Open Journal for

Educational Research

CONTENTS

_____

C O A S

_____

Historical, Contemporary and Psychological Viewpoints of Teacher's Leadership

Elisabeta Kafia & Silva Ibrahimi

Albanian University, Tirana, ALBANIA
Department of Psychology

Ervin Ibrahimi

Klik Ekspo Group Italia, Ancona, ITALY

Abstract

Today, in the 21st century, an increasing number of children and youth are facing disorders, problems and challenges regarding the nature of learning, psycho-emotional, social behavior, and further on. Today, the educational system faces not only a number of students with difficulties, but also the multitude of severity and complexity of the difficulties themselves. To successfully cope with these difficulties, immediate needs have arisen to redefine the role of the teacher as a leader in the school both in terms of teaching and in the form of reforming the roles and services that day-to-day access to students, parents and the wider community. The focus of this article is to present a broader and supportive view of the teacher leadership and its psychological and social training towards qualitative changes and ever-increasing demand for education-based training as a significant pre-requisite for EU integration.

Keywords: education leader, teacher, training, integration.

1. Introduction

The concept of leadership has received a wide attention initially in the studies of organizational psychology and afterwards, in clinical and psychopathologic, since the second mid of the 1900s (Quaglio, 2005). In the etymology of the recent English word "*lead*" stand the roots of the olden verb "*læden*" that coincides with the Dutch word "*leiden*" and the German "*leiten*" as an etymological part of the Anglo-Saxon word family. This novel property "*to lead*" meant "*...to go with...*" whereas the first use of the term "*leadership*" meaning "*being in the first place*" is not recognized until the 1300 B.C. (Family Word Finder, 1978). The crucial characteristic of leadership, therefore, is the ability to organize individuals within social contexts, the mobilization of all parties involved within a relationship range between subjects who interact together in the achievement of the inquired results. The psychodynamic study of the leadership process and dynamic aspects of a leader personality are very important for the analysis and interpretation of the present work. Childhood experiences and child rearing patterns influence on how individuals mature and develop. In his psychanalytic model, Zigmund Freud and subsequently, his daughter Anna, argued for the significance of the teaching method in schools and universities as one of the great advantages psychoanalysis could give in the ordinary life (Freud, 1919). Teaching and

learning methodology to Freud should be didactic through lectures, discussions and experience. In 1930 in her work "*Psychoanalysis for teachers and parents, Four lectures on ….*" Anna Freud wrote that the relationship which is created between teachers, child and analyst is equal to a delicate process of education; the role of psychoanalysis is to give "a helping hand" to children either to disclose their unexplored possibilities or in the full and real experience of the symptom. In her theoretical model, students projected even their worries in the endeavor to understand other through the pedagogical relation (Object Relation) but also their ordinary life frustrations. The concept of Anna Freud (1930) on education is like "*an endless battle*" when ego comes into the world through its defense mechanisms (perception, observation, projection, hallucination and reality testing), beyond external influences and pressures. Teachers and leaders may also be involved in dreaming and fantasies with a great covering range of defense mechanisms. Early theories of leadership and organizations were task oriented. The aim was to improve efficiency regardless human factor. Contrary to this approach, in 1960 researcher Douglas McGregor introduced the humanist leadership model when human relations and motivation for work had a crucial role. Recent studies of Robert Tannenbaum and Warren Schmid describe leadership as a continuum where several leader behavior tendencies interact (1985).

For these authors, leadership styles can be defined according to two macro-objectives that have to be followed up:

(1) *coherence* of outcomes and focusing in responsibilities (a characteristic feature of an autocratic or paternal leader who commands and convince);

(2) *interpersonal relations* and focusing in Human-resource (a characteristic feature of a democratic leader or counselor, who involves and collaborates with his or her dependents).

In their situational approach pattern, Blake and Mouton (1964) argue that there is a connection between two objectives that could be beyond a range of leadership styles:

- authoritarian-aggressive,
- assertive searcher /attentive,
- motivational,
- administrative,
- political.

Through this model the authors also defined a style to orientation, tasks and situation where the leadership style is developed. We encounter therefore an approach where there is an emphasis on the objectual relations of teacher or principals as school leaders. In their view, an executive and functional school leader must hold several responsibilities as:

- be able to organize and plan (according to case priorities and urges),
- delegate,
- be able to recognize merits and values in a sincere and insistive mode,
- be able to verify and assess,
- be able to reproject for a consistent improvement (actions appropriate in time),
- be a leader who knows what he is looking for, finds ways to achieve what he wants through maximizing resources and aiming to enhance efficiency and productivity, creates the suitable climate to motivate individual efficiency,

- posses normative, juridical and expert knowledge, understanding and solidarity, capacities of analytical synthesis, capacity to resolve problems and take assertive and constructive decisions, they are also flexible.

School leadership must respond to the needs of changing and information asked by the society and embracing new leadership forms especially in the field of teaching leadership such as a follow-up formation, trainings and coaching (Frost & Durrant, 2003). *Formative leadership* shares the responsibility of guiding to a range of individual educators in an anti-hierarchical or horizontal way. Gonzales (2004) argues that the democratization of education occurs when re-defining teacher leadership as a shared form of leadership to all teachers. "*Teacher leaders can transform schools in communities that prepare students to be citizens and work in a complex, technological and democratic society*" (Lieberman & Miller, 2004: 12). Researches of Silins and Mulford (2002) revealed a strong relationship between the very high scores of students and leadership used in school community, including teacher empowerment. Teachers as leaders may pursue to ask school institutions to leave structured systems and to join into improved organizational forms (Ackerman & Mackenzie, 2006).

Let us remember at this point the continuous efforts of setting an inner and outer control of treating school as "community service" in Albania. This new formula for our country based on strong credibility in Western Countries, creates more space in fixing organizational behavior and teacher leadership. In a similar study for the fulfillment of educational reform in the United States, Glickman, Gordon, and Ross-Gordon (2001) distinguished an important characteristic related to the shared leadership. In this leadership form, teachers, according to the authors, should be active participants to be able to contribute to the school progress (Ash & Persall, 2000; Lieberman, 1992; McCay et al., 2001). Recent data indicate that teachers choose to stay in those educational institutions that offer opportunities of collaboration and shared leadership (Harris & Muijs, 2005).

Some of the most important dimensions of educational leadership may be summarized in the following table.

Table 1. Summarized scheme of the most core dimensions of effective educational leadership

Source: Goleman, D. (1998). "*La pratica de inteligencia emocional*" (adapted by the Spanish version, pp. 19)

Self-Cognition
Cognition of the self-internal status and interpersonal resources.
Emotional Cognition: Recognizing own emotions and effects
Appropriate Assessment of Self: Knowing own strength and weakness.
Self-Confidence: Security on the assessment of Self and other capacities.

Autoregulation *Control of our states, impulses and internal resources*
Auto control: Capacity to manage appropriately the emotions and conflictual impulses.
Reliability: Confidentiality to the criterion of sincerity and integri*ty*.
Integrity: Assuming the responsibilities of our personal actions
Adaptability: Flexibility to cope with change.
Innovation: Feeling comfortable and open to new ideas, approaches and information.

Motivation
Emotional tendencies that facilitate achieving our objectives
Motivation for achieving: Improvement and satisfying criteria for excellence.
Compromise: Fulfill the objectives given by the group or organization.   *Initiative*: Ready to take action when is needed.
Optimism: Persistence in the consequences of objectives despite the obstacles.

Social Competencies

These competencies determine the mode of relationship with others

Empathy
Cognition of feelings, necessities and preoccupation of others.
Comprehension of others: Having the ability to capture the feelings and views of others and actively concern on things that are for interested to them.
Orientation to the service: Anticipating, recognizing, and meeting customer needs
Advantages of Diversity: Advantaging from opportunities offered by different types of people.
Political Awareness: Ability to realize the emotional currents and relationships underlying power in a group.

Social Abilities
Ability to induce desirable responses in others.
Influence: Using effective techniques of persuasion
Communication: Sending clear and persuasive messages
Leadership: Inspiring and directing groups and persons.
Catalyzing Change: Beginning to direct changes.
Resolution of conflicts: Ability to negotiate and resolve conflicts.
Collaboration and Cooperation: Being able to work with others in achieving a common goal.
Group Skills: The ability to create group synergy in pursuing collective goals.

2. Leadership styles and teachers as school leaders

Leadership styles are related to personality, demeanor and communication patterns of leaders in guiding others for achieving personal or organizational goals. Significant research on leadership styles have been associated to self-reporting perceptions toward leader's behavior in decision-making, interpersonal relations, planning, instructions and efficient management. Among the most widely used instruments in literature to assess leadership style are: Climate Description Questionnaire (OCDQ), Leadership Behavior Description Questionnaire (LBDQ) and the Organizational Health Inventory (OHI). These instruments collect evidences on staff and members perceptions of the leadership style of directors and teachers in the dynamics of school organization. Literature, on the other hand, reveals little empirical research in understanding better why some leadership styles in certain situation are prevailing to others. Among the prime

leadership categories in the recent literature review we encounter: charismatic leadership, social justice leadership, gender and race leadership, moral and spiritual leadership.

The four styles derived by these categories include the authoritarian, participative, transactional or transformational leadership.

Authoritarian leader employs coercive tactics to enforce rules, he or she uses Machiavellian modes to manipulate others and reward trust over merit. Control and dominance are the primary management strategies employed by authoritarian leaders. In this form of leadership, is emphasized the objectivity in the workplace and tends not to be involved to human problems and not displaying emotions or affection toward others. The X theory of Douglas McGregor is the leitmotiv of authoritarian style, under which people must work, closely supervised and rewarded according to their productivity. In certain situations when "*a commander to right the ship*" is needed, authoritarian leadership style has been effective. Thus, for instance, if a director of an important institution would not have disposed some authoritarian features, likely, the direction would create space for neglect and chaos. At the same time, it is very important to know the perception of the individual over his or her own leadership style; evidences following this study suggest a progressively increasing perception over style of leadership and the reinforcement of the precepted style features.

Participative leadership moved away from the authoritarian mode of leadership to the human side of the institution. This form of leadership was initially proposed in 1930 by Mary Parker Follett, Elton Mayo, Frederick Roethlisberger et al. They argued that productivity and human relations were closely linked and directed toward informal structures and social systems. Follet thought that "*managers should treat workers with dignity and change the workplace from strict authoritarian control to a collegial team concept*". Authors of this stream viewed organizations as social systems where human social needs are the most important factors in motivation and efficiency.

In 1938, Douglas McGregor, Rosabeth Kanter, Tom Sergiovanni and Terry Deal, argued that shared decision-making and grouping participation in productive organizations is focused on people and their needs. These authors greatly influenced to the creation of shared decision-making in public education.

Transactional leadership tend to balance structures that meet the needs of people while things are being completed. This form of leadership requires the integration of organizational goals and expectations with the needs of individuals. As an example of representation of the transactional leadership style is the Getzels Guba (1957) social systems model. This model includes three essential dimensions: *idiographic* (the needs of individuals), *nomothetic* (the goals of the organization) and *transactions* between the two. Thus, the model balances the dynamics of needs and productivity of organization with needs, personality and dispositions of people working.

Eric Berne initially analyzed the relations between group and leadership as the principles of transactional analysis which includes the following elements: contingency reward, management through active exception and management through passive exception. These leaders influence the motivation of their followers by exchanging rewards to their workers for the time they are efficient with their managing needs.

Transformal leadership is called the kind of leadership style where the leader works together with employees to identify the necessary changes, develop a leadership view of change and bring to life the effects of this change. This form of leadership promotes motivation, moral and performance at work through a variety of mechanisms such as understanding self-identity and how to project this understanding into group identity, being a role model for employees, challenging employees to take control of their work, and understanding employees' strengths and

E. Kafia, S. Ibrahimi & E. Ibrahimi – Historical, Contemporary and Psychological Viewpoints of ...

_____

weaknesses so that the leader can boost their performance. The term was first used by Downton in 1973 but its establishment as an approach began with the publishment of James MacGregor Burns entitled "*Leadership*" (1978). In this work, he describes leaders as "people who tap the motives of followers in order to better reach leaders and followers aims" (pp. 18).

Transformal leadership is composed of the following *core elements*:

- *Idealized influence* (attribution) – form of charismatic leadership based on emotions and relations to admiration, respect and appreciation of dependents by the leader.

- *Idealized influence (behavior) – f*orm of leadership characterized by a behavioral activities related to feelings of admiration, respect and appreciation.

- *Inspirational motivation* – motivation to enhance a common view and to stimulate members of the organization to have a commitment that goes beyond the predicted tasks of the organization and providing staff with appropriate behaviors.

- *Individualized consideration – intellectual s*timulation provides new working forms associated by innovation and creativity.

With the charismatic leadership form, this form of leadership shares several similarities as: the significance of identification with leader and the consistence of leader's visions with all members of the organization. Research has shown that transformal leadership is an important defensive factor to the process of burnout in the health institutions and covers a positive impact on taking gratification from work and responsibility to organization.

Another argument on trasformal leadership was given by Bass (1998), who coined for the first time the concept of *pseudotransformal leadership*. The term is related to leaders who are self-consumed, exploitive and power oriented (Bass & Riggio, 2006). Pseudotransformal leadership is considered as personalized that is focused in leaders' interests (Bass & Steidlmeier, 1999).

Authentic transformational leadership is a socialized leadership in which leaders are generally concerned to the collective good and overshade themselves (Howell & Avolio, 1993). Zhu, Avolio, Riggio and Sosik proposed a theoretical model that explained how authentic transformational leadership affects the ethics of followers and groups (2012: 3).

Authors assumed that authentic transformational leadership positively affects to moral identity and moral emotions that lead to the moral decision-making and moral enactment of their followers. Thus, this leadership subtype is positively associated to group ethical climate, decision-making and moral enactment. Leaders' authenticity is considered as significant as the authenticity of being and its *Dasein*. Psychodynamic study of the leadership process and the dynamical aspects of leader's personality are of great importance in the analysis and interpretation of this research. Childhood experiences and the patterns of child rearing affect the maturation and development of the individual.

These developed features of personality are closely integrated to each-other. The psychodynamic approach aims to explore the unconscious motives of leaders in their educational environment and their partners in the relation, students.

Krueger and Theusen emphasize that leadership involves the use of power and personality features of leader may comprise the way of reacting to difficulties, crisis situation and decision-making.

_____

In their study on identity development, Cote and Schwartz quote the research of Marcias (1980) on the argument. They posit a 3-dimensional field of *maturity* and *self-regulation* in the psychodynamic identity of leader.

- *Identity diffusion*, the least matured is characterized by a lack of direction and orientation to aims.

- *Foreclose identity* is much more mature and involve engagement.

- *Moratorium identity* takes proactive steps and aims the achievement of an autonomous self.

In the bottom of hierarchy stands Identity Achievement or the most matured state associated by the process of thought, interpersonal and social matured relationships (Cote & Schwartz, 2002). In a psychodynamic sense, a leader with an achieved identity is the individual where libidinal and antilibidinal drives neutralize each-other for the sake of Ego.

We could speak therefore for an authentic leader with an achieved identity and Ego preservation as the teaching individual with the highest parameters of personality organization. The stability of neutral drives is the essence of a healthy personality organization and a positive behavioral trend for the teacher as a leader. In its primary purpose transformal leadership aims to improve the performance of its followers and to develop their complete potentials (Avolio, 1999; Bass & Avolio, 1990a). This leadership type may be displayed by individuals who maintain a series of personal ideals and values and may motivate others to act in supporting the interest of all and not of one (Kuhnert, 1994). Promotion of this leadership style makes the leader (teacher or principal) to influence in understanding intra-psychic conflicts and empowering internal resources of students as consumers of lore and development. The first factor, idealized influence or charisma describes the emotional component of leadership (Antonakis, 2012). Leaders under the influence of this factor act as powerful models for their followers who identify with them and want to emulate their leader's model.

3. Conclusions

Recent research argue that teachers choose to stay in those educational institutions that provide opportunities for collaboration and shared leadership (Kirkpatrick & Locke, 1991). Kilcher (1992) reasoned that when teachers feel valued as participants in a cohesive community and empowered as decision makers, they transmit this empowerment to their pupils and students by giving them a voice in decision making. It has already been argued that successful leadership in school requires a degree of administrative autonomy in decision-making for key elements of information entering the teaching process (Pont, Nusche & Moorman, 2008). Teacher leadership, therefore, plays an important role in influencing compliant behavior aimed at encouraging and progressing learning and education structures with effective organization.

Acknowledgements

References

Akerman, R., & McKenzie, S. V. (2006). Uncovering teacher leadership. *Educational Leadership*, *63*, 24-99.

Ash, R. C., & Persall, J. M. (2000). The principal as chief learning officer: Developing teacher leaders. *NASSP Bulletin*, *84*, 15-22.

Bass, B. M. (1998). The ethics of transformational leadership. In J. Ciulla (Ed.), *Ethics: The heart of leadership* (pp. 169-192). Westport, CT: Praeger.

Bass, B. M., & Avolio, B. J. (1990). *The implications of transactional and transformational leadership for individual, team, and organizational development. Research in Organizational Change and Development*, 4, pp. 231-272.

Bass, B. M., & Steidlmeier, P. (1999). Ethics, character, and authentic transformational leadership behavior. *Leadership Quarterly*, *10*(2), 181-217.

Berne, E. (1963). *The structure and dynamics of organizations and groups*. Philadelphia: Lippincott.

Cote, J. E., & Schwartz, S. J. (2002). Comparing psychological and sociological approaches to identity: identity status, identity capital, and the individualization process. *Journal of Adolescence*, *25*, 571-586.

Dimmock, C., & Walker, A. (2005). *Educational leadership: Culture and diversity*. Thousand Oaks, CA: Sage.

Freud, S. (1932). Introduzione alla psicoanalisi (nuova serie di lezioni). In *Opere, Italian Edition*., Vol. 11 (121-284). Boringhieri, Torino, 1979.

Freud, A. (1930). Quattro conferenze di psicoanalisi per insegnanti e genitori. In *Opere 1922-1943, Italian edition*, Vol. 1 (87-131). Boringhieri, Torino, 1978.

Getzel, J. W., & Guba, E. G. (1957). Social behavior and the administrative process. *The School Review*, *65*(4), 423-441.

Glickman, C., Gordon, S., & Ross-Gordon, J. (2001). *Supervision and instructional leadership: A developmental approach*. Boston, MA: Ally & Bacon.

Goleman, D. (2008). *La pratica de inteligencia emocional*. Spanish edition. Kairos.

Gonzales, L. D. (2004). *Sustaining teacher leadership: Beyond the boundaries of an enabling school culture*. Lanham, MD: University Press of America.

Harris, A., & Muijs, D. (2005). *Improving schools through teacher leadership*. UK: MPG Books, Bodmin, Cornwall.

Howell, J. M., & Avolio, B. J. (1992). The ethics of charismatic leadership: Submission or liberation? *Academy of Management Executive*, *6*(2), 43-54

Kilcher, A. (1992). Becoming a change facilitator*:* The first-year experience of five teacher leaders. In C. Livingston (Ed.), *Teachers as leaders evolving roles* (pp. 91-114). Washington, D.C.: NEA Professional Library, National Education Association.

Kirkpatrick, S. A., & Locke, E. A. (1991). Leadership: Do traits matter? *The Executive*, *5*, 48-60.

Kriegel, U. (2009)**.** *Subjective consciousness: A self-representational theory*. Oxford University Press.

Kurtines, W. M., Berman, S. L., Ittel, A., & Williamson, S. (1995). Moral development: A co-constructivist perspective. In W. M. Kurtines & J. L. Gewirtz, (Eds.), *Moral development: An introduction* (pp. 337-376). New York, Wiley.

_____

le Blanc, L. A., Bruce, L. C., Heimberg, R. G., Hope, D. A., Blanco, C. et al. (2014). Evaluation of psychometric properties of two short forms of the social interaction anxiety scale and social phobia scale. *Assessment Journal, Sage Publication*, *21*(3), 312-313.

Lieberman, A., & Miller, L. (1999). *Teachers – transforming their world and their work*. New York: Teachers College Press.

Leithwood, K., Jantzi, D., & Steinbach, R. (1999). *Changing leadership for changing times*. Buckingham: Open University Press.

McGregor, D. (2006). *The human side of enterprise – Annotated Edition*, Second eds. Mc-Graw Hill Education.

Mumford, M. D., Zaccaro, S., Harding, F., Jacobs, T., & Fleischman, E. A. (2000). Leadership skills for a changing world: Solving complex social problems. *Leadership Quarterly*, *11*, 11-35.

Pont, B., Nusche, D., & Moorman, H. (2008). *Improving school leadership. Volume 1: Policy and practice*. Directorate for Education. Education and Training Policy Division (OECD).

Quaglio, G. P. (2005). *Leadership. Nuovi profili del leader per nuovi scenari organizzativi*. Milano: Raffaelo Cortino ed.

Stech, E. L. (2007). Psychodynamic approach. In P. Northouse (Ed.), *Leadership: Theory and practice* (pp. 237-264). Thousand Oaks, CA: Sage.

Tannenbaum, R., & Schmidt, W. H. (1958). How to choose a leadership pattern. *Harvard Business Review*, *36*, 95-105.

Walumbwa, F. O., Avolio, B. J., Gardner, W. L., Wernsing, T. S., & Petersson, S. J. (2008). Authentic leadership: Development and validation of a theory-based measure. *Journal of Management, 34*(1), 89-126; Southern Management Association, SAGE Publications. http://digitalcommons.unl.edu.

_____

COAS

Determinants of Teacher Effectiveness: Pedagogical and Didactic Training

Charalambos I. Konstantinou

University of Ioannina, Faculty of Education, GREECE

Ioannis Ch. Konstantinou

Educator, PhD, University of Ioannina, GREECE

Abstract

The purpose of this article is to highlight the factors that decisively affect the effectiveness of the teacher in fulfilling his role, giving special importance to his pedagogical and didactic training. Initially, the role of the teacher is approached in relation to the mission of the school and the characteristics of an effective teacher. Subsequently, the content and the importance of pedagogical and didactic training for the exercise of the educational work are approached, as well as the additional reasons that impose it. In addition, the existing pedagogical and didactic training of current teachers is approached, in relation to the consequences of its absence for the educational process and the student. The article concludes with the final findings and remarks.

Keywords: school mission, role and effectiveness of the teacher, pedagogical and didactic training.

1. Introduction

The school, as a social and pedagogical institution with a defined structure, roles, arrangements and purposes, performs specific functions, through which, scientific, cultural and social qualities are promoted to students, such as knowledge, skills, values, rules, perceptions, behaviors and so on, as well as professional opportunities and positions. The teacher, who is responsible for carrying them out through the procedures of education, teaching, learning, evaluation, and socialization, plays, indisputably, a leading role in these functions, due to his position. These responsibilities, which the teacher has undertaken to carry out, constitute a complex and compound framework, in which interests, needs, demands and expectations arising from different sectors and carriers of social life are condensed.

The conscious or unconscious expectations of these social groups are complex, general, without differentiations and clarity, and, often, diametrically opposed or even contradictory. These expectations are manifested when the teacher fulfills his role and specifically through (Konstantinou & Konstantinou, 2017; Liakopoulou, 2020):

- The organizational-administrative specifications of the school operation;
- The teaching of the curriculum as described in the school curricula and books;

- The attitude of parents and their representatives;

- The students' demand for understanding and satisfaction of their interests and needs;

- The criticism of public opinion, colleagues, representatives of the relevant sciences, etc.;

- The way the teacher addresses and manages these expectations.

The complexity and difficulty in implementing the role of the teacher are, in general, due to the fact that the teacher is authorized to carry out his responsibilities on the one side on the basis of the relevant administrative arrangements, such as laws, circulars, regulations, curricula, etc., and on the other in accordance with his scientific and pedagogical education and training and, overall, the formation of his personality.

As a result, the teacher is several times, in a confused state and under constant pressure, dominated by dilemmas and contradictions. The expectations of social groups, of course, do not appear in the same way in different periods. However, they are maintained and constantly increasing, depending on the political, cultural, economic, scientific, technological and, in general, social developments more generally, social progress, but also depending on the way the school itself is organized and operates in the social system. And, certainly, these expectations change, differ and vary in the individual levels of education, such as kindergarten, elementary, middle, and senior high school,

Pedagogical science has always been concerned with questions about the conditions and qualities that the teacher must possess to perform his complex and difficult role in an even and effective way. There are many different theoretical approaches around this topic, mainly in international and less in the Greek pedagogical, psychological and sociological bibliography. Many of the theories related to this issue are dominated by an ethical conception in describing the characteristics that compose the role and personality of the teacher.

In these theories the teacher is portrayed with ideals and qualities that are more specific to the role of the priest by modelling the behavior of Christ. There is also talk about "born educator", a "teacher's soul", e.g., Spranger, Kerschensteiner, or an educational "pedo-trope" and "logo-trope", e.g., Caselmann, or for an educational "child counselor", e.g., Nohl, or for a teacher with a "pedagogical personality", e.g., Schneider, Döring, and "social mission" modeled on the pedagogical ideas and applications of Pestalozzi, such as pedagogical love. Other theories characterize as the main task of the teacher the "transfer of knowledge", e.g., Herbart etc. (Konstantinou, 2015; Reich & Schiess 1984; Xochellis, 2015).

A basic observation that must be made in the ethical perceptions, which refer to the qualities of the teacher, is, whether it is possible to meet a teacher with the specific characteristics in the current school and social reality. And, of course, if one does not meet "such" teachers but "others", what is this or that that interferes and prevents their emergence and action? These signs refer almost self-evidently to the dominant problem of the Sciences of Education, which is the disharmony between theory and practice, as well as the connection between school and society.

This means that there is a question of parameters related to the nature, configuration and function of the role of the teacher. Namely, what are these factors, which are involved and, obviously, interact in the form that the role of the teacher takes in school reality, since the teacher is not just a set of qualities that constitute his personality, but much more is an individual, who performs a social role under certain space-time, working and personal conditions.

_____

2. School and teacher mission

At this point it should be pointed out that the role of the teacher is closely linked to the structure, operation and nature of the education system and, in particular, of the school as a social and pedagogical institution. After all, this is the reason that led to the perception that the teaching profession is a dependent and directed profession. For this reason, we start the approach of the subject from the school as a pedagogical and social institution, in which the teacher plays his role.

According to the relevant pedagogical and sociological theories (see more: Fend, 1981; Fingerle, 1987; Konstantinou, 1989; Konstantinou, 2015: 127-132; Xochellis, 2015), the mission of the school is summarized as follows (see Chart 1):

THE INDIVIDUAL ROLES OF THE TEACHER
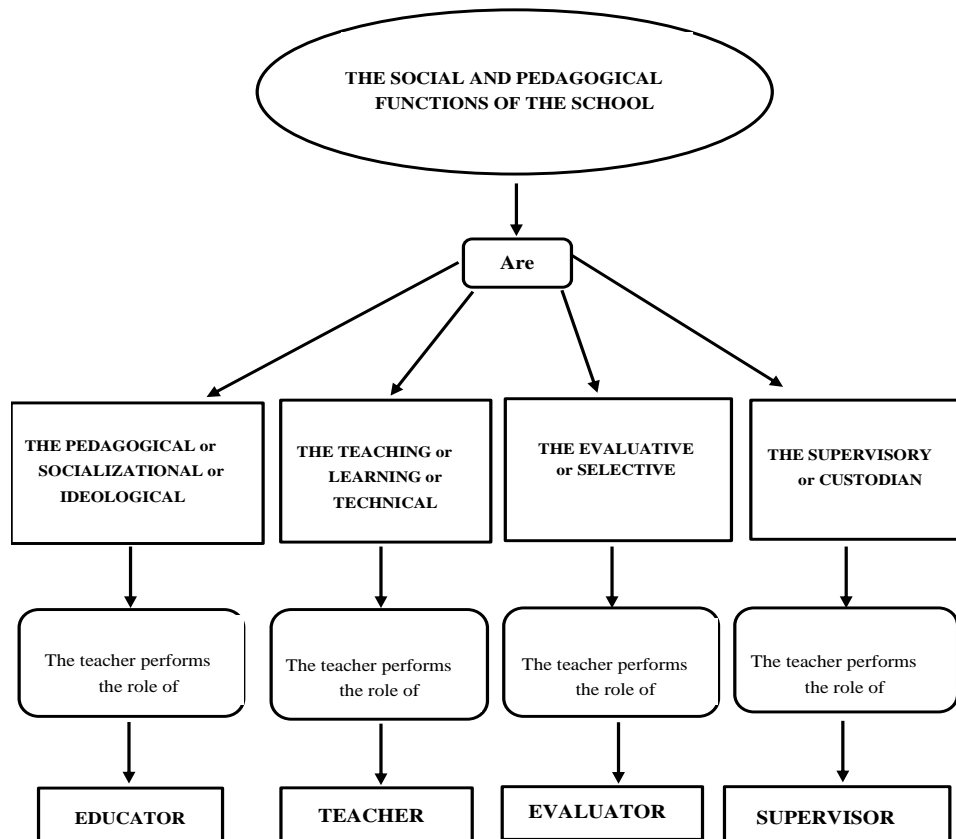
Chart 1. The individual roles of the teacher in relation to the school functions

Analytically it (Fend, 1981; Konstantinou, 1989; Konstantinou, 2015; Xochellis, 2015):

• The school *educates and socializes* the student, to shape his personality and contribute to his smooth integration into the social system. According to this function of the school, the teacher performs the role of the *educator*.

• The school *teaches and learns,* aiming to the development of student's cognitive, mental, and emotional levels. According to this function of the school, the teacher performs the role of the *teacher*.

• The school *evaluates* the student to determine whether he achieves the educational objectives and to identify any deficiencies and inadequacies, as well as the student's potential, aiming to receive feedback and improve the learning process

and the integration of the student into the labor market. According to this function of the school, the teacher performs the role of the *evaluator*.

● Finally, the school *supervises* the student, releasing the parent from his pedagogical role, while his child is at school, and seeking to offer safe and decent living to the student. According to this function of the school, the teacher performs the role of the *supervisor*.

As found in this brief description and as we have highlighted in the introduction, the teacher, who is in charge of handling them through its procedures, undoubtedly plays a leading role in the school mission and, in particular, in its specific functions: education, teaching, learning, assessment and socialization.

In this way, the teacher seeks to create an educational environment where the child can develop his personality as smoothly and harmoniously as possible. His pedagogical efforts include the removal of factors that negatively affect the child's development. The school, that is, through education, seeks to "open the educational path to the student", according to the curricula and, overall, the orientations of the school.

This does not mean that the child should only acquire knowledge in specific subjects, for example history, mathematics, etc., but much more, the school aims to give pedagogical meaning to all its school processes, so as to contribute to an, as far as possible, complete development of the child's personality. To cultivate skills and familiarize him, namely, with the value system of society, contributing in such a way that the child becomes mature, autonomous, responsible, consistent, emancipated, free, democratic, with creative and critical thinking, with respect for the identity of others, with respect for culture and the environment, etc. (Giesecke, 1989; Hentig, v, 1988; Konstantinou, 2015).

In other words, and based on convergent pedagogical principles, a pedagogical relationship between the teacher and the child must be developed, which differs from other social relationships and which has the following characteristics (Brunner & Huber, 1989; Konstantinou & Konstantinou, 2017; Rutter, Maugham, Mortimer & Ouston, 1980):

● Any effect should be aimed at the happiness of the child.

● The question referring to the child's happiness depends on historical and social factors.

● The pedagogical measures must be guided both by the present state of the child's development and its future potential for social life.

● Due to the pedagogical purpose, aimed at autonomous individual action and responsibility, any other foreign ("out-of-individual") effect must be inactivated.

● The social relationship between adult and underage individuals should not be coerced. This should be left more to the readiness and disposition of the educated person.

● The pedagogical relationship is a relationship of interaction, in which the individuals participating in it exert mutual influences and cause changes in themselves.

More specifically, many weighted or unbalanced factors are involved in the processes of education, teaching, learning, evaluation and socialization which affect them to a greater or lesser extent, even though the degree of their influence is not possible to be determined precisely. Experts in these fields can only approximately estimate the influence or involvement of these factors. In today's societies some environmental impacts are indeed almost irrepressible, and this concerns mostly the political and financial factors as well as the technological means, that is computers, the internet and so on. Therefore, the difference arises from the fact that the "others"

who contribute to the child's education and socialization are neither definitely nor always oriented to the same factors, but to different rules, values and practices, for example to those of the employment market. Perhaps they are interested more in what is useful and profitable for the job market and not in what is good and acts in the interests of the child's development.

