulthood: A serial mediation model. Frontiers in psychology, 13, 1057557. https://doi.org/10.3389/fpsyg.2022.1057557

Holst, J. (2017). The dynamics of play – back to the basics of playing. International Journal of Play, 6(1), 85–95. https://doi.org/10.1080/21594937.2017.1288383

Jensen, C.X.J. (2021). Evolution of Play. In: Shackelford, T.K., Weekes-Shackelford, V.A. (eds) Encyclopedia of Evolutionary Psychological Science. Springer, Cham. https://doi.org/10.1007/978-3-319-19650-3_1062

Milteer, R. M., Ginsburg, K. R., Council On Communications And Media, & Committee On Psychosocial Aspects Of Child And Family Health (2012). The importance of play in promoting healthy child development and maintaining strong parent-child bond: focus on children in poverty. Pediatrics, 129(1), e204–e213. https://doi.org/10.1542/peds.2011-2953.

Muppalla, S. K., Vuppalapati, S., Reddy Pulliahgaru, A., & Sreenivasulu, H. (2023). Effects of Excessive Screen Time on Child Development: An Updated Review and Strategies for Management. Cureus, 15(6), e40608. https://doi.org/10.7759/cureus.40608

Ndlovu, Blanche & Okeke, Chinedu & Nhase, Zukiswa & Christian, Sunday & Okeke, Charity & Ede, Moses. (2023). Impact of play-based learning on the development of children in mobile early childhood care and education centres: Practitioners' perspectives. International Journal of Research in Business and Social Science (2147- 4478). 12. 432-440. 10.20525/ijrbs.v12i3.2358.

Nicholson, Julie & Dominguez-Pareto, Irenka. (2021). The Powerful Role of Play in Early Education.

Pellegrini, A. D. (2009). The role of play in human development. Oxford University Press. https://doi.org/10.1093/acprof:oso/9780195367324.001.0001

Riede, F., Johannsen, N. N., Högberg, A., Nowell, A., & Lombard, M. (2018). The role of play objects and object play in human cognitive evolution and innovation. Evolutionary anthropology, 27(1), 46–59. https://doi.org/10.1002/evan.21555

Riede, F., Walsh, M. J., Nowell, A., Langley, M. C., & Johannsen, N. N. (2021). Children and innovation: play, play objects and object play in cultural evolution. Evolutionary human sciences, 3, e11. https://doi.org/10.1017/ehs.2021.7

Roopnarine, J. L. (2011). "Cultural variations in beliefs about play, parent?childplay, and children's play: meaning for childhood development," in The OxfordHandbook of the Development of Play, ed A. Pellegrini (New York, NY: OxfordUniversity Press), 19–37.

Sanne L. Nijhof, Christiaan H. Vinkers, Stefan M. van Geelen, Sasja N. Duijff, E.J. Marijke Achterberg, Janjaap van der Net, Remco C. Veltkamp, Martha A. Grootenhuis, Elise M. van de Putte, Manon H.J. Hillegers, Anneke W. van der Brug, Corette J. Wierenga, Manon J.N.L. Benders, Rutger C.M.E. Engels, C. Kors van der Ent, Louk J.M.J. Vanderschuren, Heidi M.B. Lesscher. (2018). Healthy play, better coping: The importance of play for the development of children in health and disease, Neuroscience & Biobehavioral Reviews, Volume 95,Pages 421-429, ISSN 0149-7634, https://doi.org/10.1016/j.neubiorev.2018.09.024.

Smith, P. K. (2005). Play: Types and Functions in Human Development. In B. J. Ellis & D. F. Bjorklund (Eds.), Origins of the social mind: Evolutionary psychology and child development (pp. 271–291). The Guilford Press.

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Sutapa, P., Pratama, K. W., Rosly, M. M., Ali, S. K. S., & Karakauki, M. (2021). Improving Motor Skills in Early Childhood through Goal-Oriented Play

Activity. Children (Basel, Switzerland), 8(11), 994. https://doi.org/10.3390/children8110994

Tuncer, F. F., (2023). Discussing Globalization and Cultural Hybridization. Universal Journal of History and Culture, 5(2), 85-103. DOI: 10.52613/ujhc.1279438

van Oers, B. (2012). Culture in play. In J. Valsiner (Ed.), The Oxford handbook of culture and psychology (pp. 936–956). Oxford University Press.

Yogman, M., Garner, A., Hutchinson, J., Hirsh-Pasek, K., Golinkoff, R. M. (2018). Committee on Psychosocial Aspects of Child and Family Health, & Council on Communications and Media the Power of Play: A Pediatric Role in Enhancing Development in Young Children. Pediatrics, 142(3), e20182058. https://doi.org/10.1542/peds.2018-2058

Zosh, J. M., Hopkins, E. J., Jensen, H., Liu, C., Neale, D., Hirsh-Pasek, K., Solis, S. L., & Whitebread, D. (2017). Learning through play: A review of the evidence. Retrieved from https://cms.learningthroughplay.com/media/esriqz2x/role-of-play-in-chi ldrens-development-review_web.pdf/. (Accessed 15 June 2024).

CHAPTER 5

9TH GRADE STUDENTS' TIME MANAGEMENT PERCEPTIONS AT DISTANCE EDUCATION: TURKEY EXAMPLE DURING THE COVID-19 PANDEMIC*

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Introduction

In February 2020, following China, total 24 country including Turkey experienced a harsh time by transferring their education system from schools to distance models due to the Covid-19 pandemic. In crisis situations, there occur a variety of needs of each different group in the society. From our concern, this crisis has caused both all education system to transform and all students to undergo a dramatic change. IASC Guidelines on Mental Health and Psychosocial Support in Emergency Settings (2007) states that in crisis situations students are in need of psychological and sociological support other than academic support. All stakeholders of education, primarily parents and teachers are supposed to be responsible for creating environments which can affect students in a positive way.

As a result of the break in face-to-face education, distance education came into prominence since this crisis was to be handled with care and consideration. Distance education is suggested to have both positives and negatives; however, it has become the first and the most immediate solution in the case of the pandemic. To highlight the advantageous sides of it, the following descriptions are considered vital. According to Zan and Zan (2020) distance learning is stated to be an advantage in terms of time and cost. The fact that teachers and scholars record their online lessons enables students who cannot attend or tend to revise the lessons to access those authentic video clips. Asynchronous learning enables students to access lesson recordings when they are available and when they would like to (Simonson et al. 2006). From those perspectives, distance education seems to bring about convenience and practicality to education.

However, it is aforementioned that distance education has some negative sides in student live. In the first place, some recent studies show students face with some difficulties and challenges during distance education (Sercemeli and Kurnaz, 2020). One of the mentioned challenges is time management (TM). In Italy, a study conveyed with a group of high school students showed some discrepancy about students' TM skills. The parents and the students suggest the students' TM skills improved in comparison with the

period before the pandemic while the teachers acclaim the opposite (Giovannella et al. 2020). Another research finds that more than 50% of the students stated that web-based education does not leave space for daily planning and does not contribute to developing a sense of responsibility (Keskin and Kaya, 2020). The result of a research done with the students of a distance accountant course showed that 44 % of the students claimed that distance education did not allow them to use their time effectively (Sercemeli and Kurnaz, 2020). A conclusion can be drawn from the given results that the educational implementations during the Covid-19 pandemic trigger some time management problems in student life.

On the other hand, it deserves to mention the fact that there is a group of students who can organize their own learning process by themselves has been revealed. Mintz (2020) finds that students who can learn themselves consider distance education to be more practical for themselves than traditional settings. Sercemeli and Kurnaz (2020) find out that some participants express they can focus on better and use time efficiently, so they consider distance education a time-saver. There are some techniques to be suggested for students which are walking with the time, prioritizing, scheduling life, making a to-do list, learning to say 'No', taking complete rest, focusing on one's aim, sparing time for entertainment, testing one's inner strength. On the other hand, it is possible to understand that TM is not conveyed properly with a few typical indicators. Therefore, some of these indicators are being in a hurry all the time, frequent procrastination, low motivation and energy, disappointment, restiveness, indecisiveness among options, setting up goals and having difficulty in accomplishing goals (Center for Good Governance, 2001). As seen in the examples, TM has both strategic and affective perspectives. In the online learning model, while students need to have improved self-regulation and self-directive skills, K-12 students are portrayed to have insufficient competence in TM and are suggested to be supported with counseling activities at schools (Bozkurt, 2020).

Time has a crucial place in learning and teaching (Caldwell et al. 1982). In fact, managing time means managing yourself (Kirillov et al. 2015).

In educational institutes, TM is determined by school climate, administrators, and teachers. Crone and MacKay (2007) suggest that students are not aware of how to use their time and teachers should have an active role in teaching students how to manage their time effectively. Zimmerman and Bandura (1994) suggest that TM is related to personal, environmental factors and the variables dependent to learning ability of an individual. TM seems to have a close relation to setting up goals and self-discipline.

In this period, authorities took a range of actions to overcome the challenges of the lockdown and distance education. State schools, as well as private schools, took certain steps to implement distance education since the outbreak. In the meantime, what type of differences occurred between the opportunities provided by state schools and those by private schools became a discussion topic. Private schools suggested offering a more systematic program and implementation to meet students' needs than state schools. Students were subject to take responsibility for their own learning and use time effectively in that period. Hence, private school children were one of the subjects to undergo this situation and it was crucial to investigate their TM perceptions to reach an understanding. Our concern was to understand the students' time management perceptions, so we have determined to examine a 9th-grade-student group who attended a synchronous program of a private school.

This study aims to reveal three questions:

(1) How do the students interpret time during the lockdown due to the Covid-19 pandemic?

(2) How are the students' time management perceptions?

Method

Design

The study is a qualitative research analysed with the postpositivist paradigm. We aim to interpret the time management perceptions of the 9th-grade students attending distance education programs of a private school with the method of phenomenology since it is used to interpret the lived experiences of the students. According to Miller (2003), phenomenology, one

of the qualitative research designs, is a method of studying the lived experiences of a certain group. Another basic purpose of phenomenology is to bring the personal experiences related to a specific phenomenon to generalized grounds (Creswell, 2007).

The participants of the study were chosen regarding criterion sampling. This study has one main participant group who were the student participants and two sub participant groups who were the parent participants, and the teacher and the administrator participants. Our main aim to have the three different participant groups is to ensure corroboration of data and convergent validation with data triangulation. The student group, who were the 9ᵗʰ graders, are the first grade of high school in Turkey. Besides, the student group was separated into 3 sub-categories according to their high school entrance exam results. The groups are cited as Group A, Group B and Group C, which respectively consists of the students with the highest scores, the students with mid-level scores and the students with the lowest scores. The research was conveyed with semi-structured interview questionnaires consisting of open-ended questions via one-to-one online interviews. Also, the student group were subject to keep a 14-day dairy related to their time. To ensure the data validation, we interviewed the parents, the mentor teachers, the school counsellor, and the school administrators, and evaluated their views, as well.
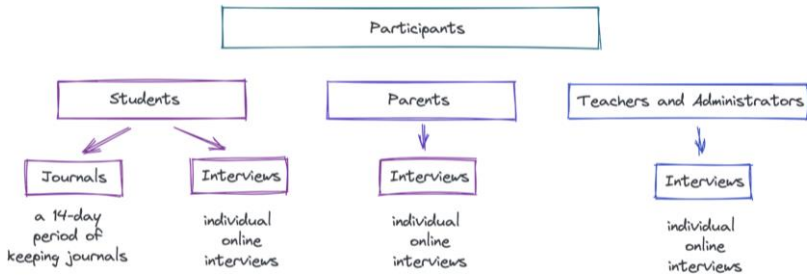
Findings

Time awareness of 9th grade students during the Covid-19 pandemic

Time has been interpreted in different ways by the three subcategories of the participant students. Group A state that time is something passing fast and impossible to manage. This group have a tendency to obey the rules and adapt a program imposed, but when they are on their own, they state that they do not feel competent to manage their time. According to the parents, Group A students do have time awareness. Group B have a general interpretation of time as something unmanageable, something passing fast, something like a chaos, and something which lost its value in the pandemic period. It can be stated that Group B do not have many positive perceptions of time during the period. According to the parents, the students have improved time awareness triggered by outside factors during the distance education. Group C perceive time as something whose speed changes depending on a task, something dominantly slow, and something having a negative effect on their wellbeing. Group C's parents think that this group of students do not have a certain time awareness. The teachers and the administrators state that when school which is a factor offering the students a framework of time has stayed away from students' lives, students have lost their awareness of time. Distance education has left children without directive instructions, that is why students become negligent of time, believe impossibility of TM, and prefer procrastination.

From the given findings, we conclude that Group A and Group B interpret time as something passing fast. We interpret this as a result of a chaos caused by the lockdown. Considering the students showed a better performance than the last group in the high school entrance exam, it is assumed that they got a strict study plan for the last months, and they experienced how to accomplish their goals by getting admission and scholarship from a prestigious school in their city. Since the pandemic rose to the occasion at the very early months of their high school period, they may have continued their studying habits in the new courses. However, in the lockdown, they stayed out of the formal timetable somehow due to participating the lessons at home without sparing any time to commute to school. Yet, Group C regard time as something very slow and if there is a special task to do, then it passes fast. This may result from the lack of goals and motivation related to using their own time.

Students' Interpretations of their own Time Management Performances

Group A
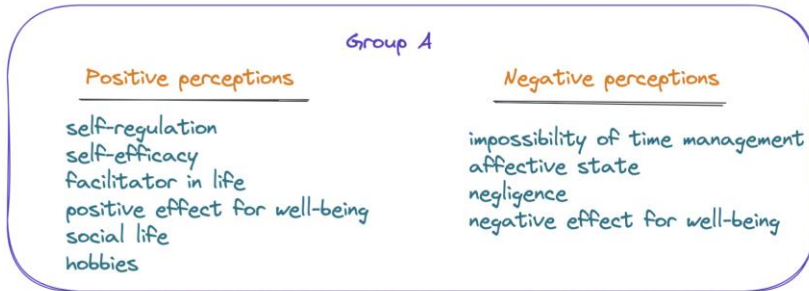
The findings from the diaries and the interviews show that Group A possess varying individual interpretations. The most dominant positive finding is the students consider TM directly related to self-regulation and self-efficacy. Scheduling time and day, planning daily activities and delegating time are some techniques used by the students utilizing time. Students consider managing time is a facilitator in their lives since it contributes to their

wellbeing, and they can spare time for social life, that's why they think TM brings comfort and pleasure into their lives. Group A mostly opt for controlling their time and being aware of the activities they are doing. Leaving time to flow is not a common theme for this group, but they prefer it in some situations.

> 'Every day, I wake up at 7.30 and have my breakfast. If I do not make a plan, I do not have discipline.' (Student 4, (S4))
>
> 'I made time planning since I would like to have more time for my social life.' (S1)
>
> 'My responsibility about TM is to attend in lessons and doing my homework.' (S5)

Also, some students consider TM as a positive impact on their wellbeing.

> 'I used some strategies today and benefited from them, sparing time for my friends.' (S1)
>
> 'Planning your time is important not to waste it.' (S2)

The students have different opinions related to applying time management techniques (TMT). Some students in the group decide whether they will apply TMT considering their affective states, which may be supported with the previous finding. The students' wellbeing and using TMT may have a relation affecting one another in both positive and negative ways.

> 'It depends on my mood. I may not plan every day of my life.' (S3)
>
> 'I have got some friends to do things in an organized way and other friends to live randomly.' (S3)

When there is an unexpected situation, they can lose control and the plans can be left behind for some reason. The fact that they do not have a strong passion to stick to their plans and they think time is impossible to manage at some point may be a result of their not being competent enough to take the responsibility of their own time.

> 'It is like a domino game, once skipping one, all stay for the last day.' (S1)
>
> 'When it is Friday, I can abandon some tasks forever.' (S5)

'I couldn't manage my time because some unexpected things happened.' (S2)

Some students think that the idea of planning makes a negative impact on their well-being since it may be unfavorable and troublesome to take the responsibility of their own time and face with failures.

'If the school was open physically, I would go there, but now I do not plan anything.' (S3)

'I don't want to see any incomplete tasks in my notebook, I do not feel pleased when I cannot complete everything I have planned.' (S5)

There are some cases that the students do not have any goals, passions or plans to accomplish and they show negligence. That's why they consider TM is not necessary for their lives. This may be related to their age since adolescence is a period when it is difficult to keep balance on the things.

'I did not use TMT because I did not need them.' (S1)

'I only surf on the net on the phone in my free time.' (S2)

'I have very limited daily activities, so I do not use TMT.' (S1)

Group B
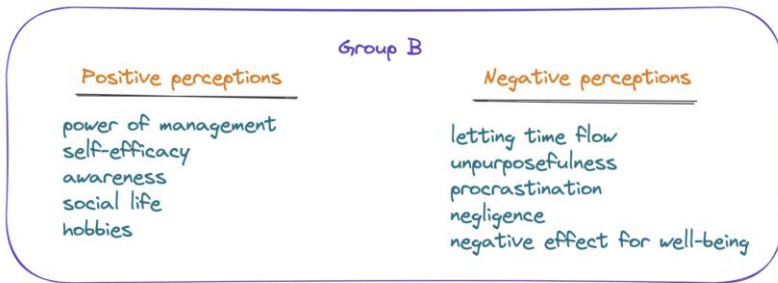
This group of students dominantly regard TM as a negative effect on well-being, that's why using TMT is not preferred by them. They have more tendency to leave time to flow and feel out of the frame given by outsider obligations.

'School program is fine, but boring. So, I do not prefer more planning in my life.' (S6)

'Some hitch can occur if we try to do everything in a planned way.' (S8)

'I think I cannot spend my free time well when I plan it.' (S10)

Another distinctive theme is students believe that it is not necessary to make an effort to manage time, which shows they are indifferent to time unless TM is enacted by outer factors. Also in this group, some comments which deserve attention are related to the students' having no goals which accounts for why they do not find TM necessary. They do not consider TM vital since they feel comfortable and free without those types of rules in both their academic lives and social lives.

'You do not need it if everything goes well.' (S7)

'There is TM in my life willy-nilly which bores me, but it is fine not to have it in my free time. I act as I feel like.' (S6)

'We, of necessity, attend in the classes, this is something out of my preference. I feel I am more successful when I let it flow.' (S8)

Some students in the group believe that TM and planning bring them the power of management. Also, managing time causes them to feel self-efficacy and feeling of purposefulness/awareness. Given that, some of the students in the group regard TM as a contributor in their lives and see the power of success which comes from planning and accomplishing goals, which accounts for the relation to their wellbeing. These individuals seem to have tried to make plans and fulfil them. They may not have improved self-regulation skills yet, but these remarks may be the signs of their primitive skill to be improving.

'I feel ambitious when I do the planning and successful when I completed my plans.' (S10)

'I understand how important time is day by day. I think we can plan for our needs and be happy.' (S9)

'When I make a program, I can stick to it.' (S7)

The students in this group make some remarks about their hobbies and social life when they are asked about TM, which explains they get motivated to make plans with their peers.

'I used TM to go out with my friends and it worked.' (S8)

'I made a plan to play games.' (S6)

As in Group A, there are some comments showing some relation between using TMT and students affective' states. They have tendency to direct their state of not planning or not being stick to the plans or procrastination to their mood. It is obvious that some students in the two groups are not inclined to be a part of strict plans, instead they more like to listen to their inner states and act as they direct them.

'I did not stick to my plan, playing games seems more attractive

than studying.' (S6)

'Some plans can fail; it depends on my mood.' (S9)

Group C
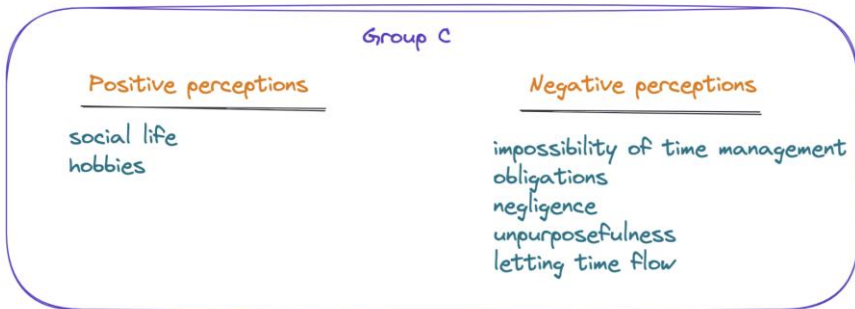
Group C have a less complicated perception, relatively. These students mostly believe the impossibility of TM. They show negligence toward using the time effectively and they would like to let their time flow since they suggest after schoolwork and other obligatory stuff, they have very little free time for themselves. TM and planning mean obligations for them. Obviously, the members of this group see TM as a rule maker, so they would like to avoid the rules as much as possible.

'It is ridiculous to make a plan for a month from today.' (S15)

'I don't make plans because after lessons doing homework takes
all the time and you have nothing to plan.' (S13)

'I let my life flow.' (S14)

'I do not think of studying when there is a chance to sit freely. I
want to live what time brings me.' (S11)

Most of the remarks of the students related to the negative impact of
TM on their lives can be accounted for they do not have specific goals and the
ability to make plans. During the interviews, from the students' tone and
attitudes, it could be deduced that they consider implication like TMT
meaningless and something that can restrict their actions.

'Weekdays, unfortunately, are spent with managing time, so I
do not like to plan my weekends.' (S14)

'I feel restricted with planning.' (S11)

'Planning causes me to lose my interest.' (S11)

To Group C, in spite of avoiding planning and managing their time,
they show some tendency to make plans for hobbies and social life. Also, few
of their ideas show TM can be preferred in some cases. Clearly, Group C
regard TM as something useful if there is an obligation or a strict situation,
otherwise, they do not consider it attractive. Their negligence and
unawareness may, to some extent, be explained by their academic history,
which is that they are not inclined to study strictly in their previous years and
they have not got to manage their time aggressively before.

'TM is something I use for making plans with my friends.' (S11)

'Today I made a plan to meet my friends.' (14)

'I started to plan and accomplished the first part of it.' (S12)

'I use TM to avoid a chaos.' (S14)

Parents views about students TM performances

Group A's Parents

Group A parents' statements and the students' statements have some
common points which are self-regulation, obligations, self-efficacy,
purposefulness, and social life. As the students disclose when they prefer

managing time, they do it for organizing their lives and complete the tasks as fast as possible.

> 'Even if she doesn't go to school, she has a plan similar to a school program.' (Parent 5, (P5))
>
> 'No problem with planning and sticking to it.' (P1)
>
> 'He does it himself and obeys it with no interference.' (P4)
>
> 'She can motivate herself.' (P3)
>
> 'She can spare time for violin practice and friends regularly.' (P3)
>
> 'For him, it is important to hang out with friends.' (P4)

On the other hand, mostly, the parents suppose that managing time and planning is not a habit in their children's lives because they do not want to have any restrictions and obligations other than their schoolwork and some similar academic activities. Therefore, the parents' remarks reveal themes like the impossibility of TM, negligence, lack of goals, a negative impact on well-being and letting time flow.