Could the child act in a competitive society based on the Christian-Greek values of the form of "love your neighbor as yourself", when he learns from an early age that in the exams – promotional, introductory, etc. – the rule of competition, which is interpreted as "the end justifies the means", applies and, even more, when their place in higher education is determined by these exams? An effort, namely, that required the entire and comprehensive arousal of the whole family, the tuition centers, the educational system, etc. and, of course, the student's onerous, harrowing and often torturous devotion? Is it possible for someone to "filter" or classify and rationalize the pluralistic social interests and benefits, so that they act pedagogically and in the best interest normal development of the child? In other words, can the teacher combine all these so as to achieve a balance of the factors that influence the process of education, teaching, learning and socialization?

Consequently, the answer to the question concerning the kind of practices and messages that are cultivated and promoted through school reality and, especially, through the socializing function of the school, is: knowledge accumulation, competition, grade pursuit, individualism, servitude, formalism and the like. A reality that is, where the student cannot be considered as an individual with his own particularities, needs, interests and experiences. In other words, a reality that does not favor the harmonious and balanced physical and mental-emotional child development, since it is prevailed by situations of anxiety, fear, indifference and aggressiveness, that are anything but in line with the pedagogical goals. The question that arises in this issue is, which is the role of the teacher as a pedagogue in an institution characterized by bureaucratic structure and organization. Which are the teacher's qualifications, among others, in order to confront and cope with the child through pedagogical and teaching means, so that personal and social identity are developed as well as completeness in communication and practice.

3. Qualities of an effective teacher

By utilizing the information concerning all school functions and the teacher's role, one can illustrate, in a more distinct way, the educational, organizational, practical and personal features that a teacher should have in order to join the category of "effective" teacher. First of all, what should be stressed at this point is that the form of practices, which are used by the teacher during the pedagogical communication with his students, depends on the role played by the teacher himself in school reality as the key factor of all the school processes. More precisely, the practices that are used while a role is fulfilled depend on the existing occasion, the kind of influence exerted on that role and the status that the person has in this specific occasion. Methodologically, it has been understood that in order to interpret and evaluate a specific behavior and then classify it, one must subsume it in a semantic context (occasion), which is determined by time, place, organization and the cultural standards of a society. That is, whichever meaning is given to a specific action, comprises an interdependence between the rule that regulates it and the semantic context to which it belongs. This point is particularly prominent since the role of the teacher depends to a decisive extent on the very hypostasis, structure, orientations and form of school operation as a social institution and, at the same time, on the political, economic, scientific, religious, technological and, generally, the socio-cultural conditions prevailing in its area of hypostasis.

First of all, from a general conceptual point of view, a teacher is considered effective when he effectively carries out his professional mission or else when he achieves the scientific and educational goals that are inextricably linked to his role. It has already been a pedagogical axiom

that the way the teacher organizes and carries out the pedagogical communication plays a decisive role in the general attitude and behavior of the student towards the educational-learning process, but also towards the teacher himself (Doll, Zucker & Brehm, 2009; Hentig, v. 1988; Kassotakis & Flouris, 2005; Konstantinou, 2015: 142-144; Papandreou, 2002; Postic, 1995; Rutter, Maugham, Mortimer & Ouston, 1980; Trilianos, 2004; Whitaker, 2013; Xochellis, 2015).

So, by that definition what plays an important role is (*Ibid.*):

- How the teacher educates and socializes his students;

- How he organizes the educational performance and how he implements the evaluation;

- If he takes the particularities of each student into account;

- If he takes the social reality into account;

- How he organizes the educational communication and relationship with the students;

- How he organizes and implements the discipline procedures;

- What kind of cooperation conditions he creates;

- How he deals with and handles behavioral issues, for example, indiscipline;

- Which is the way he engages students in the learning process;

- If he trusts and respects students and how he cooperates with them;

- Which is the way of using and administering justice;

- If he is ironic and insulative to students;

- If he encourages and rewards students;

- If he shows understanding and dedicates time to listening to students, and in general,

- How he treats his students, and so on.

In any case, and according to research data, effective, from a pedagogical, cultural and social point of view, is considered a teacher, who (*Ibid.*):

- Organizes appropriately, from a methodological point of view, the teaching and learning process;

- Evaluates the student based on the pedagogical content of the assessment by applying valid, reliable and objective methodological means;

- Takes the cultural and social reality into account, during the educational process and performance;

- Respects the needs, interests and, in general, the particularities of the student;

- Cultivates and strengthens teamwork and collaboration;

- Develops a relationship of trust with students;

- Strengthens his responsibility and autonomy;

- Jointly formulates rules that contribute to the delineation of student's behavior;

- Avoids stigmatizing and, generally, offending the student;

- Dedicates time to listen to students;

_____

- Is characterized by self-restraint, justice, equality, reliability, consistency, mildness and patience;

- Finally, he is the teacher who respects the student's personality and, above all, serves the learning, educational and, overall, pedagogical interests of the student, as well as the needs and promotion of society.

4. Factors influencing the effectiveness of the teacher

According to relevant research conclusions, a teacher is closer to the most effective fulfillment of his role (Karatzia-Stavlioti & Lambropoulos, 2006; Konstantinou & Konstantinou, 2017; Liakopoulou, 2020; OECD, 2011; Xochellis, 2015):

- When he has a comprehensive scientific, pedagogical and didactic training and reeducation;

- When he performs his work in a favorable context of school and working conditions;

- When his work is recognized from a moral, state, economic, social, and so on, point of view.

One of the most important features of the teacher's role is that it is determined by social expectations, which affect, in any case, the fulfillment of his role. This means that the way the teacher performs his role results from the function and interaction of a series of different factors. According to relevant research and theoretical models, the effectiveness in performing the role of the teacher is mainly influenced by the following three factors (Holzner, 1980; Konstantinou, 2015; Liakopoulou, 2020; OECD, 2011; Pyrgiotakis, 1992; Spanhel, 1981; Xochellis, 2015):

1) The scientific, pedagogical and didactic training and, in general, the professional formation and shaping of his personality that define to a great extent the interpretation he gives to his role.

2) The school reality with the organizational and operational conditions of the school, the role of the headteacher, the organization of school life, the school atmosphere and so on.

3) The wider social environment, meaning the various aspects of social life, such as culture/civilization, value system, politics, economy and so on. More specifically, he is undoubtedly influenced by social groups and their expectations which are attributed to his role by students, parents, colleagues, school management, public opinion, etc., and that manifest themselves not in the same form in different periods of time or differ from one group to another, or even between the members of the same group.

In the process of the following analysis, special emphasis will be given to the first factor that concerns the educational and professional composition of the teacher. Particularly, an attempt will be made to determine, mainly from a pedagogical point of view, the expectations that refer to: the role of the teacher and its individual qualities, the scientific and, in general, the professional composition that he has at his disposal for their implementation, in school reality where they are implemented and, finally in the factors of influence, which shape them and demand their realization.

_____

4.1 *The importance of the pedagogical and didactic training as a factor of effectiveness for the teacher*

By "pedagogical and didactic training-education" we mean the knowledge, abilities, skills and experiences acquired by the teacher during his education and training, and which are related to the educational system as a whole, and, especially, to school, as a daily workplace, and to the recipients of the educational processes, that is students themselves (Konstantinou, 2015: 145-146; Liakopoulou, 2020; Trilianos, 2004; UNESCO, 1999; Xochellis, 2015).

In other words, as pedagogical and didactic education-training we mean the qualifications a teacher should have from a pedagogical, didactic, sociological and psychological point of view, in order to perform his role as a professional teacher in a professional and effective way, that is as a pedagogue, teacher, evaluator and supervisor in the educational practice. The basis for this training is Pedagogy with its branches, Teaching Methodology, Psychology, Philosophy, Sociology of Education, Educational Evaluation and other disciplines both from the field of Social and Positive Sciences, which contribute and enrich this work with their research and theories (*ibid.*).

4.2 *Additional reasons that necessitate the comprehensive pedagogical and didactic training of the teacher*

The additional reasons, which necessitate the comprehensive and perfect pedagogical and didactic training of teachers, are the scientific, educational, cultural, economic, technological and political circumstances that have shaped a polyphonic, changeable and open to new context changes. This framework implies continuous rearrangements and developments in terms of information, knowledge, values, orientations and, in general, socio-cultural data. These specific adjustments and developments are so rapid that a teacher and a school reality, persisting in static, unilateral and outdated perceptions and practices, will increase immeasurably, catalytically and, perhaps, insurmountably the distance from socio-cultural prospects that determine their very existence.

Today, the need for a more complete professional training of teachers is urgently highlighted, in order to manage, in addition to the established pedagogical and didactic needs, the students' cultural diversity and the increased rates of their delinquency and deviant behavior. It should become clear that school is neither a place which provides a quantity of knowledge which is actually categorized into useful and non-useful, nor a place that considers the student as a storage receptor for their recruitment through unilateral and monotonous learning processes, nor is it a place where authoritarian practices and evaluative distortions are used. However, this means that the successful realization of the teacher's role must be considered in relation to changes concerning the orientations and the operation of the school itself, which has really diverged in this domain, as stated elsewhere.

4.3 *New roles for the teacher: "Social educator" and "social psychologist"*

For at least the last twenty years, there has been an increase in the rate of children disorders. This increase is estimated at 10-20%, depending on the methodological approach to the issue. In particular, research data from many countries show that today's school children are lonelier and more oppressed, angrier and more unruly, more aggressive and more impulsive. School has now an important role upon this matter, developing and enhancing social skills in children, such as empathy, self-control, resolving dispute resolution, cooperation, collectivity, etc. (Doll, Zucker & Brehm, 2009; Konstantinou, 2015; OECD, 2018).

_____

Searching for the reasons for the change in students' behavior, researchers find crucial changes in both the family environment and the wider social one, which are particularly noticeable in the Greek social reality, as a result, among others, of the economic and social crisis that has been plaguing the country for the past few years. This implies new data on student behavior, which must be handled by the teacher on a daily basis and for which he is not institutionally prepared and trained to deal with from a pedagogical and psychological point of view (*Ibid.*).

4.4 *The existing pedagogical and didactic training of today's teachers*

4.4.1 *Training of primary education teachers*

Regarding the students of the Departments of Primary Education in our country and according to their curriculum, this training is provided, since most of the total teaching hours refer to the pedagogical and didactic training of their students. Admittedly, a sufficient number of teachers, currently working in primary education, have graduated exclusively from Primary Education Departments in Greece and other Balkan countries, mainly of the former Yugoslavia, where the study was short-term, hardly in-depth, without the possibility of research and with particular emphasis on instructive formalism as well as "ready-made" and "complete" didactic models for imitation. These reasons were the main cause for the abolition of the Pedagogical Academies in Greece, which echoed the long-standing demand and struggle of the trade unions of both primary school and preschool teachers and, in particular, the Teachers' Federation of Greece (DOE). A demand, which was finally met with the establishment of the University Departments of Primary and Preschool Education (1983) (see also Pyrgiotakis, 1992).

4.4.2 *Training of secondary education teachers*

However, the situation in Greece is extremely problematic for secondary education teachers, given that the majority of students, having graduated from the respective university departments, have hardly had any pedagogical and instructive/didactic training, in both theoretical and practical form. Investigating the data in the study guides of the aforementioned departments reveals that the provided pedagogical and instructive/didactic training of the future high school educators is either insufficient or non-existent. In particular, the students of the departments of Biology, Mathematics, Informatics, Philology, Physics, Chemistry, etc., are given the opportunity, on an optional basis, to choose typically 1-2 Pedagogic Science and/or Teaching Methodology courses, taught in the departments of Primary Education or the departments of Philosophy, Pedagogy and Psychology; however, this is if they themselves wish to do so.

Insufficient to non-existent theoretical and practical pedagogical and instructive/didactic training led the Greek secondary school teachers to seek relevant knowledge through their own experiences, which is drawn either from their personal experiences as a student or from their experiences as a teacher from everyday practice. This means that the teachers have great confidence in the importance and exclusive validity of their experience, which is based on the data of an empirical way of acquiring knowledge. In other words, one can observe a "mythologizing" of empiricism based eminently on strict formalism, on a standardized teaching methodology, on subjectivity, amateurism, superficiality and arbitrary generalizations (Fragoudaki, 1993; Konstantinou, 2015; Papakonstantinou, 1986).

4.5 *Teacher training*

The problem, however, less in primary and more in secondary education, still exists at this time and is exacerbated by the fact that almost the majority of the teachers who serve at these

levels, have little or no further pedagogical and instructive/didactic education at all. And, undoubtedly, the teacher's further education is not only imposed by their inadequate pedagogical and instructive training, but also by the social, cultural, scientific and technological needs and developments of our time; at a time when intense scientific developments and educational changes are being observed. This situation is exacerbated by the fact that most of the teachers go through almost their entire professional career, from appointment to retirement, without any professional renewal. At a time when many things are being abolished and others are being radically renewed, the professional renewal of teachers is becoming imperative. The activation and the contribution of the teachers to the modern social developments presupposes, but also imposes, better training, information on the use of new pedagogical and instructive/didactic methods and information as well as understanding of new educational goals (Konstantinou, 2015; Vergidis, 1993; Xochellis, 2015).

4.6 *The absence of pedagogical and instructive/didactic training and its impact on the educational process and on students*

Based on what was mentioned previously, it becomes clear that the pedagogical and instructive act, as a complex and multifaceted phenomenon, is a key element in the role of the teachers, who, in order to perform accordingly, need sufficient and thorough pedagogical and instructive/didactic knowledge, experience and skill. This means that, without a doubt, the absence of adequate pedagogical and instructive/didactic training has its effects on the quality of the processes of education, teaching, learning, socializing and evaluation and, in particular, on the quality of the pedagogical and instructive relationship of the teachers with their students. And this is happening, since a key point in the role of the teachers is the pedagogical interaction, through the mutual social relations and effects of which, important values, rules and messages are raised and promoted, which relate to the formation of the students' behavior and identity.

According to relevant research, the lack or the inadequacy of teachers' pedagogical and instructive/didactive training, in conjunction with other school and social factors, leads to empiricism and, consequently, to empirical and self-taught perceptions and practices. It also leads to pedagogical errors, pedagogical distortions, to pedagogical, instructive and evaluative practices of dubious value and, overall, to a degradation of the quality of the school's educational functions. In particular, it leads to (Konstantinou, 2015: 152-153; Konstantinou & Konstantinou, 2017; Rutter, Maugham, Mortimer & Ouston, 1980):

- distancing from the needs, interests and particularities of the student, on a cognitive, mental, emotional and social level;
- problematic situations concerning the pedagogical relationship between teacher and students, discipline, social behavior of the student, which appear more specifically in the form of the student questioning or even rejecting the teacher, the lesson or the school; in the form of lack of trust, respect, understanding, acceptance, but also with the use of insults, stigmatization and exclusion by the teacher.
- stereotypical and routine teaching-learning procedure, evaluation errors and, in general, educational and mainly teacher-oriented processes, which lead to the indifference and boredom of the student, and which cultivate sterile memorization, individualism, grading, competition and also do not promote critical thinking, self-motivation, cooperation, teamwork, interest and overall, the student's learning, mental, emotional and social activation.

_____

5. Final findings and remarks

From the approach of the subject, it is understood that the teachers are binding to the state in an administrative, professional, ethical and financial way, through a network of laws, rules, programs and regulations, which forces them to take into account, as per organizing the educational procedures, state standards and resolutions. This legal and regulatory framework that governs the teachers' relationship with the school forms a suffocating barrier that binds his action decisively and from which it is not easy to get rid of, without suffering the intended consequences. This context, although it changes from time to time depending on the goals and choices of the educational policy, at its core remains oppressive for teachers and is a point of conflict, leading them to dilemmas regarding their pedagogical autonomy. Thus, when the teachers in the classroom implement almost literally the specifications and objectives of the curricula, as well as the indicated methods outlined in the teacher's book, teacher autonomy seems to be out of the question, substituted by a kind of freedom within a binding framework.

The previous summary analysis also showed that education, teaching, learning, evaluation and socialization are part of the processes that decisively determine the teachers' professional activities, therefore, contribute to shaping their role. These processes are, at least in theory, established and institutionalized in school reality. In practice, however, one can observe an inadequate application of the standards associated with these processes, which, among other things, is inconsistent with the orientations of the Education Sciences. The insufficient processing of the pedagogical-didactive specifications is due both to the emergence of the school as a formal and non-processing organization with the predominance of the principles of power, hierarchy, bureaucracy, etc. as well as due to the professional identity formed by the teachers, through shortcomings, inadequacies and dysfunctions in their scientific and, mainly, in their pedagogical and instructive/didactive training. This development, however, constitutes the result of a broader function involving several factors related to political, economic, cultural and, as a whole, social reality. Consequently, addressing this situation at school should be combined, first and foremost, with a change in political and social choices and priorities.

It would, of course, be a methodological mistake to argue that all teachers treat the implementation of their role in the same way. There are clearly differences for everyone, due to many factors, personal, scientific, professional, ideological and so on. In addition, the teachers cannot be perceived as simple executive bodies of the educational authority, but as responsible and competent persons who organize the educational processes for the sake of the student and the social system. Where teachers were treated as executive bodies, they became passive receivers and executors of authoritarian orders, without their own free contribution to the procedures they had assumed to carry out.

In any case, it is difficult for the teachers to strike a balance between their own professional beliefs and aspirations (pedagogical dimension) and the social role they perform (socio-political dimension). Because formalism, hierarchy, bureaucracy and political choices and expediencies prevail in the relationship between the teachers and the school, nonetheless. For the successful confrontation of these two pressing parameters (pedagogical, socio-political) the teachers are required to possess quality attributes, related to the whole of their personality (Friderikou & Folerou-Tserouli, 1991; Konstantinou, 2015; Pyrgiotakis, 1992).

Undoubtedly, however, the development that the pedagogical and didactic reality takes depends on the teachers' own presence, interpretation, participation, reaction and resistance. Because the way in which the teachers implement their pedagogical and official functions is a matter certainly related to their own personality. The fulfillment of their role would have the least conflicts and disputes, if the teachers organized the pedagogical and instructive processes based on the theories and findings of the Educational Sciences and the neighboring disciplines and interpreted the school and social reality with the needs, interests and

particularities of each student always in mind. A function and a development which are, of course, not observed in today's school reality and, especially, in the realization of the role of the teacher. The lack of pedagogical and instructive/didactic training causes the teachers to develop feelings of insecurity, which, under the effect of influencing factors, lead them to a confused and uncertain situation, resulting to their "complying/conforming" more easily to the standards of educational ideology and power.

The teachers have a personal, autonomous and realistic professional identity, only when (Döring, 1980: 49; Konstantinou, 2015):

- they manage to combine theory with practice and when their educational activities are based on both of these levels;

- they define their role based on the institutionalized regulations, but they act while taking advantage of the opportunities for autonomous activity provided to them as well as making use of the advantages of their personal and professional identity. After all, any measures or objectives of the educational policy are implemented through the realization of the role of the teacher;

- the teachers, as subjects who act, they analyze and interpret autonomously and voluntarily the pedagogical situation in the classroom and the school and everything related to the realization of their role;

- they interpret the expectations or specifications of the influence groups and they delimit and manage their impact.

The teachers, based on the above pedagogical orientations, can change the form of the educational and organizational power that they have towards the students and, finally, they can treat them as persons with their own biography and their own peculiarities. However, a necessary condition for the implementation of such an educational role is the formation of a favorable school, professional and work environment by the educational policy pursued. Regardless of political expediencies, it is crucial that the state, through its educational policy, respects and stands by the work of teachers. After all, it is commonly accepted that teachers who are dissatisfied will perform less in the work they do. This means that the state must provide them with decent working conditions, which require, among other things, adequate resources for education, a safe and healthy school environment, scientific and professional autonomy, confidence in the teacher, high-quality initial education and continuing training and professional development.

And let us not miss the most comprehensive and important point, that society needs citizens with culture and education, as well as a school close to the actual/real life of the child. Close to social needs and social reality. And making use of a wise and genuine pedagogical saying by a great writer: "An ideal teacher is one who becomes a bridge for his student to cross over. And when he finally facilitates the crossing, he happily lets himself plunge, encouraging his student to build his own bridges." N. Kazantzakis.

_____

References

Brunner, E., & Huber, G. (1989). *Interaktion und Erziehung*. München: Union.

Döring, K. W. (1980). *Lehrerverhalten: Forschung – Theorie – Praxis.* Weinheim – Basel: Beltz.

Doll, B., Zucker, St., & Brehm, K. (2009). *School classes that promote mental resilience: How to create a favorable environment for learning,* Chatzichristou, Ch. (scientific editing). Athens: Tipothito - Giorgos Dardanos. (in Greek).

Fend, H. (1981). *Theorie der Schule*. München-Wien – Baltimore: Urban und Schwarzenberg.

Fingerle, K. (1987). Von PARSONS bis FEND - strukturell – funktionale Schultheorien. In: Tillmann, K.-J. (Hrsg): *Schultheorien*. Hamburg.

Fragoudaki, A. (1993). Insufficient education and lack of retraining of teachers: Main cause for the failure of the teaching operation. *Sigchroni Ekpedefsi*, t. 71, p. 26-30. (in Greek).

Friderikou, A., & Folerou –Tserouli, F. (1991). *The teacher at the primary school – A Sociological approach*. Athens. Ypsilon.

Giesecke, H. (1989). *Pädagogik und Beruf - Grundformen pädagogischen Handelns*. Weinheim - München.

Hentig, v. H. (1988). Werte und Erziehung. In: *Neue Sammlung* 28, 3, S. 323-342.

Holzner, F. (1980). Der Lehrer in seinem Umfeld. In A. Schnitzer (Hrsg): *Schwerpunkt Lehrerpersönlichkeit*, S. 157-186. München.

Karatzia-Stavlioti, E., & Lampropoulos, H. (2006). Evaluation, effectiveness and quality in education. In *Educational Planning and Economy*. Athens: Gutenberg. (in Greek).

Karras, K. (2011). *The teacher in a changing world: A challenge for the today's pedagogy*. Athens: Gutenberg. (in Greek).

Konstantinou, Ch. (1989). *Entstehung, Leistungsfähigkeit und Perspektiven der griechischen Schulen am Beispiel Bielefelds*. Frankfurt am Main: Haag + Herchen.

Konstantinou, Ch. (2015). *The good school, the competent teacher and the suitable education as a pedagogical theory and practice*. Athens: Gutenberg. (in Greek).

Konstantinou, Ch., & Konstantinou, I. (2017). *The evaluation in education: The evaluation of the educational work, the teacher and the student as theory and practice*. Athens: Gutenberg. (in Greek).

Liakopoulou, M. (2020). *Improving school effectiveness: From theory and research to practice*. Athens: Gutenberg. (in Greek).

OECD (2011). *Better Performances and Successful Reforms in Education: Recommendations for the Educational Policy in Greece*. (in Greek).

OECD (2018). *PISA 2018 results*. (in Greek).

Papakonstantinou, P. (1986). From the pedagogical ideology to scientific pedagogy: The training content of the Greek teacher. In Th. Gotovos, G. Mavrogiorgos & P. Papakonstantinou (Eds.), *Critical pedagogy and educational practice* (pp. 17-24). Athens: Sigchroni Ekpedefsi. (in Greek).

Postic, M. (1995). *The educational relationship* (trans. Touloupis, D. H.). Athens: Gutenberg.

Pyrgiotakis, I. (1992). *The Odyssey of the teaching profession*. Thessaloniki: Kyriakidis. (in Greek).

Reich, G., & Schiess, G. (1984). *Praxisbezogene Einführung in die Erziehungswissenschaft*. Stuttgart – Berlin - Köln - Mainz.

Rutter, M., Maugham, B., Mortimer, P., & Ouston, J. (1980). *Fünfzehntausend Stunden – Schulen und ihre Wirkung auf die Kinder*. Weinheim - Basel: Beltz.

Spanhel, D. (1981). Die Rolle des Lehrers in unserer Gesellschaft. In W. Twellmann (Hrsg): *Handbuch Schule und Unterricht*, Band 1, S. 101-121. Düsseldorf.

Trilianos, A. (2004). *Methodology of modern teaching,* Book A΄& B΄. Athens: Aftoekdosi. (in Greek).

UNESCO (1999). *Education. The treasure within. Report of the International Commission on Education in the 21st Century chaired by J. Delors* (trans. Center of Scientific Reasearch). Athens: Gutenberg. (in Greek).

Vergidis, D. (1993). Neoliberal educational policy and teacher training. *Sigchroni Ekpedefsi*, t. 69, p. 43-49. (in Greek).

Whitaker, T. (2013). *A good teacher: What distinguishes him?* Athens: Patakis. (in Greek).

Xochellis, P. (2015). *Introduction to pedagogy. Fundamental problems of pedagogical science*. Thessaloniki: Adelfi Kyriakidi. (in Greek).

_____

Opinions of Social Studies Teacher Candidates About Smoking Addiction

Kamil Uygun

Usak University, Education Faculty, Usak, TURKEY

Ahmet Durmaz

Nevsehir Haci Bektas Veli University, TURKEY
Education Faculty, Nevsehir

Abstract

The aim of this study is to examine the opinions of social studies teacher candidates about smoking addiction. For the purpose of the study, phenomenological research design, which is one of the designs of qualitative research method, was used. The study group consisted of 20 volunteer teacher candidates (10 male and 10 female) who have been studying at Usak University Faculty of Education in the 2019-2020 academic year and who have been smoking for the last year. Data were collected with a semi-structured interview form. The interview form, which is a data collection tool, was prepared based on the opinions of three experts. 6 open-ended questions were asked to the participants according to expert opinions. The data was analyzed by content analysis.

Keywords: social studies, teacher candidates, smoking, addiction, opinion.

1. Introduction

Addiction is attention bias for any substance (Kalınkılıç & Baran, 2019). Nicotine addiction is the primary reason for the development of smoking habit, the maintenance of this behavior and the failure of treatment interventions (Okutan, Taş, Kaya & Kartaloğlu, 2007).

Addiction is when a person loses control of any substance. According to the World Health Organization (WHO): The person who smoked a pack of cigarettes a day for at least 6 months but quit left now is called an old smoker. The person who has never tried smoking is called a non-smoker. A person who smokes less than one cigarette per day is called an occasional smoker. At least one smoker every day is called a daily addict. Light smoker is the one who smokes less than 10 cigarettes a day (Canbaz, Sunter & Tunçel, 2005). The World Health Organization defines smoking as a state of bio-socio-psychological poisoning (Sağar, 2017).

Smoking addiction is first among the preventable causes of death worldwide (Karadağ, Karadağ, Ediz & Işık, 2011). Smoking is known to be the greatest preventable disease and death cause in the United States (Spring, Pingitore & McChargue, 2003).

Correspondence: Ahmet Durmaz, Nevsehir Haci Bektas Veli University, Education Faculty, Nevsehir, TURKEY. E-mail: ahmtdrmz50@gmail.com.

Smoking is one of the biggest threats to human health. In developed countries, smoking habits increased rapidly at the beginning of the last century. Due to this situation, the rate of smoking related diseases has increased (Okutan, Taş, Kaya & Kartaloğlu, 2007). While smoking tendency decreased in many developed countries in 2000s, cigarette consumption increased in developing countries (Şahin, Öztürk, Ünlü, Uskun & Akkaya 2000). Over time, developed countries reduced their smoking rates through anti-smoking campaigns, and especially the rate of lung cancer began to decline. However, smoking habits in women started a little late compared to men and continue to spread (Okutan, Taş, Kaya & Kartaloğlu, 2007).

Smoking is a direct cause or condition of many diseases such as chronic bronchitis, larynx, lung, oral mucosa and bladder cancers, especially in cardiovascular diseases (Erbaydar, Avcı & Altay, 2003). Smoking is known to adversely affect cognitive performance (Pakyürek & Şenyüz, 2019).

Psychotherapy in smoking cessation clinics, treatment with hypnosis, behavioral methods (electrical stimulation, boredom or fast smoking), self-management techniques (writing and recording smoking cigarettes gradually), acupuncture, medical treatment, nicotine replacement therapy and nicotine transdermal therapeutic system smoking cessation methods are recommended (Yorgancıoğlu & Esen, 2000).

According to the World Health Organization, prevalence of smoking among adults over the age of 15 is 26.0% worldwide and 35.3% in the European Region (Çapık & Çingil, 2013). In Turkey, the smoking rate was 43.6% (Kayla & Yararbas, 2016). If no immediate action is taken, the World Health Organization assumes that there will be more than 8 million deaths per year starting in 2030 and 80% of these will be in developing countries. It is estimated that more than one billion people will die from smoking in the 21st century (Karadağ, Karadağ, Ediz & Işık, 2011).

According to Turkey in 2012 Global Tobacco Survey, 41.4% men, 15.2% women have used cigarette (Çapık & Çingil, 2013). In recent years, smoking prevalence of male students between the ages of 13-15 increased from 9.4% to 10.2%, while the frequency of smoking among female students increased from 3.5% to 5.3%. age of onset of smoking in Turkey, the level has dropped to 10-11 years. Approximately 100 thousand people die due to cigarettes per year (Kaylı & Yararbaş, 2016). If the measure is not taken, it is thought that this number will increase to 250 thousand people in 2030s (Kutlu, Marakoğlu & Çivi, 2005).

Since the age of starting smoking and the effect of friends are important, schools and teachers are important in the fight against smoking. There are many studies on teachers in literature. While there were studies conducted on prospective teachers in some branches, no studies were conducted on prospective social studies teachers. In this study, it was aimed to reveal the opinions of prospective social studies teachers about smoking addiction.

2. Method

2.1 *Research design*

In this research, phenomenology research design which is one of the research designs of qualitative research method was used. Phenomenology researches are considered suitable for studies aiming to investigate phenomena and concepts that we are not completely foreign to, but which we do not fully understand. Phenomenon is the subjective life of the person who perceives himself and his environment in a unique way. In our lives, phenomena appear in different ways such as events, experiences, perception, tendency / orientation, concepts and situations (Yıldırım & Şimşek, 2005: 72).

_____

2.2 *Study group*

The study group of the research consists of a total of 20 volunteer teacher candidates, 10 male and 10 females, who have been smoking at the Usak University Faculty of Education in the 2019-2020 academic year.

2.3 *Data collection and analysis*

The data were collected through a semi-structured interview form. The interview form, which is a data collection tool, was prepared by taking three expert opinions. 6 open-ended questions were asked to the participants according to expert opinions.

The data were analyzed by content analysis. Content analysis is one of the most used methods among qualitative data analysis types. Content analysis is a commonly used technique for analyzing written and visual data tools. The purpose of content analysis is to reach concepts and relationships that can explain the collected data. The basic process of content analysis is to bring together similar data within the framework of certain concepts and themes, and to organize and interpret them in a way that the reader can understand (Yıldırım & Şimşek, 2005: 227).

The themes were coded to another academician and the reliability formula proposed by Miles and Huberman (1994: 64) was used to determine the index of agreement between the two codes. The percentage of agreement among the researchers was .94.

During the direct transfer, the identity of the prospective teachers was kept hidden due to ethical requirements. Direct quotation examples are coded as "volunteer" (gönüllü) abbreviated as "G" in the demonstration.

3. Results

3.1 *Findings related to age starting to smoking according to the opinions of social studies teacher candidates*

According to the opinions of social studies teacher candidates, the opinions about the age they started to smoke are summarized in Table 1.

Table 1. Age distribution of social studies teacher candidates

Voluntary	Current age	Age of onset to smoking
G1	21	15
G2	21	20
G3	21	17
G4	21	19
G5	21	19
G6	21	16
G7	23	21
G8	21	18
G9	22	20
G10	21	17
G11	22	20
G12	26	18
G13	22	13
G14	20	17
G15	23	19
G16	21	20
G17	21	12
G18	21	17
G19	23	20
G20	22	17

The age range of social studies teacher candidates who participated voluntarily and gave opinions was between 20-26. There are 1 teacher candidates at the age of 20, 11 teacher candidates at the age of 21, 4 teacher candidates at the age of 22, 3 teacher candidates at the age of 23, and 1 teacher candidate at the age of 26. The age range of the teacher candidates starting smoking is between 12-21. There are 1 teacher trainees starting at 12, 13, 15, 16 and 21, 5 teacher trainees starting at 17, 2 teacher trainees starting at 18, 3 teacher trainees starting at 19, and 5 teacher trainees starting at 20.

3.2 *Findings regarding psychological factors causing smoking to start according to the opinions of social studies teacher candidates*

The opinions of the pre-service social studies teachers about the psychological factors that lead to smoking are summarized in Table 2.

Table 2. Distribution of social studies teacher candidates'
views on psychological factors causing smoking to start

Theme	Frequency (f)	Percent (%)
Wannabe	8	40
Stress / sadness	7	35
Family problems	3	15
Problems in emotional	2	10
Total	20	100

According to the data in Table 2, it is seen that the main psychological factor that causes social studies teacher candidates to start smoking is wannabe (8 people – 40 percent). Other psychological reasons; stress, family problems and emotional relationship problems.

Here are some examples of direct quotations about the opinions of prospective social studies teachers about the psychological factors that lead to smoking:

I started with totally wannabe. At a young age, I had the desire to see myself smoking. I thought that my environment saw it and I started with this psychology... (G11)

I got a new job. It was difficult for me to get used to the new job and to adapt. I was very stressed and angry during this process. I started smoking with the idea that smoking is helpful for stress. (G6)

I started because of family problems. My father and I were broken and he didn't understand me. We were arguing. The fact that I was upset with my father led me start to smoke. (G18)

My problems with my boyfriend caused me to start smoking. I started smoking after our first departure. (G5)

3.3 *Findings regarding environmental factors causing to start smoking according to the opinions of social studies teacher candidates*

Table 3 summarizes the opinions of prospective social studies teachers about environmental factors causing smoking.

Table 3. Distribution of social studies teacher candidates'
views on environmental factors causing smoking to start

Theme	Frequency (f)	Percent (%)
Friend	16	80
Family	3	15
Relatives	1	5
Total	20	100

According to the data in Table 3, it was found out that the main environmental factor that caused social studies teacher candidates to start smoking was the friend effect. Other environmental reasons; family and relatives' effect.

Some examples of direct excerpts of social studies teacher candidates' views on environmental factors leading to smoking are given below:

I had friends who smoked too much in the school I was studying. I started with their influence. Almost all of our group of friends smoked. There are no smokers in my family and relatives. I'm smoking for nine years. (G13)

Friends were the biggest factor in the surroundings. (G15)

My father is an idol for me. My father smoked with me for 15 years. I was very impressed with my father's smoking (G14).

My brother's smoking in the family made me try occasionally. I took cigarettes from my brother's package and burned them on the balcony when no one was at home. Later, I became an addict with the influence of my university classmates and roommates in the dormitory. (G4)

I started because of my cousin. He was smoking. Most of the time, he handed it to me. I said, once, let me smoke. I've been since that day. (G20)

3.4 *Findings on the according to the effects after starting to smoking*

Table 4 summarizes the opinions of social studies teacher candidates about their effects after starting to smoke.

Table 4. Distribution of social studies teacher candidates' views on the effects after smoking

Theme	Frequency (f)	Percent (%)
Shortness of breath	12	60
Financial difficulty	4	20
Tooth yellowing	2	10
Bad smell	1	5
Frequent coughing	1	5
Total	20	100

According to the data in Table 4, the most serious effect of smoking for the prospective teachers was stated to be shortness of breath. According to the views of the prospective teachers, smoking also causes financial difficulties, teeth stains, foul breath, and frequent cough.

Here are some examples of direct quotations on the views of social studies teacher candidates about their effects after starting smoking:

Sometimes I find it hard to breathe when I play ball, and I get tired quickly. (G16)

My smoking causes financial difficulties. It is both a financial burden by taking cigarettes and I use more perfume to remove the smell of cigarettes. Consequently, it constitutes the extra cost. I'm having a hard time because my parents don't know I drink. (G7)

My teeth and nails began to turn yellow. I had stains on my front teeth. I suffer mostly because my teeth are yellow. (G8)

I've been disturbed by foul breath since I smoked. My boyfriend doesn't smoke. I know he's uncomfortable with the bad smell. (G1)

My health problems increased after I started smoking. Especially like a cough. In the past, when you cough, it would pass right away. I often cough. (G19)

3.5 *Findings on the causes of increasing smoking desire*

Table 5 presents the opinions of the social studies teacher candidates about the reasons that increase smoking desire.

Table 5. Distribution of social studies teacher candidates'
views on the causes of smoking desire

Theme	Frequency (f)	Percent (%)
Coffee	9	45
Tea	7	35
Alcohol	2	10
Computer game	1	5
Match tracking	1	5
Total	20	100

According to the data in Table 5, 9 (45%) of the social studies teacher candidates reported that they always felt the need to smoke while drinking coffee. Distribution according to other views; 7 teacher candidates say that they drink cigarettes every time they drink tea and 2 teacher candidates say that they drink cigarettes when they drink alcohol. There are 1 teacher candidates who say that they should smoke while watching computer games and games.

Some examples of direct excerpts from social studies teacher candidates' opinions about the reasons that increase smoking desire are given below:

It is very good to drink tea and coffee while smoking. I don't smoke without drinking coffee. Cigarette became a necessity because I love coffee too. (G9)

I burn cigarettes every time I drink tea. I smoke when I buy tea from the canteen between courses. (G12)

I would like to smoke while drinking alcohol. (G2)

It is very enjoyable to smoke while playing PC games. I'm smoking cigarettes in a row while I'm playing the PlayStation. (G20)

_____

Normally, if I smoke a cigarette every hour, I watch 7-8, including halftime. When the matches of Fenerbahce, derby matches, the National Team's European matches are high excitement. (G11)

3.6 *Findings on the reasons for smoking cessation*

Table 6 summarizes the opinions of social studies teacher candidates about the reasons that encourage smoking cessation.

Table 6. Distribution of social studies teacher candidates' views
on the reasons causing encourage smoking cessation

Theme	Frequency (f)	Percent (%)
Economic problems	13	65
Health problems	4	20
Family pressure	2	10
Faith	1	5
Total	20	100

According to the data in Table 6, economic problems, namely the financial situation, are the first reason of smoking cessation. There are teacher candidates who report economic problems 13, health problems 4, family pressure 2, and belief 1.

Here are some examples of direct quotations on the opinions of social studies teacher candidates about the reasons that encourage to smoking cessation:

I decided to quit a few times, but these were short-term. As for the price increases, I started to suffer financially. I couldn't quit, but I had to cut it down. (G7)

I've never tried to quit so far, but I want to quit because cigarette prices push me. The cigarette I had was 15 TL. (G17)

Sometimes I have trouble breathing. I can't breathe while I run. I had a lung problem. I want to leave in case more serious illnesses may occur. (G10)

I'm very upset that my parents found out I was smoking. (G3)

I want to stop smoking because it's a sin. There are those who say haram, but all the teachers say sin. Cigarette is sin. (G13)

4. Discussion and conclusions

The research aimed to reveal the opinions of the prospective social studies teachers about smoking addiction. Pre-service teachers' age of onset of smoking, psychological factors that caused smoking, environmental factors, effects of smoking on their lives, causes that increase smoking desire and causes to stop smoking were tried to be determined.

It was seen that the age of starting smoking for social studies teacher candidates ranged between 12-21 and started at the age of 17 at most. In the literature, it is possible to see similar findings regarding the age of onset of smoking. Research has determined that smoking habit starts between the ages of 15-19 (Pekşen & Species; 1995; Unlu, Forest, Cirit & Demirel, 2002; Coskun, Karadağ, Ursavas & Aegean, 2010). In the United States, it was concluded that young adults started smoking during their adulthood (Arrazola, Neff, Kennedy, Holder-Hayes &

Jones, 2014; American Cancer Society, 2014; Department of Health and Human Services, 2014). Some researches show that students try smoking for the first time in the last year of primary school or secondary school (Kocabaş, 1988). In 1992, 60% of young people between the ages of 16 and 18 said they tried smoking for once (Moss, Allen, Giovino & Mills, 1992).

It was stated that at the end of the 20th century, 80% of smokers started smoking before the age of 18 and the age at which smoking started was gradually decreasing (Coogan et al., 1998; Centers for Disease Control and Prevention, 1998; Department of Health and Human Services, 2012; 2014). The age of starting smoking is gradually decreasing and has decreased to the age of 13-19 (Ünlü, Orman, Javelin & Demirel, 2002). 65.1% of the high school students stated that they smoke at least once in their lives (Ögel, Tamar, Evren & Çakmak, 2000). In university students, smoking rate was found to be 61.5% at least once in their lives (Kolay-Akfert, Çakıcı & Çakıcı, 2009). In another study, the rate was found to be 73.9% (Boyaci, Corapcioglu, Ilgazli, Basyigit & Yildiz, 2003).

It is seen that the basic psychological factor that causes social studies teacher candidates to start smoking is wannabe.

In this study, the wannabe is 40%. Ünlü, Orman, Cirit & Demirel (2002) research found that the reason for teachers to start smoking is 82.1% wannabe. In the study conducted on secondary and high school students, 42.4% of the smokers gave curiosity / wannabe answers when asked the reasons for starting to smoke in the same way (Emekdar et al., 2017). In our study, stress / sadness is the second reason with a rate of 35%. In another study, it was found that relieving distress was the main reason for starting smoking (Boyacı et al., 2003).

The main environmental factor that causes social studies teacher candidates to start smoking is the friend effect. 80% and it appears to be a very high factor. Many studies in the literature emphasize that peer influence of friends is strong in starting smoking (Keskinoglu et al., 2005; Flay, Hu & Richardson, 1998). In another study, the effect of friends on university students was mentioned and 69.7% of smokers were known to have two or more close friends who smoke (Öksüz, Mutlu & Malhan, 2007). 68.1% of primary school students stated that they were friends as a reason to start smoking (Ünsal & Sezgin, 2009). The closest friends are very effective in starting smoking (Varies, Engels, Kremers, Wetzels & Mudde, 2003). In a study conducted on 1028 adolescents in 6th, 8th and 10th grade students, the effect of close friend factor on smoking and alcohol use was examined. If a student's close friend smokes cigarette and alcohol, it is determined that he starts smoking and drinking (Görgülü, 2019). In some studies, it has been revealed that smoking addicts consider smoking as friends (Şimşek, Akvardar, Doğanay, Pekel & Günay, 2014).

The most serious problem expressed by the prospective teachers was found to be shortness of breath. There are many similar studies in the literature. It is known that smoking addicts who smoke every day experience more shortness of breath than non-smokers (Diana, Petitti, Gary & Friedman, 1985; Demircan et al., 1994; Movahead & Milne, 2007). It was found that smokers are more tired, run more slowly, have difficulty in physical movements, muscle weakness and especially shortness of breath compared to nonsmokers (Soyuer, Ünalan & Elmalı, 2011).

Social studies teacher candidates stated that consumption of coffee and tea increases the need for smoking. Marshall, Green, Epstein, Rogers, and McCoy (1980) showed that subjects smoked more when they took coffee in one hour session. Tea and coffee drinking habits are known to affect smoking cessation treatment (Fidancı, Arslan, Tekin & Gümüş, 2016). Canbaz et al. (2005), in the study of smoking needs are the strongest, 41.4% after meals. The tea/coffee factor was 6.9% as the lowest factor.

_____

Social studies teacher candidates stated that they had difficulty in smoking with increasing hikes and they wanted to quit smoking for economic reasons. Some of their families do not know that they smoke and the money they send for education is not enough. In many studies in the literature, health problem is shown as the reason for smoking cessation. Sahin et al. (2005), the main reason for those who tried to quit smoking was found to be illness. Kutlu et al. (2005), in his study on those who quit smoking, stated that they quit smoking because it was a health problem and harmful. In the study of Konan (2012), 43.1% of the teachers who quit smoking stated that they would adversely affect their health in the future, 27.1% stated that they had health problems and 12.8% reported that they were harmful. In this research, the emergence of the economic problem can be interpreted as our study group is economically challenged because they are students.

As a result of the research, it is seen that the age of starting smoking is 12 age. Compared to previous years, the age of starting smokıng is gradually decreasing. Pre-service teachers start smoking with wannabe. Especially the environment of friends is very effective in starting smoking. Smoking adversely affects the vital functions and physical activities of young people. Coffee and cigarettes increase the desire to smoke. Although teacher candidates experience some health problems due to smoking, they want to quit smoking not for health reasons but for financial reasons. According to the results of the research, it can be suggested that smoking incentives, publications or images should be prevented. Awareness raising activities and activities can be increased. Reducing smoking-promoting foods and beverages may be recommended. Since the age of onset of smoking decreases to primary and secondary schools, conferences and academic meetings can be organized in schools. It will also be useful to have family, school and teacher cooperation coordinated in the fight against smoking addiction. If it is determined those children are trying to smoke, the necessary intervention should be done with the support of experts and addiction should be prevented.

Acknowledgements

References

American Cancer Society (n.d.). *Great American smoke out*. Atlanta, GA: American Cancer Society.

Arrazola, R. A., Neff, L. J., Kennedy, S. M., Holder-Hayes, E., & Jones, C. D. (2014). Tobacco use among middle and high school students – United States, 2013, *Morbidity and Mortality Weekly Report*, *63*(45), 1021-1026.

Boyacı, H., Çorapçıoğlu, A., Ilgazlı, A., Başyiğit., İ., & Yıldız, F. (2003). Kocaeli Üniversitesi öğrencilerinin sigara içme alışkanlıklarının değerlendirilmesi [Evaluation of the smoking habits of Kocaeli University students]. *Solunum Hastalıkları*, *14*, 169-175.

Canbaz, S., Sunter, A. T., & Tunçel, E. K. (2005). Ondokuz Mayıs Üniversitesi Yaşar Doğu Beden Eğitimi ve Spor Yüksek Okulu öğrencilerinde sigara içme sıklığı ve etkileyen faktörler [Smoking prevalence and affecting factors among students of Ondokuz Mayıs University Yaşar Doğu Physical Education and Sports High School]. *Bağımlılık Dergisi*, *6*(3), 111-116.

Centers for Disease Control and Prevention (1998). Tobacco use among high school students-United States. *Morbidity and Mortality Weekly Report*, *47*, 229-233.

Coogan, P. F., Adams, M., Geller, A. C., Brooks, D., Miller, D. R., Lew, R. A., & Koh, H. K. (1998). Factors associated with smoking among children and adolescents in Connecticut. *American Journal of Preventive Medicine*, *15*, 17-24.

Coşkun, F., Karadağ, M., Ursavaş, A., & Ege, E. (2010). Öğretmenlerin sigara içme alışkanlıkları ve yeni yasaya bakışları [Teachers' smoking habits and their view of the new law]. *Solunum*, *12*(3), 119-124.

Çapık, C., & Cingil, D. (2013). Hemşirelik öğrencilerinde sigara kullanımı, nikotin bağımlılık düzeyi ve ilişkili etmenler [Smoking, nicotine addiction level and related factors in nursing students]. *Kafkas Tıp Bilimleri Dergisi*, *3*(2), 55-61.

Demircan, C., Önder, Y., Emirler, N., Deniz, R., Oktar, F., & Şahin, B. (1994). Ondokuz Mayıs Üniversitesi Tıp Fakültesi çalışanlarında sigara içme sıklığı ve nedenlerinin araştırılması [Investigation of the frequency and causes of smoking in Ondokuz Mayıs University Faculty of Medicine employees]. *Journal of Experimental and Clinical Medicine*, *11*(3), 165-172.

Diana, B., Petitti, M. D., Gary, D., & Friedman, M. D. (1985). Respiratory morbidity in smokers of low- and high-yield cigarettes. *Preventive Medicine*, *14*(2), 217-225.

Emekdar G., Çıtıl, R., Önder, Y., Bulut, Y.E., Yaşayancan, Ö., Kazancı, N. Ö., Sönmezgöz, E., & Eğri, M. (2017). Tokat ili ortaokul ve lise öğrencilerinde sigara içme prevalansı ve etkileyen faktörler [Smoking prevalence and affecting factors in secondary and high school students in Tokat province]. *Journal of Contemporary Medicine*, *7*(1), 58-66.

Erbaydar, T., Avcı, S., & Altay, G. (2003). Öğretmenlerin okul ortamında sigara içilmesi ve öğrencilerin sigara kullanımı konusuna yaklaşımları [Teachers' and students' approach to smoking in the school environment]. *Marmara Üniversitesi Atatürk Eğitim Fakültesi Eğitim Bilimleri Dergisi*, *17*, 63-74.

Fidancı, İ., Arslan, İ., Tekin, O., & Gümüş E. (2016). Sigara bırakma başarısında; çay, kahve, alkol içme alışkanlıklarının, kilo alma korkusunun ve tedavi yöntemlerinin rolü [In smoking cessation success; Role of tea, coffee, alcohol drinking habits, fear of weight gain and treatment methods]. *Konuralp Tıp Dergisi*, *8*(2), 132-136.

Flay, B. R., Hu, F. B., & Richardson, J. (1998). Psychosocial predictors of different stages of cigarette smoking among high school students. *Preventive Medicine, 27*(5 Pt 3), 9-18.

Görgülü, T. (2019). Madde kullanım risk faktörleri ve madde kullanım davranışının sonuçları: Madde kullanıcılarının deneyimlerine ilişkin nitel bir çalışma [Substance use risk factors and consequences of substance use behavior: A qualitative study on the experiences of substance users]. *Addicta: The Turkish Journal on Addictions*, *6*(3), 509-536.

Kalınkılıç, E., & Baran, Z. (2019). Olumsuz duygudurum değişimlemesinin sigara kullanan ve kullanmayan genç yetişkin erkeklerde görülen dikkat yanlılığı üzerindeki etkileri [The effects of negative mood swings on attention bias in young adult males who smoke and those who do not.]. *Addicta: The Turkish Journal on Addictions*, *6*(3), 565-608.

Karadağ, M., Karadağ, S., Ediz, B., & Işık, E. S. (2011). Nikotin bağımlılığının sigara bırakmadaki etkisi [The effect of nicotine addiction on smoking cessation]. *Yeni Tıp Dergisi*, *29*(1), 27-31.

Kaylı, D.Ş., & Yararbaş, G. (2016). Ege Üniversitesi meslek yüksek okulu öğrencilerinin sigara içme durumları [Smoking status of Ege University vocational high school students]. *Celal Bayar Üniversitesi Sağlık Bilimleri Enstitüsü Dergisi, 2*(5), 134-138.

Keskinoğlu P., Karakuş, N., Pıçakçıefe, M., Giray H, Bilgiç N., & Kılıç B. (2006). İzmir'de lise öğrencilerinde sigara içme sıklığı ve içicilik davranışı üzerine sosyal öğrenmenin etkisi [The effect of social learning on smoking frequency and smoking behavior among high school students in Izmir]. *Toraks Dergisi*, *7*(3), 190-195.

_____

Kocabaş, A. (1988). Orta dereceli okul öğrencilerinde sigara içme alışkanlığı [Smoking habit in middle school students]. *Ankara Tıp Mecmuası*, *4*, 9-22.

Kolay-Akfert, S., Çakıcı, E., & Çakıcı, M. (2009). Üniversite öğrencilerinde sigara-alkol kullanımı ve aile sorunları ile ilişkisi [Smoking and alcohol use among university students and its relationship with family problems]. *Anadolu Psikiyatri Dergisi*, *10*, 40-47.

Konan, N. (2012). İlköğretim okulu ve lise öğretmenlerinin sigara içme alışkanlıkları [Smoking habits of primary and high school teachers]. *Sosyal Bilimler Dergisi*, *2*(4), 78-100.

Kutlu, R., Marakoğlu, K., & Çivi, S. (2005). Selçuk Üniversitesi Tıp Fakültesi hemşirelerinde sigara içme durumu ve etkileyen faktörler [Smoking status and affecting factors in nurses of Selcuk University Faculty of Medicine]. *Cumhuriyet Üniversitesi Tıp Fakültesi Dergisi*, *27*(1), 29-34.

Ögel, K., Tamar, D., Evren, C., & Çakmak, D. (2000). İstanbul'da lise gençleri arasında sigara, alkol ve madde kullanımı yaygınlığı [Prevalence of cigarette, alcohol and substance use among high school youth in Istanbul]. *Klinik Psikiyatri*, *3*, 242-245.

Marshall, W. R., Yeşil, S. B., Epstein, L. H., Rogers, C. M., & McCoy, J. F. (1980). Coffee drinking and cigarette smoking: II. coffee, urinary pH and cigarette smoking behavior. *Addictive Behaviors*, *5*(4), 395-400.

Movahead, M., & Milne, N. (2007). Association between amount of smoking with chronic cough and sputum production. *The Internet Journal of Pulmonary Medicine*, *7*(1), 1-3.

Moss, A. J., Allen, K. F., Giovino, G. A., & Mills, S. L. (1992). Recent trends in adolescent smoking, smoking-uptake correlates, and expectations about the future. *Advance Data*, *2*(221), 1-28.

Öksüz, E, Mutlu E. T., & Malhan, S. (2007). Characteristics of daily and occasional smoking among youths. *Public Health*, *121*, 349-56.

Okutan, O., Taş, D., Kaya, H., & Kartaloğlu, Z. (2007). Sigara içen sağlık personelinde nikotin bağımlılık düzeyini etkileyen faktörler [Factors affecting the level of nicotine addiction in smoking healthcare professionals]. *Tüberküloz ve Toraks Dergisi*, *55*(4), 356-363.

Pakyürek, G., & Şenyüz, L. (2019). Sigara kullanımı ve bilişsel yük farklılaşmasının ileriye dönük bellek performansına etkisinin incelenmesi [Investigation of the effect of smoking and cognitive load differentiation on prospective memory performance]. *Addicta: The Turkish Journal on Addictions*, *6*(2), 221-238.

Pekşen, Y., & Tür, A. (1995). *Smoking effect of health and smoking cessation*. İstanbul: Logos Yayıncılık.

Sağar, M. E. (2017). Üniversite öğrencilerinin sigara bağımlılığına ilişkin tutumlarının sigara içme sıklıklarına göre incelenmesi [Investigation of university students' attitudes towards cigarette addiction according to their smoking frequency]. *Gümüşhane Üniversitesi Sağlık Bilimleri Dergisi*, *6*(3), 41-49.

Spring B, Pingitore, R., & McChargue (2003). Reward value of cigarette smoking for comparably heavy smoking schizophrenic, depressed and nonpatient smokers. *The American Journal of Psychiatry*, *160*(2), 316-322.

Soyuer, F., Ünalan, D., & Elmalı, F. (2011). Sigara içmek üniversite öğrencilerinin fiziksel aktivitesini etkiliyor mu? [Does smoking affect the physical activity of college students?]. *Kafkas Tıp Bilimleri Dergisi*, *1*(3), 103-108.

Şahin, Ü., Öztürk, M., Ünlü, M., Uşkun, E., & Akkaya, A. (2000). Üniversite örgencilerinin sigara kullanım ve bağımlılık düzeylerini etkileyen faktörlerin irdelenmesi [Examining the factors affecting the smoking and addiction levels of university organizers]. *Türkiye Klinikleri Arch Lung*, *1*(2), 1-5.

Şimşek, H., Akvardar, Y., Doğanay, S., Pekel, Ö., & Günay, T. (2014). Sigara ve sigara bırakmaya ilişkin görüşler: Kalitatif bir araştırma [Smoking and smoking cessation views: A qualitative research]. *Türk Toraks Dergisi*, *15*, 18-22.

Tanrıkulu, A. Ç., Çarman, K. B., Palancı, Çetin, D., & Karaca, M. (2009). Kars il merkezinde çeşitli üniversite öğrencileri arasında sigara kullanım sıklığı ve risk faktörleri [Smoking prevalence and risk

factors among various university students in the city center of Kars]. *Türk Toraks Dergisi*, *10*, 101-106.

US Department of Health and Human Services (2012). *Preventing tobacco use among youth and young adults*. Atlanta, GA: US Department of Health and Human Services, CDC.

US Department of Health and Human Services (2014). *The health consequences of smoking — 50 years of progress*. Atlanta, GA: US Department of Health and Human Services, CDC.

Ünsal, A., & Sezgin, S. (2009). Erzurum ili ilköğretim okulu öğrencilerinin sigara kullanma durumlari [Smoking Situation of Erzurum Province Primary School Students]. *Türk Toraks Dergisi*, *10*, 75-81.

Ünlü, M., Orman, A., Cirit, R., & Demirel, R. (2002). Afyon'da lise öğretmenlerinin sigara içme alışkanlığı ve sigaraya karşı tutumları [Smoking habits and attitudes of high school teachers in Afyon]. *Solunum Hastalıkları Dergisi*, *13*, 203-207.

Vries, H., Engels, R., Kremers, S., Wetzels, J., & Mudde, A. (2003). Parents and friends smoking status as predictors of smoking onset: Findings from six European countries. *Health Education Research*, *18*, 627-636.

Yorgancıoğlu, A., & Esen, A. (2000). Sigara bağımlılığı ve hekimler [Smoking addiction and physicians]. *Toraks Dergisi*, *1*(1), 90-95.

_____

Syrian Refugee Middle School Students' Perceptions of the History Subjects Taught in Social Studies Lessons

Osman Akhan

Akdeniz University, Antalya, Education Faculty, TURKEY

Abstract

The purpose of this research is to determine perceptions of refugee middle school students in Turkey about history subjects taught in social studies classes. Accordingly, the study was designed in the phenomenology model, a qualitative research method. The sample included 58 middle school 7th and 8th grade Syrian students (28 female, 30 male) legally registered in Gaziantep province of Turkey in 2019-2020. Convenience sampling method was used to select the schools, and criterion sampling, a purposive sampling method, was used to select the sample from students in these schools. Research data were collected with a questionnaire form containing open-ended questions created by the researcher, and subjected to descriptive analysis. Considering the results of the research, one can say that the students could remember the history subjects they learned, and found Ottoman history subjects more interesting. However, they found history lessons boring, and studying history subjects was not effective in creating patriotic perceptions.

Keywords: refugee, Syrian, middle school students, history.

1. Introduction

People may voluntarily migrate to other countries in order to have a better life, bu they may also be forced to migrate to other countries due to extraordinary reasons such as war. The issue of migration, which is as old as human history, has created a new group of refugee children due to the increase in the population of refugee children in many countries over time. This situation has made it necessary for countries to take children into account in their immigration policies. Consequently, education policies for immigrant children have gained currency (Taşkın & Erdemli, 2018).

Many Syrians had to leave their country and migrated to various countries as a result of the civil war that broke out in Syria in 2011. It can be said that the Syrian refugee crisis is the biggest refugee crisis in the world. Countries like Turkey, Jordan and Lebanon have been severely affected by waves of immigration (Bicer, 2017). The unending civil war conditions in Syria, without a ray of hope for peace in the offing, *caused the refugees in Turkey to settle in Turkey* (Kılcı, cited in Çepni & Kilinc, 2017). Previously hosting large numbers of refugees, Turkey pursued an unconditional "open borders policy" for those fleeing the civil war in Syria, just as it did for those fleeing the military conflict and occupation in Iraq (Aydin & Kumar, 2017). Since the beginning of the Syrian crisis in 2011, the number of refugees in Turkey increased gradually, and it was hosting over 3 million Syrian refugees as of 2016-2017 (Tezel McCarthy, 2018).

Correspondence: Osman Akhan, Akdeniz University, Faculty of Education, Antalya, TURKEY. E-mail: osmanakhan@akdeniz.edu.tr.

Education has been a human right since the 1948 Universal Declaration of Human Rights. While refugee students are being planned to be integrated into the society they are in, prioritizing education, some negative behaviors may occur depending on the psychological conditions they experience. Considering that the Syrian refugee children have been traumatized by the violence they were subjected to, schools can serve as areas that can help refugee children escape from various threats (such as violence, abuse, child labor, child marriage) and help them return to normal and routine life after trauma. This fact is reason enough for the world to invest more resources in providing quality education to refugees (Gümüşten, 2017; Kiwan, 2021; Le, 2019). In addition, schools are an important factor in terms of social cohesion and integration of refugee children (Kağnıcı, 2017). In short, the inclusion of refugees in national education systems has been adopted as a standard global policy approach (Dryden-Peterson, 2020).

According to the data of the Republic of Turkey Interior Ministry General Directorate of Immigration Administration, the population of Syrians in the 5-17 age range in our country is increasing on a yearly basis. Education services are planned and conducted in line with these data. In the 2019-2020 academic year, the number of Syrians at school age was 1,082,172. The number of Syrian students who were provided with access to education was 684,919 in 2019-2020. The number of Syrian students who were given access to formal education was determined as 50.82 % for male (348,103) and 49.18 % (336,816), for female students, whereas the number of female students at middle school level was 109,875 and male students 113,307 (MNE, 2020).

The refugee reality experienced in Turkey has revealed the necessity to implement a strategic planning at the Ministry of National Education (MNE) related to refugee children. This plan includes activities planned to overcome the existing obstacles for the adaptation of refugees to the education system, international cooperation agreements and educational activities at national level. Syrian students are entitled to receive education in Turkish in Turkey with their peers (Baloğlu Uğurlu & Akdovan, 2019; Unal Gezer, 2019).

Although each discipline area has a distinct place in terms of social adaptation of refugees in educational institutions, Social Studies is one of the courses that emphasize the teaching of social values the most in terms of content. The Social Studies course tries to instill a sense of us, not me, in refugee children and this improves the sense of social belonging in refugee children. Moreover, learning about our history, geography and culture, learning written and unwritten social rules and adopting citizenship responsibilities will be effective in terms of their adaptation to Turkish society (Baloğlu Uğurlu & Akdovan, 2019).

Children with backgrounds and traditions belonging to different societies will share the same learning environment, use the knowledge, skills, values and attitudes they have acquired in the Social Studies course in their own communication environments and will internalize peace and tolerance, which are indispensable for a society, and transfer them to their own lives. It should not be forgotten that Social Studies has a curriculum that includes some current social issues like global peace and has inherent potential for solving some social and global problems (Odia, 2014, cited in Baloğlu Uğurlu & Akdovan, 2019). It can be said that teaching subjects of history, which is one of the most basic disciplines of the Social Studies course, which derives its content from social sciences, is important for integrating students from different cultures into the society they live in. Therefore, the purpose of the present research is to determine the perceptions of middle school students who are refugees in Turkey about the subjects taught in history classes.

When the literature related to the subject under investigation is examined, it is seen that many studies have been conducted on refugees (Ardıç-Çobaner, 2015; Balkar, Şahin & Işıklı Balaban, 2016; Başar, Akan & Çiftçi, 2018; Börü & Boyacı, 2016; Kağnıcı, 2017; Kara, Yiğit & Ağırman, 2016; Er & Bayındır, 2015; Erdem, 2017; Kolukırık, 2009; Özer, Komşuoğlu & Ateşok, 2016; Mercan-Uzun & Tüm, 2016; Palaz, Çepni & Kılcan, 2019; Sakız, 2016; Şeker & Aslan, 2015; Topkaya & Akdağ, 2016; Yurdakul & Tok, 2018; Zaimoğlu-Öztürk, 2018; Baloğlu Uğurlu &

Akdovan, 2019; Ablak, 2020). However, there is no study in the literature in which refugee students were directly included as samples. Therefore, it is hoped that our research will serve as a basis for new studies.

2. Method

This study was designed in the phenomenology model, which is one of the qualitative research methods. The phenomenology model is a highly suitable model for studying both emotional and effective and intense experiences (Merriam, 2018). In phenomenological studies, it is aimed to bring the individual experience associated with a case to a general level. In addition, these studies help reveal and interpret personal perceptions (Creswell, 2007; Yıldırım & Şimşek, 2013). Therefore, phenomenology was used in this study, which aimed to reveal the perceptions of middle school students who were refugees in Turkey regarding the topics of history taught.

3. Sample

The sample consisted of 58 Syrian students (28 female and 30 male) legally registered in the Gaziantep province of Turkey and attending middle school 7th and 8th grades during the 2019-2020 academic year. The convenience sampling method was used in the study in the selection of the middle schools, and criterion sampling, which is one of the purposive sampling methods, was used in the selection of the sample from among the students in these schools. Criterion sampling "aims to work with individuals who meet pre-determined conditions" (Yıldırım & Şimşek, 2013). The main purpose of using the convenience sampling method is "to provide speed and practicality to the researcher" (Büyüköztürk, Kılıç Çakmak, Akgün, Karadeniz & Demirel, 2008). The criterion for the sample in this research was to be studying in the 7th and 8th grades in middle school, to be literate in Turkish and to be refugees in Turkey. In the determination of the sample, it was ensured that the participation of the students in the study was entirely on a voluntary basis.

4. Data collection and analysis

The research data were collected with a questionnaire form consisting of open-ended questions created by the researcher. While creating the questions, the relevant literature was examined and the opinions of faculty members who specialized in the field were utilized.