> 'No plans for the rest of the time, only computer games.' (P1)
>
> 'Every activity is mixed in one another since they are always at home.' (P2)
>
> 'TM makes them angry and nervous.' (P1)
>
> 'They procrastinate frequently these days.' (P3)
>
> 'If there is nothing obligatory, she lets time flow.' (P1)

Group B's Parents

Group B are said to use TMT mostly for personal interests and socializing according to the parents.

> 'She manages her time to spare some more time for her friends.' (V9)
>
> 'He is good at time management when going out with friends.' (P8)

Some parents state that TM means self-regulation and obligations for their children. This group of parents also mention that the students are fed up

with managing their time due to the tons of the tasks coming from the school and some other outsider sources. They are prone to procrastination and letting time flow as well as showing negligence to time.

> 'He is punctual when it comes to the classes.' (P8)
>
> 'Feels as if in a mold.' (P7)
>
> 'No anxiety related to time-wasting, always sandwiching tasks and works.' (P7)
>
> 'She does not spare time for the things she dreams of doing, like practicing the piano.' (P10)
>
> 'He has some hitches about TM, but it is necessary for him to use TM all the time.' (P10)
>
> 'He has no interest in time, likes to be relaxed most of the time.' (P6)

Group C's Parents

As in Group B parent comments, this group is claimed to use TM for their hobbies, social life, and as a tool for self-regulation.

> 'Their expectation from time is only about socialization.' (P11)
>
> 'He cannot control time on the games.' (P12)
>
> '..got a new habit of telling us what time she will be back after meeting her friends.' (P14)
>
> 'He has plans for academic tasks.' (P15)
>
> 'He is responsible for his homework.' (P15)

Group C parents claim that the students are negligent about TM, and they opt for letting time flow. Besides, according to the parents' remarks students think that managing time and making plans have a negative effect on their lives. Their affective states seem to be a powerful drive in their decision-making process.

> 'He is only pretending to make plans, but not applying them.' (P11)
>
> 'No goals, no challenges. He has no passion of managing his life.' (P14)
>
> '..no weekend planning, that is how he likes it.'(P13)

'The words related to TM make them angry.' (P12)

the Teachers and the Administrators' Comments on the Students' Time

The teachers and the administrators suppose that school is a crucial determinant in students' life to understand how they spend their daily life and make plans afterwards. They think that the behaviors and attitudes students show and perform stay the same when they change learning environments.

'We can categorize the students into two. On one side, there are the ones who can organize their own lives, on the other side is the ones who cannot make any plans. The first group of students are organized in all life, have awareness of schooling and time, and self-regulation skills.' (Counselor (C))

'Students with adaptation skills at school have no problems with adaptation to distance education.' (Administrator 2 (A2))

'The students with self-motivation can go on well even in this period.' (Mentor 4 (M4))

'There are some students who do not need any support to complete themselves.' (A2)

According to the teachers and the administrators, the students with goals and self-regulation skills are adaptive to distance education. Since the other group does not know how to make arrangements and does not have goals, they show negligence.

'They are in a mode to procrastinate everything.' (M3)

'They spend this period inefficiently and do not make any planning.'

The teachers and the administrators suggest that the students easily escape academic life's challenges and avoid facing failures if they do not use TM. With this respect, TM is considered to be related to a negative impact on well-being.

'They think any suggestion to improve their free time is rubbish.' (M1)

'They think they will be frustrated and fail, so they are coward to take risks.' (M2)

'Our students, by losing their time awareness, experienced lack
of motivation and lack of attention. (A1)

Another issue is that the students lack emotional support in their
family and friendship. Nearly all of the students' both parents work full-time
and do not spare enough time to direct and take care of their children.

'They are always playing games since they offer them
materialistic happiness.' (M2)

'The individual cannot have self-regulation, self-value and self-
discipline if not supported well during the childhood, so we can
observe them failing now.' (M2)

We can state that since some do not have self-efficacy, they tend to let
life flow. Also, the teachers stress that these students need counselling support.

'The main reason why they do not use TM is that they are more
inclined to their social lives.' (C)

'If they do not attend the classes, they won't be allowed to use
the internet or other devices to play games.' (M3)

 'They do not have anything to make them move, so they do not
use TM.' (A1)
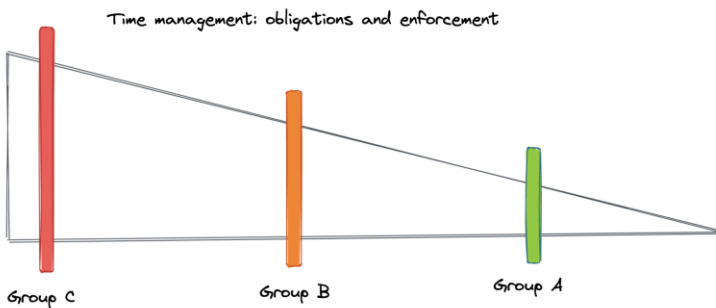
There is a common perception that all groups believe the impossibility
of time management and another commonly shared idea is TM is a great tool
for obligations. Considering the three sub-categories of the students, Group A
are the most capable of and responsive to TM while Group C can be said to be
negligent to TM. Group A consider TM as a facilitator in life and a positive

impact on well-being. Group B can be stated not to have clear goals and they regard TM as a negative effect in their lives. It can be said that Group B do not have improved self-efficacy. Group C let time flow in most cases and prefer TM in social situations.
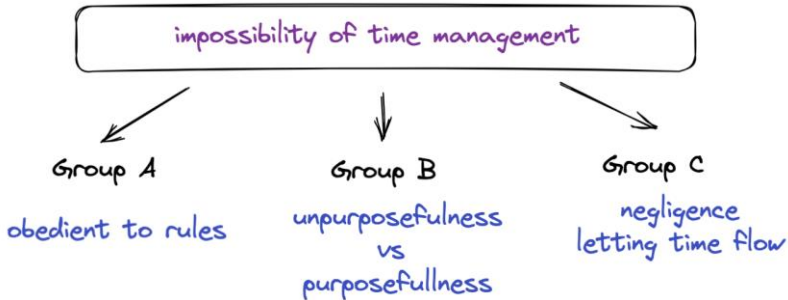
The interview findings of the parent group reveal that the three sub-categories have distinctive TM perceptions and performances. The parents of Group A declare TM means self-regulation, hobbies, social life, obligations, and self-efficacy. The parents of Group B suggest that TM means hobbies, social life, and self-regulation while the tendency of procrastination and letting everything flow is high. The parents of Group C state that TM means hobbies and social life, yet they have developed negligence and the habit of letting things flow. In the light of these findings, Group B and Group C are prone to time traps. These students can be considered to be unaware and unpurposeful and incapable of using goal-setting strategies. The teachers and the administrators claim that the students with improved time awareness can manage the distance education period efficiently.

Discussion

In our study, Group A regard TM as a tool of self-efficacy, self-regulation, and a positive impact on well-being. A similar finding is that Eldeklioglu (2008) discovers that the high school students with low self-esteem show low attitude of TM. Aeon and Aguinis (2017) state that the students

associate TM with a robust purposefulness, high self-esteem, good health and positiveness.

This study discloses that all of the student participants deem TM to match with self-efficacy, purposefulness, awareness, and self-regulation in their lives. MacCann et al. (2012) find that the students with a sense of responsibility have improved TM attitudes. Similarly, Bond and Feather (1988) state that TM is related to purpose, good health and optimism. The other similar findings are seen in Macan et al. (1990)'s research that TM is linked to pleasure. Therefore, it can be deduced that when students have goals and some purpose in life, they have a tendency to realize themselves and prefer using some tools for time management. Their belief to realize themselves or accomplish their goals can show they have self-efficacy, purposefulness and awareness.

In contrast, a distinctive finding is that some students in each sub-category depict time management something having a negative impact on well-being. The study by Eldeklioglu (2008) unearths that TM is not sufficient to have inner peace. Ozgen (2000) suggests that the people who set goals and make plans to fulfill three goals are the ones who feel satisfied with their success. Mukhtarova (2017) sets forth that TM has a fundamental place in reaching goals. According to this study, the students with TM attitude have goals while the students not paying attention to time management seem to have no goals to reach. Also, the remarks from the parents, the teachers and the administrators confirm this finding. The students state that success, setting goals, and controlling the time make a positive impact on their well-being. Accordingly, the parents state the students with no goals do not make any efforts in their daily lives and show unhappiness or aggressivity. The teachers and the administrators justify the idea by saying the students with plans are ambitious and motivated to be successful. The others are seeking for immediate happiness and a lifestyle to entertain themselves. Erdem et al. (2005) states that in the research about TM the highest score is seen in the students' social planning. Another finding supporting this situation is that although the students are categorized into three according to their academic

performances, in each group there are some individuals believing the impossibility of managing time, regarding TM as something inapplicable, not suitable for their character, and impossible to internalize. They think TM is meaningless to have and use. From this direction, we can conclude that the students having specific goals improve their well-being using TM while the other students having no goals regard TM breaking their well-being and putting their interests and social lives forward.

Conclusion
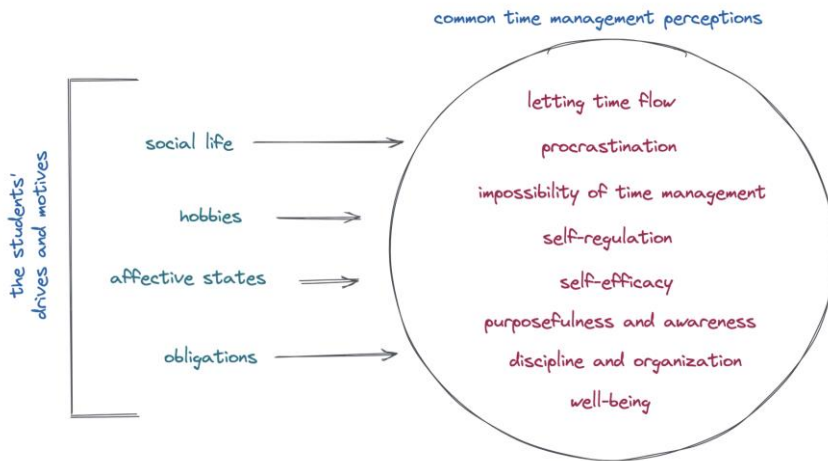
In the research, the findings gathered from the three student groups show consistency. Also, the remarks of the parents, the administrators and the mentors mostly support the findings collected with diaries and student interviews. From a broad perspective, it can be concluded that 9th graders time perfectives are strongly depended on their affective states. This is a clue to understand how this aged people decide and determine their priorities. The fact that social life and hobbies stand forward considering their time management represent the characteristic of their age group. Since they are adolescents, they have more tendency to socialize and do the popular activities their communities lead them to, which may be going some sports trainings or playing online games. At the same time, in each group, there is a tendency to let time flow, which can be interpreted as managing time and making plans

mean school and strict study plans for the students. This idea was supported by the parents, the administrators and the mentors' two distinctive remarks, which are that school form students' life, and that planning means rules and obligation to them. A close, yet somehow diverse idea from the parents is the students give priority to their social lives and interests and their related plans whereas they could procrastinate if the plans are related to schoolwork.

It is also understandable the fact that the students with higher entrance exam scores have a better performance to adopt the requirements of distance education and have more improved self-regulation skills than the ones with lower scores is related to their inherited study habits from the previous year. These ideas are supported by the mentors and the administrators' common opinion, which is disciplined students at school are also disciplined in their all life. Obviously, students being aware and self-regulated can be said to have a close relationship with their backgrounds.

Another conclusion which can be drawn is that the students whose statements linked to self-regulation, self-efficacy, purposefulness and awareness, discipline and organization has penetrated in all aspects of their lives. On the contrary, the students who favor for let time flow mind their social life and personal interests more and can be called family-directed followers.

REFERENCES

Aeon, B. and Aguinis, H. (2017). It's about time: new perspectives and insights on time management. *Academy of Management Perspectives, 31(4), 309–330.* doi:10.5465/amp.2016.0166

Bond, M. J. and Feather, N. T. (1988). Some correlates of structure and purpose in the use of time. *Journal of Personality and Social Psychology,* 55, 321–329.

Bozkurt, A. (2020). Koronavirüs (Covid-19) pandemi süreci ve pandemi sonrası dünyada eğitime yönelik değerlendirmeler: Yeni normal ve yeni eğitim paradigması. AUAD, 6(3), 112-142.

Center for Good Governance (2001). *Handbook on time Management Skills for Public Managers.* https://www.academia.edu/29520986/_Handbook_on_Time_Management_S kills

Caldwell, J. C., Reddy, P. H., & Caldwell, P. (1982). The causes of demographic change in rural South India: A micro approach. Population and development review, 689-727.

Creswell, J. W. (2007). Qualitative inquiry & research design choosing among five approaches. Sage Publications.

Crone, I., & MacKay, K. (2007). Motivating Today's College Students. Peer Review, 9(1).

Eldeleklioğlu, J. (2008). Investigation of adolescents' time-management skills in terms of anxiety, age and gender variables. *Elementary Education Online,* 7 (3), 656e663.

Erdem, R., Pirinçci, E. ve Dikmetaş, E. (2005). Üniversite öğrencilerinin zaman yönetimi davranışları ve bu davranışların akademik başarı ile ilişkisi. *Manas Üniversitesi Sosyal Bilimler Dergisi,* 7 (14), 167-177 .

Giovannella, C., Passarelli, M. and Persico, D. (2020). Measuring the effect of the Covid-19 pandemic on the Italian Learning Ecosystems at the steady state: a school teachers' perspective.

Keskïn, M. ve Özer Kaya, D. (2020). Covid-19 sürecinde öğrencilerin web tabanlı uzaktan eğitime yönelik geri bildirimlerinin değerlendirilmesi. *İzmir Katip Çelebi Üniversitesi Sağlık Bilimleri Fakültesi Dergisi,* 5(2), 59-67.

Kirillov, A. V., Tanatova, D. K., Vinichenko, M. V. and Makushkin, S. A. (2017). Theory and practice of time-management in education. *Asian Social Science,*

11(19), 193. Canadian Center of Science and Education. doi:10.5539/ass.v11n19p193

Kuruluşlararası Daimi Komite (IASC) (2007). IASC Acil Durumlarda Ruh Sağlığı ve Psikolojik Destek Kılavuzu. Cenevre: IASC

Macan, T. H., Shahani, C., Dipboye, R. L. and Phillips A. P. (1990). College students' time management: Correlations with academic performance and stress. *Journal of Educational Psychology*, 82, 760–768.

Miller, S. (2003). Analysis of phenomenological data generated with children as research participants. Nurse researcher, 10(4).

Mintz, V. (2020). *Why I'm Learning More With Distance Learning Than I Do in School.* The New York Times. https://www.nytimes.com/2020/05/05/opinion/coronavirus-pandemicdistance-learning.html?smid=tw-share (3), 381-391.

MacCann, C., Fogarty, G. J., & Roberts, R. D. (2012). Strategies for success in education: Time management is more important for part-time than full-time community college students. Learning and Individual Differences, 22(5), 618-623.

Mukhtarova, K. S. (2017). *Time Management: educational manual.* Al-Farabi Kazakh National University.

Özgen, C. (2000). *Etkili Zaman Yönetimi.* Bilkent Üniversitesi Yayınları: Ankara.

Simonson, M. Smaldino, S. Albright, M. ve Zvacek, S. (2006). *Teaching and Learning at a Distance: Foundations of Distance Education* (Third Edition). Pearson Education: New Jersey.

Serçemeli̇, M. ve Kurnaz, E. (2020). Covid-19 pandemi döneminde öğrencilerin uzaktan eğitim ve uzaktan muhasebe eğitimine yönelik bakış açıları üzerine bir araştırma. *Uluslararası Sosyal Bilimler Akademik Araştırmalar Dergisi*, 4 (1), 40-53.

Zan, N. ve Zan, B. U. (2020). Koronavirüs ile acil durumda eğitim: Türkiye'nin farklı bölgelerinden uzaktan eğitim sistemine dahil olan Edebiyat Fakültesi öğrencilerine genel bakış. *Turkish Studies,* 15(4), 1367-1394. https://dx.doi.org/10.7827/TurkishStudies.44365

Zimmerman, B. J., & Bandura, A. (1994). Impact of self-regulatory influences on writing course attainment. American educational research journal, 31(4), 845-862.

CHAPTER 6

THE SATISFACTIONS, VIEWPOINTS, AND RECOMMENDATIONS OF UNIVERSITY STUDENTS ATTENDING ERASMUS + PROGRAM

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INTRODUCTION

The Erasmus+ Program allows young groups from various countries to gather and conduct short-term joint projects. In a youth exchange, you might anticipate participating in activities such as workshops, exercises, discussions, role-playing, outdoor activities, and more (EU Center for Education and Youth Programs, 2005). Students experiencing Erasmus+ tend to experience many other cultures, costumes, and lifestyles even after their first experience in a European country. Today, it is possible to talk about a similar Erasmus experience that goes beyond the experience of the country in which the students work and, in the lifestyle and student culture, connecting to and sharing daily life with students from other countries is part of the Erasmus experience (Dunkel & Teichler, 2006; Corbett, 2005). By utilizing such programs, students will likely find opportunities to learn about universities outside of Turkey and are encouraged to study and live in another country. Erasmus + seeks to establish what changes occurred in students' perspectives, their assessment of events, and their educational and professional outlook. This study aims to determine the satisfaction and views of university students experiencing at least an Exchange Program (Youth Pass, Mobility, Voluntary Service, etc.).

Literature Review

In Europe, the concern about the mobility of students in universities is increasing each passing day (Altbach & Teichler, 2001; Corbett, 2003; Papatsiba, 2006). In order to create a shared European consciousness, the Lisbon Strategy promotes mobility throughout Europe as the primary objective. The Bologna Declaration aims to increase mobility among students and lecturers in every part of Europe. The Berlin Conference also emphasized that mobility is one of the main features of creating the European Higher Education field and the importance of academic, cultural,

political, social, and economic aspects in forming one Europe (EU Center for Education and Youth Programs, 2005). European mobility practices in higher education started in 1987 with pilot projects. Since 1995, mobility in the form of student/faculty exchange programs has been given a structural framework with the Socrates-Erasmus Program and has continued to grow gradually. The Erasmus Program focuses on higher education. The program's goals are to promote the quality of higher education in Europe and strengthen the European aspect. In the Socrates program, the highest budget is devoted to the Erasmus program; the highest percentage of the Erasmus program is allocated to the exchange of students and lecturers. The total number of students attending mobility is predicted to reach 3 million by 2011 (European Union, 2005). EU Delegation to Turkey Cooperation Department Head Gatti: " Half a million Turkish citizens benefited from the Erasmus Plus program between 2004-2015, and Turkey is amongst the most benefited countries participating in this program." The National Agency Director of Turkey, Mesut Kamiloğlu, stated that "Turkey joined the Erasmus Plus program 14 years ago, 26 thousand projects and nine million Euros were allocated as a resource" (From Erasmus, 2017, November 7).

The Erasmus program promotes cooperation between universities, provides an exchange of students and educators across Europe, and aims at academic recognition of studies and degrees achieved in participating countries. The regulation and management of the program is under the control of the EU Commission. The European Commission makes financial contributions to change by granting unrequited grants to contribute to the additional costs of the individuals benefiting from the change abroad. The Erasmus student exchange program allows students to study in a university or higher education institution for 3-12 months. However, the time spent by the student in other countries and his academic studies is recognized by the university where he is registered in his country. For this purpose, the European Credit Transfer System (ECTS) was developed to solve the problems related to the recognition of the education received by various

higher education institutions and other education institutions in Europe and to support student mobility. Especially in recent years, the international mobility of students gaining qualifications at universities in Turkey, with European countries, establishing themselves as a target of the National Higher Education Policy (DPT, 2000).

It is very important to evaluate the expectation and satisfaction levels of the students who benefit from the Erasmus program utilizing objective tools and studies and to evaluate whether or not the Erasmus program has been reached. The results of the research on this subject, as well as the academic program, department, faculty, university, and country levels of the students, reveal their expectations and satisfaction levels, allowing a comparison of the quality, continuous monitoring, and review of the program. (Yağcı, E., et al. 2007) stated that the research at Hacettepe University indicated that most students going to Erasmus+ met their expectations regarding daily life, academic life, and support services. Executives in European universities conduct follow-up surveys to test student satisfaction levels (Figlewicz & Williams, 2005; Rekkedal & Qwist-Eriksen, 2003). Universities determine the satisfaction level of their students going to other countries. In addition, universities aim to develop the services offered to the students by determining their satisfaction level and the level of the students coming to their own. In the study of Papatsiba (2005) on the experience of 80 Erasmus students benefiting from the Erasmus program, he identified mobility makes it easier for students to cope with the challenges they meet in different environments, develop their own self-perceptions, increase self-confidence, take control of their lives, take risks, easily tolerated. Rathje (2007) states that interaction between countries builds linguistic and cultural acquaintances and ensures students are self-reliant and goal-oriented. According to Santos and Cunha (2018), the idea has evolved to include international communication, the promotion of student mobility, university collaboration, and the recognition of higher education certificates, which can all significantly contribute to realizing integration in education. In other words, being in different communities and cultures may change students'

perspectives positively (Arndt, 1984; Saliba, 1995). These programs make them more self-confident by providing a great educational and intercultural experience. A different study (Stronkhorst, 2005) stated that the level of student motivation and the quality of institutional support and service provided are two main factors in determining student achievements.

The goal of this study is to determine the satisfaction levels of the students going to study abroad through the Erasmus program from the University of Hakkari and returning to Turkey about the daily lives of students, their academic life and support services, and the suggestions of the students to the other students. According to this research, the university authorities can consider student satisfaction in their decisions about students. Information-based action can be taken to organize student services by providing data to the European Union office. The research findings can be shared with the students, and they can be provided with the ability to act realistically to determine their preferences and expectations. The research results on this subject, academic program, department, faculty, university, and country levels of the students reveal their expectations and satisfaction levels, allowing a comparison of the quality, continuous monitoring, and review of the program.

Research Question

In this study, the responses to the following questions were investigated:

1. What are the satisfaction levels of university students attending Erasmus+ Program?

2. What are the views of university students attending Erasmus+ Program?

3. What are their recommendations to stakeholders?

METHODOLOGY

Research Design

This mixed-method study aims to obtain the views of university students who have been abroad as Erasmus students via a survey and an open-ended question. According to Creswell (2014), mixed-methods research incorporates aspects of both qualitative and quantitative research to answer the research topic

Participants

The universe of this study is 26 students between 18-30 years of age at Hakkari University who are going abroad as Erasmus students and returning in the 2014-2024 academic year. Everyone who participated in the study did so for educational purposes. The study sample is 26 students who were reached with the "convenience sampling method "from non-probability sampling types. In addition, 10 were associate students, 12 were undergraduates, and four were graduate students. Due to time limitations, the sample was selected from easily accessible and practicable types. Convenience sampling is a method that accelerates research because, in this method, the researcher chooses a situation that is close and easy to access (Kılıç, 2013).