The data obtained from the research were subjected to descriptive analysis. The purpose of descriptive analysis is to interpret the obtained findings and present them to the readers in an orderly manner (Yıldırım & Şimşek, 2013). In order to increase the reliability of the research, the analyses were conducted, apart from the researchers, with the help of two researchers, who were experts in their fields. For the reliability of the research, the formula R (Reliability) = [Na (Agreement 40) / Na (Agreement 40) + Nd (Disagreement 3)] x 100, which was proposed by Miles and Huberman (1994), was used. According to the calculations made, the reliability was found to be 93 % and the analysis of the research was accepted as reliable. In addition, the findings were supported by direct quotations from the students' opinions (S1: Student 1, S2: Student 2).

5. Findings

5.1 *Findings regarding which history subjects taught in the social studies course the students in the sample remembered*

The students in the sample were first asked which history subjects they remembered from the social studies course. The answers given by the students are shown in Table 1.

Table 1. The history subjects that the students remembered

Codes	f
Ottoman History	36
Culture and Heritage	28
National Struggle	25
History of the Republic	14
Reformation-Renaissance	11
Colonialism	8
The Age of Enlightenment	5
The French Revolution	4
Central Asia	3
The Seljuk State	3
Ancient Civilizations	2
Turkic World	2

Considering Table 1, it can be said that in general the students in the sample could recall history subjects in social studies. Since the sample consisted of 7th and 8th grade middle school students, it was observed that the students mostly mentioned the subjects of the period they studied, such as Ottoman History, National Struggle and History of the Republic. In addition, it was observed that the students gave the names of the units directly because the subjects they studied about history in the social studies course were given in the learning area of "Culture and Heritage". Some of the students' answers are as follows:

> *The subjects I remember from social studies are the subjects of Ottoman history and culture and heritage.*

> *There are many things that I remember, but of the topics related to history, I can only list Ottoman history and Seljuks.*

> *We studied a lot of subjects from history. When I think of history, Culture and Heritage comes to mind.*

5.2 *Findings about the subjects that interested the students the most from the history subjects taught in the social studies course*

The students in the sample were asked which subject attracted the most attention among the history subjects they studied in the social studies course. The answers given by the students are shown in Table 2.

Table 2. History topics attracting students' interest

Codes	f
Ottoman History	21
Life of Mustafa Kemal	13
Topics with Ataturk	11
The Conquest of Istanbul	6
The History of Revolution	5
Ataturkism	2

Considering Table 2, it is seen that one of the most interesting subjects among the history subjects that the students in the sample studied in the social studies course is again the subjects related to Ottoman history. After that, it can be said that the subjects of The History of Revolution attracted more attention from the students. Some students, on the other hand, cited the Conquest of Istanbul, which is also one of the subjects of Ottoman history, among the topics that also attracted their attention. It can be said that the students also associated the films they watched with the subjects that interested them. Some of the students' answers are as follows:

> *Studying Ottoman history sounds very interesting. Every era feels like an adventure movie. Indeed, their movies are also very interesting.*

> *I am interested in every subject that involves Ataturk. Because he is a leading person.*

> *The Conquest of Istanbul attracted me a lot because I had also watched a movie about it.*

5.3 *Findings regarding the subjects that the students had the most difficulty with from among the history subjects taught in social studies course*

The students in the sample were asked which history subjects they had the most difficulty with from among the subjects they studied in the social studies course. The answers given by the students are shown in Table 3.

Table 3. History subjects that the students had difficulty with

Codes	f
Chronological information	20
Wars	15
Historical names	13
Historical concepts	8
Historical locations	3
Ancient history subjects	1
The Caucasian Front	1

Considering Table 3, it is seen that chronological information comes first among the subjects that the students in the sample had the most difficulty with from the history subjects they studied in the social studies course. In addition, it can be said that the students had difficulty with subjects such as wars and historical names, which are known as subjects requiring rote learning in history teaching. Some of the students' answers are as follows:

I get confused about historical names a lot and learning them is difficult.

I have a hard time learning the dates. I'm afraid they'll be on the exam. If they are asked, I will confuse them.

I have difficulty learning about wars. Actually, I can say that I don't like wars, I don't want to learn about them.

5.4 *Findings regarding the opinions of the students about the treatment of the history subjects taught in the social studies course*

The students in the sample were asked how the history subjects they studied in the social studies course were taught. The answers given by the students are shown in Table 4.

Table 4. Students' assessment of the way the history course was taught

Codes	f
Boring	22
Constant test solving	19
Not written on the board	12
Reading from the book	9
Requires memorization	5
Plain teaching	2
Very enjoyable	6

Considering Table 4, it is seen that the students in the sample generally used negative expressions such as "boring, continuous test solving, and reading from the book" regarding the teaching of the history subjects they studied in the social studies course. 6 students in the sample, on the other hand, used positive expressions about the course. It was found that the same teacher taught the classes of the students who used positive expressions and the students cited the teacher's name, saying his/her classes were enjoyable. Some of the students' answers are as follows:

In the history class, the teacher constantly does tests. It's like an exam preparation lesson. I am very overwhelmed.

The teacher is constantly reading from the book. If s/he does not read himself/herself, s/he makes us read it.

I love the social studies course. I wish every lesson was as enjoyable as Ayla teacher's lesson.

_____

5.5 *Findings about the students' opinions regarding the certain historical events from the history subjects taught in the social studies course*

The students in the sample were given 5 topics from the history subjects taught in the social studies course. The students were asked which subject they knew best and could teach. The answers given by the students concerning the subjects they preferred are shown in Table 5.

Table 5. History subjects students knew best

Subjects	f
Ottoman History	26
National Struggle Period	23
World War I Fronts	11
Central Asian Turkish History	10
Anatolian Civilizations	6

When the students in the sample were asked to choose one of the topics related to history, it was observed that the students preferred the Ottoman History and National Struggle Period more, which is in support of the previous findings, and they stated that they had more mastery of these subjects. Some of the students' answers are as follows:

I would have preferred subjects of Ottoman history. For I have more interest. Because I would like to better understand that period, since it ruled Syria and Iraq fairly for many years.

I prefer topics of national struggle. There are many lessons to learn from that struggle. I think it is an exemplary period for the whole world.

I prefer Anatolian civilizations. Because Anatolia is a key point for all humanity. I believe that understanding this geography well will shed light on the future.

5.6 *Findings regarding the effect of history subjects taught in social studies course on students' perceptions of citizenship*

The students in the sample were asked what the contribution of the history subjects they studied in social studies lessons was to their thoughts of citizenship. 37 of the students in the sample could not comment on the contribution of the history subjects to their citizenship perceptions. These students could not make an evaluation about the effect of the history subjects on their own thoughts of citizenship by giving answers such as "I don't know, I don't think so, and they didn't contribute much". The answers given by the other 21 students are shown in Table 6.

Table 6. Contribution of history subjects to students' *patriotic* thoughts

Subjects	f
I became *distanced/alienated*	17
I understood	3
I appreciated	2
I realized the truth	1
I felt I belonged	1

According to Table 6, when the answers of the students in the sample who said that history subjects had an effect on their understanding of citizenship were examined, it can be said that there were those who stated that they became distanced from a feeling of citizenship because they could not learn their own history. Some of the students' answers are as follows:

> *In the history class, I learn the history of the country where I live. That is why I feel that I am becoming distanced from being a citizen of my own country.*

> *As I study the subjects of history, I feel myself belonging here as much as my own country. Because, in fact, the solution of the problems my country is experiencing lies in the past.*

> *Seeing the past mistakes in the history classes made the present more meaningful. Because my country and the country where I live have experienced many common events in the same geography.*

6.Conclusion and suggestions

When we make a general evaluation of the results of this research, which aimed to reveal the perceptions of middle school students, who were refugees in Turkey, concerning the history subjects taught in social studies classes, it is possible to say that the students could remember the history subjects they had studied; subjects related to Ottoman History attracted their interest more; they found history classes boring, and the classes did not have much effect on their perceptions of patriotism. When we evaluate the results of the study in terms of sub-dimensions, the following results appear.

It can be said that the students in the sample could generally recall the history subjects in the social studies course. Since the sample consisted of 7th and 8th grade middle school students, it was observed that the students mostly cited the subjects of the period they studied, such as Ottoman History, National Struggle, and History of the Republic. In addition, it was observed that the students gave the name of the unit directly because the subjects they were taught about history in the social studies course were given in the learning area of "Culture and Heritage". It is possible to interpret this result as an indication that the students were interested in the lesson and could remember history subjects.

The subjects that attracted the most attention of the students in the sample from among the history subjects they studied in the social studies course were again those related to Ottoman History. Then, it can be said that the subjects of History of Revolution attracted more attention from the students. Some students also mentioned the subject of the Conquest of Istanbul, which is also among the Ottoman history subjects. It was determined that the students also associated the topics that interested them with the films they watched. Accordingly, it can be said that the students had an interest in Ottoman History, which covers a time period shared by their own country, as well as recent Turkish history. This interest can be attributed to the films they watched and their finding information about their country in Ottoman history. Moreover, when the students in the sample were asked to choose one of the topics related to history, it was seen that the students preferred Ottoman History and the National Struggle period more, which is in support of the previous findings. Moreover, they stated that they were more knowledgeable about these subjects. Likewise, the findings in Biçer's (2017) study indicate that Syrian refugees saw similarities between Turkish culture and their own culture, watched Turkish movies, listened to Turkish songs and knew Turkish traditions. We can say that these findings show that refugees had a positive approach to Turkish culture and they adopted various cultural elements.

Chronological information was one of the most difficult subjects that the students in the sample studied in the social studies course. In addition, it can be said that the students had difficulties with subjects such as wars and historical names, which are known to require rote

learning in history teaching. It can be said that the students found the aspect of history that required memorization boring. The students in the sample also generally used negative expressions such as "boring, constantly doing tests, and reading from a book" about the treatment of the history subjects they studied in the social studies course. Similarly, Ulusoy (2009) concluded that students found history lesson boring because it was taught plainly and they felt uncomfortable with the subjects that required memorization. The fact that the findings of Ulusoy's study on Turkish students show similarities with the findings of this research conducted with refugees indicates that history lessons are still being taught in a plain and monotonous way for students in our schools. Moreover, it can also be considered that refugee students were reactive to wars as they found them repulsive as well as difficult, considering the reason for leaving their country. For example, in Aydin and Kaya (2017)'s study with teachers, one teacher observed, "I shouted in the middle of the classroom and my Syrian student covered his ears. I saw the fear in his eyes. Then I realized the fear the war brought them." These statements support the findings of the present research. In Ulusoy's (2009) study, it was found that Turkish students did not feel uncomfortable about subjects related to war. This finding of Ulusoy can be interpreted to mean that Syrian students had difficulty with these subjects because they caused them to remember the negative experiences they had of the recent events. In the findings of the present study, it was also seen that 6 students in the sample used positive expressions about the treatment of history subjects. Considering the data of the students who used positive expressions, they stated that the same teacher taught the classes of these students and their classes were enjoyable. Although it was determined that the students found the history lesson boring, the fact that, of the students in the sample, the students in the class which the same teacher taught found history lesson enjoyable points to the role of the teacher in making the lesson popular.

When the students in the sample were asked what the contribution of the history subjects they studied in the social studies classes was to their thoughts about citizenship, 37 of the students could not make a comment about the contribution of the history subjects to their perception of citizenship. These students could not make an evaluation about the effect of history subjects on their own thoughts of citizenship by giving such answers as "I don't know, I don't think so, they did not contribute much". Of the 21 students who said that the history subjects had an effect on their understanding of citizenship, there were also those who said that they became distanced from an understanding of citizenship because they could not learn their own history. However, there were also some who cited the positive effects on their perception of citizenship by associating the history of their country with the history subjects they studied in our country. *Considering the purpose of our research, this result can actually be interpreted to mean that the history subjects failed to achieve the desired goal, taking into account the importance of creating a sense of belonging in refugee students' perceptions of the citizenship during their school period.* Similar to this result, Zayimoğlu-Öztürk (2018) revealed that social studies teachers thought that refugee students should first embrace the society they lived in and adapt to the cultural structure of the country. However, they found the content of the social studies lesson inadequate in terms of refugees' adaptation to our country. On the other hand, it is an important problem that refugee students in our country cannot develop a perception of homeland in their minds during school age. Dryden-Peterson (2020) indicated that a refugee student was in a dilemma with questions like "What will my life be if I integrate as a citizen of this country? Would it be better or worse than I was in the refugee camp?". The words of a refugee student in Aydın and Kaya (2017) reading "I am in a different place, I live in a different country. But my heart remained in Syria" reveal the uncertainty they experienced during their school years.

In the 1951 Geneva Convention, the refugee was defined as a stateless person residing in a different country for fear of persecution for reasons of race, religion, nationality, political opinion or other reasons (Geneva Convention, 1951). The expression "stateless" in this definition should in fact be considered, as Ilcan (2018) stated, indicating that responsible citizenship education and good citizenship education should aim to instill socially acceptable behaviors in

refugees in a supportive environment. For students experience problems in adapting to the school culture and therefore to the society they live in at school age. For example, Başar, Akan and Çiftçi (2018) revealed in their study that teachers stated that refugee students had communication problems because they faced linguistic barriers in the learning process. Likewise, Caniglia (2018) emphasized that teachers from various disciplines stated that they had difficulties in preparing refugee students for academic and professional education. Reinking (2019), on the other hand, revealed that refugee children often experienced interruptions in allocating time to school. Considering all these problems, it may be suggested that social studies course and especially history subjects in the middle school period should be organized in a way to help students' adaptation, or to help refugee students to integrate into the country with different activities during the classes. In addition, academic studies should be conducted in this regard, especially with refugee students as sample, and steps should be taken in every sense in education in their favor by clarifying the problems and the relations of students in different fields.

Acknowledgements

References

Ablak, S. (2020). Attitudes of secondary school students towards refugee students. *International Journal of Psychology and Educational Studies, 7*(3), 101-110.

Ardıc-Cobaner, A. (2015). Representation of Syrian refugee children in news in the context of children rights. *Marmara Journal of Communication, 24,* 27-54. https://doi.org/10.17829/midr.20152419996

Aydin, H., & Kaya, Y. (2017) The educational needs of and barriers faced by Syrian refugee students in Turkey: A qualitative case study, *Intercultural Education, 28*(5), 456-473, https://doi.org/10.1080/14675986.2017.1336373

Balkar, B., Şahin, S., & Işıklı Babahan, N. (2016). Problems confronted by Syrian teachers working at temporary education centers (TECS). *Journal of Theory and Practice in Education, 12*(6) 1290-1310.

Baloğlu Uğurlu, N., & Akdovan, N. (2019). Refugee students from the perspective of social studies teachers. *Bolu Abant Izzet Baysal University Journal of Faculty of Education, 19*(3), 782-801.

Başar, M., Akan, D., & Çiftçi, M. (2018). Learning-teaching process issues in classrooms with refugee students. *Kastamonu Education Journal, 26*(5), 1571-1578. https://doi.org/10.24106/kefdergi.427432

Biçer, N. (2017). The views of Syrian refugees migrating to Turkey on the Turkish language and culture: Kilis case. *Journal of Education and Training Studies, 5*(3), 97-109.

Börü, N., & Boyacı, A. (2016). Immigrant students' problems in education-instruction processes (an example of the province of Eskisehir). *International Periodical for the Languages, Literature and History of Turkish or Turkic, 11*(14), 123-158.

Büyüköztürk, Ş. Çakmak, E. K. Akgün, Ö. E. Karadeniz, Ş., & Demirel, F. (2010). *Bilimsel araştırma yöntemleri* [Scientific research methods]. Ankara: Pegem A Yayıncılık.

_____

Caniglia, J. (2018) *Teaching function mathematics skills to refugees. Adults Learning Mathematics*: *An International Journal*, *13*(1), 7-16.

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

Dryden-Peterson, S. (2020) Civic education and the education of refugees. *Intercultural Education*, *31*(5), 592-606. https://doi.org/10.1080/14675986.2020.1794203

Er, A. R., & Bayındır, N. (2015). Pedagogical approaches of elementary teachers for primary refugee children. *International Journal of Social and Educational Sciences*, *2*(4), 175-185.

Erdem, C. (2017). Instructional problems experienced by primary school teachers who have refugee students in their classes and their solutions for problems. *Journal of Civilization Educational Research*, *1*(1), 26-42.

Geneva Convention (1951). Retrieved from http://www.multeci.org.tr/wp-content/uploads/2016/12/1951-Cenevre-Sozlesmesi-1.pdf.

Gümüşten, D. (2017). Review on intervention programs for refugee children's education and adaptation. *Nesne-Journal of Psychology*, *5*(10), 247-264.

Ilcan, S. (2018). The humanitarian-citizenship nexus: the politics of citizenship training in self-reliance strategies for refugees. *Geografiska Annaler: Series B, Human Geography*, *100*(2), 97-111. https://doi.org/10.1080/04353684.2018.1453754

Kağnıcı, D. Y. (2017). School counselors' roles and responsibilities in cultural adaptation process of Syrian refugee children. *Elementary Education Online*, *16*(4), 1768-1776.

Kara, Ö. T, Yiğit, A., & Ağırman, F. (2016). The study of the perceptıons of the students studyıng ın the department of turkısh teachıng ın Çukurova unıversıty about the term "Syrian refugee". *Journal of Theory and Practice in Education*, *12*(4), 945-961. https://doi.org/10.17051/ilkonline.2017.342990

Kılcan, B., Çepni, O., & Kılınç, A. Ç. (2017). Development of the attitude towards refugee students scale. *Journal of Human Sciences*, *14*(2), 1045-1057. https://doi.org/10.14687/jhs.v14i2.4324

Kiwan, D. (2021) Inclusion and citizenship: Syrian and Palestinian refugees in Lebanon. *International Journal of Inclusive Education, 25*(2), 283-297. https://doi.org/10.1080/13603116.2019.1707308

Kolukırık, S. (2009). Image of refugees and asylum-seekers in the media: an evaluation on media politics. *Gaziantep University Journal of Social Science*, *8*(1), 1-20.

Le, H. M. (2019). Private encroachment through crisis-making: The privatization of education for refugees. *Education Policy Analysis Archives*, *27*(126). https://doi.org/10.14507/epaa.27.4325

MEB (2020). Yıllara göre ülkemizde bulunan geçici koruma altındaki Suriyeli nüfus [Syrian population under temporary protection in our country by years.]. *MEB. Hayat Boyu Öğrenme Genel Müdürlüğü Göç ve Acil Durum Eğitim Daire Başkanlığı Bülteni*. https://hbogm.meb.gov.tr/meb_iys_dosyalar/2020_01/27110237_OCAK_2020internet_BulteniSunu.pdf (Downloaded on 15 January 2021).

Mercan Uzun, E., & Bütün, E. (2016). Teachers' views on the problems faced by Syrian refugee children in preschool education institutions. *International Journal of Early Childhood Education Studies-IJECES, 1*(1), 72-83.

Merriam, S. B. (2018). *Nitel araştırma/desen ve uygulama için bir rehber* (3. Baskı, Çev. S. Turan). Ankara: Nobel Yayınevi.

Miles, M. B., & Huberman, A. M. (1994). *Qualitative data analysis: An expanded sourcebook* (2nd ed.). Thousand Oaks, CA: Sage.

Özer, Y. Y., Komşuoğlu, A., & Ateşok, Z. Ö. (2016). Education of Syrian children in Turkey: Problems and suggestions. *The Journal of Academic Social Science*, *4*(37), 34-42.

Palaz, T., Çepni, O., & Kılcan, B. (2019). Secondary school students' opinions and attitudes on refugee students. *Turkish Studies Educational Sciences*, *14*(3), 1661-1684. https://doi.org/10.29228/TurkishStudies.22631

Reinking, A. K. (2019). Addressing the needs of refugee students in school environments: Pre and post arrival considerations. *New Waves Educational Research & Development*, *22*(1), 14-26.

Sakız, H. (2016). Migrant children and school cultures: A suggestion for inclusion. *Migration Journal*, *3*(1) 65-81.

Seker, B. D., & Aslan, Z. (2015). Refugee children in the educational process: A social psychological assessment. *Journal of Theoretical Educational Science*, *8*(1), 86-105. https://doi.org/10.5578/keg.8234

Taskin, P., & Erdemli, O. (2018). Education for Syrian refugees: Problems faced by teachers in Turkey. *Eurasian Journal of Educational Research*, *75*, 155-178. https://doi.org/10.14689/ejer.2018.75.9

Tezel McCarthy, A. (2018). Politics of refugee education: Educational administration of the Syrian refugee crisis in Turkey. *Journal of Educational Administration and History*, *50*(3), 223-238.

Topkaya, Y., & Akdağ, H. (2016). Prospective social studies teachers' views about Syrian defectors (Kilis 7 Aralık University Sample). *Cankiri Karatekin University Journal of Institute of Social Sciences*, *7*(1), 767-786.

Ulusoy, K. (2009). High school students' views about instructıon of history lessons (A case study in Ankara). *Ç.Ü. Journal of Social Sciences Institute*, *18*(1), 417-434.

Ünal Gezer, M. (2019). Looking through the multicultural glass: Re-examination of Syrian refugee children education in Turkey. *Eurasian Journal of Applied Linguistics*, *5*(2), 303-322. https://doi.org/10.32601/ejal.599275

Yıldırım, A., & Şimşek, H. (2013). *Sosyal bilimlerde nitel araştırma yöntemleri* (9. Baskı) [Qualitative research methods in the social sciences]. Ankara: Seçkin Yayıncılık.

Yurdakul, A., & Tok, T. N. (2018). Migrant/refugee student from the view of teachers. *Adnan Menderes University Journal of Educational Sciences*, *9*(2), 46-58.

Zayimoğlu-Öztürk, F. (2018). Evaluation of educational service provided for refugee students according to social studies teachers' opinions. *Anadolu Journal of Educational Sciences International*, *8(*1), 52-79. https://doi.org/10.18039/ajesi.393879

Intergenerational Education to Enhance Sustainable Community Development

Nives Ličen

University of Ljubljana, Faculty of Arts, SLOVENIA

Aleksandra Šindić

University of Banja Luka, Faculty of Philosophy, BOSNIA AND HERZEGOVINA

Jurka Lepičnik Vodopivec

University of Primorska, Faculty of Education, SLOVENIA

Klara Kožar Rosulnik

Research Centre of the Slovenian Academy of Science and Arts, SLOVENIA
Slovenian Migration Institute

Abstract

The article outlines the emergent cooperation between generations in the local environment. The aim of the research was to identify the key characteristics of learning ecologies that may be used to promote new practices. The theoretical framework was constructed through the concepts of learning ecology, community education, and postformal education. A qualitative research approach was used. Data was collected by means of 10 individual and one focus group interviews. The research revealed that the networks of different actors in the local community are effective approaches for developing intergenerational practices. It is important to connect different types of knowledge (intangible cultural heritage, local knowledge and scientific knowledge, social and emotional knowledge), skills and values, as well as different groups and organizations in the local environment to act and learn together.

Keywords: community education, learning ecology, local community, sustainable development.

1. Introduction

The complexity of the 21ˢᵗ century leads to a search for innovative practices that can respond to the social and economic challenges of the ecological crisis. A number of projects that explore the options for developing new social practices are underway and various non-governmental organizations, e.g., ECOLISE, the European network for community-led initiatives, have emphasized the need for social innovation. The presented research was based on the thesis that sustainable development and community well-being require the education of all generations and, therefore, new intergenerational connections are sought. A new ethic linked to ecological justice is emerging in the wake of the posthumanist turn (Häggström, 2017; Smith, 2019). The aim

was to explore the factors that promote the development of innovation in community-based environmental education. The conceptual framework for reflection on intergenerational learning consisted of postformal education, learning ecologies, community well-being and intergenerational education.

2. Conceptual framework

2.1 *Learning ecologies and postformal education*

Educational organizations are opening up to the environment and joining together in educational and learning networks. To reflect on their work, they use the concept of postformal education (Gidley, 2016) and posthumanism (Braidotti, 2013), which allows the interpretation of learning with a focus on interpersonal relationships and relationships between humans and non-humans (Taylor & Hughes, 2016). Higgins (2016) explored the ecologies of relationships, which include those between humans, and relationships between humans and other-than-human matter, i.e., plants, animals, rivers, mountains, space. They also include more-than-human relationships, i.e., relationships with what is beyond humans. The ecology of relationships encompasses all individuals' relationships with humans and non-humans (e.g., street graffiti, which serves the role of an educator), with learning taking place in all relationships. Local culture is created in relationships, as is a sense of place (Jubas & Lenters, 2019; Fenwick & Edwards, 2017). This is important for the presented research as intergenerational ecological education is intended to encourage attachment to a place.

Another concept that has emerged in addition to the ecologies of relationships is the learning ecology concept, which incorporates all learning processes that create complex learning environments (Barnett & Jackson, 2020; Yamagata-Lynch, 2010) and multiple complex systems of interaction. Therefore, it is perfectly legitimate to explore the cooperation between different actors of formal, non-formal, and informal education as there is a flow of knowledge, skills, values, attitudes, and affects between environments. Since all learning activities within an environment form a learning ecology, it is important to connect different types of learning and different learning outcomes (e.g., knowledge, practical wisdom, wisdom, skills, virtues), as well as groups of people and institutions.

Postformal education and posthumanism challenge traditional concepts, such as identity. Identity formation is a persisting entity and is a culturally and spatially embedded process, which is why the term "liquid learners" has emerged to refer to learners who are formed continuously. In posthumanism, ecological views of humans come together in movements that do not believe humans occupy a central position in the world, whereas anthropocentrism was a human-centered viewpoint that regarded humans as actors that impact the development of their environment. Industrial society has brought development – based on rationality and power – to the forefront, despite the fact that humans are not the only ones living on the planet and should consider all other living and non-living things (Taylor & Hughes, 2016). Posthuman ecologies (Braidotti & Bigual, 2018) expose human agency and moral responsibility in connection with the contemporary paradox of non-human development. Responses to many challenges also need to be sought in education. The responses will be reflected as the changed paradigms of learning that Gidley (2016) referred to as postformal education, which responds to the complexity of our time. The existing education model was developed to educate people for industrial and colonial expansion, and modern education is expected to prepare people for global uncertainty, complexity and changes. It is therefore imperative to develop creativity, flexibility and participation, as well as resilience and, in doing so, connect all learning environments, i.e. all environments where people learn, into common learning ecologies.

_____

2.2 *Community well-being and community education*

Community well-being is defined as a "state in which the needs and desires of a community are fulfilled" (Lee, Kim & Philips, 2015: 2; Martinez, Verplanke & Miscione, 2017: 386-387). This includes economic, social, environmental and cultural needs. An alternative definition links well-being to the quality of life. However, at a time of intense technoscientific transformation, when it is not known where the development in an industrially polluted environment is heading for, it is necessary to think critically about the ecological crisis (Latouche, 2018), the extreme complexity and the weak sense of belonging that affect community well-being. Guattari (2000) sought the answer to this problem in ecological philosophy, i.e., a philosophy of ecological harmony. Ecosophy is an ethico-political articulation between ecological registers: the environment, social relations and human subjectivity. An ecosophical issue is that of the production of human existence itself in new historical contexts, and therefore strives for the development of specific practices that will modify the ways in which we live as families, in a local community or at work. Mental ecosophy will lead us to reinvent the relation of the subject to the body, the passage of time, the mysteries of life and death (while searching for conformism, standardisation, manipulation through advertising, etc.). As pointed out by Guattari (2000), to exist it is not enough only to think (*cogito*), as one does not only exist in thoughts, but the subject is created in many areas (Higgins, 2016; Gidley, 2016). Guattari (2000, p.36) used the term components of subjectification, which are the elements of all types of education. It is necessary to kick the habits, routines, and the 'sedative discourse' in order to be able to apprehend the world and the production of human existence through the points of view of the three ecologies. Intergenerational education has the capacity to explore routines. Intergenerational education and sustainable development are viewed as a complex and integrated practice that is embedded in a particular social and cultural context. All the elements are interconnected and act as a whole that is aimed at developing community well-being. Social well-being includes the following: affective elements such as belonging, inclusion, contribution and trust, as well as social elements such as solidarity and common goals. All these elements can be impacted through education. All events or practices take place in a context that includes history (personal history, community history), as well as present events and future projections.

An important concept for community education is the concept of social empowerment of all groups through connectivity and inclusion (Anderson, 2017). Intergenerational education as part of community education is an extensive and inclusive education, defined by local narratives, non-hierarchical relationships, progressive and emancipatory dynamics. These ideas are important because, in the light of a sustainable future, transformative and expansive learning is required to develop mutual trust, solidarity and reciprocity. Community education promotes commitment to the common good and to caring relationships, all of which is part of community well-being. In its early beginnings, community education in local environments also became linked to religion as an integral part of culture. However, since contemporary religiosity "individualizes" and no longer constitutes a binding element, a different kind of connection is important, such as being connected through joint efforts to save the environment.

Sustainable development can be considered in broader and narrower contexts. A policy framework set by the United Nations is a very broad context. The broad goals of the 2030 Agenda embody a common global vision. They are a universal set of goals for which the UN member states are expected to strive, however, more culturally specific goals that are relevant to the local environments need to be created for each environment. In doing so, it is also important to develop environmental ethics through education (Weldemariam, 2017). Intergenerational education for sustainable development is a dynamic and rapidly evolving practice that includes a new perspective on education and seeks to educate all generations to take responsibility for co-creating the future. Various institutions are involved in the organization of education for sustainable development: universities, adult education centers, primary schools, cultural

institutions, societies and also preschools. Parents and grandparents are willing to participate in children's projects, and schools can thus operate as a factor that contributes to the awareness of the importance of environmental protection in the local environment.

3. Research problem and research questions

The empirical part of the research was focused on examining cases through which community learning networks are developed in the local environment with regard to the implementation of environmental intergenerational education practices. Environmental education in preschools and schools in Slovenia is relatively well developed, environmental education for adults in the local environment, however, is developed to a lesser degree. The aim was to examine how selected interviewees assess key factors in the emergent practices that create intergenerational learning ecologies and involve children, adults and older adults.

In the community education network, preschools and schools hold a special place on account of (a) the emotional bond between generations and the mutual attachment of adults and children, and (b) intergenerational education and the transfer of knowledge within the network from older to younger members, and vice versa. In fact, research has shown that children in preschools and schools are aware of the importance of caring for the environment (Engdahl, 2015). The findings that new strategies and networks are being developed in community education have been corroborated by other studies (Clover, Jayme, Hall & Follen, 2013; Fazey, 2017; Kaplan, Sanchez & Hoffman, 2017; Philips & Wong, 2017). There has, however, been relatively little research into how people assess intergenerational learning as part of community education and the formation of learning ecologies.

The research presented in this paper was focused on the following two research questions:

What factors do research participants consider important for the development of intergenerational community education?

How do research participants experience the affective elements of intergenerational learning in the context of community well-being?

4. Methodology

Qualitative research (Creswell & Plano Clark, 2017; Flick, 2019) was used, in particular narrative methods, as the aim was to learn about the way participants judge the characteristics of good practices related to innovation in intergenerational learning in a local community. The aim was to study a contemporary phenomenon that is part of social developments over which we have no visible influence and whose course we are unable to control, and therefore a qualitative research paradigm was chosen. A further aim was to examine the process from different angles (Yin, 2018). In the real world, the phenomenon and the context are not separable, and therefore several sources that allow triangulation of data sources were used in the research.

Empirical data was collected in Slovenia, a country with a population of two million, which has a well-expanded network of preschools, schools and universities of the third age, as well as a well-functioning system of non-governmental organizations (societies). Individual partially structured interviews and a focus group were used for the collection of data, which took place between 2019 and 2020. Research preparations (2019) included an analysis of forty websites of societies, schools and preschools, movements that are involved in intergenerational learning for sustainable development and bring together various actors (e.g., an eco-school/eco-preschool, Institute for Spatial Policies (IpoP), etc.) in community education. Representatives of all the

_____

practices were chosen and in-depth interviews (a total of ten) on intergenerational learning in a local environment were conducted with them during the next research stage.

4.1 *Participants*

The interviewees that took part in the research were from different backgrounds and different regions of Slovenia. They were selected systematically as individuals involved in different organizations following the aforementioned analysis of organizations' activities based on their websites. All the interviewees had experience with intergenerational learning. A total of nine interviews were conducted first, followed by a follow-up interview with an expert on community education and older adult education.

Table 1. List of interviewees, F= female; M= male

Interview Number	Interviewees	Sex and Age	Educational Attainment
1	Educator/community workshop leader, study circle mentor	F, 39	BA
2	President of the local Anbot society, Piran	F, 70	BA
3	Member of the local Housewives' Society, Planina	F, 62	Secondary school
4	Mother of one of the girls in the preschool	F, 34	MA
5	Grandfather	M, 73	Secondary school
6	Preschool teacher	F, 32	MA
7	Teacher	F, 48	MA
8	School head teacher	M, 45	MA
9	Mentor at the Slovenian Third Age University	F, 53	MA
10	Researcher at the Slovenian Third Age University (follow-up interview)	F, 72	PhD

The interviews lasted from 45 minutes to 1 hour and were conducted to learn more about the phenomena from the different angles of actors in the local environment.

The interviews were followed by a focus group, which was conducted in November 2020 with five participants in older adult education. The focus interview was conducted through Zoom and lasted 90 minutes.

Table 2. List of focus group participants, F= female; M= male

Focus Group Participant	Sex and Age	Educational Attainment
Ana	F, 69	Secondary school
Beti	F, 74	MA
Cecilija	F, 62	MA
Črt	M, 67	MSc
Dominika	F, 80	Secondary school

4.2 *Data analysis*

The interviews were transcribed and analyzed using the content analysis method with two-step coding. All the interview transcripts were reviewed in order to become familiar with the material as a whole. Thereafter, coding and categorization work began. Later, data were organized into themes. The interview analysis took place within a conceptual framework: concepts of learning ecology, community education, and postformal education.

5. Results and discussion

The findings were thematized as (a) the connection between processes, actors and types of knowledge, (b) transformative learning, (c) strong communities, and (d) intergenerational contact zones. The table below shows the formation of categories and themes.

Table 3. Themes, categories and interview quotes

Themes	Categories	Examples of Interview Quotes
Connection between processes, actors and types of knowledge	Societies as a part of learning ecologies Connectivity: multiple knowledge systems Innovation in connecting Participative learning/active participation Action learning	Our society makes sure that children are involved in the preparation of exhibitions on healthy eating. We also hold workshops in schools. [Interview 1] We put on a theatrical play about how people used to eat more healthily in the past. And about drinking water... Younger and older people would spend time together, the less learned and the more learned. [Interview 3] As part of projects, we worked with an ethnologist who guided our work with professional knowledge. She is a university researcher. [Interview 3]
Transformative learning (changing attitudes and habits)	Ecosocial learning in changing practices Relationship-based learning Becoming (continuous knowledge and identity construction) Environmental programmes and changing habits Institutions promote better learning and transformation Non-formal education	Education is important in creating new habits; habits need to be changed. For example, separating waste. Habits related to food, however, are harder to change. [Interview 6] My best environmental education took place in relationships with others, often younger people. I do read a lot, but you learn most in a relationship with others when you work on something together. [Interview 9]
Strong communities	Inclusivity Planned creation of inclusive communities Cohesiveness Community resilience Educating parents and teachers Mutual respect Sense of belonging Feeling of safety Well-being	Our school organizes many educational meetings, including environmental ones. The problem, however, is how to animate those parents who don't want to join in in the first place. [Interview 7] We were the first to organize a produce swap (*Zelemenjava*) in our village. It took quite a lot of effort at first. [Interview 1]

Intergenerational contact zones	Shared places	The botanical garden was one such shared space, but it can also be a library or a park. Places like this all have the potential for meetings. [Focus Group]
	Issues of local (public) concern	
	Connected generations	
	Multiple generations of children, adults and older adults	We need to make people more familiar with environmental issues. The older generation should also be included. [Interview 5]
	Potential intergenerational engagement	
	Innovative practices	
	Cooperation Joyful	

5.1 *Connection between processes, actors and types of knowledge*

Intergenerational strategies are important for the promotion of learning among all people. In our education system, everything takes place separately according to age. The groups are divided by individual years. We live separately. We need to meet somewhere. We need to organize some activities that bring together the older and the younger generations. [Focus Group]

The research participants emphasized the importance of opportunities for connections that allow learning. Community education that societies, universities of the third age, preschools, and schools are a part of brings together various organizations to benefit all generations. As part of this, organizations cooperate and impact one another. Preschools connecting with other actors of formal and non-formal education in a community-based learning network (or a local learning ecology) prompts reflection on the importance of parents' cooperation with preschools or schools. The connection of actors in a joint complex network also creates more opportunities for intergenerational education.

Societies are an important part of learning ecologies. Those societies that are important actors in their respective local environments also attach great importance to education for sustainable development. The interviews revealed that, when non-formal education for sustainable development is organized, all of them follow learning strategies that provide an experience (experiential learning, action learning, participatory action research), whilst also stimulating creativity, activity and critical thinking (photovoice, storytelling). All aspects of a person (physical, spiritual, cognitive and emotional) need to be addressed in education, hence integrative approaches are used.

It has been noted that in community education for sustainable development/environmental protection, various strategies (study circles, lectures and workshops, conferences, project work, the use of films and artistic approaches) are used that allow transformative learning, the results of which are changed thinking, attitudes, views, emotions – this is the case both in Slovenia and other countries. Transformative learning that takes place in relation to resolving water conflicts (Azeiteiro, Leal & Aires, 2018) leads to the changing of views. In Slovenia, commonly used strategies involve art in connection with local societies (e.g., the Anbot society), cultural heritage (the Housewives' Society) and the introduction of innovative projects (Slovenian Third Age University).

The Slovenian Third Age University has been focusing on innovative learning with all its educational formats and innovative social practices in the field of "professional" volunteering based on purposive education and volunteering in

culture (cultural mediators in museums), Personal Town Tours having transformed older learners into self-confident researchers, tourist guides, authors of texts, teachers, enlightened citizens and participants in radio programs and exhibitions, and CINAGE [European Cinema for Active Ageing], which resulted in older learners learning significantly about active ageing and shooting short featured films in co-operation with younger filmmakers. [Interview 10]

The analysis of interviews suggests that many groups and organizations that participate in projects that are recognized as effective in their environment created learning ecologies, although the interviewees did not use this particular term to refer to their practices.

The changes needed for environmental protection require making decisions that relate to responsibility, commitment and a willingness to act. Knowledge (scientific knowledge) alone does not suffice – socio-emotional knowledge, active wisdom or practical wisdom with ethical components related to the environment (local knowledge) and developed socio-cultural practices are much desired elements. This is consistent with the research findings from various other environments (Röttger-Rössler & Slaby, 2018). The interviewees pointed out that all types of knowledge need to be combined for sustainable development. Parents play an important role in integrating different types of knowledge and organizations. They feel an intense emotional bond for children and are therefore willing to participate in some projects that they would not be keen on joining if their children were not involved. Thus, parents' motivation for participation in such projects increases. This is a case of dual embeddedness into the environment: through the relationship with children and through local knowledge, which is viewed as intangible cultural heritage and has a motivational effect on different groups (e.g., local older adults who are attached to cultural heritage through their memories). Different types of knowledge form a rhizomatic connection, which is driven precisely by the emotional (relational and affective) connection between children and adults.

5.2 *Transformative learning: Preschools and schools as institutions that promote transformative environmental education*

Preschool teachers, teachers, parents and grandparents cooperate within the community in forming new habits, which takes place as transformative learning. An example of this is sustainable mobility projects (e.g., the White Bunny project) that promote exercise and walking. It has been noted that the kind of project work that people are personally involved in is particularly important. When adults (parents) and older adults (grandparents) accompany children to a preschool or school, they help children develop the habit of walking and, in doing so, physical activity also becomes an important part of their lives and a habit. If the first process is viewed as intentional education, the second is considered transformative learning. As pointed out in the focus group, transformation happens when different views are confronted.

The complex issue of sustainable development cannot be solved only in homogeneous groups. Such [homogeneous] groups agree with one another and are not encouraged to change, for example, their views. Each group understands the problem in its own way but nothing happens. It is necessary to make sure that different voices are heard, and then a new understanding is gained so that things can change. The whole lifestyle needs to change. [Focus Group]

Some other examples of introducing innovations that encourage new practices and transformative learning in the environment that were mentioned in the interviews are: encouraging environmental awareness and waste sorting, sensory gardens, and the Open Learning Environment for All Generations project (2019). This project is based on the idea of a preschool in a small rural town working with other partners to contribute new ideas for the development of the rural area and the development of green tourism in accordance with the natural capacities of

the area in question. In this case, the open learning environment will be created in three locations and will be intended for all generations to which the education of preschool teachers, parents and local residents will be linked. The educational topics form the pedagogy of heritage model and include the following: the attitude to the environment and the potentials of heritage, green tourism through the interpretation of tradition, forests, and the "intelligence" of nature. In this project, the preschool is a part of innovations in the local environment, a part of social connections and through its activities an important part of the community, which is also the case in other environments, as noted by Stoknes (2015).

In many preschools in Slovenia, the Eco-School/Eco-Preschool project is developed as a way of life. As part of these projects, parents and grandparents work with children and preschool teachers, preparing and holding eco-workshops to promote healthy lifestyle habits. The workshops are prepared in accordance with preschool education programs. Some are related to art-based approaches, while others relate to forest pedagogy. These workshops have also been found to have an impact on the whole community as ideas spread through children and parents into the environment. In this way, emancipative psycho-social capital (i.e., mutual trust) is developed. Similar examples of cooperation can be found in the field of forest pedagogy. Outdoor education is being developed and a network of forest preschools and schools, which also organize various environmental workshops, is being set up in the local environment. Another example of cooperation in the local environment is that between preschool children and members of the Slovenian Third Age University, as well as museums or libraries. For example, older adult volunteers who are members of the Third Age University participate in workshops for children in museums and local libraries. Intergenerational cooperation promotes the transfer of knowledge. The various examples presented suggest that preschools and schools are important factors in establishing social connections between social organizations, that they use practices that promote changes aimed at environmental protection and environmental education, and that they impact transformative learning in the environment.

5.3 *Strong communities: Educating parents and teachers as a source of mutual respect*

Introducing change requires the education of both teachers and parents, young people and older adults, as well as understanding and mutual trust. The interviewees mentioned the examples of good practice of study circles and parent schools that promote social capital in the local environment. Transformations will be accepted if people are convinced that they are beneficial to their quality of life, hence dialogue-based learning is used to harmonize the subjective theories, beliefs and values of teachers and parents. In Slovenia, parent schools (in schools and preschools) are quite common as programs that assist in children's education. In addition to supporting education, they act as connecting elements. They can be run in cooperation with local adult education centers or various societies (pedagogical societies, rural women's associations, Caritas). When it comes to organizing parent schools, it is important to make sure that the parent-educator relationship is not one of power or superiority. Parent schools can also be linked to study circles or ecoliteracy development programs, and can work with societies for the protection of natural and cultural heritage. All of this combined constitutes the emergent networks of actors in the field of learning. All emergent networks exist in a dynamic balance, and parents and preschool teachers maintain them because they are beneficial to both sides and, even more so, to their children and families.

Personal interaction and communication are two means of influencing the changing of behavior. It is necessary to find common goals shared by different individuals and groups. An example deserving of note is a parent school [interview 6] held at a preschool – as part of it, the parents and preschool teachers set some action goals that led to the search for appropriate

_____

knowledge and skills depending on the goals. One of the goals was to use scraps of fabric to sew toys for children. This was the parents' contribution to the common good, which is part of community well-being. Learning about the 3R (repair, reuse, recycle) concept was only one part of the education, which also included learning about sewing, dyes and material processing, as well as participants' socializing and getting to know one another. Toys made of scraps of fabric were given to children as Christmas presents. The participants' conversations contributed to the formation of new views and behaviors. One of the mothers – all participants were mothers – who attended the workshops said the following in an interview:

> I hadn't expected us to bond quite as much as we did. At first, it all felt like a bit of a nuisance. I'd decided to take part in it because of M. [her daughter's name, authors' note], so others wouldn't think I didn't want to participate. And then we got together on a regular basis and did some sewing and chatted [laughter]. We had quite a good time. And then we started applying these reuse ideas when it came to our own clothes too. I think all of us started giving a bit more thought to what we buy. [Interview 4]

The mothers in the group bonded and, judging by the above statement, the sense of belonging and commitment increased. Belonging, trust and support are the feelings that contribute to the satisfaction in a neighborhood. Anderson and Baldwin (2017) referred to them as neighborhood feelings. In addition to shared emotions, transformative learning, which results in a changed way of thinking and acting, can also be perceived (as may be noted in the above statement about reuse). Such forms of organized education are thus appropriate in communities where people want to work together on changing the attitude towards the environment. It is children who connect (common goals are developed) and lead to a dialogue between teachers, parents and grandparents, as well as to mutual respect. When it comes to bringing about change and transformative learning (Taylor, 2017), an important role is played by social connections and social networks, as well as by social learning.

5.4 Intergenerational contact zones: Innovative practices

The interviews revealed a number of examples of good practice. A common feature was the cooperation among different partners, which makes intergenerational education for sustainable development similar to intercultural education.

> We no longer do projects that only involve visiting one another. We prefer projects where we can do something together. The best kinds of projects are those that involve physical activity, cooking, and singing. You have to connect people in a certain place, through an activity, so they look forward to it and so they have a good time. [Interview 7]

Projects involve the cooperation of different generations of children, as well as that between children and adults (parents, grandparents). An example of this is a project titled Produce Swap (*Zelemenjava*), which is participated in by parents, grandparents and children in a local environment. Another example of good practice is adults connecting with preschools and schools in preparing a safe route to school (Active travel to school, 2019). The so-called "walking bus" and "bike train" are organized campaigns where children are accompanied to preschool/school. In organizing a route to school/preschool, grandparents and parents connect with preschools and schools, which is not only a case of social cooperation and connections, but also habit (trans)formation.

Intergenerational interaction may involve a higher or lower level of contact. If the only thing that happens is children meeting older adults (e.g., when children from a preschool visit nursing home residents), this is an example of a low level of contact. Higher levels of contact occur in longer-lasting intergenerational programs, such as participants creating art or gardening together. Such activities are reflected throughout the community and various stereotypes are

challenged. Shared gardens that are tended by children, teachers and grandparents are examples of good practice.

Intergenerational cooperation in a local community takes into account diversity. Each person has their own talent, which is not sufficiently developed by standardized programs, as such programs are constrained by the beliefs and knowledge of planners (who are not familiar with local knowledge and local culture). Multiple intelligence and socio-emotional knowledge is much more pronounced in various intergenerational projects where individuals learn in situ. Two important dimensions can be highlighted: creativity and connectivity. In the projects mentioned by the interviewees, the children worked with adults on, for instance, planting trees. The Anbot society in Piran cooperated with the Little Sailor (*Mornarček*) preschool from the same town and, on Earth Day (22 April), they planted some trees together. Another event organized by the society's members is a children's herb workshops titled 'Bay Leaf'. Since the society's seat in the town of Piran is located in a street named after Oton Župančič (a famed Slovenian poet), they also organize get-togethers for children on Župančič' birthday (23 January). As part of this, they invite children to workshops on selected poems by Župančič and also cooperate with the local library. The society president said the following:

> It's important to set an example, an example of community cooperation. Sustainable development can only take place if we are connected. All societies, preschools, and schools need to work together. You can't do anything by yourself. I believe that you can only change something if you develop a good relationship together. I always ask myself what <u>we all</u> [this was emphasized by the interviewee] need. You can't shut yourself off. When all of us are together, adults and children, you commit people to your memory. You commit a relationship and a person to memory. And then you are able to remember it all. You move on from this deeply felt relationship and keep searching. [Interview 2]

In addition to the content, relationships, the transfer of tacit knowledge and getting a sense of one another, embodied and embedded knowledge are all important parts of intergenerational learning. In community education for sustainable development, it is essential to learn about and interpret the values that are immanent in groups and communities, and that are expressed in the way of life. Individuals are in a relationship with the community, with society (and the state) through social networks through which social and cultural capital is generated, as confirmed by Kaplan, Thang, Sanchez and Hoffman (2020). Intergenerational cooperation either happens or does not (if there is no one to encourage it), therefore, it is important for the community to form contact zones for meetings. In community education, transformative learning also includes affective and activity elements. Knowledge formation takes place through "ways-of-knowing-in-being". An important part of this is the environment, i.e., the place and the nature where an individual or a group live. Viewing learning in this particular way attaches great importance to groups and learning spaces (forests, meadows, streams) with which people in the local community can identify. The older generation transfers the identification and the care of this space to the younger generation.

6. Conclusion

The research participants, who all had previous experience with intergenerational projects, expressed positive opinions about intergenerational education, which they view as a new opportunity for community-based environmental learning and education. This suggests an urgent need for cross-sectoral and inter-institutional connections and interagency. The research participants believe that it is necessary to organize intergenerational contact zones, where young people and older adults can meet and work together.

The local community as a whole (people, space/place, ways of thinking and feeling, memories, stories) is becoming crucial for intergenerational cooperation, the formation of learning ecologies and for the development of ecological awareness. Educational organizations, NGOs and families play an important part. New cooperation strategies are part of postformal education. It has been established that preschools can be part of community education and contribute to transformative learning in the local environment. It has also been established that the following is important for the process of preschools' connection with community education to create learning ecologies: (a) connecting different types of knowledge (intangible cultural heritage, local and scientific knowledge, practical wisdom) with emotional attachment across generations (socio-emotional intelligence, affective attachment), (b) connecting various organizations (preschools, schools, universities of the third age, societies, libraries, museums).

The contribution of preschools, schools, universities of the third age to community education models is important as cohesive communities are more resilient to global pressures. As positive emotions (connectedness, support, respect, commitment to the common good) are cultivated in the community, community well-being is developed. Cooperativeness and empathy are developed through experiencing cooperativeness and empathy. Stronger feelings of belonging to the community, changes to community life, solidarity and anti-individualism develop in learning ecologies where all generations are involved.

Sustainable development and the related community well-being are an ethical issue, and one of transformation of consciousness and activity. Therefore, all organizations and generations need to be integrated into common networks, which imply educational programs that will be inclusive, and will animate the development of new practices. The community and its capacity for change is at the core of the changes for a sustainable future.

Acknowledgements

References

Active travel to school (2019). Retrieved 15 July 2019, from https://www.aktivnovsolo.si/vrtci-in-os-vabljeni-da-se-prikljucite-projektu-trajnostna-mobilnost-v-vrtcih-in-os/.

Anderson, R. E. (2017). Community functioning that fosters sustainable social well-being. In R. Philips & C. Wong (Eds.), *Handbook of community well-being research* (pp. 3-10). Dordrecht: Springer.

Anderson, J., & Baldwin, C. (2017). Building well-being: Neighbourhood flourishing and approaches for participatory urban design intervention. In R. Philips & C. Wong (Eds.), *Handbook of community well-being research* (pp. 313-337). Dordrecht: Springer.

Azeiteiro, U., Leal, F., & Aires, L. (Eds.). (2018). *Climate literacy and innovations in climate change education. Distance learning for sustainable development*. Cham: Springer.

Barnett, R., & Jackson, N. (Eds.) (2020). *Ecologies for learning and practice*. New York: Routledge.

Braidotti, R. (2013). *The nosthuman*. Cambridge: Polity Press.

Braidotti, R., & Bigual, S. (Eds.). (2018). *Posthuman ecologies. Complexity and process after Deleuze*. London: Rowman & Littefield.

_____

Clover, D., Jayme, B., Hall, B., & Follen, S. (2013). *The nature of transformation*. Rotterdam: Sense.

Creswell, J. W., & Plano Clark, V. L. (2017). *Designing and conducting mixed methods research*. London: Sage.

Engdahl, I. (2015). Early childhood education for sustainability: The OMEP world project. *IJEC International Journal of Early Childhood*, *47*, 347-366.

Fazey, I. (2017). *Community resilience to climate change*. Dundee: University of Dundee.

Fenwick, T., & Edwards, R. (Eds.) (2017). *Revisiting actor-network theory in education*. New York: Routledge.

Flick, U. (2019). *An introduction to qualitative research*. 6th ed. London: Sage.

Gidley, J. (2016). *Postformal education: A philosophy for complex futures*. Cham: Springer.

Guattari, F. (2000 [1989]). *The three ecologies*. London: The Athlone Press.

Häggström, M. (2017). An aesthetic and ethical perspective on art-based environmental education and sustainability from a phenomenological viewpoint. In O. Franck & C. Osbeck (Eds.), *Ethical literacies and education for sustainable development. Young people, subjectivity and democratic participation* (pp. 85-104). Cham: Palgrave MacMillan. https://doi.org/10.1007/978-3-319-49010-6_6

Higgins, M. (2016). Decolonizing school science: Pedagogically enacting agential literacy and ecologies of relationship. In C. Taylor & C. Huges (Eds.), *Posthuman research practices* (pp. 267-289). Basingstoke: Palgrave Macmillan. https://doi.org/10.1057/9781137453082_12

Jubas, K., & Lenters, K. (2019). Extemporaneous lesson on place, space, and identity: Graffiti as a pedagogical disruption. *Engaged Scholar Journal: Community-Engaged Research, Teaching and Learning*, *5*(2), 79-94. https://doi.org/10.15402/esj.v5i2.68336

Kaplan, M., Sanchez, H., & Hoffman, J. (2017). *Intergenerational pathways to a sustainable society*. Cham: Springer.

Kaplan, M., Thang, L. L., Sanchez, M., & Hoffman, J. (2020). *Intergenerational contact zones*. New York: Routledge.

Latouche, S. (2018). The misadventures of the good life between modernity. In H. Rosa & C. Henning (Eds.), *The good life beyond growth*. New York: Routledge.

Lee, S. J., Kim, Y., & Philips, R. (2015). *Community well-being and community development*. Dordrecht: Springer.

Martinez, J., Verplanke, J., & Miscione, G. (2017). A geographic and mixed methods approach to capture unequal quality-of-life conditions. In R. Philips & C. Wong (Eds.), *Handbook of community well-being research* (pp. 385-402). Dordrecht: Springer.

Open learning Environment for All Generations project (2019). Retrieved 17 August 2019, from http://vrtec-konjice.si/?p=5817; https://www.zgodovinska-mesta.si/wp-content/uploads/2019/05/ODPRTO-U%C4%8CNO-OKOLJE-ZA-VSE-GENERACIJE-Kratek-opis-projekta.pdf.

Philips, R., & Wong, C. (Eds). (2017). *Handbook of community well-being research*. Dordrecht: Springer.

Röttger-Rössler, B., & Slaby, J. (2018). *Affect in relation*. London: Routledge.

Smith, T. S. (2019). *Sustainability, wellbeing and the posthuman turn*. Cham: Palgrave Macmillan, Springer.

Stoknes, P. E. (2015). *What we think about when we try not to think about global warming*. White River Junction: Chelsea Green Publishing.

Taylor, E. W. (2017). Transformative learning theory. In A. Laros, T. Fuhr & E. W. Taylor (Eds.), *Transformative learning meets buildung* (pp. 17-29). Rotterdam: Sense.

Taylor, C. A., & Hughes, C. (Eds.) (2016). *Posthuman research practices in education*. New York: Palgrave Macmillan.

Weldemariam, K. (2017). Challenging and expanding the notion of sustainability within early childhood education: Perspectives from post-humanism and/or new materialism. In O. Franck & C. Osbeck (Eds.), *Ethical literacies and education for sustainable development. Young people, subjectivity and democratic participation* (pp. 105-126). Cham: Palgrave MacMillan.

Yamagata-Lynch, L. C. (2010). *Activity systems analysis methods*. New York: Springer.

Yin, R. K. (2018). *Case study research and application*. London: Sage.

_____

Comparison of Prospective Teachers' Perceptions of Problem-Solving Skills in Terms of Various Variables

Murat Keskin

Afyon Kocatepe University, Afyonkarahisar, TURKEY
Bolvadin Vocational School

Abstract

The study aimed to determine whether there is a difference between the perceptions of pre-service teachers' problem-solving skills according to various factors. 297 pre-service teachers from Afyon Kocatepe University Faculty of Education in the province of Afyonkarahisar in Turkey participated in the study. The group hidden figures test was used to determine the cognitive styles of pre-service teachers. The problem-solving inventory was used to measure the perceptions of problem-solving skills. According to the findings, it was found that the perception of problem-solving skills of pre-service teachers was high. It was observed that the candidates also perceived themselves as having these approaches in all sub-dimensions. According to the research results, problem-solving perception does not affect the way of approaching the problem. Male and female candidates' perceptions of problem-solving skills are not directly related to gender. Candidates' perceptions vary according to the grade level.

Keywords: education, teaching, problem-solving, cognitive style.

1. Introduction

The most prominent feature of today's education system is that it takes the individual as a basis. Therefore, the necessity of teaching activities based on individual characteristics is an undeniable fact. Teaching methods affect the students' learning, remembering, and using their information and the ways they prefer while performing these operations. Teachers should organize teaching activities by taking students' cognitive characteristics into account. For this, they should know the cognitive features of the students well. In the dimension of planning individual activities, the concept of cognitive style especially emerges as a concept that will help teachers. It is one of the ideas that occurred due to cognitive learning theorists' research on how an individual obtains information, how he creates new knowledge, how he stores this information in permanent memory, and how he remembers it (Somyürek, 2004). Messick (1976), a cognitive style researcher, underlined those individual differences reveal a difference; He claimed that each individual determines a method for himself regarding the situations he sees, remembers, or thinks. Based on this method, he named the individual differences gained in processing, organizing, and gaining experience as cognitive style (cited in Ören, 2007). Witkin, Moore, Goodenough and Cox (1997) stated that cognitive style has a higher meaning than the classically used "personality" concept.

Correspondence: Murat Keskin, Afyon Kocatepe University, Bolvadin Vocational School, Afyonkarahisar, TURKEY. E-mail: mkeskin@aku.edu.tr.

As a result of some researches conducted by Witkin et al. in the 1940s, it was seen that individuals use specific strategies while performing certain tasks. In these studies, it was revealed that some individuals prefer to use clues from the visual field, while others consider internal clues (Somyürek & Yalın, 2007). As a result of experimental studies (Ataizi, 1999) using the "Group Hidden Figures Test" started to be developed by Witkin in the 1950s, Witkin et al. named individuals using internal cues as "field independent" and individuals using environmental cues as "field-dependent" (Somyürek & Lean, 2007). These two areas, consisting of different styles, have opposite features (ALTUN, 2003). Witkin (1977) expresses the differences of cognitive field dimensions: Individuals who try to find the difference by re-examining the beings they have seen before and who tend to perceive the entities analytically are field independent. Field addicts, on the other hand, adapt passively to their environment and global fashion rules (cited in Güven, 2003).

- There is not a relationship between pre-service teachers' cognitive styles and their perception of problem-solving skills.
- There is not a relationship between pre-service teachers' gender and their perception of problem-solving skills.
- The scores the students got from the PSI total and hasty approach, thinking approach, evaluative approach, and planned approach sub-dimensions were found to be statistically significant.
- The difference between the departments in which the candidates were educated was observed in the avoidant approach and the planned approach sub-dimensions.

Based on the information obtained from research results with different approaches and techniques, the researchers have suggested many cognitive styles. However, among these cognitive styles, "Field Dependence" and "Field Independence" are the cognitive dimensions (Güven, 2003). The mentioned cognitive style dimensions are one of the sub-domains of the "Holistic-Analytical" cognitive style family, one of the cognitive style areas put forward by various researchers (Ataizi, 1999).

Figure 1. Cognitive Style Areas (created from information taken from Ataizi, (1999.)
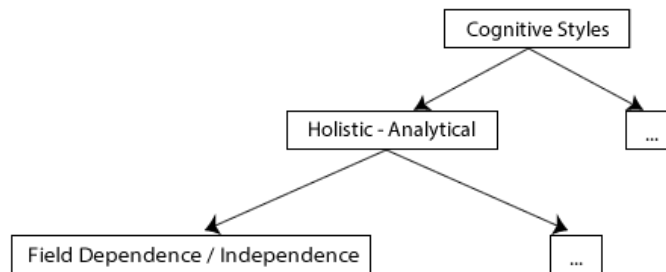
Characteristics of individuals with field-dependent and independent dimensions defined by Ramirez and Castenade (1974), Witkin and Goodenough (1981), and Saracho (1988) were compiled by Güven (2003). While field-dependent learners have characteristics such as being calm and more socially conscious, obeying the rules, and self-discipline, independent learners have high energy, prefer to work independently, and desire to be accepted in society, and so on.

Considering that individuals use specific strategies while performing certain tasks, teacher approaches gain particular importance in teaching environments. Witkin, Moore, Goodenough, and Cox (1977) identified the characteristics listed below in terms of teacher approaches.

_____

Field independent teachers:

• They take a more formal approach;

• They used questions as teaching tools;

• They tried to emphasize the subject with their thoughts;

• They tend to find students' mistakes and say them;

• They are not in an effort to create a positive classroom environment;

• They encourage students to apply the principles.

Field dependent teachers, on the other hand:

• They tend to interact with students more often;

• They use the questions to control what has been learned during their teaching;

• By attracting the students' attention to the subject, they encouraged them to produce their inferences;

• Avoid giving critical feedback;

• They strive to create a positive classroom environment;

• They stated that they taught the facts.

Witkin et al. (1977) stated that the concept of cognitive style is related to an individual's approach to a problem can be interpreted as revealing the importance of cognitive features in the problem-solving phase. The difference in individuals' cognitive styles with field-dependent/independent dimensions indicate the difference in their approach to a problem and naturally the difference in problem-solving skills. Therefore, when examining the dimensions of cognitive style within individual differences, it is possible to talk about the effects of cognitive style features on skills such as "problem" and "problem-solving skill".

Problem is a concept that expresses the situations that we frequently encounter at every stage of life that is complex, undesirable, and distressing to the individual (Yalçın, Tetik & Açıkgöz, 2010). Changes in social, economic, political, and technological fields make the social structure even more complex. Individuals who cannot keep up with this complexity face many problems (Demirtaş & Dönmez, 2008). If people can solve their problems, they can adapt to change, produce things, and contribute to society's advancement and itself.

It takes some effort to overcome the challenges we face. While expressing these efforts in problem-solving, Altun (2000) stated "knowing what to do in situations where it is not known what to do" and considered the problem-solving process as "controlled activities performed to reach a goal that is clearly designed but cannot be reached immediately". Problem-solving skill is a process of adapting to the environment in which an individual life. In this process, effective adaptation to the environment is directly proportional to problem-solving skills. However, while some problems in this adaptation process have correct and definite answers, some require knowledge related to many fields (Mertoğlu & Öztuna, 2004).

Savaşır and Şahin (1997) re-evaluated three basic approaches that individuals show in problem-solving and identified six approaches. These approaches point out the importance of the individual's efforts to understand the problem and find solutions to the problem-solving process. In this study, said analysis of said data consider six approaches the migrants. These approaches can be listed as "hasty approach, thinking approach, avoidant approach, evaluative approach, self-confident approach and planned approach" (cited in Yalçın, Tetik & Açıkgöz, 2010).

Since the problem is a state of discomfort and tension, problem-solving means eliminating this situation. It is possible to think that the problem is a situation that disrupts the mental balance of the individual and an opportunity in which he shows his cognitive skills, determination, and personal control. For this reason, solving problems will enable teachers to be more successful and self-confident individuals in educational activities, both professionally and personally.

In the light of this information, as the concepts of problem solving and cognitive style are interrelated, cognitive styles express how the problem is perceived, what strategies will be produced for its solution, in short, the individual's approach to the problem. The main difference between a field-dependent individual and a field-independent individual is the method used to perceive the situation or problem. This study compares the six sub-dimensions determined by Savaşır and Şahin (1997) from the Heppener's problem-solving skill inventory, the field-dependent/independent pre-service teachers' approach to problems was tried to be measured in terms of various variables. Besides, it is possible to examine the meaning of the candidates' approaches in terms of educational activities and make some suggestions against the wrong behaviors that pre-service teachers may display according to their cognitive styles. In this context, the purpose of the research is as follows.

1.1 *Purpose of the research*

The primary purpose of the study is to determine how prospective teachers think and act while finding solutions to the problems in their daily lives, whether they differ according to their cognitive style, gender, grade level, and departments, and to make suggestions about their approaches to the problems they may encounter while performing their teaching duties. In this direction, the questions given below will be tried to be answered:

(1) Is there a relationship between pre-service teachers' cognitive styles and their perception of problem-solving skills?

(2) Is there a relationship between pre-service teachers' gender and their perception of problem-solving skills?

(3) Is there a relationship between pre-service teachers' grade level and their perception of problem-solving skills?