Table 1. Descriptive Statistics of the Participants

Female	Male	Total	
N	%	n	%
18	69	8	31

As Table 1 shows, this study had 18 (69%) female participants and 8 (31%) male participants ---

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Data Instruments and Procedure

The University of Hakkari External Relations Unit and Erasmus Coordinator ship Unit developed the questionnaire used in this study. The coordinator ship applies this questionnaire to determine the satisfaction of students going abroad within the scope of Erasmus+ to manage the process better. The researchers utilized this questionnaire to conduct a scientific study in this direction. The questionnaire consists of 30 multiple-choice questions and an open-ended question. Before starting the study, the researcher held an online meeting with the students participating in the Erasmus+ program and provided necessary information about the implementation process. The participants voluntarily participated in the study. Google forms created by the researcher were shared with the participants online, and they were allowed to do so. The students were informed that the questionnaire results would be shared with the European Union (EU) Office of the Hakkari University to allow a comparison of the quality, continuous monitoring, and review of the program, and students were informed about the application of the questionnaire.

Data Analysis

The frequency and percentage distributions of the responses to the survey items were obtained. The following path was followed in determining the students' satisfaction level and in the questionnaire's evaluation. The variation between the level of satisfaction and expectation was identified to assess the level of satisfaction with each item. The difference was determined, and the difference was assessed based on satisfaction level. In other words, the student's rating for his / her satisfaction with his / her level of satisfaction with an item was removed, and the variation was accepted as the level of satisfaction. The difference points for satisfaction vary between (-4) and (+4). The nine degrees in this range were divided into three interval values and converted to verbal expression, as in Table 2. In addition, the open-ended

question was analyzed, divided into themes and subthemes, and categorized under five sub-themes as in Table 23.

FINDINGS

Table 2. Primary motivations for studying abroad

	F		%
Experience different learning contents/curricula	12		46
Developing social skills such as adaptability, problem-solving, curiosity	6		23
To learn/develop a foreign language		8	31
TOTAL	26		100

Table 2 shows that 46% of the participants' main motivation for studying abroad was to experience different learning contents /curricula. In addition, 31% of the participants aim to learn or develop a foreign language, and 23% aim to develop social skills such as adaptability, problem-solving, and curiosity.

Table 3. Criteria for choosing the university

	F	%
Education quality, Reputation/rankings	14	54
Feedback from Erasmus+ graduates	4	15.3
Foreign Language, Country	8	30.7
Total	26	100

As it is observed in Table 3, while 54% of the participants choose to go abroad because of the quality of education, reputation and rankings of the university; 30.7% of the participants' criteria was the foreign language and country and 15.3% of them choose these countries with regard to feedback they received from Erasmus+ graduates.

Table 4. Students' thoughts related to the education they received with the Erasmus+ program

	Yes	No	Neutral	Total
F	20	2	4	26
%	77	7	16	100

Table 4 shows that while 77% of participants believe that they received a good education, 16% of them were neutral, and 7% percent of them thought that they did not receive a good education with the Erasmus+ program

Table 5. The Erasmus+ program contributes positively to their personal development

	Yes	No	Neutral	Total
F	26	0	0	26
%	100	0	0	100

Table 5 shows that all the participants (100%) thought that the Erasmus+ program contributed positively to their personal development.

Table 6. Their happiness to be in another country

	Yes	No	Neutral	Total
F	26	0	0	26
%	100	0	0	100

Table 5 shows that each study participant claimed they were happy to be in another country.

Table 7. Their feelings to have the opportunity to get to know new cultures

	Yes	No	Neutral	Total
F	26	0	0	26
%	100	0	0	100

Table 7 shows that all of the participants felt lucky to have the opportunity to learn about new cultures.

Table 8. Their thoughts of being in a foreign country

	Yes	No	Neutral	Total
F	26	0	0	26
%	100	0	0	100

Table 8 shows that 100% of the participants thought being in a foreign country was a positive experience**.**

Table 9. Participants' thoughts on having the opportunity to be together with students from different cultures

	Yes	No	Neutral	Total
F	26	0	0	26
%	100	0	0	100

As illustrated in Table 9, each of the participants in this study felt lucky to be together with students from different

cultures.

Table 10. Participants' thoughts on the Erasmus+ program in making a new circle of friends

	Yes	No	Neutral	Total
F	26	0	0	26
%	100	0	0	100

Table 10 shows that all the participants in this study believed that participating in the Erasmus+ program helped them make a new circle of friends**.**

Table 11. The Erasmus+ program's effect on improving participants' sense of responsibility

	Yes	No	Neutral	Total
F	26	0	0	26
%	100	0	0	100

In table 11, it is clear that every participant in this study thought that Erasmus+ program has improved their sense of responsibility.

Table 12. Participants' beliefs of the Erasmus+ program in improving their foreign language skills

	Yes	No	Neutral	Total
F	22	0	4	26
%	85	0	15	100

Table 12 shows that 85% of students believed the Erasmus+ program has improved their foreign language skills**.**

Table 13. The Erasmus+ program impact on participants' future career plans

	Yes	No	Neutral	Total
F	20	0	6	26
%	77	0	23	100

As Table 13 shows, 77% of the students thought the Erasmus program had impacted their future career plans.

Table 14. Participants' thoughts of the Erasmus+ program as a special experience

	Yes	No	Neutral	Total
F	26	0	0	26
%	100	0	0	100

Table 14 illustrates that every study participant believed the Erasmus program to add a unique experience to their CVs.

Table 15. The participants' adaptation to the university they attended

	Yes	No	Neutral	Total
F	9	11	6	26
%	35	42	23	100

As observed in Table 15, while 35% of students stated they had difficulties adapting to the university they attended, 42% identified no challenges, and 23% were neutral about this issue.

Table 16. The participants' satisfaction with the approach of the lecturers

	Yes	No	Neutral	Total
F	26	0	0	26
%	100	0	0	100

Table 16 shows that all of the participants in this study declared they were satisfied with the lecturers' approach at the university they attended in the Erasmus+ program.

Table 17. The participants assess the physical conditions of the training areas, accommodation, transportation facilities, internet, and online

	Very Good	Good	Neutral/Bad	Total
F	12	8	6	26
%	46	31	23	100

services

Table 17 shows that while 46% of the students in this study assessed the physical conditions of the training areas, accommodations, transportation facilities, internet, and online services in the Erasmus+ program as "very good," 31% declared these issues as "good," and 23% declared them as "neutral/bad."

	Yes	No	Sometimes	Total
F	4	14	8	26
%	15	54	31	100

Table 18. Participants' ideas of financial difficulties

As shown in Table 18, 54% of the students claimed that they did not have financial problems. On the other hand, 31% of students mentioned they sometimes had financial problems, and 15% claimed they had financial difficulties in Erasmus+ programs.

Table 19. The participants' ideas about general expenses related to their mobility period

	0-25%	26-50%	51-75%	76-100%
F	3	10	9	4
%	12	38	35	15

As regarded in Table 19, while 38% of students remarked that the Erasmus+ programs met 26-50% of their general expenses, 35% of them stated that it met 51-75%, 15% of them 76-100% and 12% of them 0-25%.

Table 20. The problems participants experienced in the country they have been to. (More than one option can be marked)

	F	%
Economic problems	10	39
Foreign Language	5	19
Food and drink	6	23
Climate conditions, Cultural differences	5	19
Total	26	100

Table 20 shows that 39% of the students remarked that they had economic problems in the Erasmus+ programs. In addition, 23% stated they had food and drink problems, 19% said they had foreign language problems, and 19% said they had problems with climate conditions and cultural differences.

Table 21. Participants' satisfaction levels with their Erasmus+ mobility experience?

	Very Satisfied	Satisfied	Not Satisfied	Total
F	14	10	2	26
%	54	38	8	100

As observed in Table 21, 54% of students stated they were very satisfied, 38% were satisfied, and 8% were unsatisfied with their Erasmus+ mobility experience.

Table 22. Participant's recommendations this experience to other students

	Yes	No	Neutral	Total
F	26	0	0	26
%	100	0	0	100

Table 22 illustrates that all the students participating in the Erasmus+ program recommended this experience to other students.

Table 23. Participant's recommendations and comments for the sender and host higher education institutions

	F	%
Students Cultural Adjustment Process	20	76
Academic Support and Counseling	22	84
Cultural Interaction and Language Learning	18	69
Safety and Health Services Cultural and Social Support	15	57
		69
	18	

In Table 23, most students involved in the Erasmus+ program recommended that higher education institutions offer support in cultural adaptation, academic counseling, cultural interaction, language training, security, health assurance, and social support.

RESULTS, CONCLUSIONS AND DISCUSSIONS

This study aimed to find out the satisfaction and views of university students towards the Erasmus+ program attending to this program in advance. Based on the opinions of the students who participated in the Erasmus+ Program, it is understood that all of the students who participated in the program experienced different cultures and improved their foreign languages, which is in line with Adanır and Susam (2019). One of the biggest reasons the students express is to improve their language skills, which is in line with (Endes, 2015; Bağcı et al., 2018). Therefore, it can be said that students want to participate in the program significantly to improve in practical terms, in line with Bakioğlu and Certel (2010). It was found that most of the participants' primary motivation for studying abroad was to experience different learning contents /curricula, to learn or develop a foreign language, and to develop social skills such as adaptability, problem-solving, and curiosity parallel (Demir &Demir, 2009; De Wit, 2017). The study's findings unveiled that the Erasmus+ program offers students a highly qualified education, fosters personal growth positively, instills a sense of satisfaction in their involvement within a foreign country and culture and leads to a favorable experience of being in diverse international settings. These results are in line with (Göksu, 2011; Bağcı et al., 2018; Mede & Tüzün, 2016).

The study's findings indicate that the Erasmus+ program facilitated opportunities for students to gain exposure to diverse cultures (Teichler, 2004; Santos & Cunha, 2018) and engage with individuals from various backgrounds. The fact that all of the students in our study recognized different cultures and people as an outcome is included in many studies in the literature. Their studies (Altay, 2016; Kohn, 2015; Papatsiba, 2005; Urquía-Grande & Sancak, 2009; Ünal, 2016) found that the program provided students with the opportunity to encounter different cultures and that students were able to view events in different dimensions.

Furthermore, it was ascertained that this program augmented students' sense of accountability, enhanced their linguistic proficiency (Okur, 2016; Sarıtaş, 2011; Altay, 2016), shaped their prospective vocational aspirations, and afforded them a unique experiential opportunity. As previously indicated, students primarily emphasize the cultural aspect of the program. However, it can be observed that approximately half of the students also place importance on the academic dimension of the program. From this perspective, a significant proportion of the student population actively engaged in the program with the primary objectives of exploring diverse educational systems and visiting novel destinations, particularly within the European continent, which aligns with (Şahin, 2007).

It can be argued that students engaged in the program to foster interpersonal connections, conduct comparative analyses of educational systems, acquire knowledge about the European Union, enhance their professional competencies, explore possibilities for relocation to Europe, examine student-faculty dynamics, and explore prospects for postgraduate studies as in line with (Adanır & Susam, 2019). This study additionally discovered that most university students who participated in the Erasmus+ program encountered various challenges. The primary challenges encompass economic hardships (Kohn, 2015; Bağcı et al., 2018), linguistic barriers (Dinçer et al., 2017), climate conditions, cultural differences (Pavlina, 2021; Onağ et al., 2022; Göksel, 2022), and issues of food and nourishment. The findings indicate that the students who participated in the Erasmus+ program expressed overall satisfaction with the quality of instruction provided by the instructors at the universities in which they were involved. Furthermore, it was found that students had no difficulties with education, accommodation, transportation services, and internet connectivity in line with (Pavlina, 2021; Guan, 2021; Hanson et al., 2019).

The students listed additional information, observations, comments, or advice from the participating students that may be useful for students wishing to go abroad to participate in Erasmus+ student mobility and for sending and receiving higher education institutions. They recommended

that these higher institutions provide information about the local culture, traditions, lifestyle, and language in advance and support in dealing with possible difficulties they may encounter in the host country. In addition, it emphasized the need to provide academic support and counseling. Furthermore, it was indicated that the Erasmus+ students recommended that host universities organize events to encourage cultural interaction among students and offer programs to support language learning. Eventually, it was also emphasized that host universities should provide students with the necessary information on health care, insurance, and emergencies and take measures to keep them safe, encourage students to participate in social activities and integrate them into the local community. Based on the feedback from the students, they believe that both sending and receiving institutions should implement corrective actions in different areas. Hence, it is evident that the institutions capable of overseeing and governing the Erasmus+ program should consider these student recommendations.

One of the outcomes of this study is that the wages provided to students participating in the Erasmus+ program are insufficient to cover their overall expenses. However, the students were generally highly satisfied with the Erasmus+ program and expressed strong recommendations to their peers and the sending and hosting institutions.

RECOMMENDATIONS AND LIMITATIONS

The current study has a few limitations. The sample group is 26 students at Hakkari University. The small number of students in the current sample is a limitation. An example of different universities with many students may increase the credibility of the result so that the generalization of results can be more comprehensive. Therefore, more research on this subject should be investigated. The results of this study may be helpful for ESL students who have prejudices but do not have enough courage to go abroad and plan their future careers. It is recommended that policymakers and university educators demonstrate thoroughness and care by considering the results of

this study when facilitating student involvement in the Erasmus+ program. Additionally, they should ensure that students receive sufficient information before participating in the program.

As a result of the study, it was revealed that students had economic problems, problems of adaptation to different cultures, and difficulties with foreign languages. In this direction, it is suggested that universities should improve these skills by taking students to foreign language courses, organizing courses or activities to introduce different cultures, and taking necessary initiatives to improve the fees paid within the scope of the Erasmus+ program.

REFERENCES

Adanır, Y. & Susam, E. (2019). Yükseköğretim Öğrencilerinin Erasmus+ Programı Hakkındaki Görüşleri (Muş Alparslan Üniversitesi Örneği) Journal of History School, 43, 1584-1612.

Altay, A. (2016). Influence of the Erasmus+ student mobility programme on competence development of students. Yayınlanmamış yüksek lisans tezi. Akdeniz University, Antalya.

Altbach, P. ve Teichler, U. (2001). Internationalization and exchanges in a globalized university. Journalof Studies in International Education, 5, 5–25.

İlter, B. G. (2013). How do Mobility Programs Change EFL Students' Point of View? Hacettepe Üniversitesi Eğitim Fakültesi Dergisi, 44(44), 181-188.

Babbie, E. R. (2020). The practice of social research. Cengage learning.

Bağcı, Ö. A., Erdem, S., & Erişen, Y (2018). Erasmus+ ka103 hareketlilik programının öğrenci ve koordinatör görüşlerine göre değerlendirilmesi. Türkiye Eğitim Dergisi, 3(1), 54-76.

Creswell, J. W. (2014). Research Design: Qualitative, Quantitative and Mixed Methods Approaches (4th ed.). Thousand Oaks, CA: Sage.

De Wit, H. (2017). Global: Internationalization of higher education: Nine misconceptions: International higher education, summer 2011, number 64. In Understanding higher education internationalization (pp. 9-12). Brill.Livingstone.

Demir, A., & Demir, S. (2009). Erasmus+ programının kültürlerarası diyalog ve etkileşim açısından değerlendirilmesi (Öğretmen adaylarıyla nitel bir çalışma). Uluslararası Sosyal Araştırmalar Dergisi, 2(9), 95-105.

Dinçer, Ç., Aslan, B., & Bayraktar, A. (2017). Ankara University Erasmus coordinators views on Erasmus programme. Ankara University Journal of Faculty of Educational Sciences (JFES), 50(2), 201-223.

DPT, (2000). 8. Beş Yıllık Kalkınma Planı 2001 – 2005, [8th Five-Year Development Plan] Ankara: DPT.

Endes, Y. Z. (2015). Overseas education process of outgoing students within the Erasmus+ exchange programme. Procedia-Social and Behavioral Sciences, 174, 1408-1414.

Figlewicz, R., & Williams, J. (2005, August). How satisfied are Erasmus students. In 27th Annual Fair Forum (pp. 28-31).

Göksu, F. (2011). Bir kültürlerarası iletişim incelemesi: Erasmus+ programı ile Avusturya'ya giden Türk öğrencilerin yaşantı ve beklentileri üzerine yapılan odak grup çalışması. Yayınlanmamış Yüksek Lisans Tezi. İstanbul Üniversitesi, İstanbul.

Göksel, A. (2022). Stimulating learning organization through Erasmus+: Youth organizations in Turkey. Gençlik Araştırmaları Dergisi, 10 (27) , 15-38. OI:10.52528/genclikarastirmalari.982763

Guan, W. (2021). English program Service Quality and student satisfaction At a Southern Chinese university. JSE, 2(11), 32. https://doi.org/10.5296/jse.v11i2.18445

Hacettepe university, (2006). AB ofisi Avrupa birliği eğitim ve gençlik programları çalışma raporu, [EU office European union education and youth programs study report] Ankara: Hacettepe university.

Hanson, T., Bryant, M., Lyman, K. (2019). Intercollegiate Athletic programs, university Brand Equity and student satisfaction. IJSMS, 1(21), 106-126. https://doi.org/10.1108/ijsms-

10-2018-0102J. Spencer-Rodgers, T. McGovern / Int. J. of Intercultural Relations 26 609–631 Kılıç, Selim. (2013). Örnekleme yöntemleri, (research methods), Journal of Mood Disorders, March 1, 2013.

Kohn, M. P. (2015). The influences of Erasmus+ and Fulbright exchange programs from the perspectives of their participants. Yayınlanmamış doktora tezi. Ortadoğu Teknik Üniversitesi, Ankara.

Mede, E., & Tüzün, F. (2016). The Erasmus+ teaching staff mobility: The perspectives and experiences of Turkish ELT academics. The Qualitative Report, 21(4), 677-694.

Okur, S. (2016). Representation of European identity in multiparty incoming and outgoing Erasmus+ students' discourses. Yayınlanmamış Yüksek Lisans Tezi. Ortadoğu Teknik Üniversitesi, Ankara.

Onağ, Z., Saylam, D. K., Kaya, E. (2021). Views of Erasmus+ exchange students studying in the field of sports in different countries regarding the programme. JEI, 2(7), 420. https://doi.org/10.5296/jei.v7i2.19285

Urquía-Grande, E., & Del Campo, C. (2016). Erasmus+ programme effects: a Spanish case. Papeles de Europa, 29(2), 94.

Ünal, M. (2016). Öğretim elemanı ve öğrencilerin AB Erasmus+ programını algılama durumlarının incelenmesi. Journal of Kirsehir Education Faculty, 17(3).

Papatsiba, V. (2005). Student mobility in Europe: An academic, cultural and mental journey? Some conceptual reflections and empirical findings, International Perspectives on Higher Education Research, 3, 29-65.

Pavlina, S. Y. (2021). Cross-border education: Students exchange programme participants' perspective on ERASMUS. Vysshee Obrazovanie v Rossii [Higher Education in Russia], 30(4), 146-156.

Rathje, S. (2007). Intercultural competence: The status and future of a controversial concept. Language and intercultural communication, 7(4), 254-266.

Rekkedal, T.ve Qvist-Eriksen, S., (2003). The student's need for and satisfaction with student support services, study report, Bekkestua.

Sarıtaş, E. (2011). Avrupa Birliği Erasmus+ programına katılan Türk ve yabancı öğrencilerin programlailgili görüşlerinin karşılaştırılması. Yayımlanmamış yüksek lisans tezi. Uludağ Üniversitesi, Bursa.

Şahin, İ. (2007). Perceptions of Turkish exchange students of the European Union's Erasmus+program. Unpublished master thesis. Boğaziçi Üniversitesi, Sosyal Bilimler Enstitüsü, İstanbul.

Stronkhorst, R. (2005). Learning outcomes of international mobility at two Dutch institutions of Higher Education. Journal of Studies in International Education, 9, 292-317.

Santos, Y., & Cunha, A. (2018). The participation of Portuguese students in Erasmus+: From its European conception to its implementation in universities. Estudos do Século XX, (18), 97-113.

Teichler, U. (2004). Temporary study abroad: The life of Erasmus+ students. European Journal of education, 39(4), 395-408.

Yağcı, E., Ekinci, C. E., Burgaz, B., Kelecioğlu, H., & Ergene, T. (2007). Yurt dışına giden Hacettepe Üniversitesi Erasmus öğrencilerinin memnuniyet düzeyleri. Hacettepe Üniversitesi Eğitim Fakültesi Dergisi, 33(33), 229-239.

CHAPTER 7

INTELLECTUAL DISABILITY THROUGH HISTORY: FROM ANCIENT PREJUDICE TO MODERN SUPPORT

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INTRODUCTION

The most recent definition of intellectual disability, according to the American Association on Intellectual and Developmental Disabilities (AAIDD, 2021), reads: "Intellectual disability is a condition characterized by significant limitations in intellectual functioning and adaptive behavior that appear before the age of 22". General mental ability, such as learning, thinking, and problem solving, refers to intellectual functioning. One way to measure intellectual functioning is the IQ test, with a score around 70 or up to 75 indicating significant limitations. Adaptive behavior encompasses the acquisition and application of cognitive, social, and functional abilities in daily situations. This involves developing language and literacy, understanding money, time, and numbers, and self-awareness. Interpersonal relationships, social duties, self-worth, and problem-solving skills are part of social adaptation. Practical adaptation involves performing activities essential for daily life, including personal hygiene, work-related tasks, healthcare, and ensuring safety during travel. Standardized tests can be used to assess limitations in adaptive behavior. This condition begins during the developmental period, defined as before 22 years, and is part of the group of conditions known as developmental disabilities and is one of the most common developmental disabilities in the world (Cleveland Clinic, 2023).

Intellectual disability is not a phenomenon of modern times, nor is it a result of the complex demands of modern education systems or environmental pollution, which has become particularly pronounced in the 20th century. In fact, intellectual disability has deep roots and has been present among people since the earliest times of human civilization (Chichevska Jovanova, 2018).

Ancient times and the Middle Ages

Historical records show that people with intellectual disabilities have also existed in ancient societies and cultures, where their treatment has depended on the customs and beliefs of a particular culture. The earliest evidence of intellectual disability dates back to 1552 BC, recorded in the

Thebes (Luxor), Egypt therapeutic papyrus, indicating a long history of the condition (Ainsworth & Baker, 2004).

In Ancient Greece, the treatment and life of people with intellectual disabilities have varied according to time and place, but it is generally considered that they have not been accepted in society as they are today. Intellectual disability has often been a subject to different attitudes and treatment, which has differed from city-state to city-state. For example, in the city-state of Sparta, newborns have been examined by the City Council of the Elders, and if the child has been found to have a "defect", it has been killed, or left in the wild to die (Switzer, 2003). In Athens, attitudes may have been less harsh than in Sparta, but still, people with intellectual disabilities have not been accepted as full members of society. They have often been the subject of ridicule and prejudice (Gleason, 1998).

Plato and Aristotle, the two most influential philosophers in ancient Greece, had different views on people with intellectual disabilities. Plato in his works, such as The Republic, has mentioned that people with severe physical and mental disabilities should not be part of the ideal state. Aristotle, on the other hand, in his "Politics" has indicated that children with serious disabilities should be left to die, which reflects the cruel attitudes of the time.