(4) Is there a relationship between pre-service teachers' departments in which they study and their perception of problem-solving skills?

When analyzed literature related to the studies carried out in Turkey problem solving, perception is often seen to work towards (Demirtas & Dönmez, 2008; Captain & Korkmaz, 2002; Butcher, 1989; Soyer & Scholar, 2010; Taylor, 1990; Yalcin, Trigger & Açıkgöz 2010). When the studies on cognitive styles are examined, many studies stand out again, and among these studies, there are also studies conducted with field dependent and field independent cognitive styles (Boz, 1987; Çakan, 2005; Çıkrıkçı, 1990; Dinçer, 1993; Somyürek, 2004. Horzum & Alper, 2006). At the beginning of the studies on the perception of problem-solving skills in the foreign field, the studies conducted by Heppener and Petersen (1982), Heppener and Anderson (1985), Larson and Heppener (1989), Jerath, Hasija and Malhotra (1993) and Ho (1981) countable. Although it is possible to find many studies on field-dependent and independent cognitive styles, the most common of these are the studies by Witkin et al. (1977) and Witkin and Goodenhough (1981), and Miller (1995), Weller and Weller (1993), Wey and Waugh (1993), Saracho (1988) and Shade (1983).

However, the most recent studies on the subject investigated in this study, including the studies other than those mentioned above, are made by Soyer and Bilgin (2010) and Ho (1981).

Soyer and Bilgin (2010), in a study conducted with 551 university students, examined whether the problem-solving skill perception differs according to gender, age groups, and grade level attended and found that the difference was significant only by departments. In the other study, the gender, gender role type, and problem skills of 95 children between the ages of 8-10 were examined, and it was found that problem-solving skills differed according to gender role type (Ho, 1981). However, one of the aims of this study was to find no study on whether the field-dependent/independent cognitive style made a difference in the pre-service teachers' perception of problem-solving skills.

2. Method

The study was modelled according to the quantitative research method. Relationships between data were carried out with the relational questionnaire model. With this model, predictions can be provided for high-level data in research (Büyüköztürk, 2016: 185). In addition, relationships and the level of relations are determined with the mentioned model (Karasar, 2016: 114).

2.1 *Population and sample*

The population of this study includes the Faculty of Education students studying in Turkey. The study sample consists of 297 teacher candidates studying in the first and fourth grades of primary education, social Studies Education, Preschool Education, and the Turkish Education department of the Faculty of Education at Afyon Kocatepe University in the province of Afyon in Turkey. Candidates are determined voluntarily.

2.2 *Data collection tools*

2.2.1 *Group Embedded Figures Test (GSFT) – Group Embedded Figures Test*

In the study, GSFT developed by Witkin et al. (1971) was used to determine pre-service teachers' cognitive styles. It was adapted into Turkish by Çakan (2005). The test includes items that require individuals to find and draw on the 8 simple shapes given, on 25 figures consisting of 3 sections hidden in them and consist of 3 parts ordered from easy to difficult. The seven items in the first section are for practice purposes. There are nine items in each of the other two sections. The correct numbers obtained in the two sections represent the raw score. The teacher candidates' scores are grouped as field-independent for the top 27% and area dependent for the bottom 27% (Cureton, 1957, as cited in Çakan, 2005). In the adaptation to Turkish by Çakan (2005), test-retest reliability was determined as 0.82 for the total participant, 0.84 for men (N=179), and 0.81 for women (N=354).

2.2.2 *Problem Solving Inventory (PSI)*

In the study, PSI developed by Heppner and Peterson (1982) was used to determine pre-service teachers' problem-solving skills. The scale was adapted to Turkish by Şahin, Şahin, and Heppner (1993). It consists of 35 items. It is a Likert-type scale that is scored between 1-6. It is used to measure individual problem-solving perception. The lowest score of 32 and the highest 192 points can be obtained, and reverse scoring is done. In other words, a high score indicates a low perception of problem-solving. Items 9, 22, and 29 are not included in the assessment. Also, item in size 1, 2, 3, 4, 11, 13, 14, 15, 17, 21, 25, 26, 30 and 34 numbered operated in reverse in the scoring. It was assumed that the scale items adequately measure problem-solving perceptions at

the individual level (Savaşır & Şahin, 1997). Besides, a personal information form was used to obtain information about the gender, department, and grade levels.

2.3 *Data collection and analysis*

This study was carried out with 297 teacher candidates. GSFT was applied first, and since the test had to be applied in a limited time frame, the time frame allocated to each section was followed, and care was taken to ensure that the teacher candidates comply with the time allowed for the sections. In the test consisting of three parts in total, a 2-minute time frame was given for the first part, and this part consisting of 7 shapes was applied for trial purposes due to the nature of the test. The second and third sections contain nine figures each, and the time allotted for them is 5 minutes. Within these periods, it was determined that the candidates were in the field-dependent or field-independent group according to the number of figures they drew (0-18). For this, the arithmetic mean of the scores was calculated, and the candidates who scored below the average were grouped independently. In this study, the average score was calculated as 4.99. Candidates with a score of 5 and less than five were evaluated as field-dependent, who scored above 5 (6-18) were evaluated field independently.

Later, PSI was applied to determine the perceptions of pre-service teachers towards problem-solving skills. While the test-retest reliability coefficients of PSI were measured between r=.83 and r=.89, the Cronbach Alpha coefficient was found to be .88, and the reliability coefficient was r=.81 (Saraçoğlu, Serin & Bozkurt, 2005). The scale consists of three factors, "Trust in problem solving ability" (Items 5, 10, 11, 12, 19, 23, 24, 27, 33, 34 and 35), "Approach-avoidance" (1, 2, 4, 6, 7, 8, 13, 15, 16, 17, 18, 20, 21, 28, 30 and 31), and "Personal control" (Items 3, 14, 25, 26 and 32). As a result of the factor analysis, six factors were found as "Hasty Approach" (Items 13, 14, 15, 17, 21, 25, 26, 30 and 32), "Thinking Approach" (Items 18, 20, 31, 33 and 35), "Avoidant Approach" (Articles 1, 2, 3 and 4), "Evaluative Approach" (Articles 6, 7 and 8) "Self-Confident Approach" (Articles 5, 23, 24, 27, 28 and 34), and "Point Approach" (items 10, 12, 16 and 19) (Savaşır & Şahin, 1997).

Both practices were applied during the course hours of the teacher candidates and by the researcher. The teacher candidates participating in the study were voluntarily included in the study sample, and data forms that were not by the principles of data collection tools were excluded from the study.

Some studies show that GEFT can be considered an achievement test (Crandall & Sinkeldam, 1964). In the implementation phase of this study, there were reactions that pre-service teachers had such a perception. For this reason, it was stated to the candidates who participated in the study that this was not an achievement test, finding and drawing the figures or otherwise determined only the cognitive style. Also, it was emphasized that cognitive styles do not have superiority to each other but only determine how to approach events and problems.

3. Results

Work on the findings based, the frequency and percentage distribution of the pre-service teachers participating in the study and the scores obtained by the candidates from PSI and its sub-dimensions according to their cognitive styles, gender, department, and class are given below. Accordingly, Independent Sample T-test was applied to examine the perceptions of pre-service teachers' problem-solving skills and the six sub-dimensions of these perceptions determined by Savaşır and Şahin (1997) terms of whether there is a significant difference between cognitive styles, gender, and grade level. Also, the PSI scores' situation making a significant difference according to the departments was investigated by the One-Way Anova test.
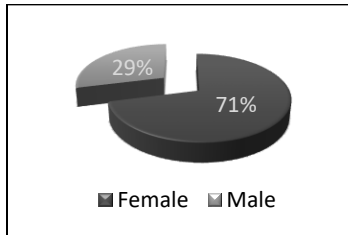
According to Table 1, 211 of the study participants are females (71%), and 86 are males (29%). In other words, approximately 3/4 of the candidates are women.

Table 1. Teachers' percent by gender and frequency distribution categories

Gender	N	%
Female	211	71
Male	86	29
Total	297	100

Figure 2. Distribution of teacher candidates by gender

When Table 2 is examined, the candidates were selected from the departments with students in the first and fourth years of the faculty. The highest attendance took place in the Primary Education department with a total of 112 candidates (37.7%), including 58 first-year students (19.5%) and 54 fourth-year students (18.2%). The minor participation was from the Social Studies Education department with a total of 53 candidates (17.7%), 30 first grade students (10.1%), and 23 fourth grade students (7.7%). A total of 71 candidates (23.9%) from the other two departments, 32 first grade (10.8%) and 39 fourth grade (13.1%) from the Preschool Education department, participated in the study, while 32 from the Turkish Education department were in the first grade (10.8%), and 29 fourth-year students (9.7%), a total of 61 candidates (20.5%) attended.

Table 2. Percentage and frequencies of pre-service teachers according to their departments

Department	Grade Level	N	%
Primary Education	1	58	19.5
	4	54	18.2
Social Studies Education	1	30	10.1
	4	23	7.7
Preschool Education	1	32	10.8
	4	39	13.1
Turkish Education	1	32	10.8
	4	29	9.7
Total		297	100

Figure 3. According to the department of teacher candidates' distribution
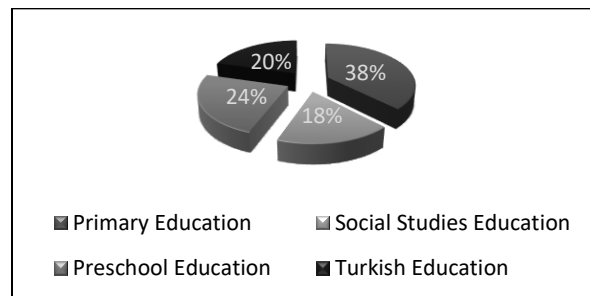
As it is known, the scores obtained from PSI indicate that the level of proximity to the minimum score is high on problem skills, and on the contrary, the perception decreases. For this reason, the data regarding the PSI total score were evaluated according to the average score (32 minimum, 192 maximum, the average score value is 112) that can be obtained in the PSI score. According to the data in Table 3, the average score the candidates got from PSI was calculated as 88.60. This situation shows that the candidates' perception of problem-solving skills is high. When the sub-dimensions are examined, the candidates' average scores in all sub-dimensions are close to or lower than the average scores that can be obtained. This situation shows the perception that candidates have these approaches in all sub-dimensions.

Table 3. Pre-service teachers' score analysis of PSI and its sub-dimensions

PSI Dimension I	Score Range	X̄	Lowest Score	Highest Score
Hasty Approach	9-54	28.95	14	44
Thinking Approach	5-30	12.55	5	30
Avoiding Approach	4-24	10.63	4	24
Evaluating Approach.	3-18	7.81	3	18
Self-Confident Approach	6-36	15.92	6	35
Planned Approx.	4-24	9.80	4	22
PSI Total Score	32-192	88.60	47	152

4. Discussion

(1) Is there a relationship between pre-service teachers' cognitive styles and their perception of problem-solving skills?

When the scores obtained from PSI were examined in terms of the candidates' cognitive styles, Table 4 was obtained.

Table 4. PSI score analysis according to cognitive styles of pre-service teachers

PSI	Cognitive Style	p	N	%
PSI Total	Field Dependent	0.51	Field Dependent 180	60.6
	Field Independent			
Hurry Approach	Field Dependent	0.383		
	Field Independent			
Thinking Approach	Field Dependent	0.189		
	Field Independent			
Avoiding Approach	Field Dependent	0.618		
	Field Independent			
Reviewed Approach	Field Dependent	0.13	Field Independent 117	39.4
	Field Independent			
Confident Approach	Field Dependent	0.1		
	Field Independent			
Planned Approach	Field Dependent	0.192		
	Field Independent			

As shown in Table 4, there is no statistically significant difference between the scores of PSI and sub-domains of individuals with field-dependent and field-independent cognitive styles (p>0.05).

_____

(2) Is there a relationship between pre-service teachers' gender and their perception of problem-solving skills?

Table 5 is obtained when the pre-service teachers' PSI and sub-dimension scores according to gender were analyzed.

Table 5. PSI score analysis according to cognitive styles of pre-service teachers

PSI	Gender	p	N	%
PSI Total	Female	0.868		
	Male			
Hurry Approach	Female	0.167	Bayan	
	Male			71
Thinking Approach	Female	0.831	211	
	Male			
Avoiding Approach	Female	0.470		
	Male			
Reviewed Approach	Female	0.836		
	Male		Erkek	
Confident Approach	Female	0.483		29
	Male		86	
Planned Approach	Female	0.707		
	Male			

According to the data in Table 5, no statistical significance was found in the scores of 211 female teacher candidates (71%) and 86 male teacher candidates (29%) in PSI and its sub-dimensions.

(3) Is there a relationship between pre-service teachers' grade level and their perception of problem-solving skills?

In Table 6, the significance between the scores that first-grade and fourth-grade students got from PSI and sub-domains is analyzed.

Table 6. PSI score analysis of pre-service teachers according to their grade levels

PSI	Grade Levels	p	N	%
PSI Total	1	0.001		
	4			
Hasty Approach	1	0.003	1st Grade	
	4			51,2
Thinking Approach	1	0.001	152	
	4			
Avoiding Approach	1	0.545		
	4			
Reviewed Approach	1	0.000		
	4		4th Grade	48,8
Confident Approach	1	0.569		
	4		145	
Planned Approach	1	0.013		
	4			

According to the data obtained from Table 6, the scores the students got from the PSI total and hasty approach, thinking approach, evaluative approach, and planned approach sub-

dimensions were found to be statistically significant according to p<0.05. Besides, when the scores of the avoidant approach and self-confident approach sub-dimensions were examined, it was observed that there were no significant differences in these areas according to the grade level.

(4) Is there a relationship between pre-service teachers' departments in which they study and their perception of problem-solving skills?

Another comparison was made between PSI and its sub-dimensions at the departmental level. One-Way ANOVA test was used here. The data obtained are as shown in Table 7.

Table 7. PSI Score Analysis of Pre-Service Teachers According to their Departments

Point Type	p	Point Type	Difference Between Departments	$\overline{X}$
PSI Total	0.2	Avoidant	Primary Education-	1.627
Hurry Approach	0.47		Turkish Education	
Thinking Approach	0.206	Planned	Primary Education-	2.063
Avoiding Approach	0.045		Social Studies Education	
Thinking Approach	0.491	Planned	Turkish Education	1.663
Confident Approach	0.136		Social Studies Education	
Planned Approach	0.004			

According to the data presented in Table 7, the difference between the departments in which the candidates were educated was observed in the avoidant approach (0.045) and the planned approach (0.004) sub-dimensions (p<0.05). When the departments differ in these sub-dimensions, there is a significant difference in favor of Primary Education in the avoidant approach sub-dimension between Primary Education and Turkish Education. In the planned approach sub-dimension, a significant difference was observed between Primary Education and Turkish education in favor of Primary Education and Turkish Education and Social Studies Education in favor of Turkish education.

5. Conclusion

In this study, the results obtained from the tests performed on a sample of mostly female students can be addressed in 4 items:

(1) It has been revealed that there is no statistically significant difference between the scores of the pre-service teachers in PSI and its sub-dimensions of field-dependent and field-independent ones. This situation can be interpreted as problem-solving perception is not affected by way of approaching the problem. Even when the problems are approached in different ways, it can be concluded that the perceptions are not related to the approach.

(2) In the analysis conducted to measure the effect of pre-service teachers' being male or female on problem-solving perception, no statistical significance was found between males and females. In this case, it can be concluded that the perception of problem-solving skills is not related to gender since there are no data directly related to gender in the perceptions of men and women regarding problem-solving skills.

(3) The statistical difference between the scores of PSI total and hasty approach, thinking approach, evaluative approach, and planned approach sub-dimensions showed that students' perceptions might change in different dimensions depending on the grade level.

(4) The statistical difference regarding the problem-solving skill perception among the departments they study in can be interpreted as classroom teacher candidates' problem-solving perceptions are more confident than students studying in Turkish education and social studies education. A similar situation is observed between Turkish education and social studies education, and it can be said that Turkish Education students' perceptions are more favorable than social studies education.

In this study, first and 4th-year students were included in the study sample to determine the difference between grade levels at the highest level. Studies can be carried out to examine problem situations such as how problem-solving skills perceptions develop among grade levels, whether this changes with the education given at the university, or whether any variable is a factor. Besides, the reasons for the differences arising between departments can be investigated. While determining the sample of this study, students were selected at the 1st and 4th-grade levels, and there was no other department at the 4th grade except for the four departments included in the study in the education faculty of the university where the study was conducted, so other fields in education faculties were not included in the study. For this reason, these studies can be carried out on the students of education faculties where other departments are located.

Acknowledgements

References

Altun, A. (2003). Examining the relationship between teacher candidates' cognitive styles and their attitudes towards computers. *The Turkish Online Journal of Educatioanal Technology*, *2*(1), 56-62.

Altun, M. (2000). Teaching problem solving in primary education. *Journal of Milli Eğitim*. http://dhgm.meb.gov.tr/yayimlar/dergiler/Milli_Egitim_Dergisi/147/altun.htm.

Ataizi, M. (1999). *The effects of cognitive style and authenticity level on development of problem solving skills during computer-based situated learning* (Unpublished PhD Thesis). Anadolu University/Social Scientes Institute, Eskişehir.

Boz, Y. (1987). *Evaluation of addiction and field independence dimension from cognitive styles from 5-12 years old hearing-impaired students attending Eskişehir Anadolu University Hearing Impaired Children Education Center* (Unpublished Master Thesis). Anadolu University/Social Scientes Institute, Eskişehir.

Büyüköztürk, Ş. (2016). *Multivariate Statistics for Social Sciences SPSS and LISREL Applications*. Ankara: Pegem Akademi Publishing.

Crandall, J. V., & Sinkeldam, C. (1964). Children's dependent and achievement behaviors in social situations and their perceptual field dependence. *Journal of Personality*, *32*, 1-22. http://doi.org/10.1111/j.1467-6494.1964.tb01322.x. PMID: 14132503.

Çakan, M. (2003). Psychometric data on the group embedded figures test for Turkish undergraduate students. *Perceptual and Motor skills*, *96*(3), 993-1004. http://doi.org/10.2466/pms.2003.96.3.993

Çakan, M. (2005). Relationship between second language proficiency and cognitive styles: example of 8th grade French. *Elementary Education Online*, *4*(1). Retrieved from http://ilkogretim-online.org.tr/index.php/io/article/view/2023/1859.

Çıkrıkçı, N. (1990). *The effect of negative anticipation and cognitive style on mental performance*. (Unpublished Master Thesis). Ankara University/Social Sciences Institute, Ankara.

Demirtaş, H., & Dönmez, B. (2008). Secondary school teachers' perceptions about their problem solving abilities. *İnönü University, Journal of the Faculty of Education*, *9*(16), 177-198. Retrieved from https://dergipark.org.tr/tr/pub/inuefd/issue/8707/108713.

Dinçer, Z. (1993). *The impact of socio-economic level on cognitive styles* (Unpublished Master Thesis). Ankara University/Social Sciences Institute, Ankara.

Güven, B. (2003). *The effect of teaching activities designed for field dependet and independent students on their academic achievement and attitudes in the 5th grade of the social studies course in elementary school* (Unpublished PhD Thesis). Anadolu University/Educational Sciences Institute, Eskişehir.

Heppener, P. P., & Anderson, W. P. (1985). The relationship between problem solving self-appraisal and psychological adjustment. *Cogn Ther Res*, *9*, 415-427. https://doi.org/10.1007/BF01173090

Heppener, P. P., & Peterson, C. H. (1982). The development and implications of a personal problem solving invetory. *Journal of Counseling Psychology*, *29*(1), 66-75. http://doi.org/10.1037/0022-0167.29.1.66

Ho, R. (1981) Sex, sex-role typing, and children's problem-solving behavior. *The Journal of Social Psychology*, *115*(2), 219-226, http://doi.org/10.1080/00224545.1981.9711661

Horzum, M. B., & Alper, A. (2006). The effect of case based learning model, cognitive style and gender to the student achievement in science courses. *Ankara University, Journal of Faculty of Educational Sciences*, *39*(2), 151-175.

Jrath, J. M., Hasija, S., & Malhotra, D. (1993). A study of state anxiety scores in a problem solving situation. A study of state anxiety scores in a problem solving situation. *Studia Psychologica*, *35*(2), 143-149.

Karasar, N. (2016). *Scientific research method: Concepts, principles, techniques* (30th Edition). Ankara: Nobel Publishing.

Kaptan, F., & Korkmaz, H. (2002). A study on the perception towards to pre-service teachers' problem solving skills. *Journal of Qafqaz University*, *9*(1), 183-188.

Kasap, Z. (1989). *The relation between success and manner of primary school 4th year students in problem solving according to the socio-economic level* (Unpublished Master Thesis). Marmara University/Educational Scientes Institute, İstanbul.

Larson, L. M., & Heppener, P. P. (1989). Problem solving appraisal in an alcoholic population. *Journal of Counseling Psychology*, *36*(1), 73-78. https://doi.org/10.1037/0022-0167.36.1.73

Mertoğlu, H., & Öztuna, A. (2004). Is the use of technology of individuals related to their problem solving abilities? *The Turkish Online Journal of Educational Technology*, *3*(1), 83-92. Retrieved from http://www.tojet.net/articles/v3i1/3112.pdf.

Miller, G. (1995). *Learning style of agricultural distance learners*. NAERM (Dec1, 1995).

Ören, D. (2007). *An investigation of 10th grade students' proof schemes in geometry with respect to their cognitive styles and gender* (Unpublished Master Thesis). Middle East Technical University/ Graduate School of Natural and Applied Sciences, Ankara.

_____

Ramirez, A. I., & Castenada, A. (1974). *Cultural democracy, bicognitive development and education*. Academic Press.

Saracaoğlu, A. S., Serin, O., & Bozkurt, N. (2005). Examination of problem solving and locus of control levels of graduate students of educational sciences institute in terms of some variables. *Dokuz Eylül University, Journal of Buca Faculty of Education*, *17*. Retrieved from https://dergipark.org.tr/tr/pub/deubefd/issue/25433/268368.

Saracho, O. N. (1988). Cognitive styles and young children's learning. *Early Child Development and Care*, *30*(1-4), 213-220, http://doi.org/10.1080/0300443880300118

Savaşır, I., & Şahin, H. N. (1997). *Assessment in cognitive-behavioral therapy: frequently used scales*. Ankara: Turkish Psychologists Association Publications.

Shade, J. B. (1983). Cognitive strategies as determinants of school achievements. *Psychology in the Schools*, *20*(4), 488-493. https://doi.org/10.1002/1520-6807(198310)20:4<488::AID-PITS2310200416>3.0.CO;2-U

Somyürek, S. (2004). *The effects of advance organizers existing in computer assisted instruction software on achievement of the field dependent and field independent students*. (Unpublished Master Thesis). Gazi University / Educational Sciences Institute, Ankara.

Somyürek, S., & Yalın, H. İ. (2007). The effect of pre-organizers used in computer-aided educational software on academic achievement of field dependent and independent students. *Turkish Journal of Educational Sciences*, *5*(4), 587-607. Retrieved from https://dergipark.org.tr/tr/pub/tebd/issue/26114/275121.

Soyer, M. K., & Bilgin, A. (2010). Problem- solving skills perceptions of the university students according to different variants. *International Conference on New Trends in Education and Their Implications*. Antalya (November 11-13).

Şahin, N., Şahin, N., & Heppener, P. P. (1993). Psychometric properties of the problem solving ınventory in a group of Turkish university students. *Cogn Ther Res*, *17*, 379-396. https://doi.org/10.1007/BF01177661

Taylan, S. (1990). *Adaptation, reliability and validity studies of Heppner's problem solving inventory*. (Unpublished Master Thesis). Ankara University/ Social Sciences Insttitute, Ankara.

Weller, R., & Weller, L. (1993). *The effects of cognitive styles and learning strategy in a hypermedia environment*. The Computer Ethics Stack.

Wey, P., & Waugh, M. L. (1993). The effects of different interface presentation modes and users' individual differences on users' hypertext information access performance. Paper presented at the annual meeting of *American Educational Research Association*, Atlanta, GA.

Witkin, H. A., & Goodenhough, D. R. (1981). Field dependent-independent. *Journal of Educational Psychology*, *75*(5).

Witkin, H. A., Moore, C. A., Goodenough, D. R., & Cox, P. W. (1977). Field dependent and field independent cognitive styles and their educational implications. *Review of Educational Research*, *47*, 1-64.

Witkin, H. A., Oltman, P. K., Raskin, E., & Karp, S. A. (1971). *A manual for the group embedded figures test*. Palo Alto, CA: Consulting Psychologists Press.

Yalçın, B., Tetik, S., & Açıkgöz, A. (2010). A study on the determination of the perceptions of problem solving skills and the levels of locus of control of high school students. *Journal of Organization and Management Sciences*, *2*(2), 19-27. Retrieved from https://dergipark.org.tr/tr/pub/oybd/issue/16336/171024.

M. Keskin – Comparison of Prospective Teachers' Perceptions of Problem-Solving Skills...

_____

Determination of the Readability Levels of the Texts Related to Biology Topics in the Science Textbook-6

Şeyda Gül

Ataturk University, Erzurum, TURKEY
Kazım Karabekir Faculty of Education

Abstract

The aim of this study is to examine the readability levels of the texts on the biology units in the science textbook prepared for the sixth grade. This study, which is based on a qualitative approach, was carried out with the method of document analysis. The textbook examined in the study is Middle School and Imam Hatip Middle School Science Textbook 6, which has been used since the 2018-2019 academic year. Regarding biology topics, the textbook includes in two units (Unit-1: Our Body Systems, Unit 2: Our Body Systems and Health). In the study, the learning outcomes of the units were taken as a basis in the selection of the texts to be analyzed in the textbook. In the study, a total of 22 texts were randomly selected by taking into account the learning outcomes in the curriculum. In addition, it has been paid attention that each text contains at least 100 words. Ateşman readability formula was used to determine the readability levels of the selected texts. According to the findings obtained as a result of the analysis, it was determined that the readability level of the texts for unit-2 was medium, while the readability level of the texts for unit-6 was found to be difficult. In the light of the findings, suggestions were made that the textbooks should be prepared in accordance with the student level in terms of readability and that texts consisting of simpler and shorter sentences should be used more.

Keywords: 6th grade, biology, textbook, readability.

1. Introduction

Today, the need for enlightenment through knowledge has led nations to structure curricula based on contemporary learning theories. Curriculums can be defined as theoretical and practical structures aiming to train the type of people defined in the general objectives of education (Epçaçan & Erzen, 2008). There are four basic elements in a curriculum, including the dimensions of goal, content, learning-teaching process and evaluation (Gül, 2019). For the success of the curriculum, it is extremely important that all four elements are in harmony with each other and none of them are ignored in practice. Of these, the content element searches for an answer to the question "what will be taught in a curriculum?". Textbooks have a very important role in transferring the content of the program to students (Taş, 2007). Because textbooks are one of the most important materials that present the information on the subjects in the curriculum in a regular and planned manner, as well as guiding as a source of information and educating the students in line with the objectives of the course (Karamustafaoğlu, Salar & Celep, 2015). In other words, textbooks are a mirror and visible face of the curriculum because they are prepared on the basis of curriculum and they are tools that embody learning outcomes generally stated abstractly

Correspondence: Şeyda Gül, Ataturk University, Kazım Karabekir Faculty of Education, Erzurum, TURKEY. E-mail: seydagul@atauni.edu.tr.

in curricula (Çelik, Çetinkaya & Yenmez, 2020; Demirel & Kıroğlu, 2008; Kılıç & Seven, 2006). Therefore, in addition to teachers, administrators and other factors, the role of textbooks is also important for the success of a curriculum (Çelik et al., 2020). As a matter of fact, according to Ceyhan and Yiğit (2004), textbooks have an important place as teachers, physical facilities and training programs in improving the quality of human resources as indispensable tools of educational services.

Textbooks are the basic element of educational environments because they are portable and stable and can be used without the need for another power source, unlike other electronic course tools (Çelik et al., 2020; Sunday, 2014). For this reason, they are the most frequently used tools by teachers in the classroom environment (Çakıroğlu, 2015). Textbooks are important teaching materials that teachers use to conduct their lessons in a correct, systematic and conceptual framework (Ellis, 1997). Textbooks help teachers especially when teaching materials are insufficient, laboratory facilities are limited and classes are crowded (Şahin, 2012). When textbooks are considered as instruction materials that convey 99% of the information along with a teacher and whiteboard (Yılmaz, Gündüz, Çimen & Karakaya, 2017), it is unthinkable that textbooks that are commonly used comprise of materials written haphazardly and imprecisely. In other words, to receive the expected benefit from textbooks, textbooks should possess certain qualities and be prepared according to certain standards (Anılan, Balbağ, Anılan, Görgülü & Çemrek, 2007; Chiappetta, Fillman & Sethna, 1991; Gül, Özay Köse & Diken, 2020; Kelly, 1989). Accordingly, the standards that will be developed for textbooks can be analyzed under the main titles; physical features, educational design, visual design and language and expression (Gül et al., 2020; Yurt & Arslan, 2014).

In addition to the above, the instructional effectiveness of the textbook depends on four basic variables. These consist of the readability level of the book, the content and structure of the book, the pattern features of the book, and student characteristics such as interest, motivation, prior knowledge and skills (Şahin, 2012; Yalın, 1996). Among these variables, the readability of the textbook can be explained as the student's reading the material quickly and the level of understanding the text, she/he reads (Çakmak & Çil, 2014). This definition emphasizes the interaction between a group of readers whose characteristics such as reading skills, prior knowledge and motivation are known (Güney, Temur & Solmaz, 2009).

The number of words in the sentences, the number of syllables in the words and the number of ideas to be emphasized in the sentences are factors affecting readability (Tekbıyık, 2006). The readability of a text requires being appropriate to the level of the target audience as well as all its features (Çakmak & Çil, 2014). Each class includes students with different reading levels and experiences. Some students may be above the reading level and some students may be below this level. Likewise, the difficulty levels of the texts differ from each other. While students can easily read some texts in textbooks, they may have difficulty with some texts (Ulu Kalın & Aydemir, 2017). Overlapping the reading levels of the texts with the reading levels of the students will make the texts easy to understand (Ulusoy, 2009). In this respect, it is extremely important that the texts in the textbooks are suitable for the students' level and therefore the author takes these features into account when preparing a textbook (Bağcı & Ünal, 2013; Gül et al., 2020). The author aims to teach new concepts to students and to convey the text content correctly while establishing communication strategies. However, to what extent these goals are realized is a matter of debate (Kılıç, Atasoy, Tertemiz, Şeren & Ercan, 2001). Regarding this subject, due to the nature of science, quite a lot of technical terms are used in science books. These are difficult for students to understand. Compared to physics, chemistry and other sciences, especially biology is a science with more reading difficulties due to the definitions of concepts, theories and principles. Therefore, readability gains a great importance in the selection of such science books (Özay Köse, 2009). However, it is known that students face some problems in reading and understanding such written sources used in biology lessons. One of the problems faced by students is that a technical

_____

language is used in scientific writings and this language is not fully and adequately understood by students (Özay Köse & Gül, 2016). Another problem is that terms that are not used much in daily life are used excessively in written sources. It is stated that if technical and scientific concepts are used too much in the texts, the perception of students can be prevented, and if they are used adequately, the perception of information will be easier (Yürümez, 2010). Therefore, as important as the accuracy of scientific information in the texts of biology textbooks, it is also important to convey this information to the reader in an understandable way. Presentation of information in an understandable way is possible with a good language, good expression and readability (Köseoğlu et al., 2003).

Numerous studies have been conducted in the literature so that the texts in the textbooks can be easily understood by students (Çeçen & Aydemir, 2011; Gül et al., 2020; Ulu Kalın & Aydemir, 2017). In these studies, it was tried to determine the suitability of the texts to the reader level with the help of formulas that help to predict the reading level. These formulas are called readability formulas (Çakmak & Çil, 2014). In order to determine the difficulty levels of the texts, formulas such as Dale-Chall formula, Gunning Fox Index, Fry Readability Graph, Flesch-Kincaid formula and Raygor were developed in different countries (Ulu Kalın & Aydemir, 2017). These formulas are generally used to determine at which level the text is suitable for the reader. Formulas are usually applied to a hundred words of selected texts. Word length and sentence lengths are generally used to determine readability (Zorbaz, 2007). Readability studies in Turkey began in the 1990s (Bağcı & Unal, 2013).