Hippocrates, known as the "father of medicine", has believed that mental disabilities are the result of natural causes, such as imbalances in body fluids. This has been an important step towards a medical view of disability, although the treatments have been primitive by modern standards (Blackhurst, 2005).

In the 2nd century AD, in the Roman Empire, disabled people, including children, have been often sold as slaves. They have been considered less valuable and used for specific tasks or even for the entertainment of wealthy Romans. This has included gladiator fights, animal fights, and other forms of cruel entertainment that has highlighted their physical shortcomings. Philosophers such as Seneca has supported the view that deformities and disabilities are a natural flaw that should be ignored or eradicated. In the Middle Ages (5th to 15th centuries), the treatment of people with intellectual disabilities has changed according to the religious and cultural attitudes of the

time. More humane techniques have emerged (e.g. reducing infanticide and opening "orphanages"), but even so, the status and care of people with disabilities has differed in many respects. Society then often has been viewed these individuals through the lens of religious beliefs, believing that their condition has been the result of divine punishment or demonic possession. As a result, many people with intellectual disabilities have undergone religious rituals and prayers as a way of healing (Hsy, Pearman, & Eyler, 2022).

However, some religious institutions have showed compassion and have provided care for people with intellectual disabilities in monasteries and religious institutions. Monasteries have been among the first institutions that have begun to care for the sick and poor, including people with intellectual disabilities (Metzler, 2016). They have been often treated with compassion and care, even though their condition has not been well understood.

In the communities, people with intellectual disabilities have often remained supported by their families and the local community. In some cases, they have been involved in various activities such as farm work or performing simple tasks, if possible (Eyler, 2022). For example, in rural communities, people with intellectual disabilities have been often engaged in agricultural work or performing basic tasks to contribute to their families.

However, not all treatment has been humane. People with intellectual disabilities have sometimes been marginalized or abused. In some royal courts, these individuals have been used as "court jesters" for entertainment, exposing them to humiliation and exploitation (Hsy, Pearman, & Eyler, 2022).
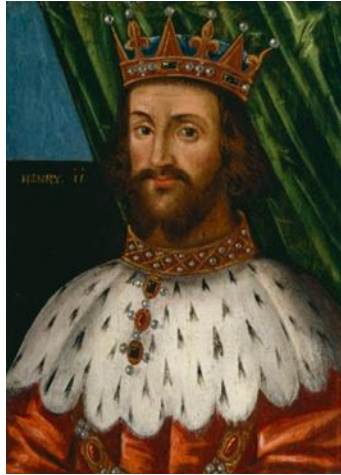
Picture 1. Henry II of England

In the early 12th century, Henry II of England has introduced a law that placed people with intellectual disabilities under the protection of the state. This meant that they have been supported and protected by the king, in order to ensure their safety and basic care. This step has been important in recognizing the need for systematic care for people with intellectual disabilities and has laid the foundation for further legal and social reforms regarding their protection (Harris, 2006).

In 1690, John Locke has published his influential book, An Account of Human Reason, in which he has presented the theory that the infant's mind is a blank slate (tabula rasa). According to this theory, all knowledge and ideas have come from experience and perception. This concept has significantly influenced the education and care of people with intellectual disabilities, as it has suggested that with appropriate education and a stimulating environment, they could develop and thrive. Locke has been the first to distinguish between intellectual disability and mental illness, which has been key to the understanding and treatment of these conditions in the future (Spreat, 2017).

19th century

Picture 2. Jean Itard (19th Century painting)

The work of Dr. Jean-Marc Gaspard Itard has been the key to the development of treatment for people with intellectual disabilities. In 1800, Itard has been called to work with a wild child from Aveyron called Victor, who had spent much of his life in a forest in the south of France. Victor has been found at the age of about 12 and placed at the National Institute for the Deaf and Dumb in Paris, where Itard has begun to work with him.

Itard has believed that humans differed from animals in the capacity for empathy and language, and so his goals has been to civilize Victor by teaching him speech and expression of human emotions. Based on the theories of Locke and Condillac, Itard has developed a curriculum that has been focused on the development of Victor's senses, intellect, and emotions. This program has included five main goals: to interest him in social life, to improve his awareness of external stimuli, to expand the range of his ideas, to teach him to speak and to teach him to communicate through symbols (New World Encyclopedia, 2023).

Despite the initial success, Victor has shown significant difficulties in further learning speech. Itard has been able to teach him basic words like "milk" and "Oh my God" but has failed to teach him more complex verbal communication. However, Victor has shown signs of empathy, which Itard has considered as a significant advance. One such moment has been when Victor has comforted Itard's housekeeper who has been crying after the loss of her husband (Harvard University Press, 2023).

Although Itard has not succeed in completely teaching Victor to speak, his work has laid the foundation for the further development of special education and has made him one of the founders of this field. His methods and approaches continue to influence contemporary understanding and treatment of people with intellectual disabilities (New World Encyclopedia, 2023).


Picture 3. Edouard Seguin

Edouard Séguin, has been originally taught by Jean-Marc Gaspard Itard, dedicated himself to working with children with intellectually disability at the Home for the Incurables in France. In 1839, he has founded the first private school in Paris dedicated to the education of children with intellectual disabilities. By the middle of the 19th century, Séguin had developed a comprehensive approach to their education, known as the physiological method, which has been based on the idea that intellectual disability is the result of disturbances in the central nervous system and that strengthening the nervous system could improve the cognitive abilities of people with intellectual disabilities (Britannica, 2023).

Seguin has incorporated sensory education in his physiological approach, encompassing sight, hearing, smell, taste, and hand-eye coordination. The program has evolved to encompass the enhancement of fundamental self-care abilities and focused education highlighting perception, imitation, positive reinforcement, memory, coordination, and generalization.

In 1850, Seguin has moved to the United States, where he has become a prominent promoter of education for the children with intellectual disability. There he has continued to develop and apply his physiological method in various institutions. In 1866 he has published the book "Idiocy: And Its Treatment by the Physiological Method", which has described the methods used in his schools. Seguin's programs have emphasized the importance of developing autonomy and independence among people with intellectual disabilities through a combination of physical and intellectual tasks (Museum of disability history, 2023).

In 1876, Seguin has founded the Association of Medical Officers of American Institutions for Idiots and Feeble-Minded Persons, which later has become the American Association for Mental Retardation (AAMR), today known as the American Association for Intellectual and Developmental Retardation (AAIP). Many of Seguin's modified techniques are still used today in the education and care of people with intellectual disabilities (Eric, 1964).
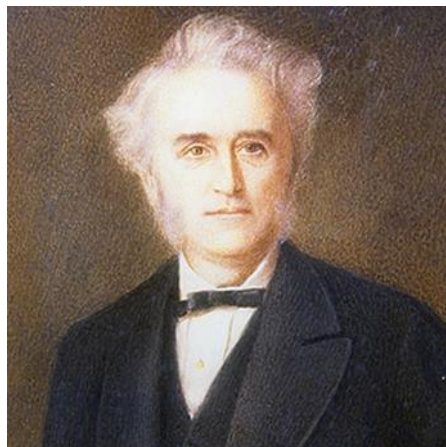
Picture 4. Portrait of John Langdon Down (c. 1870) by Sydney Hodges

In 1866, John L. Down, a British physician, has published his influential study, Observations on an Ethnic Classification of Idiots, in which he has been the first person to describe the physical characteristics of what would later become known as Down syndrome. This paper, that has been

published in the London Hospital Report, represents a significant milestone in the medical science of intellectual disability. Down has classified people with intellectual disabilities according to ethnic standards and has singled out a group he called the "Mongoloid type of idiocy". He has described patients with flat and broad faces, slanted eyes, small noses, and thick, rough skin that has appeared to be too large for the body. These individuals have exhibited both poor coordination and a weak circulatory system, tending to worsen in the winter months. According to Down, they have been congenital idiots, and he has attributed the cause of their condition to degeneration caused by tuberculosis in the parents (Neonatology.net, 2023; Intellectual Disability and Health, 2023).

Down has come to the conclusion that the causes of intellectual disability can be divided into three groups: congenital, developmental and accidental. This classification has helped to focus attention on the specific conditions that can manifest as intellectual disability. Although advances in diagnosis have not been accompanied by equally significant advances in treatment, his work has laid the foundation for further research and development of medical and educational methods for these individuals (Down-Syndrome.org, 2023).

Although the terms "Mongoloid type" and "idiocy" are considered archaic and offensive in the modern context, Down's work has been crucial for a better understanding of intellectual disabilities and for the development of the modern concept of Down syndrome. This work has drawn the attention of the medical community to the need for systematic treatment and support for people with intellectual disabilities (Intellectual Disability and Health, 2023).

20th Century

Picture 5. Theodore Simon and Alfred Binet

French psychologists Alfred Binet and Theodore Simon have developed the first intelligence tests (IQ tests) in 1905 to assess children's intelligence and determine which children needed special education (Fancher, 1985). These tests, known as the Binet-Simon scale, have been the first widely used intelligence tests that focused on mental abilities such as memory, attention, and problem solving, rather than academic knowledge (Verywell Mind, 2023; UW News, 2013). With the advent of these tests, mass testing of people of all ages has begun, including children from the general population, marginalized groups, and prisoners. These tests have made it possible to identify children who needed special education, but also has led to the association of mild intellectual disability with psychopathy and criminal behavior in the opinions of many prominent figures, such as Henry Goddard (University of Toronto, 2023).

Henry Goddard in his book "The Kallikak Family: A Study in the Heredity of Feeble-Mindedness" published in 1912 has suggested that intellectual disability and antisocial behavior are hereditary, he has also emphasized the link between intellectual disability and crime. This has led to the view that people with intellectual disabilities are a danger to society because of "free sexual intercourse" and the possibility of creating impaired offspring (Verywell Mind, 2023; UW News, 2013). These attitudes have fueled

the eugenics movement, which have sought to protect society through the institutionalization and sterilization of people with intellectual disabilities. These practices have continued until the middle of the 20th century, in order to prevent the inheritance of such conditions (University of Toronto, 2023).
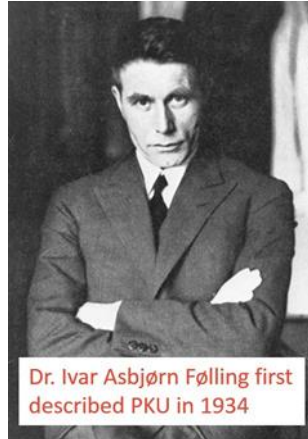
Picture 6. Ivar Asbjorn Folling

In 1934, Norwegian biochemist and physician Ivar Asbjorn Folling has discovered that the metabolic disorder phenylketonuria (PKU) has been associated with intellectual disability. He has noted that this condition could be identified by the presence of phenylpyruvic acid in the patients' urine. Folling's discovery has led to the development of a dietary therapy that could prevent intellectual disability in infants and young children with PKU by regulating dietary phenylalanine levels (Science History Institute, 2023; MDPI, 2020). Accordingly, medical science has again become interested in discovering the biological causes of intellectual disability and in discovering effective treatment. In 1961, Robert Guthrie has developed the first newborn screening test for PKU, which has enabled early detection and intervention. This test has become a standard part of neonatal screening programs in many countries, significantly reducing the incidence of intellectual disability caused by PKU (Human Genomics, 2023).

In the 1920s and 1930s, Lev Vygotsky has conducted special education research, working with children with intellectual disabilities to explore the developmental interaction between children and their cultural environment (Rieber RV & Carton AS, 1993; van der Veer R & Valsiner J, 1991). Vygotsky,

known for his theory of social constructivism, has been focused on how cultural and social factors influence the development of intellectual abilities (Rieber RV & Carton AS, 1993). His research has found that children with intellectual disabilities can develop skills and knowledge through interaction with their environment and support from others (Rieber RV & Carton AS, 1993).

In 1935, Edgar Dole has developed the Vineland Social Maturity Scale, an important tool for assessing everyday skills and adaptive behavior in people with intellectual disabilities. This scale has enabled a better identification and understanding of the needs of these persons and their ability to adapt in society (Hodapp RM, 1998).

In the 1940s, Barbara Inhelder and Jean Piaget have studied children with intellectual disabilities to determine whether Piaget's stages of cognitive development have followed a universal, constant, and unchanging order (Inhelder B, 1943/1968; Piaget J & Inhelder B, 1947). Although intellectual disability has not been the focus of their research, Piaget and Inhelder have recognized that their theories could be applied to these children, providing a basis for understanding their cognitive development (Hodapp RM, 1998).

At the same time, Heinz Werner studied children with intellectual disabilities in order to formulate his orthogenetic principle, which suggests that developmental processes progress from a phase of overall undifferentiated functioning to a stage of differentiation, articulation, and hierarchical integration. (Werner H, 1938, 1941; 1957) . Werner's research has shown that development in children with intellectual disabilities can be different, but still follows certain patterns of development and integration of different abilities (Hodapp RM, 1998).

Although intellectual disability has not been at the center of these theorists' research, each have recognized that their theories could be applied, extended, and examined among children with intellectual disabilities (Hodapp RM, 1998). At that time, intellectual disability has been less researched and treated as a subtopic in developmental psychology, psychiatry, and clinical psychology (King BH, State MW, Shah B, Davanzo P & Dykens E, 1997; Routh DK, 2003).

The situation has started to change for two main reasons. Initially, there is a growing shift in research focus from studying children with intellectual disabilities to studying those with various types of intellectual disabilities. Unlike earlier times, there are now numerous studies available on children with Down syndrome, Williams syndrome, Fragile X syndrome, Prader-Willi syndrome, and several other well-known syndromes caused by genetic disorders. These studies have facilitated numerous new findings about these disorders. For example, certain genetic syndromes have shown an individual association with etiology, with cognitive or speech ability or weakness. Others have shown causally related patterns of development in different domains, and still others have even higher rates of individual behaviors or associated mental states. Thus, intellectual disability caused by different genetic disorders reveals different patterns of development and needs in children, allowing researchers and practitioners to better understand and support these individuals in their development (Dykens EM & Hodapp RM, 2001).

During World War II, the Nazis have experimented on people with intellectual disabilities in a way that reflected their brutal and inhumane approach to anyone who did not conform to the Nazi image of a superior race. These experiments have been part of a larger program of eugenic practices, which has included the sterilization and euthanasia of people deemed "undesirable". People with intellectual disabilities have been often subjected to inhumane medical experiments, involving painful and dangerous procedures, without their consent. Examples of these experiments can be found in the work of Nazi physician Josef Mengele, who has performed experiments on twins, including those with intellectual disabilities, to investigate genetic factors influencing intellectual development (Lifton, R. J., 1986).

Important Family Associations for People with Intellectual Disabilities

After the World War II, families and organizations have started significant initiatives to support people with intellectual disabilities, which has led to the formation of influential organizations that have played a key role in improving the quality of life of these people. In the 1950s, individual family groups have begun an initiative to organize research in the field of intellectual

disability. Thus appeared the National Association for Retarded Children (NARC), established in the USA in 1950 (Scheerenberger, 1983). NARC members have exerted strong pressure at a meeting of national experts, organized at the request of President John F. Kennedy, to study methods of prevention and treatment of mental illness and intellectual disability (Gleason, 1998). In 1963, President Kennedy has asked the Congress to adopt a national program to combat intellectual disability, which has represented a significant step forward in the history of this field (Switzer, 2003). The program has allowed specialists from biology, psychology and education to focus for the first time on the study of intellectual disability and ways of its prevention and treatment in the United States (Cohen & Heller, 2010). President Kennedy has showed great interest in this field due to personal experiences in his family, as his sister, Rosemary Kennedy, born with an intellectual disability, has underwent an unsuccessful lobotomy that has worsened her condition. This traumatic experience has motivated Kennedy to raise public awareness and advocate for improved conditions and treatment for people with intellectual disabilities, resulting in significant policy initiatives and programs during his tenure.

Effective medications for treating mental illness have first become available in the mid-1950s and early 1960s. They soon have found widespread use among people in residential care, sometimes as extremely effective nonbiological interventions. Unfortunately, drugs have been often overused and side effects have not been recognized.

In the 1970s, families have begun to demand "chemical restraint" and the more frequent use of educational activities and behavior-oriented procedures that would meet the needs of people with more severe forms of intellectual disability. Their concerns have been finally addressed by federal and state law, but there have been still extreme opinions.

In the following, we will list the most significant organizations that are dedicated to supporting people with intellectual disabilities:

National Association for Retarded Children (NARC)

Founded in 1950 in the United States, this organization, later renamed as The ARC, has been formed by parents of children with intellectual

disabilities. The ARC is committed to advocacy, support and development of services for people with intellectual and developmental disabilities. They work at the local, state and national levels to ensure a fair and inclusive social environment.

Mencap (The Royal Mencap Society)

Founded in 1946 in Great Britain by a group of parents of children with intellectual disabilities. Mencap stands for support, advocacy and campaigns to improve the quality of life of these people. The organization promotes inclusion and equal opportunities for people with intellectual disabilities and works at local, national and international levels.

L'Arche

L'Arche comprises communities worldwide where individuals with and without intellectual disabilities coexist and collaborate in both residential and professional capacities. Founded in 1964 by Jean Vanier in France, L'Arche promotes integration and mutual support, creating an environment where all members can grow and develop together. The organization has communities around the world and focuses on building relationships and inclusion.

Special Olympics

Founded in 1968 by Eunice Kennedy Shriver, Special Olympics provides sports training and athletic competition for children and adults with intellectual disabilities. This organization uses sport as a means to promote physical and mental health and to raise the self-esteem and social integration of people with intellectual disabilities. Special Olympics has been founded by a family member with personal experiences with intellectual disability (Special Olympics, 2024).

Inclusion Europe

Founded in 1988, Inclusion Europe is a Pan-European federation that advocates for the rights and integration of people with intellectual disabilities and their families. They work to promote inclusive policies and practices in all aspects of social life, from education and employment to health care and social

services. Although not explicitly founded by parents, the organization has strong support from families (Inclusion Europe, 2024).

Autism-Europe

Founded in 1983, Autism-Europe is an international organization working to promote the rights and well-being of people with autism and intellectual disabilities. They actively cooperate with parents and families of people with autism, advocating for the improvement of living conditions and education, as well as for greater awareness and understanding of autism in society. Although not explicitly founded by parents, the organization actively collaborates with parents and families of people with autism (Autism-Europe, 2024).

These organizations play a key role in supporting people with intellectual disabilities and their families, providing resources, advocacy and services that enable these people to live full and independent lives.

Historical development of the education of children with intellectual disabilities: from institutionalization to normalization and total inclusion

During the late 19th and early 20th centuries, institutional education has become an increasingly common form of education for students with intellectual disabilities. During this period, there has been a belief that with proper education, people with intellectual disabilities could be "cured" or significantly improved. This belief has encouraged the development of special institutions where these students have been housed and educated according to special programs that has included academic and life skills. Institutions have been often isolated from society in order to provide a special environment for the education and development of students (Trent, 1994). However, over time this approach has been found to have significant drawbacks, such as social isolation and lack of community integration.

Over time, society's attitudes towards people with disabilities has begun to change. Society began to see these people as active and valuable members, rather than passive recipients of services. This has led to increased support for inclusive practices in education and other fields (Gartner & Lipsky, 1987).

The idea of normalization has appeared in the 1940s in the Scandinavian countries, especially in Sweden and Denmark. The principle of normalization, formulated by Bengt Nirje, has implied the provision of living conditions for persons with disabilities that are as close as possible to those of other members of society (Nirje, 1969). This principle advocates that people with intellectual disabilities have access to the same services and activities as others, including education, health care, and social life (Wolfensberger, 1972).

During the 1950s and 1960s, many countries have begun opening special schools to meet the needs of children with intellectual disabilities. These schools have provided specialized support and education, but over time it became apparent that this separation has contributed to the social isolation of children (Guralnick, 2001). This has led to a change in attitudes and prompted demands for the integration of children with disabilities in regular schools. The goal has been to enable these children to learn and grow together with their peers without disabilities (Kavale & Forness, 2000).

In the 1970s, research has showed that placing students with intellectual disabilities in special schools did not solve their educational difficulties and did not "cure" the intellectual disability. As a result, many students have been moved back into society, and the educational focus has shifted from special schools to special education groups in local schools. This approach has supported the inclusion of children with disabilities in regular schools with specialized support (Stainback & Stainback, 1996).

In 1975, the passage of the Education for All Handicapped Children Act has been a landmark event that required schools to provide education in the least restrictive environment. This law has been instrumental in promoting inclusive education, as it has mandated that children with disabilities should be educated alongside their peers whenever possible (Yell, Rogers, & Lodge, 1998).

In 1994, a World Conference on special needs in education has been held in Salamanca, Spain, attended by representatives of 92 governments and 25 international organizations. The result of this conference has been the Salamanca Declaration, which highlights the importance of inclusive education and calls on all governments to adopt it as legal policy. According

to the Salamanca Declaration, children with special educational needs should have access to mainstream schools and be placed in child-centered educational institutions that meet their needs (UNESCO, 1994).

In December 2006, at the 61st session of the United Nations General Assembly, the Convention on the Rights of Persons with Disabilities has been ratified, which includes significant commitments to inclusive education. Although countries are making progress towards embracing an inclusive philosophy, there are still significant obstacles to its full implementation.

Conclusion

The history of intellectual disability is long and complex, from ancient prejudice to modern support. In ancient times, people with intellectual disabilities have often been marginalized or treated cruelly, such as in Sparta where newborns with "defects" have been killed, or in the Roman Empire, where people with disabilities have been used as entertainment slaves. The Middle Ages have brought religious explanations for disabilities, where these conditions have been thought to be punishment from God or the result of demonic possession. However, even then there have been monasteries that have provided care and support for these persons (Metzler, 2016).

Over time, attitudes have begun to change. In the 19th century, the work of Doctor Jean-Marc Gaspard Itard and his student Edouard Seguin, who have developed educational methods for people with intellectual disabilities, have laid the foundation for modern special education (New World Encyclopedia, 2023; Britannica, 2023). In the 20th century, the advent of intelligence tests and legislative changes, such as the Education of All Handicapped Children Act of 1975, have significantly changed the way these individuals have been educated and integrated into society (Yell, Rogers, & Lodge, 1998).

More recently, inclusive education has become a global goal, driven by documents such as the Salamanca Declaration (1994) and the Convention on the Rights of Persons with Disabilities (2006). These documents have required that children with special educational needs have access to mainstream schools and are supported in inclusive environments (UNESCO, 1994; United Nations, 2006).

Through these historic changes, from prejudice and marginalization to acceptance and support, society has made significant progress in securing the rights and improving the lives of people with intellectual disabilities. However, challenges remain, requiring continued engagement for full inclusion and equality.

REFERENCES:

1.   Ainsworth, P., & Baker, P. (2004). Understanding mental retardation. University Press of Mississippi.

2.   Blackhurst, A. E. (2005). Perspectives on applications of technology in the field of learning disabilities. Learning Disability Quarterly.

3.   Britannica. (2023). Edouard Seguin. Retrieved from Britannica.

4.   Cohen, R., & Heller, T. (2010). Understanding intellectual and developmental disabilities. Paul H. Brookes Publishing Co.

5.   Down-Syndrome.org. (2023). History of Down Syndrome. Retrieved from Down-Syndrome.org.

6.   European Agency for Special Needs and Inclusive Education. (2018). Inclusive education in Europe: Putting theory into practice.

7.   Ferri, B. A., & Connor, D. J. (2005). Tools of exclusion: Race, disability, and (re)segregated education. Teachers College Record.

8.   Gartner, A., & Lipsky, D. K. (1987). Beyond special education: Toward a quality system for all students. Harvard Educational Review.

9.   Gleason, J. (1998). The Kennedy legacy: JFK and the family that changed America. St. Martin's Press.

10. Harvard University Press. (2023). Jean Marc Gaspard Itard. Retrieved from Harvard University Press.

11. Human Genomics. (2023). Advances in newborn screening for PKU. Human Genomics. Retrieved from Human Genomics.

12. Intellectual Disability and Health. (2023). John Langdon Down. Retrieved from Intellectual Disability and Health.

13. MDPI. (2020). Advances in screening for phenylketonuria. International Journal of Neonatal Screening. Retrieved from MDPI.

14. Metzler, I. (2016). Fools and idiots? Intellectual disability in the Middle Ages. Manchester University Press.

15. New World Encyclopedia. (2023). Jean Marc Gaspard Itard. Retrieved from New World Encyclopedia.

16. Nirje, B. (1969). The normalization principle and its human management implications. Changing patterns in residential services for the mentally retarded.

17. Public Law 94-142. (1975). Education for All Handicapped Children Act.

18. Scheerenberger, R. C. (1983). A history of mental retardation: A quarter century of promise. Paul H. Brookes Publishing Co.

19. Science History Institute. (2023). Phenylketonuria (PKU). Retrieved from Science History Institute.

20. Smith, T. (2001). Discrete trial training in the treatment of autism. Focus on Autism and Other Developmental Disabilities.

21. Stainback, W., Stainback, S., & Forest, M. (1989). Educating all students in the mainstream of regular education. Brookes Publishing.

22. Switzer, G. (2003). Politics and disability: The Kennedy family and the evolution of disability policy. Georgetown University Press.

23. Trent, J. W. (1994). Inventing the feeble mind: A history of mental retardation in the United States. University of California Press.

24. UNESCO. (1994). The Salamanca Statement and Framework for Action on Special Needs Education. Retrieved from UNESCO.

25. United Nations. (2006). Convention on the Rights of Persons with Disabilities. Retrieved from UN.

26. University of Toronto. (2023). The Kallikak Family: A Study in the Heredity of Feeble-Mindedness. Retrieved from University of Toronto Libraries.

27. Verywell Mind. (2023). History of intelligence testing. Retrieved from Verywell Mind.

28. Wolfensberger, W. (1972). The principle of normalization in human services. National Institute on Mental Retardation.

29. Yell, M. L., Rogers, D., & Lodge, L. (1998). The legal history of special education: What a long, strange trip it's been. Remedial and Special Education.

30. Чичевска Јованова Н. (2018). Методика на наставата за ученици со интелектуална попреченост. Скопје: Филозофски Факултет.

CHAPTER 8

OUTDOOR THERAPEUTIC RECREATION

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Outdoor Recreation:

Outdoor recreation provides individuals with the opportunity to experience positive emotional and physiological outcomes, such as enhanced life satisfaction, excitement, improved flexibility, and better cardiovascular health (Zwart & Ewert, 2022). Several definitions of outdoor recreation exist. According to Ibrahim and Cordes (1993), outdoor recreation encompasses activities that individuals voluntarily participate in during their leisure time, often organized through the interaction between participants and natural elements. Leitner and Leitner (1996) define outdoor recreation as "activities that foster physical, psychological, and social renewal through interaction, thus establishing a relationship between humans and the natural environment," highlighting the significance of nature integration in outdoor activities. Growing interest in outdoor recreation can be attributed to the interaction with nature, as individuals engage with natural landscapes, resources, and beauty (Argan et al., 2013).

Outdoor recreation activities can be classified into four distinct categories: land, water, air, and ice/winter activities, as illustrated in the table below.

Land Activities	Water Activities	Air Activities	Ice/Winter Activities
Trekking	Swimming	Paragliding	Skiing
Mountain and Rock Climbing	Diving	Parasailing	Snowboarding
Camping	Rafting	Hang Gliding	Ice Skating
Horseback Riding	Canoeing	Gliding	Sledding
Cycling	Rowing	Hot Air Ballooning	Curling
Backpacking	Surfing	Bungee Jumping	
Gardening	Fishing		

Orienteering			
Nature Observation			

Table 1. Outdoor Recreation Activities

Outdoor recreation serves as an environment that combines the benefits of physical activity and/or social interaction with the positive effects of nature. Research has demonstrated that natural environments enhance attention capacity (Berto, 2005; Cimprich & Ronis, 2003) and cognitive functions (Berman et al., 2008), promote self-discipline (Taylor et al., 2002), and increase personal satisfaction (Pothukuchi & Bickes, 2001). Moreover, engaging in outdoor activities has been shown to reduce stress, anger, and blood pressure levels (Hartig et al., 2003; Rodiek, 2002), as well as alleviate symptoms of anxiety and depression (Mooney & Milstein, 1994).

Therapeutic **Recreation**

Therapeutic recreation can be defined as a functional service that transforms leisure activities into habitual practices, thereby positively impacting life satisfaction (Rothwell & Piaat, 2006). In this context, Bunt et al. (2008) emphasize that therapeutic leisure activities are centered on an individual's social, mental, and emotional recovery, rehabilitation, and behavioral change. This field encompasses recreational activities aimed at improving and enhancing the health, functional capacities, and quality of life for individuals with special needs, achieved through experiential activities or interventions that provide assistance (Carter et al., 2003).

Therapeutic recreation, which contributes to personal development in health preservation and renewal, aids individuals by facilitating adjustment to reality and supporting the establishment of balance in life through the use of leisure activities (Austin & Crawford, 1991).

As noted by Sylvester (2014), although both disability studies and therapeutic recreation disciplines focus on improving the lives of individuals with disabilities, their interaction remains limited. Additionally, recreational therapy approaches and strategies, when misaligned with the skill structures

valued by clients, can jeopardize the success of the therapeutic relationship and hinder the achievement of desired outcomes (Smart, 2009). Consequently, the design of therapeutic recreation is of paramount importance and must be tailored to meet the specific needs of each individual or client.
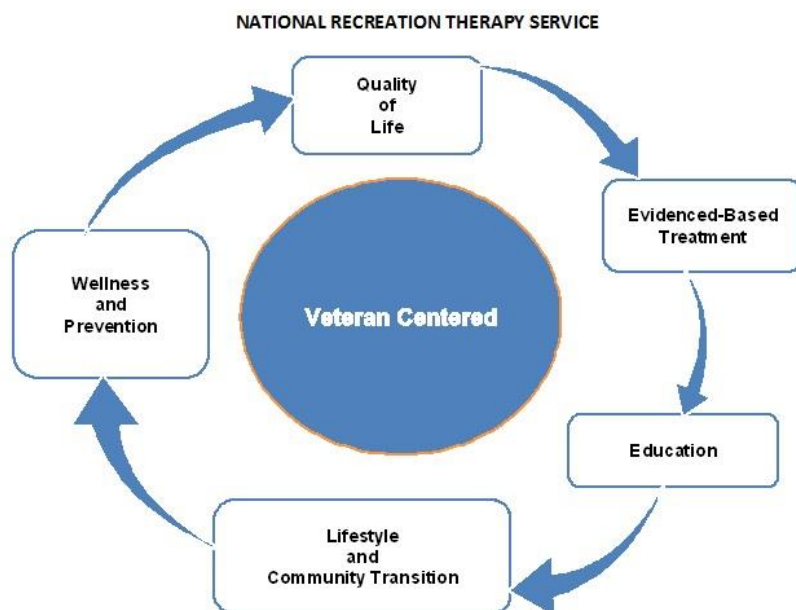

Figure 1.U.S Department of Veteran Affairs Recration Therapy Figure (2024)

The concept of disability and disability models is extensively discussed in the literature within the context of therapeutic recreation. Among the various models presented, three are particularly prominent in therapeutic recreation: the Medical Model, the Social Model, and the International Classification of Functioning, Disability, and Health (ICF). These models play a critical role in shaping how therapeutic recreation is understood and applied. Below, an explanation of each of these models is provided (Beaver, 2023).

Medical Model

The medical model of disability has deep historical roots and remains widely applied in clinical healthcare and rehabilitation settings (Braddock & Parish, 2001; Mackelprang et al., 2022; Roush & Sharby, 2011; Smart & Smart,

2006). This model adopts a binary approach, categorizing individuals as "disabled" or "non-disabled" based on their anatomy and physiology (Shyman, 2016; Smart, 2016). According to the medical model, disability is viewed as a biological and pathological condition, stemming from an individual's diagnosable physical, sensory, cognitive, mental, or psychological disorder, illness, or dysfunction. This deficiency-based perspective treats disability as a deviation from the "norm," positioning it as an undesirable condition that requires medical intervention to "correct" or "improve" (Engel, 1977; Smart, 2009; Todorovska, 2019).

In this model, the primary focus is on rectifying the condition, while environmental and societal factors are largely overlooked (Smart, 2018). The individual with a disability assumes the passive role of a patient, relying on the expertise of healthcare professionals. This leads to diminished autonomy, increased dependence, and exacerbated social stigma (Brittain, 2004; Mackelprang & Salsgiver, 1996; Mackelprang et al., 2022; Smart, 2009).

The language associated with the medical model, such as terms like "wheelchair-bound," "sick," or "physically disabled," reflects and reinforces this deficiency framework. Such terminology perpetuates stigma and discrimination by framing disability as a negative condition that requires fixing (Smart, 2016). Additionally, labels such as "blind," "deaf," or "paralyzed" can dehumanize and objectify individuals, reducing them to their impairments and failing to acknowledge their full humanity (Beaver, 2023).

Social Model

The social model of disability emerged from disability activism in the United Kingdom and stands in stark contrast to the medical model (Barnes, 2020; Kattari et al., 2017). While the medical model views disability as a "personal tragedy," the social model asserts that disability is a societal issue. According to this perspective, disability arises from deficiencies and barriers in both the physical and social environments, including negative societal attitudes, which prevent individuals with physical or mental impairments from fully participating in society (Forber-Pratt et al., 2019). Consequently, the belief that disability is inherently inferior is rejected (Kattari et al., 2017;

Smart, 2016). A key distinction in this model is the differentiation between "impairment" and "disability."

In the social model, impairment refers to a biological difference or abnormality, whereas disability is understood as a disadvantage or limitation in activities due to society's failure to accommodate individuals with impairments (UPIAS, 1975). Without the presence of social barriers, individuals with disabilities would have equal opportunities, and disability itself would cease to exist (Amponsah-Bediako, 2013; LoBianco & Sheppard-Jones, 2007).

Because the source of the problem lies not in the individual's condition but in societal structures, the social model does not focus on the medical treatment or rehabilitation of the person. Rather, disability is seen as a social construct that can be transformed, with the primary goal being to enhance the individual's participation in society (Inclusion London, 2015; Office of Developmental Primary Care, 2018). Moreover, securing civil rights and reasonable accommodations for individuals with disabilities are seen as vital measures to reduce and eventually eliminate disability. This model seeks not only to improve physical accessibility but also to change societal attitudes toward disabled individuals (Roush & Sharby, 2011; Smart, 2009; 2016). As a result of these societal changes, individuals with disabilities are expected to experience greater freedom and self-determination, with their impairments becoming an integral part of their identity (Kattari et al., 2017; Roush & Sharby, 2011). In contexts where the social model is embraced, it fosters a sense of pride and self-affirmation regarding disability (Forber-Pratt et al., 2019).

International Classification of Functioning, Disability and Health (ICF) Model (Human Rights Model)

The International Classification of Functioning, Disability, and Health (ICF), developed by the World Health Organization (WHO), aims to "synthesize the entirety of the disability concept, avoiding the limitations of both the medical and social models, without reducing it to one of its complex aspects" (WHO, 2002). The ICF is an evidence-based classification system that provides a universal framework for defining and measuring functionality and

disability, focusing on the interaction between an individual's personal health conditions and their environment. This model acknowledges the multidimensional nature of the disability experience, encompassing biomedical, personal, and social factors, and considers the various elements that influence an individual's health (Bickenbach, 2010; WHO, 2013). The WHO's comprehensive definition of health—"not merely the absence of disease or infirmity but a state of complete physical, mental, and social well-being"—is explicitly reflected in the ICF (WHO, 2013).

In the ICF framework, disability is understood as the intersection of an individual's physical body dysfunction, activity limitations, and/or participation restrictions, with consideration given to the contextual factors present in either the individual or their environment (Howard et al., 2007; Imrie, 2004). Activity is defined as the execution of a task or action (e.g., walking, communicating), while participation refers to involvement in a meaningful life situation (WHO, 2002).

The ICF model identifies three levels of human functioning (WHO, 2002):

- Body or body part level (body structures and functions domain)
- Entire person (activities domain)
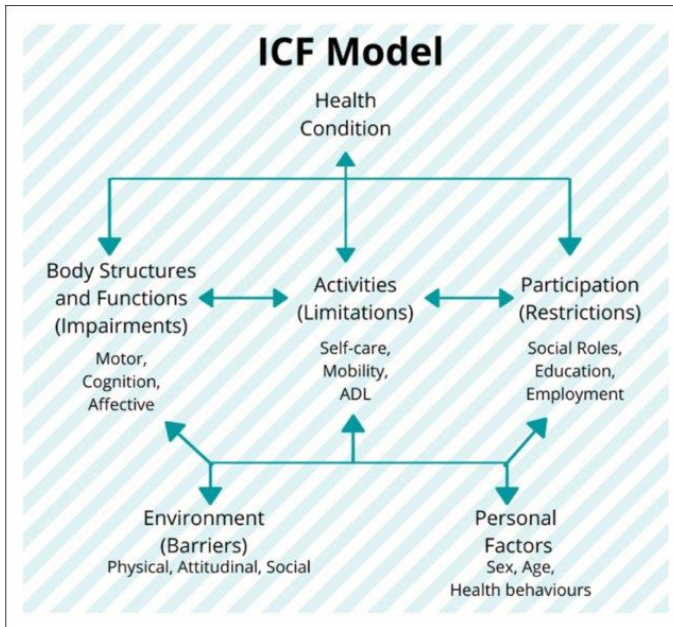- Entire person in a social context (participation domain)

Figure 2. ICF Model (Trang vd., 2020)

Outdoor Therapeutic Recreation

The National Council for Therapeutic Recreation Certification (NCTRC, 2021) defines the purpose of recreational therapy as "improving or maintaining physical, cognitive, social, emotional, and spiritual functioning to facilitate full participation in life." The recreational therapist's role is to assist clients in addressing and maintaining their physical, mental, and emotional well-being. In simple terms, as outlined by the American Therapeutic Recreation Association (ATRA) and NCTRC, recreational therapists prescribe recreational interventions aimed at alleviating the negative effects of an individual's disability (Devine & Bennett, 2020; Mobily et al., 2015), reflecting the medical model's view of disability as a problem that requires correction.

The goal of outdoor therapies is to empower individuals, build resilience, reduce stress, restore focus, develop coping strategies, enhance social skills, resolve trauma, transform behavior, and reduce resistance to change (COTH, 2021). Participants benefit directly from improvements in

their health, including physical, emotional, mental, cognitive, social, behavioral, and spiritual well-being (Gass et al., 2020).

Recreational Therapy (RT) is a systematic process provided in various settings, which includes assessment, planning, implementation, evaluation, and documentation. RT interventions are employed to promote well-being in the social, emotional, physical, spiritual, and cognitive domains (ATRA, 2022). As a therapeutic approach, RT is structured to leverage the benefits of recreational activities to improve and rehabilitate an individual's level of independence and functionality (ATRA, 2022).

The field of therapeutic recreation trains students to become recreation therapists (RTs) who deliver various treatment interventions through different facilitation techniques and modalities to assist vulnerable populations in their journey toward recovery and rehabilitation. Recreational therapy (RT) focuses on enhancing a person's health in physical, cognitive, emotional, social, and leisure domains (NCTRC, 2021).

Ewert et al. (1999) described outdoor experiential therapy as a treatment approach that utilizes or simulates an outdoor environment or natural setting to facilitate the rehabilitation, growth, development, and improvement of an individual's physical, social, and psychological well-being. This is achieved through the implementation of structured activities that emphasize direct, hands-on experiences. For example, organizing a backpacking trip for a group of individuals with developmental disabilities is an example of how such an approach can be applied in practice.

Figure 3. Mandala Healing Center Recreational Therapy İnterventions (2024)

Examples of recreational therapy activities include walking groups, swimming groups, football, and horseback riding groups (Fenton et al., 2017). Group activities, due to their psychological and social outcomes, are particularly beneficial in encouraging and sustaining participants. Adaptive sports and recreational activities also provide individuals with disabilities opportunities for physical activity, whether in competitive or recreational settings (Rayes et al., 2022). There is a wide array of adaptive sports available for individuals with disabilities, which can be organized as either team or individual sports. Notable examples of adaptive sports include wheelchair

basketball, wheelchair rugby, goalball, boccia, wheelchair tennis, athletics, sled hockey, and air rifle shooting. While adaptive sports have become more widespread, these opportunities have only recently gained traction in traditional sports contexts. For instance, wheelchair basketball became increasingly popular in the United States beginning in 1956 (Thomas et al., 2024; Miller & Kaitz, 2015).

Zabrinskie et al. (2005) investigated the effects of a community-based therapeutic recreation and adaptive sports program on 129 individuals with disabilities, focusing specifically on skiing and horseback riding programs. The findings suggested that participation in therapeutic recreation programs had a positive impact on the quality of participants' social and family life, as well as on their overall health.

Fields such as wildlife therapy, eco-therapy, forest therapy, adventure therapy, aquatherapy, and horticultural therapy employ nature-based interventions to foster well-being in the individuals they treat (Busk et al., 2022; Naor & Mayseless, 2021).

Empirical research indicates that nature-based recreational activities are associated with improved happiness, increased prosocial behavior, enhanced social connection, positive engagement, and an improved perceived quality of life. Furthermore, these activities have been shown to contribute to reductions in symptoms of depression, stress, aggression, ADHD, and blood pressure, when compared to indoor recreational activities (Bowler et al., 2010; Coon et al., 2011; Hartig et al., 2014; James et al., 2015; Lee & Maheswaran, 2011; Russell et al., 2013; Seymour, 2016). Participants in such activities have reported benefits including increased satisfaction, mental relaxation, empowerment, enlightenment, social connection, and excitement (Armstrong et al., 2023).

Outdoor therapies often combine elements of nature and challenge. These therapies can be tailored to varying levels of difficulty, incorporating different elements of nature and psychotherapy, as depicted in Figure 4 (Priest, 2022).
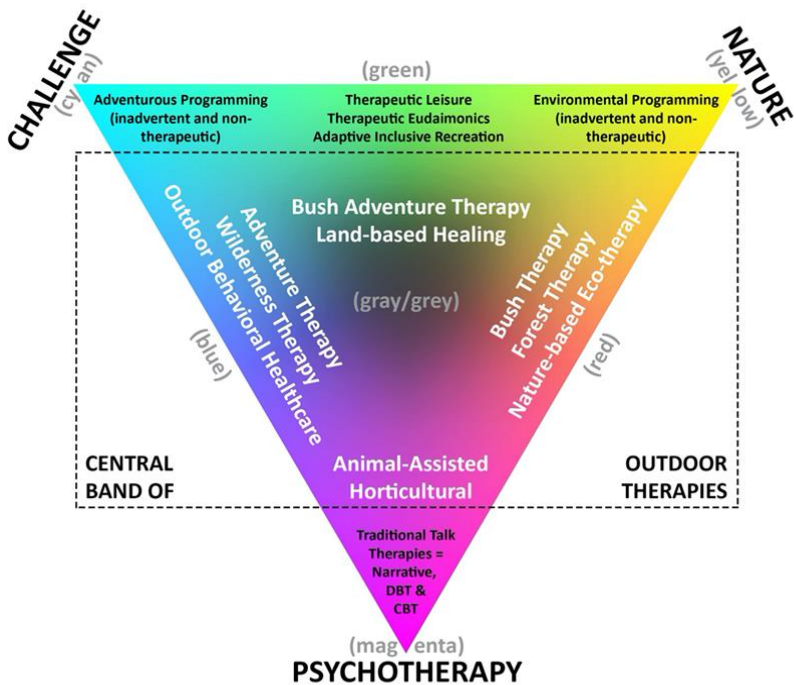
Figure 4. Challenge-Nature-Psychotherapy, Priest (2022)

AquaTherapy

The use of water-based therapies dates back to ancient civilizations, with evidence of therapeutic practices found in Greek, Roman, Egyptian, Hindu, Japanese, and Chinese cultures (Broach, 2016). Professionals specializing in aquatic therapy must possess a comprehensive understanding of functional areas, including cognition, social interaction, emotional regulation, and physical function, prior to working with individuals with disabilities in aquatic settings (Grosse, 2012).

Aqua therapy, an intervention designed to promote both physical and psychological recovery, also encourages the development of skills related to swimming and water-based exercises within leisure activities (Broach & Dattilo, 1996). Therapeutic activities in water allow individuals to engage in

movements with greater freedom, enhanced endurance, reduced body temperature, diminished muscle strain, lower energy expenditure, and fewer protective behaviors associated with a fear of falling (Broach, 2004).

Water therapy, aimed at improving swimming and facilitating exercises involving major muscle groups, is commonly conducted in group settings and is believed to have significant physiological and psychological benefits (Campion, 1990; Davis & Harrison, 1988). The application of aquatic interventions for individuals with disabilities to address illnesses, disorders, and debilitating conditions has been growing (Scott et al., 2020). Previous research on aquatic therapies has demonstrated several positive outcomes, including pain reduction (Baena-Beato et al., 2014; Cantarero Villanueva et al., 2012), prevention of bone loss (Tsukahara et al., 1994), improvements in functional and motor performance (Fragala-Pinkham et al., 2014; Hillier et al., 2010; Salem & Jaffee Gropack, 2010), increased strength (Kargarfard et al., 2013; Chi et al., 2011), enhanced endurance (Routi et al., 1994), improved conditioning (Wang et al., 2007; Driver et al., 2004), and better lung function (Getz et al., 2006).

In addition to its physiological benefits, water therapy has been shown to provide significant psychological advantages, such as improved body image (Smith & Michel, 2006), reduced depression (Benedict & Freedman, 1993), improved mood (Assiss et al., 2006), reduced anxiety (Rogers et al., 2014), and enhanced quality of life (Lai et al., 2014; Maniu et al., 2013).