Since there was no readability formula suitable for Turkish texts in studies in our country, readability formulas adapted for English texts were used in the past (Çakmak & Çil, 2014). However, these formulas were not suitable for Turkish texts because the structure of a language is not similar to another language. For this reason, studies were carried out for the readability of Turkish texts, and a readability formula suitable for the Turkish language structure was first developed by Ateşman (1997).

As it is known, readability in Turkish is affected by factors such as average sentence length and the number of syllables/words. Average sentence length is important not only for Turkish but also for other languages. As the number of words in a sentence increases, the readability level of that text decreases (Bezirci & Yılmaz, 2010). According to this, Ateşman's readability formula, which is frequently preferred in studies in our country, was created by taking these two variables into consideration. The formula created by Ateşman and the readability number (RN) according to this formula and the reading level (RL) corresponding to this number value range are as follows in Figure 1.

Although there are many studies in our country using both Ateşman and other readability formulas, it is seen that Turkish textbooks are examined in the vast majority of these studies (Bağcı & Ünal, 2013; Çepni, Gökdere & Taş, 2001; Durukan, 2014; Mirzaoğlu & Akın, 2015; Okur & Arı, 2013). However, studies on science and especially biology are also rare (Dikmenli, Çardak & Altunsoy, 2008; Gül, 2009; Çakmak & Çil, 2014; Gül et al., 2020; Özay Köse, 2009). One of these studies was done by Özay Köse (2009). In Özay Köse's study (2009), the readability level of the texts on "cell" in the ninth-grade biology textbook was calculated and compared according to different formulas. The findings showed that the readability level of the "Cell" subject was easy and readable in terms of Ateşman and Cloze tests. Another study on biology textbooks was done by Gül (2019). Gül (2019) researched the readability of the texts in the tenth-grade biology textbook and revealed that the overall readability level of the book is difficult. Similarly, Gül et al. (2020) examined the readability level of the texts in the ninth-grade biology textbook and found that readability in general was difficult. When looking at the studies conducted at lower class level, Çakmak and Çil's study (2014) comes to the fore. These researchers examined the readability of the texts in the unit "Let's Travel to the World of Living Beings, Get to Know" in the

fourth-grade science textbook. As a result of the findings, it was concluded that the difficulty level of the texts was medium and the text was understandable.
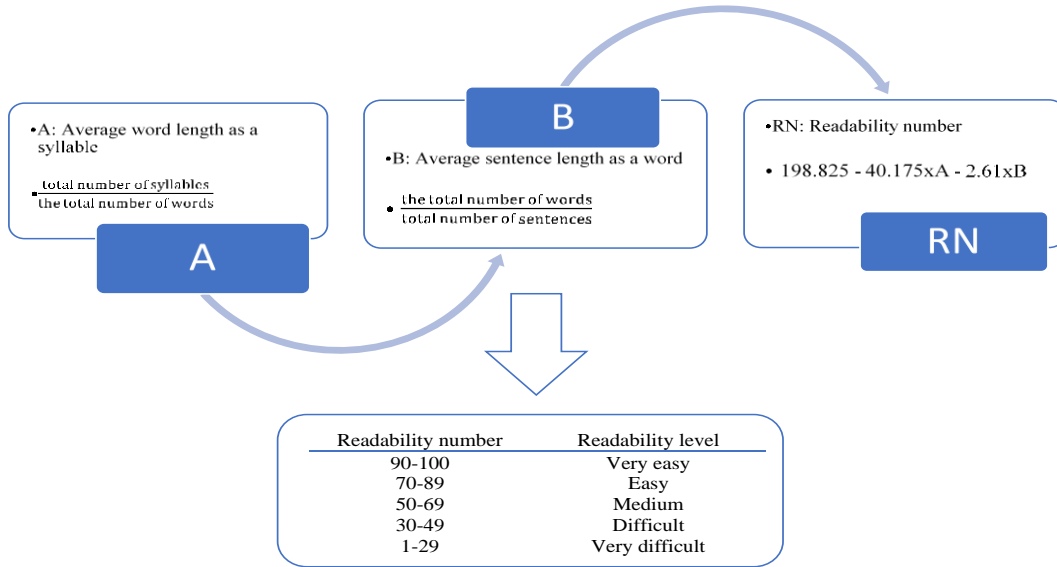

Figure 1. Ateşman (1997) readability formula and readability levels

When the above studies are evaluated in general, it is seen that the majority of the studies were done with high school biology textbooks. Therefore, it becomes a necessity to carry out similar studies for the biology subjects covered within the science course at lower levels of education. On the other hand, it is thought that it is necessary to primarily address textbooks that include biology subjects, where students have the most learning difficulties and where foreign terms are frequently included (Gül et al., 2020). In addition, it is thought that such a study can serve as an example in determining the readability of biology subjects in textbooks prepared for higher-level classes. Hence, in this study, the readability formula adapted by Ateşman (1997) from Flesch (1948) into Turkish was applied to the biology topics in the 6th grade science textbook.

2. Method

This study, which is based on a qualitative approach, was carried out with the method of document analysis. In document analysis, written materials are systematically analyzed and examined in order to provide information about the phenomenon and phenomena to be studied. In qualitative research, document analysis can be used both as a data collection tool and as a data collection method (Yıldırım & Şimşek 2005).

2.1 *Study material and analysis process*

The textbook examined in the study is Middle School and Imam Hatip Middle School Science Textbook 6, which has been used since the 2018-2019 academic year with the decision of the Board of Education and Discipline dated 28.05.2018 and numbered 78. Regarding biology topics, the textbook includes in two units namely: "Our Body Systems" and "Our Body Systems and Health". The units related to biology subjects in the textbook, the number of learning outcomes, course hours and percentages of course hours are given in the Science Curriculum (MEB, 2018) as follows om Table 1.

_____

Table 1. The units related to biology subjects for sixth graders in the science curriculum

Unit no	Name of unit	Number of learning outcomes	Course hours	Rate (%)
Unit 2	Our Body Systems	11	24	16.7
Unit 6	Our Body Systems and Health	11	18	12.5
Total		22	42	29.2

As seen in Table 1, there are two units in the textbook for the field of biology. Both units include 11 learning outcomes. At the same time, it is understood that the ratio of the second unit is higher in relation to the number of learning outcomes and course hours.

In the study, the learning outcomes of the units were taken as a basis in the selection of the texts to be analyzed in the textbook. Accordingly, texts as many as the number of learning outcomes specified in the curriculum were selected for each unit. Therefore, 11 texts for the Unit 2 and 11 texts for the Unit 10, which consisted of at least 100 words were, selected and analyzed in terms of readability. However, since the text given under the F.6.2.3.2 coded learning output is less than 100 words, this entire text is included in the analysis. Making the necessary calculations using the Ateşman readability formula requires knowing the number of sentences, words and syllables in the text. In determining these, the criteria put forward by Mirzaoğlu and Akın (2015) were taken into account. After determining the number of sentences, words and syllables in each text, average word length (A) and average sentence length (B) were calculated as shown in Figure 1. Later, these values were placed in the formula of Ateşman (1997), which is shown in Figure 1, and the readability number (RN) of each text was calculated, and these values were evaluated according to the readability levels developed by Ateşman (1997). Below is an example of texts selected from two units in the study. An example of texts selected from two units in the study is given in Figure 2 and Figure 3.
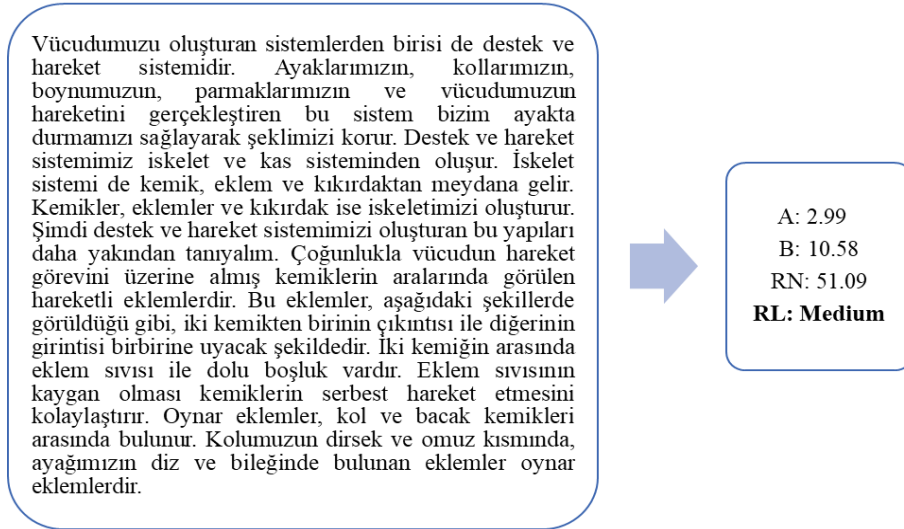
Figure 2. A sample text for the "Our Body Systems" unit

An example text examined in the "Our Body Systems" unit was given in Figure 2. When the text was examined, it was seen that it consisted of 12 sentences, 127 words and 380 syllables. As a result of the calculations made according to Ateşman's formula, it was determined that the readability level of the text was "medium". Figure 3 was showed an example text examined in the "Our Body Systems and Health" unit.

Vücudumuzdaki sistemleri denetleyen ve düzenleyen sistemlerden biri de vücudumuzun çeşitli yerlerinde bulunan iç salgı bezleridir. İç salgı bezleri, vücudumuzdaki sistemleri denetlemek ve düzenlemek için uyarıcı maddeler içeren salgılar üretirler. Bu salgıları, bir boşaltım kanalı ile bir organa boşaltmak yerine doğrudan kana karıştırırlar. Bu nedenle iç salgı bezi olarak adlandırılırlar. İç salgı bezlerinin salgıladığı ve doğrudan kana geçen uyarıcı maddeler, hormon olarak adlandırılır. İç salgı bezlerinden salgılanan çeşitli hormonlar vardır. Her biri farklı bir özelliğe sahip olan hormonların etkilediği hücreler de birbirinden farklıdır. Hipofiz bezinin salgıladığı birçok hormon vardır. Bu hormonlardan biri büyüme hormonudur. Çocukluk ve ergenlik döneminde etkili olan büyüme hormonu, vücudun büyümesi için gereklidir.

A: 2.86

B: 10.50

RN: 56.52

RL: Medium

Figure 3. A sample text for the "Our Body Systems and Health" unit

When Figure 3 is examined, it is seen that the selected text consists of 10 sentences, 105 words and 300 syllables. As a result of the calculations, it was determined that the readability level of this text according to the category suggested by Ateşman (1997) is "medium".

2.2 *Ethical procedures*

Document analysis was performed in this study, and it does not require the approval of the ethics committee since the application was not performed on any person (s).

3. Results

In the study, each of the 22 texts, the subject area, the learning outcomes, the average word length (A), the average sentence length (B), the readability number (RN) and the readability level (RL) are given in Table 2 and Table 3 below.

_____

Table 2. Analysis results for "Our Body Systems" unit

Subject Area	Learning Outcomes	A	B	RN	RL
F.6.2.1. Musculoskeletal System	F.6.2.1.1. Explains the structures of the musculoskeletal system with examples.	2.99	10.58	51.09	Medium
Mean score		**2.99**	**10.58**	**51.09**	**Medium**
F.6.2.2. Digestive System	F.6.2.2.1. Explains the functions of structures and organs in the digestive system using models.	3.00	14.29	41.00	Difficult
	F.6.2.2.2. Makes the conclusion that nutrients must undergo physical (mechanical) and chemical digestion in order to pass into the blood.	3.14	11.83	41.80	Difficult
	F.6.2.2.3. Explains the functions of organs that help digestion.	2.92	12.75	48.24	Difficult
Mean score		**3.02**	**12.96**	**43.68**	**Difficult**
F.6.2.3. Circulatory System	F.6.2.3.1. Explain the functions of the structures and organs that make up the circulatory system using a model.	2.78	10.4	59.99	Medium
	F.6.2.3.2. Examines the pulmonary and systemic circulation on a diagram and explains their functions.	2.67	12.86	57.99	Medium
	F.6.2.3.3. Defines the structure and functions of blood.	2.71	9.83	64.29	Medium
	F.6.2.3.4. Explains the blood exchange between blood groups.	2.66	11.67	61.50	Medium
	F.6.2.3.5. Evaluates the importance of blood donation for society.	2.59	10.9	66.32	Medium
Mean score		**2.68**	**11.13**	**62.02**	**Medium**
F.6.2.4. Respiratory System	F.6.2.4.1. Explains the functions of the structures and organs that make up the respiratory system using models.	2.88	13.75	47.23	Difficult
Mean score		**2.88**	**13.75**	**47.23**	**Difficult**
F.6.2.5. Excretory System	F.6.2.5.1. Summarizes the functions of the structures and organs that make up the excretory system by showing them on the model.	3.03	11.60	46.82	Difficult
Mean score		**3.03**	**11.6**	**46.82**	**Difficult**
Overall mean score		**2.92**	**12.00**	**50.17**	**Medium**

As seen in Table 2, the overall readability level for all texts in five subject areas was determined to be at "medium" level (RL=50.17). However, it was observed that the highest RN value belongs to "F.6.2.3.5. Evaluates the importance of blood donation for society." learning outcome (RN=66.32), while the lowest RN value belongs to "F.6.2.2.1. Explains the functions of structures and organs in the digestive system using models." learning outcome (RN=41.00). When the findings were examined in terms of subject areas, it was determined that the texts on Musculoskeletal System and Circulatory System were medium, while the texts on Digestive System, Respiratory System and Excretory System were difficult. The findings of Unit-6 in the study are given in Table 3.

Table 3. Analysis results for "Our Body Systems and Health" unit

Subject Area	Learning Outcomes	A	B	RN	RL
F.6.6.1. Regulatory Systems	F.6.6.1.1. Explains the nervous system, the functions of the central and peripheral nervous system on the model.	3.00	14.75	39.80	Difficult
	F.6.6.1.2. Realizes the importance of endocrine glands for the body.	2.86	10.50	56.52	Medium
	F.6.6.1.3. Explains the physical and psychological changes that occur in the transition from childhood to adolescence.	2.97	9.82	53.88	Medium
	F.6.6.1.4. Discusses what should be done to have a healthy adolescence period based on research data.	3.20	10.58	42.65	Difficult
	F.6.6.1.5. Discusses the effects of the regulatory systems on the regular and coordinated operation of other systems in our body.	3.24	10.18	42.09	Difficult
Mean score		**3.05**	**11.17**	**46.99**	**Difficult**
F.6.6.2. Sense Organs	F.6.6.2.1. Explains the structures of sensory organs by showing them on the model.	3.31	11.89	34.81	Difficult
	F.6.6.2.2. Shows the relationship between the sense of smell and taste with an experiment she designed.	2.89	11.56	52.55	Medium
	F.6.6.2.3. Gives examples of the defects in the sense organs and the technologies used to eliminate these defects.	2.87	10.50	56.12	Medium
	F.6.6.2.4. Discusses the measures to be taken to protect the health of the sense organs.	2.92	11.00	52.80	Medium
Mean score		**3.00**	**11.24**	**49.07**	**Difficult**
F.6.6.3. Health of the System	F.6.6.3.1. Discusses the things to be done for the health of systems based on research data.	3.02	12.10	45.92	Difficult
	F.6.6.3.2. Understands the importance of organ donation in terms of social solidarity.	3.13	11.82	42.23	Difficult
Mean score		**3.08**	**11.96**	**44.08**	**Difficult**
Overall mean score		**3.04**	**11.46**	**46.71**	**Difficult**

As seen in Table 3, the overall readability level for all texts in three subject areas was determined to be at "difficult" level (RL=46.71). However, it was observed that the highest RN value belongs to "F.6.6.1.2. Realizes the importance of endocrine glands for the body." learning outcome (RN=56.52), while the lowest RN value belongs to "F.6.6.2.1. Explains the structures of sensory organs by showing them on the model." learning outcome (RN=34.81). When the findings

_____

were examined in terms of subject areas, it was determined that the texts in all subject areas were difficult.

4. Discussion and conclusion

It is quite common to use textbooks in learning environments in our country (Bağcı & Ünal, 2013). Textbooks are the educational environments where students use their reading comprehension skills most (Çelik et al., 2020). At this point, the preparation of textbooks in accordance with students' language development and reading comprehension levels will enable students to understand the texts they read. Understanding a text read shows the readability of that text (Bağcı & Ünal, 2013). For this reason, it is very important to prepare the texts in the textbooks in accordance with the reader level and to determine the reading difficulty levels. This study was examined the readability levels of the texts related to biology topics in the 6th grade science textbook.

When the findings for unit-2 were examined in the study, the readability level of the texts in general was determined as "medium". This finding shows that "Our Body Systems" unit in the textbook was prepared in accordance with the student level. When the studies on the determination of the readability levels of the texts on biology subjects are examined, it is seen that the results are mostly contrary to the findings of this study (Blystone, 1987; Cardak, Dikmenli & Guven, 2016; Çakmak & Çil, 2014; Gould, 1977; Kennedy, 1979). Of course, looking at these studies, it is known that the type of readability formula also affects the readability level. For example, Özay (2009) examined the readability level of the texts on the ninth grade 'cell' topic using the Flesch-Kincaid Formula, Gunning Fog Index, Sönmez Formula, Cloze Test Method and Ateşman formula. The findings of the study revealed that Sönmez, Ateşman and Cloze tests can be only used in Turkish texts. In a similar study, Yürümez (2010) examined the readability and compliance of the texts in the ninth grade biology textbook with the target age level using the same formulas. According to the findings, it was seen that the texts in the book were understandable only according to the Sönmez formula. In another study by Çakmak and Çil (2014), the applicability of FOG, Flesch-Kincaid, Flesch Ease of Reading Powers-Sumner-Kearl, Coleman-Liau, ARI, Linsear Write, Ateşman and Sönmez formulas for fourth grade the unit called "The Case of Exploring and Knowing The World of Living Creatures" was examined. As a result of the research, it was determined that only Ateşman and Sönmez formulas are applicable to this textbook.

There are many studies on the readability of textbooks belonging to different subject areas, along with the above examples of biology subjects (Bağcı & Ünsal, 2013; Benjamin, 2012; Çelik et al., 2020; Tekbıyık, 2006). The common conclusion reached in these studies is the necessity of developing formulas suitable for the Turkish language structure. At this point, a formula suitable for Turkish language structure was developed by Ateşman (2007) and it has been used in many studies in our country in recent years. For example, the Ateşman formula has been used in studies conducted by Gül (2019), Demirci, Gül and Özay Köse (2019), Gül et al., (2020), Gül and Kaya (2021) on biology topics, especially in recent years. However, as a result of the analyzes made in these studies, different findings from each other were determined. For example, Özay's study (2009) was determined that the readability of the texts on the cell subject is suitable for the target student population. Kaya and Gül (2021) examined the readability levels of the texts belonging to the "from Gene to Protein" unit in the twelfth grade biology textbook. As a result of the analysis, it was determined that the readability level of the texts in general was difficult. Demirci et al. (2019) examined the readability levels of the texts on "Photosynthesis" in the twelfth grade biology textbook. As a result of the analysis, it was revealed that the readability level of the texts in general is in the medium category. In Gül's study (2019), it was revealed that the readability level of the texts in the tenth grade biology textbook is difficult. When the findings were

evaluated separately for the units, it was found that the readability level of all three units in textbook was difficult. It was founded that the lowest unit of readability was "Basic Principles of Inheritance" and the highest unit of readability was "Ecosystem Ecology and Current Environmental Problems". Gül et al. (2020) revealed that the readability levels of texts in biology textbook were generally in category "difficult" but also close to the "medium difficulty" border. As separately examined the findings for three units, it was founded that the readability levels of the texts were generally as "difficult" for the first unit namely "Biology: The Science of Life", "medium" for the second unit namely "The Cell", and finally "medium" for the thirst unit namely "The World of Living Organisms".

When the above findings are evaluated in general, it is seen that the readability of most of the texts is difficult according to the Ateşman readability formula. As a matter of fact, although the readability level of the texts for unit-2 was determined to be medium in this study, when the findings were analyzed according to subject areas the overall readability level for all texts was determined to be at "medium" level. When the findings were examined in terms of subject areas, it was determined that the texts on musculoskeletal system and circulatory system were medium, while the texts on digestive system, respiratory system and excretory system were difficult. On the other hand, when the findings for unit-6 were examined, it was found that the readability levels of all texts were difficult both in the unit and in the subject areas. These findings may suggest that although the texts belonging to unit-2 are prepared in accordance with the student level, the texts belonging to unit-6 are not suitable for the student level. When the studies examining the readability levels of the texts on biology subjects in the literature are examined, it is stated in the above sample studies that mostly similar or different results from this study have been reached. Of course, in order to make a definite judgment about these findings, it is necessary to examine the textbooks comparatively by developing different formulas suitable for Turkish texts. Because Temur, Sarı and Orhon (2011) examined the studies on the concept of readability in the fields of science and social sciences with document analysis. The findings revealed that both the readability formulas developed for Turkish and the formulas adapted from a foreign language to Turkish give different results in terms of readability level. At this point, it is beneficial to consider different elements from variables such as word or sentence length, which are frequently considered in formulas used in studies on readability. As a matter of fact, it is stated that the ratio of the items whose meaning is unknown rather than the proportions of long words and sentences in a text is more effective in determining the intelligibility ratio. In other words, as the proportion of items whose meaning is unknown increases, the level of comprehensibility of the text decreases (Budak, 2005). Biology is a field that includes a lot of foreign terms in terms of subject content (Özay Köse & Gül, 2016). In addition, the fact that more concepts are included in the higher levels of education and the subjects are more detailed, and also the readability level of the textbooks is difficult as can be seen from the studies carried out especially at the high school level, may support this view. On the other hand, although this study is at the level of sixth grade, it is known that the subject of Regulatory Systems (nervous and endocrine systems) in unit-6, whose readability level was found to be difficult, is among the subjects that students have the most learning difficulties (Bahar, Johnstone & Hansell, 1999; Güneş & Güneş, 2005). This may be effective in evaluating the readability level of unit-6 as difficult.

4.1 *Implications*

As a result, according to the findings of this study detailed above, it can be said that the readability level for all the texts on biology subjects in the science textbook-6 is not suitable for the student level. Based on this, in the light of the conclusion reached in the study, considering the following suggestions may be a guide for future research:

Especially in the lower levels of education, texts containing short, easy and understandable sentences should be used in textbooks prepared for both biology and other subject areas.

When the literature is examined, it is seen that the studies to determine the readability levels of biology texts are carried out with high school level textbooks. In addition, it was found that the readability levels of the texts in these studies are mostly difficult. This may be due to the fact that more foreign terms are used in textbooks prepared for upper classes. However, in this study in which the sixth grade textbook was examined, it was determined that the readability level of one of the units was medium, while the texts in the other unit were difficult. These results may imply that the textbooks will produce more appropriate results for the lower grades. However, it is recommended to examine the textbooks prepared for the first stages of primary education in order to clarify this situation.

As stated before, as the proportion of items whose meaning is unknown increases, the level of comprehensibility of the text decreases (Budak, 2005). Since biology is a field that frequently includes abstract and foreign terms, attention should be paid to the use of foreign elements in small numbers, as well as the texts being short and plain while preparing textbooks.

Since biology topics contain a large number of Latin/foreign terms, new readability formulas specific to this course can be developed. Thus, more accurate results can be obtained.

Finally, the readability levels of different books prepared for the same grade levels can be compared. Thus, it can be revealed more clearly whether the determined difficulty levels are due to the length of the texts or the content of the subject.

References

Anılan, H., Balbağ, M.Z., Anılan, B., Görgülü, A., & Çemrek, F. (2007). Fizik, kimya ve biyoloji dersi ders kitaplarının öğretmen adayları tarafından değerlendirilmesi. *e-Journal of New World Sciences Academy*, *2*(4), 313-320.

Ateşman, E. (1997). Türkçede okunabilirliğin ölçülmesi. *Dil Dergisi*, *58*, 71-74.

Bağcı, H., & Ünal, Y. (2013). İlköğretim 8. sınıf Türkçe ders kitaplarındaki metinlerin okunabilirlik düzeyi. *Ana Dili Eğitimi Dergisi*, *1*(3), 12-28.

Bahar, M., Johnstone, A. H., & Hanseli, M. H. (1999). Revisiting learning difficulties in biology. *Journal of Biological Education*, *33*(2), 84-86.

Bezirci, B., & Yılmaz, A. E. (2010). Metinlerin okunabilirliğinin ölçülmesi üzerine bir yazılım kütüphanesi ve Türkçe için yeni bir okunabilirlik ölçütü. *Dokuz Eylül Üniversitesi Fen Bilimleri Dergisi*, *12*(3), 49-62.

Benjamin, R. G. (2012). Reconstructing readability: recent developments and recommendations in the analysis of text difficulty. *Educational Psychology Review*, *24*, 63-88.

Blystone, R. V. (1987). Collage introductory biology textbooks. *American Biology Teacher*, *49*(7), 418-425.

Budak, Y. (2005). Metinlerin okunabilirlik düzeylerinin saptanmasına yönelik eleştirel bir bakış. *Eğitim Araştırmaları*, *21*, 76-87.

Cardak, O., Dikmenli, M., & Guven, S. (2016). 7th grade science textbook readability and compatibility with the target age level. *International Research in Higher Education*, *1*(1), 101-106.

Ceyhan, E., & Yiğit, B. (2004). *Konu Alanı Ders Kitabı İncelemesi*. Ankara: Anı Yayıncılık.

Chiappetta, E. L., Fillman, D. A., & Sethna, G. H. (1991). A method to quantity major of scientific literacy in science textbooks. *Journal of Research in Science Teaching*, *28*(8),713-725.

Çakıroğlu, O. (2015). İlkokul Türkçe ders kitaplarındaki metinlerin okunabilirlik düzeylerinin öğrenme güçlüğü olan öğrenciler açısından değerlendirilmesi. *İlköğretim Online*, *14*(2), 671-681.

Çakmak, G., & Çil, E. (2014). 4. sınıf fen ve teknoloji ders kitabının okunabilirlik formülleriyle değerlendirilmesi: Canlılar dünyasını gezelim, tanıyalım ünite örneği. *Turkish Journal of Educational Studies*, *1*(3), 1-26.

Çeçen, M. A., & Aydemir, F. (2011). Okul öncesi hikâye kitaplarının okunabilirlik açısından incelenmesi. *Mustafa Kemal Üniversitesi Sosyal Bilimler Enstitüsü Dergisi*, *8*(16), 185-194.

Çelik, T., Çetinkaya, G., & Yenmez, A. A. (2020). Ortaokul matematik ders kitaplarındaki metinlerin okunabilirliği ve anlaşılabilirliği üzerine öğretmen-öğrenci görüşleri. *Ankara Üniversitesi Eğitim Bilimleri Fakültesi Dergisi*, *53*(1), 1-28.

Çepni, S., Gökdere, M., & Taş, E. (2001). *Mevcut fen bilgisi kitaplarının bazı okunabilirlik formülleri ile değerlendirilmesi*. Yeni Bin Yılın Başında Fen Bilimleri Eğitimi Sempozyumu içinde (pp. 356-363). İstanbul: Maltepe Üniversitesi.

Demirci, T., Gül, Ş., & Özay Köse, E. (April, 2019). *12. Sınıf biyoloji ders kitabındaki 'Fotosentez' konusuna ait metinlerin okunabilirlik düzeylerinin incelenmesi*. International Human and Civilization Congressfrom Past to Future, Alanya/Turkey.

Demirel, Ö., & Kıroğlu, K. (2008). *Konu alanı ders kitabı incelemesi*. Ankara: Pegem A Yayıncılık.

Dikmenli M., Çardak O., & Altunsoy S. (2008, Haziran). *Ortaöğretim Biyoloji Ders Kitaplarında "Hücre Bölünmeleri" ile ilgili metinlerin Okunabilirlik Düzeyleri*. ICES, Kuzey Kıbrıs.

Durukan, E. (2014). Metinlerin okunabilirlik düzeyleri ile öğrencilerin okuma becerileri arasındaki ilişki. *Ana Dili Eğitimi Dergisi*, *2*(3), 68-76.

Ellis, R. (1997). The empirical evaluation of language teaching materials. *ELT Journal*, *51*, 36-42.

Epçaçan, C., & Erzen, M. (2008). İlköğretim Türkçe dersi öğretim programının değerlendirilmesi. *Uluslararası Sosyal Araştırmalar Dergisi*, *1*(4), 182-202.

Flesch, R. F. (1948). A new readability yardstick. *Journal of Applied Psychology*, *32*, 221-233.

Gould, C.D. (1977). The readability of school biology text books. *Journal of Biological Education,* *11*(4), 248-252.

Gül, Ş. (2019). Ortaöğretim 10. Sınıf biyoloji ders kitabındaki metinlerin okunabilirliğinin incelenmesi. *Asya Öğretim Dergisi*, *7*(2), 22-37.

Gül, Ş., Özay Köse, E., & Diken, E. H. (2020). The examination of the readability levels of texts in 9th grade biology textbook. *Çukurova Üniversitesi Eğitim Fakültesi Dergisi*, *49*(1), 2020, 1-27.

Gül, Ş., & Kaya, S. (Şubat, 2021). *12. Sınıf biyoloji ders kitabında yer alan 'Genden Proteine' ünitesindeki metinlerin okunabilirlik düzeylerinin incelenmesi*. 9. Uluslararası Sosyal, Beşeri ve Eğitim Bilimleri Kongresi, Turkey.

Güneş, M. H., & Güneş, T. (2005). İlköğretim öğrencilerinin biyoloji konularını anlama zorlukları ve nedenleri. *Gazi Üniversitesi Kırşehir Eğitim Fakültesi*, *6*(2), 169-175.

Güney, T., Temur, T., & Solmaz, E. (2009). Bilgisayar destekli metin okunabilirliği analizi. *Türk Eğitim Bilimleri Dergisi*, *7*(4), 751-766.

Karamustafaoğlu, S., Salar, U., & Celep, A. (2015). Ortaokul 5. sınıf fen bilimleri ders kitabına yönelik öğretmen görüşleri. *Gazi Eğitim Bilimleri Dergisi*, *1*(2), 93-118.

Kelly, A.V. (1989). *Curriculum: Theory and practice*. London: Paul Chapman Publishing Ltd.

Kennedy, K. (1979). Determining the reading level of bi ology textbooks. *American Biology Teacher*, *41*(5), 301-303.

Kılıç, A. & Seven, S. (2006). *Konu alanı ders kitabı incelemesi*. Ankara: Pegem A Yayıncılık.

Kılıç, Z., Atasoy, B., Tertemiz, N., Şeren, M., & Ercan, L. (2001). *Konu alanı ders kitabı inceleme kılavuzu*, L. Küçükahmet (Ed.). Ankara: Nobel Yayın Dağıtım.

Köseoğlu, F., Atasoy, B., Kavak, N., Akkuş, H., Budak, E., Tümay, H., Kadayıfçı, H., & Taşdelen, U. (2003). *Bir fen ders kitabı nasıl olmalıdır?* Ankara: Asil Yayın Dağıtım.

Millî Eğitim Bakanlığı [MEB], (2018). *Fen bilimleri dersi öğretim programı (İlk ve Ortaokul 3, 4, 5, 6, 7 ve 8. sınıflar)*. Ankara: MEB Yayınevi.

Mirzaoğlu, V., & Akın, E. (2015). 5. sınıf Türkçe ders kitabındaki metinlerin okunabilirliği üzerine bir inceleme. *Siirt Üniversitesi Sosyal Bilimler Enstitüsü Dergisi*, *5*, 146-155.

Okur, A., & Arı, G. (2013). 6, 7, 8. sınıf Türkçe ders kitaplarındaki metinlerin okunabilirliği. *İlköğretim Online*, *12*(1), 202-226.

Özay Köse, E. (2009). Biyoloji 9 ders kitabında hücre ile ilgili metinlerin okunabilirlik düzeyleri. *Çankaya Üniversitesi Fen-Edebiyat Fakültesi*, *12*, 141-150.

Özay Köse, E., & Gül, Ş. (2016). Biyoloji öğretmen adaylarının Türkçe ve yabancı biyoloji terimlerini kullanım tercihleri. *e-Uluslararası Eğitim Araştırmaları Dergisi*, *7*(3), 1-10.

Sunday, A. S. (2014). Mathematics textbook analysis: A study on recommended mathematics textbooks in school use in southwestern states of Nigeria. *European Scientific Journal Special Edition*, *1*, 140-151.