A study involving four individuals with multiple sclerosis (MS) demonstrated improvements in stair climbing and cycling movements, further supporting previous findings (Broach & Dattilo, 2001). Another investigation with MS patients found that all participants described aqua therapy as a fun and engaging intervention (Broach et al., 2007). In children with spastic cerebral palsy, those participating in pediatric aquatic therapy exhibited higher mean scores for gross motor function compared to a control group (Lai et al., 2015).

While the psychological and relaxation-oriented benefits of aqua therapy have been recognized for many years, research has also demonstrated its broad

physiological, psychological, and social advantages for individuals facing various challenges.

Adventure Therapy

Adventure therapy is widely recognized as an intervention within the field of therapeutic recreation, where outdoor experiential activities are utilized to achieve treatment-related objectives (Datillo, 2000). The distinctive nature of these experiences provides therapeutic recreation professionals with an effective technique for facilitating behavioral and attitudinal changes in their clients (Datillo, 2000). Adventure therapy serves as an umbrella term encompassing a range of practices within human services fields, including social work, counseling, psychotherapy, and health promotion, all through the medium of outdoor adventure (Harper et al., 2015).
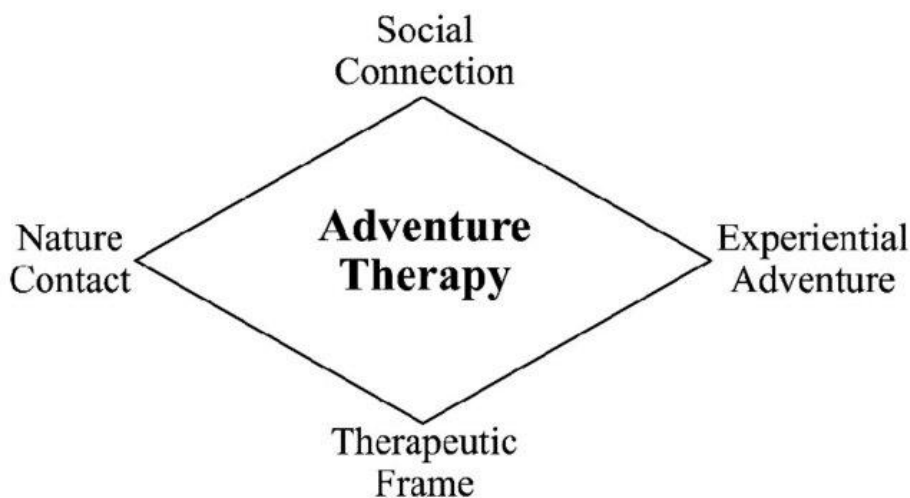

Figure 5. Adventure therapy: The intentional use of small groups, nature-contact, adventure, and therapeutic processes (AABAT, 2013).

As emphasized in the comprehensive study by Gass et al. (2012), adventure therapy requires active physical activity facilitated by an educator or rehabilitation specialist, combined with a cooperative group effort that includes an outdoor education component. Adventure therapy programs often incorporate outdoor activities such as hiking, backpacking, rock climbing, camping, and sea/raft trips (Berman & Davis-Berman, 1995; Datillo,

2000; Robb & Ewert, 1987). Given that adventure therapy utilizes experiential activities as a tool for therapeutic change in client behaviors and attitudes, it aligns well with the therapeutic recreation paradigm (Autry, 2001).

Adventure therapy has been shown to provide empowering outcomes for individuals with low self-esteem and self-destructive behaviors (Autry, 2001). It is commonly applied in therapeutic recreation contexts to treat individuals with mental health issues (Davis-Berman et al., 1995; Berman & Davis-Berman, 2000; Chakravorty et al., 1995; Datillo, 2000; Pommier & Witt, 1995; Tate & Ellis, 1997). Outdoor adventure programs, in particular, have the potential to facilitate personal growth, enabling young people to learn about themselves while acquiring valuable coping strategies for managing everyday challenges (Hattie et al., 1997; Hunter, 1987; Priest, 1991).

According to Austin (1999), the three principles in adventure therapy can be applied to other programs offered under therapeutic recreation. These principles are as follows:

1. _Individualized Challenges_**:** Adventure therapy should provide challenges tailored to the client's capabilities, ensuring success and leading to positive outcomes. Striking a balance between individual challenges and skills is a key goal in the therapeutic recreation process (Peterson & Stumbo, 2000). Adventure therapy programs can create an environment conducive to behavioral and attitudinal change, empowering clients to develop more appropriate social behaviors and a positive self-concept (Ewert, 1989; Kimball, 1990; Laurence & Stuart, 1990; Teschner & Wolter, 1984).

2. _Empowerment:_ The goal of adventure therapy is to empower clients and enable them to self-determine their destiny. These concepts are foundational outcomes of therapeutic recreation interventions.

3. _Processing Techniques_**:** The third principle emphasizes the importance of processing techniques, which are crucial for achieving treatment outcomes in both therapeutic recreation and adventure therapy. Behavioral, cognitive, and psychosocial changes, as well as empowerment, can result from these techniques, and these changes

can be generalized to other areas of the client's life (Austin, 1999; Datillo, 2000; Ewert, 1989).

Hippotherapy

Hippotherapy, in short, is a system in which the client does not actively influence the movement of the horse; instead, the client is moved by the horse and responds to its movement. The hippotherapy practitioner guides a specially trained horse caregiver to alter the horse's movement as needed through changes in pace, stride length, and direction, thus facilitating the therapy (Debuse et al., 2005).
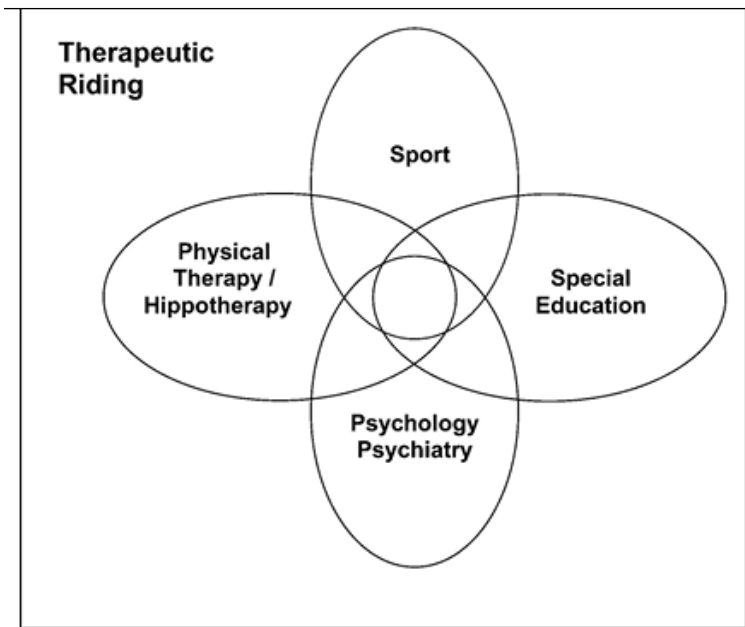

Figure 6. Diagrammatic representation of Therapeutic Riding, Heipertz (1977).

The primary objective of hippotherapy is to improve an individual's balance, posture, function, and mobility through personalized treatment, facilitated by an interdisciplinary team approach (All et al., 1999).

Existing literature highlights several significant physical benefits of hippotherapy, including regulation of muscle tone (Bausenwein, 1984; Strauß, 1998), improvement in trunk control (Haehl et al., 1999), enhancement of gait

(McGibbon et al., 1998; Would, 1998, 2000), and improvements in balance, coordination, and sensory integration (Strauß, 1998, 2000; Tauffkirchen, 1996).

A study conducted by Park et al. (2014) involving children with cerebral palsy (CP) found notable improvements in gross motor function and functional performance in the CP group when compared to a control group. Similarly, a clinical study involving elderly adults reported significant improvements in functional mobility after 16 sessions of hippotherapy, particularly among healthy and independent individuals (Araujo et al., 2011).

According to Bukovek (as cited in Granados & Agis), hippotherapy has been effectively used to treat children with a wide range of disabilities, including autism, cerebral palsy, communication disorders, cerebrovascular accidents (strokes), developmental delays, Down syndrome, language disorders, multiple sclerosis, muscular dystrophy, spinal cord injuries, traumatic brain injuries, and hearing impairments. However, it is important to note that hippotherapy is not suitable for all children. For instance, it is contraindicated for children with conditions such as fragile bones, hemophilia, hemorrhoids, a history of aggression towards animals, or uncontrolled epilepsy (Heine, 1997).

Therapeutic Outdoor Recreation and Psychological Effects

Trauma

Although there is no universally accepted definition, trauma is commonly described as "an event, series of events, or set of circumstances experienced by an individual as physically or emotionally harmful or life-threatening and that has lasting negative effects on the individual's functioning and mental, physical, social, emotional, or spiritual well-being" (SAMHSA, 2014).

In recent years, fields such as therapeutic recreation (TR) have increasingly developed programs aimed at the healing and post-traumatic growth of individuals who have experienced trauma (Arai et al., 2008; Mikal-Flynn et al., 2018).

The therapeutic benefits of nature, coupled with the principles of TR, have been shown to significantly improve individuals' mental well-being and aid in their recovery from trauma (Owens & Bunce, 2022; Picton et al., 2019).

According to Stevens and Truong (2024), three central themes have emerged from their findings, outlining the key outcomes and role of nature-based programs in supporting trauma recovery. These themes are: (1) nature experiences offer an opportunity to distance oneself from trauma symptoms and foster relaxation; (2) they facilitate the creation and strengthening of connections and relationships with others; and (3) they support the development of positive internal outcomes, promoting personal growth and resilience.

Mental İlness

The term "mental illness" is defined as "a clinically diagnosable disorder that significantly interferes with an individual's cognitive, emotional, or social abilities" (Council of Australian Governments, 2012). Among the most prevalent mental illnesses globally are depression and anxiety, which continue to increase in frequency (Commonwealth of Australia, 2015).

Over the past five years, there has been a growing body of evidence supporting the effectiveness of outdoor-based therapeutic recreation (TR) as a mental health intervention, particularly in Australia. This movement is largely associated with a project known as the "Recovery Camp" (Picton et al., 2019). The "Recovery Camp" is an immersive outdoor TR experience, structured as a five-day, four-night adventure camp. Held in rural New South Wales, Australia, the camp provides a space for adults with mental illnesses (aged 18 and older) to engage in a variety of physical and recreational activities. These include archery, orienteering, wall climbing, a 40-foot flying fox, a 60-foot giant swing, mountain rescue, yoga, art, and high ropes courses (Moxham et al., 2015; Picton et al., 2017).

Research by Wilson and Christensen (2012) highlighted a negative relationship between participation in outdoor recreation and depression. Their study found that individuals who engaged in outdoor activities exhibited lower general depression scores compared to those who did not

participate, with higher participation in outdoor recreation correlating with even lower depression scores. Similarly, Christensen et al. (2013) reported that older adults who participated more frequently in outdoor recreation demonstrated lower general depression index scores, suggesting that regular engagement in outdoor activities has a depression-reducing effect for this population. Sarungi (2024) emphasized that nature-based programs involving activities such as hiking, camping, and outdoor sports significantly reduce symptoms of anxiety, depression, and stress. Furthermore, immersion in nature enhances calmness and relaxation, while promoting physical activity, which in turn positively impacts mood and overall well-being.

Cotton and Butselaar (2012) evaluated an outdoor camp designed for individuals with mental illness, categorizing it as "adventure therapy." Their study found that participation in the camp led to significant improvements in self-esteem, social connection, and overall well-being. In a similar vein, Roebers et al. (2022) conducted a study examining the effects of nature-based physical activities on children's mental health and academic performance. Their findings provided compelling evidence of the transformative impact of outdoor activities—such as nature walks and adventure playgrounds—on children's attention capacity and mood regulation.

Severe Menral İlness

Severe mental illness encompasses conditions such as psychotic disorders, schizophreniform disorders, and mood disorders, which significantly impair an individual's ability to function in daily life (Scott et al., 2020). Previous research has demonstrated a correlation between physical activity and improved mood in adults with severe mental illness (Walter, 2014). Specifically, Walter (2014) examined the effects of an aquatic recreational therapy (RT) program on mood in adults with severe mental illnesses, including major depressive disorder, bipolar disorder, and psychotic disorders, in a mental health facility. Following just one aquatic physical activity session, participants reported an increase in positive mood and a decrease in negative mood, highlighting the therapeutic benefits of water-based activities for individuals with severe mental health conditions.

In another study, Corring et al. (2013) explored the benefits of horseback riding as a form of therapeutic recreation for individuals with schizophrenia. Participants in this study reported enhanced enjoyment, increased self-esteem, and improved self-confidence as a result of developing their horseback riding skills. These findings underscore the positive impact of recreational activities, such as aquatic therapy and horseback riding, on the mental and emotional well-being of individuals with severe mental illness.

Demantia

Russell et al. (2023) argued that nature and outdoor recreation can significantly enhance individual self-esteem and help individuals living with dementia maintain continuity in their leisure activities. The authors highlighted the critical role of social identity for people living with dementia, emphasizing that leisure activities, particularly those involving social interactions and outdoor recreation, are vital to maintaining this identity. This perspective can be understood phenomenologically through the concepts of embodiment and the lived experience of "being in the world" (Russell et al., 2023).

Furthermore, the *Dementia Practice Guidelines for Recreational Therapy* (Fitzsimmons et al., 2014) state that the symptoms of depression and anxiety can significantly decrease when positive feedback, smiles, and laughter are observed in at least 75% of each recreational therapy session. Mitchell and Van Puymbroeck (2019) affirmed this finding, suggesting that such emotional responses can serve as indicators of the therapeutic effectiveness of recreational activities in reducing distress and enhancing the well-being of individuals with dementia.

PTSD (Post-Traumatic Stress Disorder)

As nature-based approaches to stress reduction and well-being enhancement have gained popularity across various disciplines, therapeutic recreation (TR) practitioners have increasingly utilized nature-based interventions and activities to address functional outcomes and provide recreational opportunities for veterans and military populations experiencing

post-traumatic stress disorder (PTSD) and other challenges (Craig et al., 2020; Hawkins et al., 2016).

Research has shown that 31% of U.S. veterans returning from Iraq and Afghanistan met the criteria for PTSD, depression, or traumatic brain injury (Tanielian & Jaycox, 2008). Programs offering activities such as river rafting, rock climbing, and fishing have demonstrated success in providing both adventurous and reflective experiences for veterans with PTSD (Siber, 2019). In a study involving veterans, a significant relationship was found between participation in outdoor adventure activities and a reduction in depressive symptoms. Furthermore, increased participation in these activities was associated with an improved overall quality of life (McDonagh et al., 2024). Mowat and Bennett (2011) found that recreational fishing therapy, which included storytelling about wartime experiences, was particularly effective for veterans recovering from PTSD.

Military veterans participating in multi-day recreational programs—such as rock climbing, hiking, Nordic walking, rafting, sailing, and fly fishing—reported improvements in emotional regulation, attention, self-esteem, social connectivity, sense of peace, positive affect, and overall quality of life. Additionally, reductions in PTSD, tension, depression, negative affect, functional impairment, and anger were observed (Bennett et al., 2017; Bettmann et al., 2021; Duvall & Kaplan, 2014; Gelkopf et al., 2013; Lundberg et al., 2011; Vella et al., 2013).

Studies have indicated that longer durations spent in outdoor activities correlate with greater reductions in PTSD symptoms, with long-term recreational therapy proving especially effective for specific activities (Bettmann et al., 2021). Moreover, veterans participating in full-day outdoor recreational activities reported significant improvements in symptoms related to PTSD, substance use disorders, depression, and anxiety (Marchand et al., 2018, 2019; Wheeler et al., 2020).

Developmental Disorders and Therapeutic Outdoor Recreation

The Centers for Disease Control and Prevention (CDC) estimates that between 2009 and 2017, one in every six children aged 3-17 in the United

States was diagnosed with a developmental disability, including autism spectrum disorder, Down syndrome, and intellectual disability (Zablotsky et al., 2019). Individuals with developmental disabilities often experience anxiety, stress, and mental health challenges and require support to manage these emotions in a healthy way (Skokauskas et al., 2012; Woodcock et al., 2009). According to Rolston (1988), goal-directed outdoor activities are physically, mentally, emotionally, and spiritually rewarding. Participation in recreational and outdoor activities allows individuals with disabilities to increase social interaction frequency and build meaningful relationships with both disabled and non-disabled peers (Mahoo et al., 2000).

While the needs of individuals with developmental disabilities may vary, outdoor recreation offers numerous benefits that can enhance their functionality and quality of life (Armstrong et al., 2023). For instance, after participating in an adaptive surfing program, young people with developmental disabilities showed improvements in cardiovascular endurance and cognitive ability (Armitano et al., 2015).

Oyedoyin and Adeleke (2012) found that children with autism generally respond positively to outdoor activities as a therapeutic strategy to improve social competence. This observation aligns with Granpeesheh et al. (2009), who emphasized that effective therapies for children with autism often involve movement-based activities.

Moreover, outdoor family therapy has been specifically tailored for families with children who have ADHD or autism spectrum disorder (ASD). Greenfield and Senecal (1995) reported that in recreational multi-family therapy programs, adults developed new parenting skills, and the involvement in outdoor recreational activities helped resolve family conflicts.

Summary and Conclusion

The wide-ranging impact of nature-based and outdoor therapies on enhancing the general health, quality of life, psychological well-being, social support, physiological health parameters, and perceptions of various disadvantaged groups has been clearly demonstrated. The literature in this field strongly supports the benefits of nature-based therapy and recreation.

However, several recommendations can be made for future studies.

Firstly, conducting long-term studies would yield higher quality evidence. The effects and benefits of long-term outdoor therapeutic recreation interventions would be a valuable addition to the existing literature.

Secondly, it would be beneficial to conduct studies with individuals from different cultures and geographical locations, particularly with those facing various disabilities or disadvantages. These studies should be supported by innovative and adapted sports and outdoor recreational therapies that move away from traditional approaches.

Finally, considering that everyone is a potential candidate for disability or disadvantage, fostering awareness starting from our homes, local environments, and everyone we can reach is a responsibility that falls upon all of humanity.

References:

All AC, Loving GL, Crane LL. Animals, horseback riding, and implications for rehabilitation therapy. J Rehabil 1999; 65: 49–57.

American Therapeutic Recreation Association. (2022). About recreational therapy. https://www. atra-online.com/page/AboutRecTherapy

Amponash-Bediako, K. (2013). Relevance of disability models from the perspective of a developing country: An analysis. Developing Country Studies, 3(11), 121–132.

Arai, S. M., Griffin, J., Miatello, A., & Greig, C. L. (2008). Leisure and recreation involvement in the context of healing from trauma. Therapeutic Recreation Journal, 42(1), 37–55.

Araujo, T. B., Silva, N. A., Costa, J. N., Pereira, M. M., & Safons, M. P. (2011). Effect of equine-assisted therapy on the postural balance of the elderly. Brasilian Journal of Physical Therapy, 15, 414–419.

Armitano, C. N., Lamont, L. S., Clapham, E. D., & Audette, J. G. (2015). Benefits of surfing for children with disabilities: A pilot study. Palaestra, 29(3), 31–34. https://doi.org/10. 18666/PALAESTRA-2015-V29-I3-6912

Armstrong, M., Sharaievska, I., Crowe, B. M., & Gagnon, R. J. (2023). Experiences in outdoor recreation among individuals with developmental disabilities: Benefits, constraints, and facilitators. *Journal of Intellectual & Developmental Disability*, *48*(1), 46-57.

Assiss, M.R., Silva, L., Alves, A.M.B., Pessanha, A.P., Valim, V., et al. (2006). A randomized controlled trial of deep water running: Clinical effectiveness of aquatic exercise to treat fibromyalgia. Arthritis Care and Research, 55(1), 57-65.

Austin, D. R., & Crawford, M. E. (Eds.). (1991). *Therapeutic recreation: an introduction* (p. 418pp).

Australian Association for Bush Adventure Therapy. (2013). Bush adventure therapy 101 workshop handbook. Kew, Australia: AABAT

Australian Bureau of Statistics. National Health Survey: first results 2014–2015 Canberra, ABS Catalogue No. 4364.0.55.001: Commonwealth of Australia; 2015.

Autry, C. E. (2001). Adventure therapy with girls at-risk: Responses to outdoor experiential activities. *Therapeutic recreation journal*, *35*(4), 289-306.

Baena-Beato, P. Á., Artero, E. G., Arroyo-Morales, M., Robles-Fuentes, A., Gatto Cardia, M. C., & Delgado-Fernández, M. (2014). Aquatic therapy improves pain, disability, quality of life, body composition and fitness in sedentary adults with chronic low back pain. A controlled clinical trial. Clinical rehabilitation, 28(4), 350-360.

Barnes, C. (2020). Understanding the social model of disability. In N. Watson & S. Vehmas (Eds.), Routledge handbook of disability studies (2nd ed., pp. 14–31). Rout ledge.

Bausenwein, I. (1984). Sport mit Zerebralparetikern: Wettkampfsport, Gruppensport, therapeutisches Reiten. *(No Title)*.

Beaver, S. (2023). A Need for Increased Awareness of Disability Models in Recreational Therapy Practice. *Therapeutic Recreation Journal*, *57*(1), 46-68.

Beaver, S. (2023). A Need for Increased Awareness of Disability Models in Recreational Therapy Practice. *Therapeutic Recreation Journal*, *57*(1), 46-68.

Benedict, A., & Freeman, R. (1993). The effect of aquatic exercise on aged persons' bone density, body image, and moral. Activities, Adaptations & Aging, 17, 67-85.

Bennett, J. L., Piatt, J. A., & Van Puymbroeck, M. (2017). Outcomes of a therapeutic fly-fishing program for veterans with combat-related disabilities: A community-based rehabilitation initiative. Community Mental Health Journal, 53(7), 756–765. https://doi.org/10.1007/s10597-017-0124-9 Bettmann, J. E., Prince, K. C., Ganesh, K., Rugo,

Berman, D. S., & Davis-Berman, J. L. (2000). Therapeutic uses of outdoor education. Clearinghouse on Rural Education and Small Schools, Appalachia Educational Laboratory.

Berman, M. G., Jonides, J., & Kaplan, S. (2008). The cognitive benefits of interact ing with nature. Psychologiacl Science, 19, 1207-1212.

Berto, R. (2005). Exposure to restorative environments helps restore attention ca pacity. Journal of Environmental Psychology, 25, 249-259.

Bickenbach, J. E. (2010). Ethical considerations in applying the ICF. In E. Mpofu, & T. Oakland (Eds.), Rehabilitation and health assessment: Applying ICF guidelines (pp. 47–65). Springer Publishing Company.

Bowler, D. E., Buyung-Ali, L. M., Knight, T. M., & Pullin, A. S. (2010). A systematic review of evidence for the added benefits to health of exposure to natural environments. BMC Public Health, 10(1), 1–10. https://doi.org/10.1186/1471-2458-10-456

Braddock, D. L., & Parish, S. L. (2001). An institutional history of disability. In G. L. Al brecht, K. Seelman, & M. Bury (Eds.), Handbook of disability studies (pp. 11–68). SAGE. http://dx.doi.org/10.4135/9781412976251.n2

Broach, E. (2004). Aquatic therapy: Making a splash in Alabama. The Alabamian. March, 8—11.

Broach, E. (2016). Aquatic therapy. In J. Dattilo & A. McKenney (Ed.), Facilitation Techniques inTherapeutic Recreation pp. 41-92) (3rd ed.). Venture Publishers.

Broach, E., & Dattilo, J. (1996). Aquatic ther apy: A viable therapeutic recreation intervention. Therapeutic Recreation Journal, (30), 213-239.

Broach, E., & Dattilo, J. (2001). Effects of aquatic therapy on adults with multiple sclerosis. *Therapeutic Recreation Journal*, *35*(2), 141-154.

Broach, E., Dattilo, J., & McKenney, A. (2007). Effects of aquatic therapy on perceived fun or enjoyment experiences of participants with multiple sclerosis. *Therapeutic Recreation Journal*, *41*(3), 179.

Bunt G.C, Muehlbach B., Moed C.O. (2008). The Therapeutic Community: An International Perspective a Daytop Village Inc., Health Services Division , New York, 81-87.

Busk, H., Sidenius, U., Kongstad, L. P., Corazon, S. S., Petersen, C. B., Poulsen, D. V., Nyed, P. K., & Stigsdotter, U. K. (2022). Economic evaluation of nature-based therapy interventions—A scoping review. Challenges, 13(1), 23. https://doi.org/10.3390/challe13010023

Campion, M. R. (1990). Adult hydrotherapy. Oxford: Heinemann Medical Books

Cantarero-Villanueva, I., Fernández-Lao, C., Fernández-de-las-Peñas, C., Lopez Barajas, I. B., Del-Moral-Ávila, R., de la-Llave-Rincón, A. I., & Arroyo

Morales, M. (2012). Effectiveness of water physical therapy on pain, pressure pain sensitivity, and myofascial trigger points in breast cancer survivors: a randomized, controlled clinical trial. Pain Medicine, 13(11), 1509-1519

Carter M. J., Van Andel, G.E., Robb, G.M. (2003). Therapeutic Recreation: a Practical Approach, (3rd ed.) Prospect Heights, Ill.: Waveland Press, Inc.

Chakravorty, D., Trunnell, E. P., & Ellis, G. D. (1995). Ropes course participation and post-activity processing on transient depressed mood of hospitalized adult psychiatric patients. *Therapeutic Recreation Journal*, *29*, 104-104.

Chi, D., Back, Y., Park, G., Ju, S., & Jang, H. (2011). The effect of aquatic exercise on peak torque and stability of knee joints of elderly women. Journal of Physical Therapy Science, 23, 871-873.

Christensen, K. M., Holt, J. M., & Wilson, J. F. (2013). The relationship between outdoor recreation and depression among older adults. *World Leisure Journal*, *55*(1), 72-82.

Cimprich, B., & Ronis, D. L. (2003). An environmental intervention to restore attention in women with newly diagnosed breast cancer. Cancer Nursing, 26, 284-292.

Commonwealth of Australia. The roadmap for national mental health reform 2012–2022. Canberra: Council of Australian Governments; 2012.

Coon, J. T., Boddy, K., Sein, K., Whear, R., Barton, J., & Depledge, M. H. (2011). Does participating in physical activity in outdoor natural environments have a greater effect on physical and mental wellbeing than physical activity indoors? A systematic review. Environmental Science & Technology, 45(5), 1761–1772. https://doi.org/10. 1021/es102947t

Corring D, Lundberg E, Rudnick A. Therapeutic horseback riding for ACT patients with schizophrenia. Community Ment Health J 2013;49(1):121–6.

Cotton, S. M., & Butselaar, F. J. (2012). Adventure camps for young adults and adults with mental illness. Psychiatric Services, 63(11), 1154–1154.

Craig, P. J., Alger, D. M., Bennett, J. L., & Martin, T. P. (2020). The transformative nature of fly-fishing for veterans and military personnel with posttraumatic stress disorder. Therapeutic Recreation Journal, 54(2), 150–172. DOI:

Datillo, J. (2000). Facilitation techniques in therapeutic recreation. State College, PA: Venture Publishing.

Davis, B. C, & Harrison, R. A. (1988). Hydrother apy in practice. New York: Churchill Living ston.

Davis-Berman, J., Berman, D., & Faris, R. (1995). Lifestories: Discussions on death using adventure-based activities. *Activities, Adaptation & Aging*, *19*(3), 55-63.

Debuse, D., Chandler, C., & Gibb, C. (2005). An exploration of German and British physiotherapists' views on the effects of hippotherapy and their measurement. *Physiotherapy theory and practice*, *21*(4), 219-242.

Devine, M. A., & Bennett, J. L. (2020). Person-first philosophy in therapeutic recreation.

Driver, S., O'Connor, J., Lox, C., & Rees, K. (2004). Evaluation of an aquatics program on fitness parameters of individuals with brain injuries. Brain Injury, 18, 947-859

Duvall, J., & Kaplan, R. (2014). Enhancing the well-being of veterans using extended group-based nature recreation experiences. Journal of Rehabilitation Research & Development, 51(5), 685–696. https://doi.org/10.1682/JRRD. 2013.08.0190

Engel, G. L. (1977). The need for a new medical model: A challenge for biomedicine. Science, 196(42863), 129–136. https://doi.org/10.1126/science.847460

Ewert, A. W. (1989). Outdoor adventure pur suits: Foundations, models, and theories. Columbus, OH: Publishing Horizons, Inc.

Fenton L, White C, Gallant KA, Gilbert R, Hutchinson S, Hamilton-Hinch B, et al. The benefits of recreation for the recovery and social inclusion of individuals with mental illness: an integrative review. Leis Sci 2017;39(1):1–19.

Forber-Pratt, A. J., Mueller, C. O., & Andrews, E. E. (2018). Disability identity and al lyship in rehabilitation psychology: Sit, stand, sign, and show up. Rehabilitation Psychology, 64(2), 119–129. http://dx.doi.org/10.1037/rep0000256

Fragala-Pinkham, M. A., Smith, H. J., Lombard, K. A., Barlow, C., & O'Neil, M. E. (2014). Aquatic aerobic exercise for children with cerebral palsy: A pilot intervention study. Physiotherapy Theory and Practice, 30(2), 69-78.

Gass, M. A., Gillis, H. L., & Russell, K. C. (2012). Adventure therapy: Theory, practice, & research.

Gelkopf, M., Hasson-Ohayon, I., Bikman, M., & Kravetz, S. (2013). Nature adventure rehabilitation for combat-related posttraumatic chronic stress disorder: A randomized control trial. Psychiatry Research, 209(3), 485–493. https://doi.org/10.1016/j.psychres.2013.01.026

Getz, M., Hutzler, Y., Vermeer, A. (2006). Effects of aquatic interventions in children with neuromotor impairments: A systematic review of literature. Clinical Rehabilitation, 20, 927-936.

Granados, A. C., & Agís, I. F. (2011). Why children with special needs feel better with hippotherapy sessions: a conceptual review. *The Journal of alternative and complementary medicine*, *17*(3), 191-197.

Granpeesheh, D., Dixon, D. R., Tarbox, J., Kaplan, A. M., & Wilke, A. E. (2009). The effects of age and treatment intensity on behavioral intervention outcomes for children with autism spectrum disorders. *Research in Autism Spectrum Disorders*, *3*(4), 1014-1022.

Greenfield, B. J., & Senecal, J. (1995). Recreational multifamily therapy for troubled children. *American journal of orthopsychiatry*, *65*(3), 434-439.

Grosse, S. J. (2012). The role of the aquatic professional in the collaboration process. American Journal of Recreation Therapy, 11(3), 7-16.

Haehl, V., Giuliani, C., & Lewis, C. (1999). Influence of hippotherapy on the kinematics and functional performance of two children with cerebral palsy. *Pediatric physical therapy*, *11*(2), 89-101.

Harper, N. J., Peeters, L., & Carpenter, C. (2015). Adventure therapy. In R. Black, & K. S. Bricker (Eds.). Adventure programming and travel in the 21st century (pp. 221–236). State College, PA: Venture Publishing.

Hartig, T., Evans, G. W., Jamner, L. D., Davis, D. S., & Garling, T. (2003). Tracking restoration in natural and urban field settings. Journal of Environmental Psychology, 23, 109-123.

Hawkins, B. L., Townsend, J. A., & Garst, B. A. (2016). Nature based recreational therapy for military service members: A strengths approach. Therapeutic Recreation Journal, 50(1). DOI: https://doi.org/10.18666/TRJ-2016-V50-I1-6793

Heine, B. (1997). Introduction to hippotherapy. *NARHA Strides magazine.*

Heipertz W 1977 Therapeutisches Reiten Medizin, Pa ̈da gogik, Sport [Therapeutic Riding Medicine, Pedagogy, Sport], Stuttgart, Germany, Franckh'sche Verlagsbuch handlung

Hillier, S., McIntyre, A., & Plummer, L. (2010). Aquatic physical therapy for children with developmental coordination disorder: A pilot randomized controlled trial. Physical & Occupational Therapy Pediatrics, 30(2), 111 124.

Hunter, I. R. (1987). The impact of an outdoor rehabilitation program for adjudicated juveniles. Therapeutic Recreation Journal. 3 (21). 30-43.

Inclusion London. (2015). Factsheet: The social model of disability. https://www.inclu sionlondon.org.uk/wp-content/uploads/2015/05/FactSheets_TheSocialModel.pdf

Jakubec vd. (2016), uyarlanabilir doğa yürüyüşü, kano ve kayak sporlarına katılan çeşitli gelişimsel ve fiziksel engelleri olan bireylerin, etkinlik sonrasında etkinlik öncesine kıyasla daha az depresyon belirteci rapor ettiklerini bulmuşlardır.

James, P., Banay, R. F., Hart, J. E., & Laden, F. (2015). A review of the health benefits of greenness. Current Epidemiology Reports, 2(2), 131–142. https://doi.org/10.1007/s40471-015-0043-7

K. F., Bryan, A. O., Bryan, C. J., & Leifker, F. R. (2021). The effect of time outdoors on veterans receiving treatment for PTSD. Journal of Clinical Psychology, 77(9), 2041–2056. https:// doi.org/10.1002/jclp.23139

Kargarfard, M., Dehghadani, M., Ghias, R. (2103). The effect of aquatic exercise therapy on muscle strength and joint's range of motion in hemophilia participants. International Journal of Preventive Medicine, 4, 50-56.

Kattari, S. K., Lavery, A., & Hasche, L. (2017). Applying a social model of disability across the life span. Journal of Human Behavior in the Social Environment, 27(8), 865–880. https://doi.org/10.1007/s11017-017-9413-0

Kimball, R. (1990). In J. C. Miles & S. Priest (Eds.), Adventure Education (pp. 11-15). State Col lege, PA: Venture Publishing, Inc

Lai, C. J., Liu, W. Y., Yang, T. F., Chen, C. L., Wu, C. Y., & Chan, R. C. (2015). Pediatric aquatic therapy on motor function and enjoyment in children diagnosed with cerebral palsy of various motor severities. *Journal of child neurology*, *30*(2), 200-208.

Laurence, M., & Stuart, T. (1990). In J. C. Miles & S. Priest (Eds.), Adventure Education (pp. 379— 383). State College, PA: Venture Publishing, Inc.

Lee, A. C., & Maheswaran, R. (2011). The health benefits of urban green spaces: A review of the evidence. Journal of Public Health, 33(2), 212–222. https://doi.org/10.1093/pubmed/fdq068

Lia, C., Liu, W., Yang, T., Chen, C., Wu, C., Chan, R. (2014). Pediatric aquatic therapy on motor function and enjoyment in children diagnosed with cerebral palsy of various severities. Journal of Child Neurology, 30(2), 1-9.

LoBianco, A. F., & Sheppard-Jones, K. (2007). Perceptions of disability as related to medical and social factors. Journal of Applied Social Psychology, 37(1), 1–13. https://doi.org/10.1111/j.0021-9029.2007.00143.x

Lundberg, N., Bennett, J., & Smith, S. (2011). Outcomes of adaptive sports and recreation participation among veterans returning from combat with acquired disability. Therapeutic Recreation Journal, 45(2), 105–120.

Mackelprang, R. W., Salsgiver, R. O., & Parrey, R. C. (2022). Disability: A diversity mod el approach in human service practice (4th ed.). Oxford University Press.

Mahoo, M. J. Mactavish, buckstall, E. O'Dell, I. Sigenthalor, K. L. 2000. Social integration, leisure and individuals with intellectual disabilities. Parks & Recreation magazine, 35 (4); 25.

Mandala Healing Center (2024). How to Use Recreation Therapy in Addiction Treatment. 17.12.2024. Available online at https://mandalahealingcenter.net/recreation-therapy-in-addiction-treatment/

Maniu, D.A., Maniu, E.A., & Benga, I. (2013). Effects of an aquatic therapy program on vital capacity, quality of life and physical activity index in children with cerebral palsy. Human and Veterinary Medicine, 5(3), 117 124.

Marchand, W. R., Klinger, W., Block, K., VerMerris, S., Herrmann, T. S., Johnson, C., & Sheppard, S. (2018). Safety and psychological impact of sailing adventure therapy among veterans with substance use disorders. Complementary Therapies in Medicine, 40, 42–47. https://doi.org/10.1016/j.ctim.2018.07.013 Marchand, W. R., Klinger, W., Block, K.,

McDonagh, K., Bennett, J. L., & Geden, S. (2024). Physical Activity Participation, Quality of Life, and Behavioral Health Disorders for Veterans with PTSD. *Therapeutic Recreation Journal*, *58*(1).

McGibbon, N. H., Andrade, C. K., Widener, G., & Cintas, H. L. (1998). Effect of an equine-movement therapy program on gait, energy expenditure, and motor function in children with spastic cerebral palsy: A pilot study. *Developmental Medicine & Child Neurology*, *40*(11), 754-762.

Mikal-Flynn, J., Anderson, L. S., & Hoffman, J. (2018). Posttraumatic growth and metahabilitation in recreational therapy practice: A strengths-based pathway to recovery. Therapeutic Recreation Journal, 52(3), 269–287. https://doi.org/10.18666/ TRJ-2018-V52-I3-8675

Mitchell, K., & Van Puymbroeck, M. (2019). Recreational therapy for dementia-related symptoms in a long-term care setting: A case study. *Therapeutic Recreation Journal*, *53*(2), 165-174.

Mobily, K. E., Walter, K. B., & Finley, S. E. (2015). Deconstruction of TR/RT: Does TR/RT contribute to the negative construction of disability? Part I. *World Leisure Journal*, *57*(1), 46-56.

Mooney, P. F., & Milstein, S. L. (1994). Assessing the benefits of a therapeutic horticulture program for seniors in intermediate care. In M. Francis, P. Lindsay, & R. J. Stone (Eds.), The healing dimension of people–plant relations: Proceedings of a research symposium (pp.173-187). Davis, CA: Center for Research and Design.

Mowatt, R. A., & Bennett, J. (2011). Veteran stories, PTSD effects and therapeutic fly-fishing. *Ther Recreation J*, *45*(4), 286-308.

Moxham L, Liersch-Sumskis S, Taylor E, Patterson C, Brigh ton R. Preliminary outcomes of a pilot therapeutic recrea tion campfor people with amentalillness: links to recovery. Ther Recreation J 2015;49(1):61–75.

Naor, L., & Mayseless, O. (2021). The art of working with nature in nature-based therapies. Journal of Experiential Education, 44(2), 184–202. https://doi.org/10.1177/1053825920933639

National Council for Therapeutic Recreation Certification (NCTRC). (2021). About recreational therapy. https://www.nctrc.org/about-ncrtc/about-recreational-ther apy/

Office of Developmental Primary Care. (2018). Medical and social models of disabil ity. University of California, San Francisco. https://odpc.ucsf.edu/clinical/patient centered-care/medical-and-social-models-of-disability

Owens, M., & Bunce, H. L. I. (2022). The potential for outdoor nature-based interventions in the treatment and prevention of depression. Frontiers in Psychology, 13, 740210. https://doi.org/10.3389/fpsyg.2022.740210

Oyundoyin, J. O., & Adeleke, O. P. (2012). Outdoor Activities as a Therapy in Enhancing Social Competency among Children with Autism in Lagos state, Nigeria. *Afr J Pedag, 4*, 91-101.

Park, E. S., Rha, D. W., Shin, J. S., Kim, S., & Jung, S. (2014). Effects of hippotherapy on gross motor function and functional performance of children with cerebral palsy. *Yonsei medical journal, 55*(6), 1736-1742.

Peterson, C. A., & Stumbo, N. J. (2000). Ther apeutic recreation program design: Principles and Procedures (3rd ed.). Needham Heights, MA: Allyn and Bacon.

Picton C, Patterson C, Moxham L, Taylor EK, Perlman D, Brighton R, et al. (2017) Empowerment: The experience of Recov ery Camp for people living with a mental illness. Collegian 2017;25(1):113–8.

Picton, C., Fernandez, R., Moxham, L., & Patterson, C. (2019). Experiences of outdoor nature-based therapeutic recreation programs for persons with a mental illness: A qualitative systematic review protocol. *JBI Evidence Synthesis, 17*(12), 2517-2524.

Pommier, J. H., & Witt, P. A. (1995). Evaluation of an outward bound school plus family training program for the juvenile status offender. *Therapeutic Recreation Journal, 29*, 86-86.

Pothukuchi, K., & Bickes, J. (2001). Youth nutrition gardens in Detroit: A report on benefits, potential, and challenges. Detroit, MI: Wayne State University.

Priest, S. (1991). New directions in adventure learning. Journal of Experiential Education. 14 (2). 5-9.

Priest, S. (2022). Clearing up the confusion over Outdoor Therapies: How they fit with, overlap, or relate to one another. *Journal of Outdoor Recreation, Education, and Leadership*, *14*(3).

Rayes, R., Ball, C., Lee, K., & White, C. (2022). Adaptive sports in spinal cord injury: A systematic review. Current Physical and Medicine and Rehabilitation Reports, 10, 145–153. https://doi.org/10.1007/s40141-022-00358-3

Robb, G. M., & Ewert, A. (1987). Risk recreation and persons with disabilities.

Rodiek, S. (2002). Influence of an outdoor garden on mood and stress in older persons. Journal of Therapeutic Horticulture, 13, 13-21.

Roebers, C. M., Milla, G., Fucile, D., & Hascher, T. (2022). Effects of outdoor physical activity interventions on children's mental health and academic performance: A systematic review and meta-analysis. Journal of School Psychology, 89, 102-115.

Rogers, C. M., Mallinson, T., & Peppers, D. (2014). High-intensity sports for posttraumatic stress disorder and depression: Feasibility study of ocean therapy with veterans of Operation Enduring Freedom and Operation Iraqi Freedom. American Journal of Occupational Therapy, 68(4), 395-404.

Rolston, H. (1988). *Environmental ethics*. Temple University Press.

Rothweel E., Piaat J. (2006). Evaluation of an Outpatient Recreation Therapy Treatment Program for Children with Behavioral Disorders, Therapeutic Recreatinal Journal, 40(4), 241-254.

Roush, S. E., & Sharby, N. (2011). Disability reconsidered: The paradox of physical ther apy. Physical Therapy, 91(12), 1715–1727. https://doi.org/10.2522/ptj.20100389

Routi, R.G., Troup, J.T., & Berger, R.A. (1994). The effects of nonswimming water exercise on older adults. Journal of Sports Physical Therapy, 19, 140-144.

Russell, C., Kohe, G. Z., Evans, S., & Brooker, D. (2023). Rethinking spaces of leisure: How people living with dementia use the opportunities leisure centres

provide to promote their identity and place in the world. International Journal of the Sociology of Leisure, 6(2), 135–166. DOI: 10.1007/s41978-022-00121-x

Russell, R., Guerry, A. D., Balvanera, P., Gould, R. K., Basurto, X., Chan, K. M., & Tam, J. (2013). Humans and nature: How knowing and experiencing nature affect well-being. Annual Review of Environment and Resources, 38(1), 473–502. https://doi.org/10.1146/annurev-environ-012312-110838

Salem, Y., & Jaffee Gropack, S. (2010). Aquatic therapy for a child with type III spinal muscular atrophy: A case report. Physical & Occupational Therapy in Pediatrics, 30(4), 313-324.

Sarungi, J. (2024). Impact of Outdoor Recreation Programs on Mental Health in Tanzania. *American Journal of Recreation and Sports*, *3*(1), 24-33.

Scott, J., Wozencroft, A., Nocera, V., Webb, K., Anderson, J., Blankenburg, A., ... & Lowe, S. (2020). Aquatic Therapy Interventions and Disability: A recreational therapy perspective. *International Journal of Aquatic Research and Education*, *12*(3), 5.

Seymour, V. (2016). The human–nature relationship and its impact on health: A critical review. Frontiers in Public Health, 4, 1–12. https://doi.org/10.3389/fpubh.2016.00260

Shyman, E. (2016). The reinforcement of ableism: Normality, the medical model of disability, and humanism in applied behavior analysis and ASD. Intellectual and Developmental Disabilities, 54(5), 366–376. https://doi.org/10.1352/1934-9556 54.5.366 Smart, J. (2016). Disability, society, and the individual (3rd ed.). Pro-Ed.

Siber, K. 2019. Open up and say awe. Outside Magazine, May 1, 2019. Available online at https://www.outsideonline.com.

Skokauskas, N., Sweeny, E., Meehan, J., & Gallagher, L. (2012). Mental health problems in children with Prader Willi syndrome. Journal of the Canadian Academy of Child Adolescent Psychiatry, 21(3), 194–203.

Smart, J. (2018). Disability definitions, diagnoses, and practice implications: An introduc tion for counselors. Routledge.

Smart, J. F. (2009). The power of models of disability. Journal of Rehabilitation, 75(2), 3–11.

Smart, J. F. (2009). The power of models of disability. Journal of Rehabilitation, 75(2), 3–11.

Smart, J. F., & Smart, D. W. (2006). Models of disability: Implications for the counseling profession. Journal of Counseling & Development, 84(1), 29–40. http://dx.doi. org/10.1002/j.1556-6678.2006.tb00377.x

Smith, S.A., & Michel, Y. (2006). A pilot study on the effects of aquatic exercises on discomforts of pregnancy. Journal of Obstetric, Gynecologic, & Neonatal Nursing, 35, 315-323.

Stevens, A., & Truong, S. (2024). Exploring Therapeutic Nature-Based Programs for Individuals Who Have Experienced Trauma. *Therapeutic Recreation Journal*, *58*(2).

Strauß, I. (1998). Hippotherapy: its unique position within physiotherapy. *Therapeutic riding in Germany: selected contributions from the special brochures of the DKThR. DKThR, Warendorf*, 15-17.

Strauss, R. S. (2000). Childhood obesity and self-esteem. *Pediatrics*, *105*(1), e15-e15.

Substance Abuse and Mental Health Services Administration. (2014). Trauma informed care in behavioral health services: A treatment protocol (TIP) SERIES 57. HHS Publication No. (SMA) 13–4801. https://store.samhsa.gov/sites/default/files/ d7/priv/sma14-4816.pdf

Sylvester, C. (2014). Therapeutic recreation and disability studies: Seeking an alliance. T herapeutic Recreation Journal, 48(1), 46–60.

Tate, D. W., & Ellis, G. D. (1997). Effects of facilitation techniques on challenge initiative related outcomes among adolescents receiving mental health services. *Therapeutic Recreation Journal*, *31*, 92-107.

Taylor, A. F., Kuo, F. E., & Sullivan, W. C. (2002). Views of nature and self-disci pline: Evidence from inner-city children [Special issue]. Journal of Environmen tal Psychology, 22, 49-63.

Teschner, D. P., & Wolter, J. J. (Eds.). (1984). Wilderness challenge: Outdoor education alterna fives for youth in need. Hadlyme, CT: The Institute of Experiential Studies.

Thomas, A., Mueller, K., Whaley, D., & Kim, M. (2024). Adaptive Sport and Recreational Therapy: A Scoping Review to Explore Practices for the Profession. *Therapeutic Recreation Journal*, *58*(4).

Todorovska, M. (2019). Impairment and disability: Concepts and models. Proceedings of the Second International Interdisciplinary Conference: Bioethics: The Sign of a New Era, Macedonia, 131–149. http://hdl.handle.net/20.500.12188/7332

Trang, C., Lustig, T. A., and Snair, M. (2020). Examining the Use of Biomarkersin Establishing the Presence and Severity of Impairments: Proceedings ofa

Workshop
(10) (PDF) Neuromechanical Biomarkers for Robotic Neurorehabilitation.

Tsukahara, N., Toda, A., GoTo, J., & Ezawa, I. (1994). Cross-sectional and longitudinal studies on the effect of water exercise in controlling bone loss in Japanese postmenopausal women. Journal of Nutritional Science and Vitaminology, 40(1), 37-47.

U.S. Department of Veterans Affairs. National Therapy Services.17.12.2024. Available online at https://www.prosthetics.va.gov/rectherapy/index.asp

Union of the Physically Impaired Against Segregation (UPIAS). (1976). Fundamental principles of disability. https://disability-studies.leeds.ac.uk/wp-content/uploads/ sites/40/library/UPIAS-fundamental-principles.pdf

Vella, E. J., Milligan, B., & Bennett, J. L. (2013). Participation in outdoor recreation program predicts improved psychosocial well-being among veterans with post-traumatic stress disorder: A pilot study. Military Medicine, 178 (3), 254–260. https://doi.org/10.7205/MILMED-D-12-00308

VerMerris, S., Herrmann, T. S., Johnson, C., & Yabko, B. (2019). Mindfulness training plus nature exposure for veterans with psychiatric and substance use disorders: A model intervention. International Journal of Environmental Research and Public Health, 16(23), 4726. https://doi.org/10. 3390/ijerph16234726

Walter, A. A., & McCormick, B. P. (2014). Aquatic Activity and Emotional Experience in Adults with Severe Mental Illness. American Journal of Recreation Therapy, 13(3), 7-12.

Wang, T.J., Belza, B., Thompson, F.E., & Whitney, J.D., (2007). Effects of aquatic exercise on flexibility, strength and aerobic fitness in adults with osteoarthritis of the hip or knee. Journal of Advanced Nursing, 57, 141-152.

Wheeler, M., Cooper, N. R., Andrews, L., Hacker Hughes, J., Juanchich, M., Rakow, T., & Orbell, S. (2020). Outdoor recreational activity experiences improve psychological wellbeing of military veterans with post-traumatic stress disorder: Positive findings from a pilot study and a randomised controlled trial. PloS One, 15(11), 1–22. https://doi. org/10.1371/journal.pone.0241763

Wilson, J. F., & Christensen, K. M. (2012). The relationship between outdoor recreation and depression among individuals with disabilities. *Journal of Leisure Research*, *44*(4), 486-506.

Woodcock, K., Oliver, C., & Humphreys, G. (2009). Associations between repetitive questioning, resistance to change, temper outbursts and anxiety in Prader-Willi and Fragile-X syndromes. Journal of Intellectual Disability Research, 53(3), 265–278. https://doi.org/10.1111/j.1365 2788.2008.01122.x

World Health Organization (WHO). (2002). Towards a common language for function ing, disability and health: ICF. https://www.who.int/classifications/icf/icfbegin nersguide.pdf

World Health Organization (WHO). (2013). How to use the ICF: A practical manual for using the International Classification of Functioning, Disability and Health (ICF). https://www.who.int/classifications/drafticfpracticalmanual.pdf

World Health Organization (WHO). (2013). How to use the ICF: A practical manual for using the International Classification of Functioning, Disability and Health (ICF). https://www.who.int/classifications/drafticfpracticalmanual.pdf

Would, J. (1998). Improved gait in two children with cerebral palsy after hippotherapy: two case reports. *Scientific and educational journal of therapeutic riding*, *4*, 51-58.

Zablotsky, B., Black, L. I., Maenner, M. J., Schieve, L. A., Danielson, M. L., Bitsko, R. H., Blumberg, S. J., Kogan, M. D., & Boyle, C. B. (2019). Prevalence and trends of developmental disabilities among children in the United States: 2009-2017. Pediatrics, 144(4), 1–11. https://doi.org/ 10.1542/peds.2019-0811

Zabrinskie, R. B., Lundberg, N. R., & Groff, D. G. (2005). Quality of life and identity: The benefits of community-based therapeutic recreation and adaptive sports program. Therapeutic Recreation Journal, 39(3), 176-191.

Zwart, R., & Ewert, A. (2022). *Human Health and Outdoor Adventure Recreation: Perceived Health Outcomes. Forests 2022, 13, 869.*

CHAPTER 9

HIGHER VOCATIONAL SCHOOL EFL LEARNERS' MOTIVATIONAL ORIENTATIONS

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Introduction

The study of student motivation as part of English as a foreign language (EFL) education has been of great interest to scholars and educators for its vital influence in determining students' learning outcomes and overall academic achievement. Previous research has determined various factors that influence non-native learners' motivation while learning EFL at tertiary level. Relevant research indicates that motivation is a complex construct as it comprises both intrinsic and extrinsic elements that may greatly influence learning. Researchers have also highlighted the need to understand the different types of motivation that drive learners as well as the factors that shape their sustained motivation in their EFL learning experiences (Long & Tuyen, 2020).

It is particularly important in the context of higher vocational educational institutions, as these focus primarily on training students for specific professions (Lei 2012; Long & Tuyen 2020). Therefore, this research aims to investigate the motivational orientations of EFL learners at a two-year vocational college in the western part of Türkiye, focusing mainly on learners' attitudes and reasons for learning EFL.

Literature Review

Motivation is a key component in successful language learning. Given its complex structure, which is shaped by various internal and external factors, it has long been investigated with an aim to better understand this psychological aspect of language learning. To speak more specifically, it is one of the individual differences in the process of learning a foreign language, affecting various outcomes including learner success and perseverance.

According to early studies by Gardner and Lambert (1972 p. 3), there are two main types of motivation for learning a language. If the learner's orientation towards learning reflects a more utilitarian interest such as getting a prestigious job or achieving a higher GPA, then it is called instrumental motivation. On the other hand, if this orientation is integrative then it is the learner's wish to learn more about the culture and the community in which that language originally belongs. While in the former, language learning is an instrument to reach a goal, in the latter, language serves as an integrator among members of different communities, serving as the purpose itself, rather than just being a means.

In the cognitive theory of motivation, Deci (1976) and later Deci and Ryan (1985) provide a more comprehensive look at the leaner motivation by suggesting the following concepts: extrinsic motivation, intrinsic motivation, and amotivation. Since Deci and Ryan (1985) explained motivation within the Self-Determination Theory, the purpose was to provide a more comprehensive and inclusive understanding of learners' motivational orientations. In intrinsic motivation, it is common to observe internal rewards (e.g., personal achievement), while in extrinsic motivation, the driving force may be a reward such as grade. In this view, the relationship between those two motivation types is also emphasized since they may positively or negatively influence each other. Overall, understanding the balance between intrinsic and extrinsic motivation is important for optimizing educational outcomes.

Additionally, Dörnyei (2005) suggested L2 Motivational Self System for understanding language learning motivation. This framework proposed that L2 motivation is shaped by three components. The first of those is the "Ideal L2 Self," which refers to the aspect which serves as a strong trigger for learning the language. Ought-to L2 Self represents a more extrinsic type of motivation and deals with the expected features a language learner must own, namely by others. Finally, L2 Learning Experience represents the "executive" objectives

as determined by the context surrounding the learner and learning including their positive and negative experiences.

In addition to these approaches to explain motivation types, Dörnyei (2003, p. 14) claims that researchers are also attracted by "motivational basis of learning tasks" because they have a chance to break L2 learning process into segments, which would bring about an easier study of this process. Within this framework, it should be noted that the task motivation is "negotiated and finalized" in the learner and this system is represented by three stages, each situated at the one hand of a triangle (Figure 1). They are *task execution*, *appraisal* and *action control*. The learner's engagement, her continuous processing of the progress made toward the action outcome, and her enhancement of the action represent each step, respectively (p.16). Below is the schematic representation of this process.
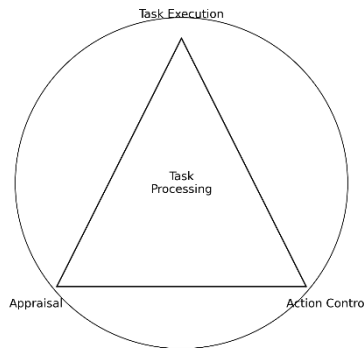

Figure 1. Schematic figure of the task processing (adapted from Dörnyei, 2003, p. 15)

The task process enables the learner to engage in the lesson by facilitating the flow of the course. If such a task is carried out in groups or pairs rather than performing individually, then this membership would be more powerful in increasing the motivation of the group members. Dörnyei (2001, p. 250) names this groups dynamics and states three ways through which this impact on members is achieved. They are as follows:

Membership has a powerful impact on group members' motivation and behavior through:

- ▪   The socionormative influences of peer pressure
- ▪   The directive influence of group goals
- ▪   The general effects of group cohesiveness on group performance

Julkunen is another researcher who has works on motivation in classroom context. Julkunen (2001) claims that "in classroom context, motivation can be seen as a continuous interaction process between the learner and the environment" (in Dörnyei & Schmidt, 2001). Therefore, not only instrumental and integrative motivation but also some other factors such as group or pair work tasks completed in class should be seen and regarded as a way of evaluating and increasing the learners' motivation to learn a foreign language. Learners may prefer group or individual work in language learning, but these preferences are not necessarily personal choices. Language learners enter the classroom with different levels of intrinsic or extrinsic motivation, i.e. their own reasons for wanting to learn a language. The question is how classroom dynamics and learner orientations can influence this initial motivation. This study investigates these questions through data collected from a large group of EFL learners at a higher vocational college examining their motivations both within and beyond the classroom, as well as their attitudes toward second language learning.

Cultural and Individual Differences in Motivational Orientations

Research has shown that different groups of language learners may have different motivational orientations (Lei 2012; Long & Tuyen 2020; Tasgin & Coskun, 2018). Factors such as age, gender, cultural background, prior learning experiences, and personal goals can influence what motivates learners to study a language. A study of Indonesian EFL university students revealed three main motivational factors: instrumental motivation tied to career advancement and economic goals; international orientation focused on overseas study, travel, and cross-cultural communication; and intrinsic

motivation stemming from personal fulfillment and parental approval (Setiyadi & Mahpul, 2019).

In order to create effective learning environments that meet the specific needs and aspirations of EFL learners in higher vocational education, it is crucial to understand their different motivational orientations. Teachers should adopt a flexible approach that encompasses a range of motivational strategies, while remaining sensitive to the various factors that influence students' motivation. Teachers can help college EFL learners develop a sincere passion for language learning and reach their full potential by fostering a positive and supportive classroom atmosphere that emphasizes both intrinsic and extrinsic motivators. Therefore, the present study aims to investigate the motivational profiles and orientations of EFL learners enrolled in English II classes at a higher vocational school/college in Türkiye.

Method
Participants
The participants of the study are 100 (f = 84) first year students at a Higher Vocational School of a Public University in Türkiye. The ages of the participants range from 17 to 23. The ratio of the time they have last studied English changes from 20 years now to without interval up to now. They study at two-year programs such as Textile, Fashion Design, Accounting, and they are enrolled in a compulsory English class. Most of the students are false beginners and they already have experience of learning English. Therefore, as a researcher, the teacher's purpose is to see the results of these two different learning experiences of the learners, in other words, whether individual work or group work is more appropriate and enjoyable for their own learning style.

Instrument
For conducting the research, a questionnaire was designed in order to achieve a trade-off between the motivation sources of the learners before they take this course and their attitude toward group work and pair work tasks and

activities. In order to comprise all aspects of motivational orientations of EFL learners in the relevant context, a new questionnaire was devised/adapted based on the existing resources. Following Dörnyei's (2003) guidelines in constructing a questionnaire, the researcher designed a Likert-scale questionnaire which consists of six different parts. In the first part, the purpose was to learn the learners' orientations for learning a language. The participants were asked to select as many options as they wished. Thus, their attitude and reasons for learning a language would be clarified by the researcher which would affect their overall look on L2 learning. In the second part, they were asked to rank the importance of their motivation along with some other reasons for learning a foreign language. This would help to clarify their view of motivation so that they would be able to face their own view of efforts and approaches for their success and failure. The third part comprised 38 questions, and some of these questions were written in the light of several other questionnaires.[*] In the fourth part, the participants were asked questions about themselves in order to draw a fuller picture of the students' attitude toward L2 learning. In the fifth and sixth parts, the participants were asked to rank the importance of group work and to give their opinion on the necessity of working together while learning a language. These items will also show us the internal consistency of the answers of the learners by asking their direct answers to questions.

Procedure

The students were given group work tasks, projects and pair work activities in class dominantly during the second half of the term. Therefore, they experienced necessary learning contexts. The questionnaire was distributed to the students in the last week of the term on which most of the students would present their optional group work or individual work projects

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[*] Survey Questionnaire Questions by Kimi Kondo-Brown in the article "Bilingual Heritage Students' Language Contact and Motivation (in Dörnyei & Schmidt, 2001); Language Orientation Questionnaire by Dörnyei & Clement in the article "Motivational Characteristics of Learning Different Target Languages: results of a Nationwide Survey" (in Dörnyei & Schmidt, 2001)

to the rest of the class. Although required information was supplied on the questionnaire, the teacher researcher explained them the purpose of the research and asked them to pay attention to each question as it will affect the results of a research which the next year students would benefit, too. They were assured of anonymity however some of the students still wrote their names on the questionnaire. Motivating them to answer the questions, she explained each part and reminded them that they should ask for clarification when they have difficulty in understanding the items. Only some of the items created difficulty for the learners and it was due to the length of the questionnaire. While the participants were answering the questions she circulated among the students to answer any questions and to check that the items were being filled out correctly. Some of the students rejected filling in them, at this point she did not reacted but collected the paper by asking the student "is it done?". This questionnaire was administered between the 10th and 30th minutes of the class hour during 20 minutes, approximately. The reason for choosing this time period is that they do not pay attention to tasks given towards the end of the lesson, and even they would not complete the form if I had presented it at the second half of the class hour.

While the participants were submitting their papers, some of them commented on their preferences to choose individual work by also stating their reasons such as "I like working alone because I understand better then". As the researcher found such opportunities she tried to elaborate the conversation by asking them more questions to find out underlying reasons. Therefore the data collected through questionnaire was endorsed by the short interviews conducted in class and following the class hour.

Data Analysis

After the data collection was completed; the next step of the research required a great deal of work, which is the analysis of the results. As this was mainly a quantitative research the data have to be put into graphics and numbers in order to be interpreted The researcher decided to handle the questionnaire data part by part, which would take a great amount of time. However, there was no other way round as the questionnaire consisted of

multi-item scales. Then, following a couple of days the data were ready to put into graphics. Each part will be investigated separately and then the transitions among the parts will be discussed in the last part.

Discussion

In the first part of the questionnaire, the participants were asked to tick the reasons for their learning English. Although they do not seem so conscious at times, only six of them said that they took this course as it is obligatory at school. This part consisted of ten items, and the most favored ones are the first, the third and the eight one, which are "to get a prestigious job", "as the life requires me to learn a foreign language" and "as it enables me to improve myself, respectively. (Look at Appendix II) This shows us that most of the students have their own instrumental motives more than integrative ones because the items which reflect integrative motivation (item 2 and 10 and 7 more or the less) are not favored by the students.

In the second part, as their reasons for learning English were specified, the next step was to ask them to rank the motivation among four other items, which are the teacher, the way the lesson was conducted, background knowledge of L2 and the materials. The results support that 44 of the participants see motivation as of primary importance and 7 of them put it on the least important scale. This proves that nearly half of the students are aware of the fact that motivation of the learner is necessary for learning. However, there is another point that needs to be pointed out. The participants might have been affected by the title of the questionnaire and therefore they might have felt the need to put motivation foreground. For the rest of the rates, please look at Appendix III.

In the third part of the questionnaire, there are a variety of questions posed to participants. The questions formed groups in themselves and therefore they are put into graphic according to this grouping. Through the questions the researcher tries to find out several aspects such as language learning milieu, that is, the extent of the parents' and friends' support and attitude towards L2 learning. This forms the first group of questions. The

reason for investigating that is also associated with the questions related to the participants in part IV. (Look at appendix IV-A) The second group of questions evaluates the attitudes towards L2. The results suggest that the students have positive attitudes toward L2 although they are not happy with their previous learning experience. (Look at Appendix IV-B) The third group of questions tries to find out the self confidence of the students while performing in class, especially while talking. (Look at Appendix IV-C) The results suggest that the students are more or the less confident of themselves apart from the situations in which they have to talk. The fourth group of questions evaluates the integrative motivation of the students to a certain extent. (Look at Appendix IV-D) It proves that the students are aware of the fact that these activities would help them a lot while talking to native speakers of English but they do not think they will achieve this with the effort they made. The last two groups are the ones which investigate the attitudes of the participants towards individual and group work activities and projects. The fifth one evaluates the individual work motivation. (Look at Appendix IV-E) In this group, the students do not support the statements in general which means that the students favor working in groups rather than working individually. The last group tries to evaluate the attitudes of the participants' toward L2 learning. The results suggest that (look at Appendix IV-F) the participants enjoy working in groups rather than working individually.

In the fourth part of the questionnaire the participants were asked to complete some information about themselves, which would help the researcher interpret and comment on the data given in an easier way. This information was not put into numbers as this is not very crucial for the research but the general results of this part were discussed at the part where participants were introduced. The general evaluation of this part is that most of the students come from "middle class" families who have an average income and most of them have not seen English for a long time, and on the whole, even if they have studied English without any interval their English proficiency level is not enough for an average university student. Another striking point is only a few of them lack motivation to learn other languages in addition to English. All of them have written various languages when they were asked.

In the fifth part, they were asked to rank the importance of group work on affecting their motivation. As the results suggest 32 of them put it on the highest category and just 2 of the 100 participants thought that it is ineffective. The graphic demonstration of the results (Look at Appendix V) demonstrates that while 29 and 24 students regards group work as a motivator in their learning process as of primary and secondary importance there are others who do not see it as an important factor. This shows us that the participants do not see group work or pair work as prominent for increasing effective learning with high motivation.

As for the last part, which is a direct question posed to the participants is a good one to learn the attitudes toward the necessity of group work and pair wok projects or activities in L2 learning. Exactly 11 out of 100 participants stated that group work is unnecessary. (Look at Appendix VI) They gave reasons such as "I like working alone", "In group work projects only one person works and the rest do not work", "because I think individual works are more useful", "because I will attend an English course when I finish my school". As is seen, their reasons are varied but on the whole their reasons for the appraisal of individual work are due to their individual preferences and also related to their own learning style.

Limitations of the study

In the present study, it should be noted that it may not be appropriate to reach generalizations due to many factors such as age, gender, family background, learning experience and other variables. Therefore the study might be piloted on a different group of learners under different contexts. While answering the questions the participants might have not taken the questions seriously and might have answered without thorough thinking. Moreover, the data for this study was collected at one single time so in order to reach reliable conclusion these questionnaire may be administered following individual and group work activities separately and then compared to each other.

Conclusion

All of the parts of the questionnaire and their data analysis prove that the students' motivations are generally instrumental and sometimes cognitive and integrative. Their family backgrounds also suggest these results. As they do not have a high possibility of going abroad they do not have much integrative motivation. Specifying that their instrumental motivation is higher then it would be easier to look into the task specific and situation specific motivation in class. By asking them to rank the role of motivation the researcher tried to learn to what extent the participants are aware of the importance and impact of their motivation. The direct questions on the importance and necessity of group work tasks were aimed at gathering the ideas of the participants on group work activities.

With the help of the data the researcher is able to reach the answers of her research questions. For the first question, as a result of all these data, it is obvious that the participants' motivation is higher during the class when they work in groups and in pairs although there are individual differences among them. As for the second and third question, the motivation of the students may increase when they work individually however, this does not apply for the whole group of participants but just for eleven of them. As for the last question, the answer is already clear. Together with the direct and indirect answers of the students all the data prove that the motivation of the students are higher when they work in groups or in pairs due to the reasons such as distribution of responsibility, enjoyable task performance, group dynamic. In conclusion, it proves that although there are individual differences among students the teachers should bear in mind that the more the students work together in and outside the class the more they are motivated to learn L2 and participate in class.

REFERENCES

Bobkina, J., Gómez-Ortiz, M.-J., Núñez del Río, M. C., & Sastre-Merino, S. (2021). Why am I learning English? Spanish EFL sports science university students´ motivational orientations through the prism of the L2 motivational self system. *Studies in Second Language Learning and Teaching*, 11(4), 543–578. https://doi.org/10.14746/ssllt.2021.11.4.4

Dörnyei, Z. (2001). *Teaching and researching motivation*. Pearson Education Malaysia.

Dörnyei, Z. (2003). *Questionnaires in second language research: Construction, administration, and processing*. Lawrence Erlbaum Associates.

Dörnyei, Z. (2003). Attitudes, orientations, and motivations in language learning. *Language Learning*, 53(1), 3–32.

Dörnyei, Z., & Schmidt, R. (Eds.). (2001). *Motivation and second language acquisition*. University of Hawaii Press.

Gardner, R. C., & Lambert, W. E. (1972). *Attitudes and motivation in second language learning*. Newbury House Publishers.

Shekan, P. (1989). *Individual differences in second language learning*. Arnold.

Setiyadi, A. B., & Mahpul, A. (2019). Exploring motivational orientations of English as foreign language (EFL) learners: A case study in Indonesia. *South African Journal of Education*, 39(1), 1–12. https://doi.org/10.15700/saje.v39n1a1500

Tasgin, A., & Coskun, G. (2018). The relationship between academic motivations and university students' attitudes towards learning. *International Journal of Instruction*, 11(4), 935–950.