Şahin, M. (2012). Ders kitaplarının mesaj tasarımı ilkeleri açısından değerlendirilmesi. *Ahi Evran Üniversitesi Kırşehir Eğitim Fakültesi Dergisi*, *13*(3), 129-154.

Taş, A. M. (2007). Yeni sosyal bilgiler ders kitaplarına ilişkin öğretmen görüşlerinin belirlenmesi. *Selçuk Üniversitesi Sosyal Bilimler Enstitüsü Dergisi*, *17*, 509-517.

Tekbıyık, A. (2006). Lise fizik i ders kitabının okunabilirliği ve hedef yaş düzeyine uygunluğu. *Kastamonu Eğitim Dergisi*, *14*(2), 441-446.

Temur, T., Sarı, M. M., & Orhon, B. D. (2011). Fen ve sosyal bilimler alanında yapılan okunabilirlik çalışmalarının karşılaştırmalı olarak incelenmesi. *KHO Bilim Dergisi*, *21*(1), 103-121.

Ulu Kalın, Ö., & Aydemir, A. (2017). 4. sınıf sosyal bilgiler ders kitabının farklı okunabilirlik formüllerine göre incelenmesi. *Studies in Educational Research and Development*, *1*(1), 83-108.

Ulusoy, M. (2009). Boşluk tamamlama testinin okuma düzeyini ve okunabilirliği ölçmede kullanılması. *Türk Eğitim Bilimleri Dergisi*, *7*(1), 105-126.

Yalın, H. İ. (1996). Ders kitapları tasarımı. *Milli Eğitim Dergisi*, *132*, 61-66.

Yıldırım, A., & Şimsek, H. (2005). *Sosyal bilimlerde nitel araştırma yöntemleri (5. Baskı)*. Ankara: Seçkin Yayıncılık.

Yılmaz, M., Gündüz, E., Çimen, O., & Karakaya, F. (2017). 7. sınıf fen bilimleri ders kitabı biyoloji konularının bilimsel içerik incelemesi. *Turkish Journal of Education*, *6*(3), 128-142.

Yurt, G., & Arslan, M. (2014). 7. sınıf türkçe ders kitaplarının şekil-içerik-metin yönünden incelenmesi: zambak ve pasifik yayınları örneği. *Süleyman Demirel Üniversitesi Fen Edebiyat Fakültesi Sosyal Bilimler Dergisi*, *31*, 317-327.

Yürümez, B. (2010). Ortaöğretim 9. sınıf biyoloji ders kitabının okunabilirliği ve hedef yaş düzeyine uygunluğu (Yüksek lisans tezi). Selçuk Üniversitesi, Fen Bilimleri Enstitüsü, Konya.

Zorbaz, K. Z. (2007). Türkçe ders kitaplarındaki masalların kelime-cümle uzunlukları okunabilirlik düzeyleri üzerine bir değerlendirme. *Eğitimde Kuram ve Uygulama*, *3*(1), 87-101.

_____

Anxiety of Not Being Appointed: A Qualitative Study

Mehmet Özcan, Mustafa Kemal Yöntem & Ahmet Galip Yücel

Nevşehir Hacı Bektaş Veli University, Faculty of Education, TURKEY

Abstract

This study aims to reveal the opinions of the senior students of education faculty about the anxiety of not being appointed. Phenomenological research design is used in this research. The convenience sampling method was used in the selection of the participants. The data of the study is collected through face-to-face individual interviews with the students. The research form consists of 2 parts. The questions in the first part are about the demographic information of the participants. The second part includes questions aiming to reveal the experiences of the participants regarding the anxiety of not being appointed. Each interview lasted 20 minutes on average. All interviews conducted within the scope of the research were recorded using a voice recorder with the permission of the participants. Descriptive analysis was used in the analysis of data. According to the findings, it was observed that family expectations affected all of the participants who had anxiety about not being appointed. All of the prospective teachers who experienced anxiety about not being appointed were found to catastrophize the situation. Five of the participants who had anxiety about not being appointed had physiological symptoms and that anxiety affected daily life. Three of the participants who experienced anxiety about preparation for appointment stated that they had no additional effort to be appointed. All of the participants stated that they used social support mechanisms for anxiety.

Keywords: senior student, unappointment, anxiety, unappointed anxiety.

1. Introduction

Anxiety is a state of mind that is present in the personality traits of individuals or experienced by an individual in the face of an occurrence. When individuals with anxiety have a high perceived threat, their self-efficacy to cope with these threats is low (Johnson & Melamed, 1979). Several causes, such as feeling helpless, receiving threats, stress, or expectations may lead to the emergence of anxiety (Mckenzie, 2006). Basic reasons that lead to anxiety in individuals can be listed as uneasiness, restlessness, despair, and uncertainty. When defined generally, anxiety is a mood in which the thought that something bad is going to happen causes concerns and discomfort in the individual (Anthony & Swinson, 2000). An individual with anxiety is in an uncomfortable and threatening mood due to external factors (Smith & Lazarus, 1990). When definitions of anxiety are examined, it can be said that it is a mood that causes a change in the physiological state and behavior of the individual and is perceived as threatening. However, anxiety is a mood acquired in the evolutionary process. Thanks to this feeling, human beings exhibit pain avoidance behavior and protect themselves from dangerous situations. When faced with a real threat, anxiety helps individuals to be alert to ensure their safety. When the level of anxiety increases, this may affect performance. In other words, the state of anxiety can positively

Correspondence: Mehmet Özcan, Qiqihar Nevşehir Hacı Bektaş Veli University, Faculty of Education, Nevşehir, TURKEY. E-mail: mehmetozcan79@gmail.com.

affect the motivation, life, working life, and social life of the individual at a certain level; however, this effect becomes negative as the level of anxiety increases. The Yerkes-Dodson Law (1908) explains this phenomenon well. According to the model, while performance decreases in situations where the level of anxiety is low or high, it reaches a maximum level when the level of anxiety is moderate.

As can be seen, anxiety can be studied under two headings as positive and negative. Accordingly, negative anxiety causes an individual to feel upset and to be negatively affected by a situation they encounter, while positive anxiety causes the motivation and success of the individual to increase (Scovel, 1978). The positive mood that anxiety creates in the individual enables the individual to feel good and to think sensibly (Manav, 2010). The capacity to control anxiety can lead individuals to success (Semerci, 2007).

Anxiety is generally expressed in two ways, namely, state and trait anxiety. State anxiety can be defined as the state of uneasiness and anxiety felt by an individual in a certain situation. It is a complex and fear-focused emotion that emerges in the continuation of a situation that the individual evaluates as stressful (Spielberger, 1972). It involves physiological changes, such as sweating, tension, and blushing, that an individual experiences as a result of worrying about a situation (Öner & Le Compte, 1998). Trait anxiety, on the other hand, can be defined as the state of mind that is perceived externally and does not involve a threat and that the individual experiences internally. Also, an important explanation about anxiety has been made within the scope of cognitive-behavioral therapies. According to cognitive-behavioral therapies, cognitive distortions (Beck, John Rush, Shaw & Emery, 1979; Fair, 1986: Burns, 2014) underlie the negative anxiety experienced by individuals.

When the concept of anxiety is considered from a developmental perspective, it can be seen that developmental periods create different sources of anxiety. Individuals go through different developmental stages throughout their lives and have to fulfill certain developmental tasks at each stage. Particularly in young adulthood, career planning and the goal of gaining economic independence, as well as establishing close relationships, becomes more important. Individuals may experience anxiety about fulfilling these tasks in young adulthood. According to some studies, university students are anxious about the future. This anxiety experienced by students is mainly related to finding a job, career, place of residence, and economic expectations. The feeling of hopelessness, anxiety, and uncertainties experienced in the decision-making process in individuals makes up future anxiety (Çokluk, 2000). Realizing uncertainties and seeing that there is a future that they cannot control causes future anxiety in individuals (Tarhan, 2012). In this context, university students are expected to experience future anxiety. Future anxiety can be generally expressed as the uncertainty about the future of the individual. The level of anxiety rises when the individual cannot find an answer to these uncertainties. Future anxiety consists of negative experiences and environmental reasons in the individual (Zaleski, 1996).

One of the most important sources of future anxiety faced by young adults in Turkey is finding the right job and starting to work. While the recruitment conditions of every country differ, anxiety levels also differ. In Turkey, prospective teachers earn an undergraduate degree. The number of teachers working in formal educational institutions in Turkey in the 2019-2020 academic year was 1,077,307. Of these teachers, 907,567 worked in public schools and 169,740 in private schools. As can be seen, 75% of teachers in Turkey are employed by state schools. Also, issues such as personal rights, job security, and the salary of teachers in private schools are generally problematic. To work in public schools, prospective teachers take the common test called the public personnel selection test and those who get enough scores start working as teachers. According to the data of the Ministry of National Education (MEB), 376,709 unemployed teachers (around 460,000 according to the data of a teachers' association), are waiting for an appointment, in addition to those who have received teacher training. While some unemployed people with a degree try to hold on to life by working in various jobs, others give up

_____

their dream of teaching because they have not been appointed. In addition, the number of teachers who will not have been appointed by 2023 is expected to reach 1 million.

The disappointment of individuals who have graduated from teacher training programs in Turkey but cannot be appointed as teachers in the public sector has been addressed in the Strategy Document prepared by the Ministry of National Education (MEB, 2017: 6). This issue is also known by the state. Given that the number of teachers who were not appointed despite applying for the common test as of 2016 in the same document is 438,134 (*Ibid*.: 6), the importance of the problem becomes more obvious. Almost half a million teachers applied for the common test in 2016, and nearly 17,000 teachers were employed. This data shows that only 3-4% of the individuals who apply for the test are appointed every year. Mutlu et al. (2019) revealed that approximately 80% of prospective teachers wanted to be employed in public schools primarily. When this data is evaluated together with the number of people employed, it can be said that at least 350,000 teachers each year have the potential to experience anxiety about not being appointed. This shows that we confront a problem that requires action. In the last two years, the story of 42 prospective teachers who have failed to be appointed to public school and ended their lives has appeared in the media and been the subject of a parliamentary motion (Yeni Çağ, 2018). According to the general opinion of the public, these prospective teachers who committed suicide made this decision because they were not appointed to public schools. This major social problem is significant in terms of showing the importance prospective teachers attach to being appointed to public schools. For this reason, the anxiety of not being appointed must be an undeniable issue in scientific studies.

Due to all of these causes, it is thought that prospective teachers in Turkey experience anxiety about not being appointed. Accordingly, this study aimed to examine the foundations of the anxiety about not being appointed, which is a new concept in the literature. The basic components underlying the anxiety of not being appointed were examined and solution suggestions were put forward.

2. Method

The method of this study is presented in the following sections, titled objective of the study, study group, data collection tools, data collection, data analysis, and validity and reliability.

2.1 *Objective of the study*

This study aimed to reveal the opinions of the senior students of education faculty about the anxiety of not being appointed. In this context, the study used a phenomenological research design, which is one of the qualitative research approaches. Qualitative research is the process of developing a field-specific explanation and theory by investigating the meanings individuals attribute to concepts (Özden & Saban, 2017). Phenomenological research aims to explain people's tangible experiences about a concept or phenomenon (Johnson & Christensen, 2014). This method was chosen to reveal the experiences of the senior students in the education faculty during their appointment to teacher position.

2.2 *Research group*

The convenience sampling method was used in the selection of the participants. For this purpose, senior students from the education faculty of a university in the Central Anatolia region were informed about the research, and the students who volunteered to participate in the study were recruited. Table 1 presents information about the participants.

Table 1. Information about the participants

Participants	Department	Perceived economic status	Number of siblings / birth order	Level of father's education	Level of mother's education
N1	ELT	Middle	4/3rd	Elementary School	Elementary School
N2	ELT	Middle	2/1st	Middle School	Elementary School
N3	ELT	Good	2/1st	High School	High School
N4	ELT	Middle	9/5th	Middle School	Elementary School
N5	Primary Math Teaching	Middle	3/1st	Undergraduate	High School
N6	Primary Math Teaching	Good	4/4th	Undergraduate	High School
N7	Primary Math Teaching	Good	3/1st	Undergraduate	High School
N8	Turkish Language Teaching.	Middle	3/1st	Undergraduate	High School
N9	Turkish Language Teaching.	Middle	6/5th	Middle School	Elementary School
N10	Social Studies Teaching	Middle	3/1st	High School	Middle School
N11	Social Studies Teaching	Middle	3/3rd	Middle School	Elementary School
N12	Social Studies Teaching	Poor	5/2nd	Elementary School	Elementary School

2.3 *Data collection tool and data collection*

The data of the study were collected through face-to-face individual interviews with the students. The research form consists of 2 parts. The questions in the first part are about the demographic information of the participants. The second part includes questions aiming to reveal the experiences of the participants regarding the anxiety of not being appointed. Each interview lasted 20 minutes on average. The answers to the research questions were audio-recorded with the permission of the participants, were transcribed in 2 weeks, and transferred to a computer file. In the study, participants were asked 6 questions to reveal their experiences regarding the anxiety of not being appointed. The questions are as shown in Table 2.

Table 2. Research questions

1. Are you worried that you may not be appointed?

2. What does 'the likelihood of not being appointed" mean to you?

3. What are the factors that cause you anxiety?

4. Does the anxiety you experience have any effect on your physiological state?

5. What do you think will happen when you are not appointed?

6. Are you doing any preparation to get appointed?

2.4 *Trustworthiness*

In the study, the methods of obtaining expert opinion (Yıldırım & Şimşek, 2000), participant confirmation (Merriam, 2013), and rich description (Creswell, 2016) were used together for trustworthiness. First of all, the items and themes in the research forms were submitted to the opinions of three experts with a PhD in guidance and counseling and an expert with a PhD in clinical psychology. During the interviews, special attention was paid to ensure that the participants were not influenced by the researcher while they were answering the questions. In addition, participant confirmation method was employed after coding the research data. This method allows participants to check whether the study findings reflect their own thoughts correctly (Merriam, 2013), and it is defined as the most functional technique in terms of validity (Creswell, 2016). Within the scope of this study, the findings obtained while applying participant confirmation were discussed with the participants. In addition, while presenting the findings of the study, the rich description method was applied by including participant views (*Ibid.*).

2.5 *Data analysis*

All interviews conducted within the scope of the research were recorded using a voice recorder with the permission of the participants. The interviews recorded were later converted to text. The texts were analyzed line by line. Descriptive analysis was used in the analysis of data. The data obtained were summarized and analyzed in accordance with the coding process results. In addition, some direct quotations were included to strengthen the report.

3. Results

In this section, firstly, the model related to research findings is shown in figure 1. After that, the themes were given together with the statements of participants.
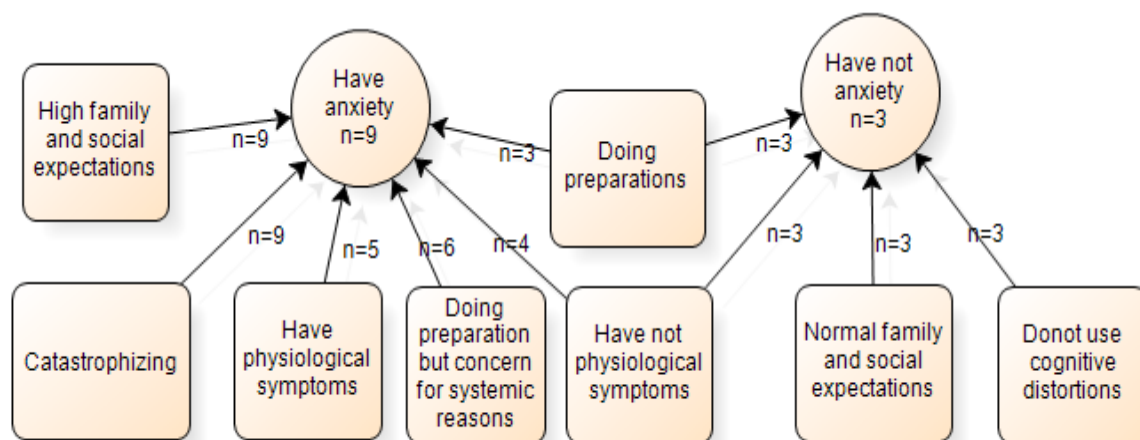

Figure 1. The model for the findings

_____

3.1 *Anxiety about not being appointed*

The majority of the participants stated that they experienced anxiety about not being appointed (n=9). The statements of some participants who stated that they experienced anxiety about not being appointed are as follows.

> N8: Not being appointed is very upsetting, and it is also a bit disappointing because too much is expected of me. I am expected to be very successful.

> N12: Yes. We are starting to go through hard times. It's distressing. Anxiety starts in the fourth year. What if not appointed? What will happen? Will the four years be wasted? How will I look at their faces when I go to my village?

The opinions of some participants who did not experience anxiety are as follows.

> N5: I'm not very concerned because if I cannot be appointed, this is not the end of everything. I think that I should not strain myself mentally for this reason... You know, there are options, or there are many ways that one can follow in relation to his/her profession. We are making plans accordingly. For example, I want to do a master's degree.

> N3: I think what matters is one's own character, thoughts, and point of view. I'm not very concerned because this is not the end of everything if I cannot be appointed. I don't think I need to mentally strain myself for this reason, either... I don't experience much anxiety.

3.2 *The effect of family and social environment expectations on anxiety*

According to the findings, it was observed that family expectations affected all of the participants who had anxiety about not being appointed. Some of the participants' expressions are as follows.

> N8: They expect that I can do my best. That's why I am trying to do my best, but of course we experience anxiety because they say "you can do it".

> N4: Yes, because they have been expecting a lot from me since I was very young. Even now they consider me as appointed. Upsetting them will impact me deeply.

> N12: Generally. Not just family. After all, if you come from a small place, you are something higher in their eyes because of the small number of people who are students there. You seem to be a more cultured, educated, well-equipped person with a certain profession. When they are disappointed, your degree in their eyes falls. If we look at the anxiety in terms of my family, they know that I am not here just to study. They say, "We know you're doing your best," because they know the fight I'm giving against life. They say I can try again once more if I fail. I do not think my life will come to a halt or everything will be over. I am doing my best. I am studying enough. If I had worked in a job with social security for four years, I could feel more secure now. I do not even have that. I am following the life four years behind. After graduation, you cannot ask for money from your family. You should make some contributions to them, instead. They are also getting old and wearing down. You have to help them. Your responsibility increases even more. I consider them all. I have been experiencing anxiety internally, but I am not showing it.

> N2: Actually, I am scared of the next year's uncertainty more. In fact, I do not think I will be appointed this year. I have even given up hope. Especially, my mom says I will be appointed. Sometimes when I get a low score, they say, "No. We do not believe you can get a low score". They have high expectations from me.

N11: I think that, particularly, my family and environment have contributed to my anxiety. This is not a direct pressure of the family, but an indirect pressure because I know what they want and their high expectations.

N10: I have grown up with this anxiety since my childhood. When I got a 100 from a test, my family would ask why I did not get 200." They made me feel like this, albeit jokingly. It continued in this way until high school.

It was observed that the participants who did not have anxiety of not being appointed did not have any problems regarding family and social environment expectations. The views of two of the participants are as follows.

N5: My mother said, "Do not worry about KPSS (the common test) too much. If you cannot be appointed, you can give private lessons or work in a private school. It is not that important." Nobody is putting pressure on me.

N3: My family does not tell me things like, "You must be appointed this year, or there will be consequences if you are not appointed". They say, "You do your best, and the rest is not important; you can prepare again the next year if you fail." I have set goals for myself. I have achieved these objectives in general. If I say I want to be appointed next year, I myself believe that I can study more and achieve it. But I don't expect I can make it this year, so I have no expectations this year. On the other hand, I haven't completely given it up; I am studying for the test whenever I find the opportunity.

3.3 *Catastrophizing*

It was observed that all of the prospective teachers who experienced anxiety about not being appointed were found to catastrophize the situation. Some of the participants' expressions are as follows.

N8: My family. They are unhappy. The important principle is that they should not get upset. I don't want to make them upset. I can't imagine I make them unhappy.

N8: After all, we are living. Money is necessary for everything. You have to work to earn money. We came here. We chose to be a teacher when we were eighteen or nineteen. It is necessary to be appointed to make it true. Okay, money is earned somehow, but if we want a more comfortable life, of course it is our priority to be appointed.

N8: Because I have studied hard; I have studied for four years. I have spent a lot of efforts, and therefore I would like to see I have realized my objectives. My years will be wasted if I can't.

N4: I will be depressed if I disappoint my family.

N2: I'm worried about what I will do next. In fact, I am planning to prepare for the test comfortably at home next year if I am not appointed. But my mother says, "No, you will work during the day and study for the test in the evening." This uncertainty scares me very much.

N1: Of course, I'll be depressed for a while.

Participants who did not have anxiety about not being appointed did not use cognitive distortions, but had alternative thoughts. The views of these participants are as follows.

N3: I do not think I will be unemployed if cannot get a good score from KPSS. I will find an alternative in some way.

N5: At worst, I will not work at all. I will relax. In fact, this is not that bad, either.

N9: I go and live in the worst house. I can't imagine any worse. I will do my best to prevent it from happening because I had a bad experience at the beginning of this year. I recovered from it and came here.

3.4 *Physiological symptoms*

It was observed that five of the nine participants who had anxiety about not being appointed had physiological symptoms and that anxiety affected daily life. Participants' statements are as follows.

N8: There is stress in my daily life. I feel it physically. I have a lot of pimples. I have irregular meals. I have gained a lot of weight. This is how it usually shows up.

N4: My sleep pattern is ruined. So is eating and drinking. This has also affected my renal functions. I also have a problem with my stomach. My heart starts beating irregularly as I start thinking of it.

N1: My sleep, eating, and drinking patterns have become irregular. I am hungry, but I don't want to eat. I feel sick. Regarding how it affects my sleep patterns, either I sleep a lot or I can't sleep.

N9: I usually have a headache. I wake up with heart palpitations. I constantly feel hungry.

N11: My sleeping and eating patterns are disturbed. Sometimes I experience panic attacks.

3.5 *Doing preparations for getting appointed*

Three of the participants who experienced anxiety about preparation for appointment stated that they had no additional effort to be appointed. The statements of these participants are as follows.

N8: Yes, but I think I'm not doing enough preparation. This is the reason for my anxiety. If I felt like I am doing enough preparation, I would not worry that much, but I realize that I am not studying enough.

N2: No, I can't. Actually, I want to do it, but our school life is very busy. We have to deal with too many unnecessary things. That's why I can't. I haven't been able to open the cover of the book for two months. Right now, my only plan is to do something a little bit after graduation. The education system is also ridiculous to me. For example, I am studying English teaching, but they will ask me math questions in the test. I am not good at math. Since I cannot do these, my first test score will be low. This will affect my other test scores.

N7: I am not studying. Actually, I had been studying hard at the beginning of the semester. Later on, perhaps, studying with this ambition and effort over a long period of time could have brought me to a better position. In a short time and along with my school responsibilities, that ambition would bring me down, and my energy would be divided. I didn't do it.

Other participants who were concerned about not being appointed stated that they made an effort to be appointed, but they thought that they would not be appointed due to systemic reasons. The views of some of these participants are as follows.

N11: I do. I go to a course at weekends. But due to school and doing an internship, I cannot allocate enough time to study regularly. If I didn't have to attend school or I finished school, things might be different.

_____

> N4: Because the necessary score for the appointment of English teachers used to be around sixty-five. Later, it increased to seventy-one. On the other hand, there are too many graduates. I am also studying. I know how to study. I also have a program for studying, but I am constantly interrupted, due to internship, the course, or school lessons... I attribute the anxiety of not being appointed to high scores.

> N12: I am doing enough preparation, but there is something called "the unemployed with a university diploma". I do not think this anxiety can be prevented.

It was observed that participants who did not experience anxiety made an effort to be appointed, too.

> N6: Zero anxiety. These family ideas are also very important to me. This is my idea. That's, I have done what's necessary, and I have studied regularly. I have finished studying all the topics in three years. I did not have a problem as I studied it topic by topic. At the beginning of this semester, I revised all subjects for eight hours a day for two months. Now, I am doing field tests. I have managed the process in this way. There is nothing to do if I fail.

3.6 *Need for social support*

All of the participants stated that they used social support mechanisms for anxiety. The statements of some of the participants on this subject are as follows.

> N4: Yes, I need support from time to time because I sometimes feel that I will give up everything. Then, I feel I need somebody to talk to.

> N1: Usually my friends. They help me.

> N7: My teachers support me. They support me and think I will have a good level of academic achievement. My teachers at the school where I'm doing an internship appreciate me a lot. My friends say I should do whatever I want and what I am happy with.

4. Discussion, conclusions and recommendations

One of the findings of this study was that most of the prospective teachers experienced anxiety about not being appointed and used similar concepts to explain not being appointed. Phrases obtained from the participants, such as frustration, wasted time, and shame caused by failure, are closely related to each other. Ending up with failure at the end of four years of education leads to disappointment, and due to this failure, the time spent at university is considered to be a waste of time despite the efforts of the students and their families, and as a result, the prospective teacher feels embarrassment. Finally, as the failure continues, this situation sooner or later leads the prospective teacher to the idea that he/she will be unsuccessful in the future, and takes him/her to a crossroads where he/she will abandon this goal and turn to new options.

Prospective teachers are generally stressed (Akpınar, 2013). One of the results obtained as a result of the data analysis was that most of the prospective teachers in the study group felt stressed and had anxiety about not being appointed. This finding is consistent with the findings of studies in the literature (Süner & Eskici, 2020; Eskici, 2016; Arı & Yılmaz, 2015; Kiraz, 2014; Akpınar, 2013). The prospective teachers in the study group tended to explain not being appointed mostly with changes that might occur in their psychological state. As can be seen, participants were predominantly in the middle-income group and their parents had a primary and secondary school level education. According to the findings of the research, prospective teachers stated that their families had high expectations from them and that their families imagined they

could achieve anything because they had an undergraduate education. Parents with relatively low levels of education place great emphasis on the undergraduate education of their children, as they had been unable to continue their education for some reason. It can be said that this tendency, which becomes visible by parents' desire that their children can do what they could not do and which can be described as a kind of reflection, causes families to believe that their children are very successful and will continue to be. Noticing this belief, prospective teachers have high anxiety due to high expectations. As they know that thousands of students like them have received the same education, the place that they position themselves in the context does not match the place that their families locate them. This discrepancy may create an excessive sense of responsibility in the prospective teacher. This is a condition that can increase anxiety. Some prospective teachers in the research group pointed out that they felt very bad while explaining what not being appointed meant to them. However, they stated that this feeling was caused by their parents' over-exaggerated assumptions about them. This may stem from the fact that Turkish culture has a relational self-construal, not an individualist one. In societies with relational self-construal, family relationships are an important element in the development and perception of the self. Süner and Eskici (2020) found that prospective teachers' perception of themselves was not negative towards not being appointed. At first glance, this situation seems inconsistent with the findings of our study. However, in our study, none of the prospective teachers indicated that they would hold themselves responsible for their failure if they could not get appointed. On the contrary, the vast majority of prospective teachers with high anxiety explained the factor that would make them feel bad, not with the appointment problem but with the attitudes and behaviors they expected to encounter in their families and environments. For this reason, the finding that at least some of the prospective teachers found flaws in the system and held the system responsible for their appointment problem is consistent with our study.

An effect similar to the anxiety of not being appointed comes from the environment. Arı and Yılmaz (2015) found that the vast majority of students who could not be appointed as a result of the common test developed the belief that they would encounter negative attitudes of the environment, they would be ridiculed, their value would decrease in the eyes of people, and that they would face pressure from their families regarding not being appointed. These findings are consistent with those of our study.

Almost all families believe that their children will be appointed and want to make them feel that they trust them to motivate them. However, the scene that the participants thought they would encounter in case of not being appointed varied. A small number of prospective teachers stated that their families did not put pressure on them. These participants also did not experience anxiety, either. It is possible to say that families with this perspective did not adopt an attitude that could cause negative anxiety at least. Also, students from such families stated that they did not see not being appointed as the end of everything. These prospective teachers stated that if they could not get appointed, they would prepare for the test again with the support of their families or teach in private institutions. This situation can be interpreted that the supportive, but not overloading, attitudes of the families cause the students to look more hopeful towards the future and that not being appointed does not mean that everything is over. It is possible to say that the families of prospective teachers play an important role in keeping their anxiety at a level that will take them to success. The prospective teachers, who stated that their anxiety was not at a disturbing level, were those who received support from their families and were not exposed to social pressure. Similarly, Arı and Yılmaz (2015) argued that increased family support decreased the perceived social pressure. Guay, Senécal, Gauthier and Fernet (2003) argue that positive family support reduces career uncertainty. In this case, the way the family reflects these attitudes and behaviors becomes as important as their attitudes and behaviors. However, the attitude of some families is among the reasons underlying the prospective teachers' anxiety about not being appointed. In the families of students who come from relatively small cities, especially where there are not many people with undergraduate education, this education may lead to the idea that the

child will become a cultured, educated, and self-sufficient person. These families often unintentionally put too much responsibility on their children and generally ignore the possibility of not being appointed. Regardless of whether the families convey these thoughts to their children or not, it is understood from the statements of the participants that this situation causes a lot of stress and anxiety to them. Arı and Yılmaz (2015) revealed that approximately half of the prospective teachers believed that if they could not get appointed, they would face social pressure or family pressure. In this context, family pressure, which the prospective teacher believes exist or may exist in the near future, emerges as one of the important reasons for prospective teachers to develop negative anxiety. Perception towards family pressure may be due to the prospective teachers' misinterpretation of the situation. However, the perception of the existence or the possibility of family pressure in any way can lead prospective teachers to anxiety levels that can be associated with failure. When the statements of the participants are evaluated together, it can be said that the participants who perceived the expectations of their families as high felt more anxiety than the participants who perceived the expectations as low. At this point, it can be interpreted that the participants had social support expectations specifically from their families in terms of adapting to a new situation. Interpersonal relations psychotherapy is an effective method to regulate social relations in adapting to new situations (Hızlı Sayar & Omay, 2019). For this reason, it may be beneficial to use interpersonal psychotherapy when working with clients who have anxiety about not being appointed.

On the other hand, an important indicator of the unhappiness that the participants would experience if they were not appointed was due to the importance they attached to the test and their view of employment opportunities in case of failure. At this point, some participants thought that they could prepare for the test again or find a job in the labor market if they were not appointed, unlike the participants who catastrophized the likelihood of not being appointed. The limited number of participants who stated that they would evaluate the alternatives if they were not appointed may indicate a point where comfort and anxiety are balanced, which is expressed by the concept of constructive optimum tension (Scovel, 1978). Participants were aware of their alternatives and knew that they could survive in a way and stated that the common test was important. However, some prospective teachers did not feel anxiety and claimed that not being appointed was not important. Based on this, it can be seen that the cognitive interpretation of students is an important factor in their anxiety levels. It was observed that the participants generally used catastrophizing cognitive distortion. At the same time, it can be interpreted that the participants felt anxiety with realistic but dysfunctional thoughts. Therefore, it is predicted that cognitive-behavioral therapy strategies can be functional in the intervention.

According to the findings of the study, it was found that prospective teachers who had anxiety about not being appointed also showed the physiological symptoms of anxiety. Participants who experienced anxiety stated that they showed symptoms, such as nutrition, sleep disorders, and heart palpitations. This shows that the anxiety about not being appointed can be handled within the scope of anxiety disorders. Therefore, the procedures applied to intervene in anxiety can also be applied to the anxiety of not being appointed.

As far as the statements of the participants indicated, one of the most important predictors of anxiety was the state of whether they were prepared for the common test. The prospective teachers who thought that they were prepared enough for the test stated that they did not feel anxiety at a disturbing level, while the participants who were not prepared enough pointed out that not preparing for the test was one of the triggers of their anxiety. However, the participants did not always look for the reason for not being prepared enough in themselves. They stated that their busy schedule and having to deal with too many tasks at the same time caused them to stop preparing for the common test for some time. The fact that having to take a test, which very few candidates can win, without preparing enough was one of the factors that caused prospective teachers to worry about not being appointed. The anxiety of not being appointed

_____

increased in students who postponed the preparation for the common test due to other responsibilities. Some participants, on the other hand, stated that they were not worried at this point as they spread their studies over time before the intensive program in the last year of undergraduate education. The prospective teachers who were ready for the test stated that their readiness prevented them from experiencing anxiety. Considering this state of the prospective teachers, it can be concluded that not being prepared for the test increases anxiety.

When all study findings are evaluated together, it can be argued that the factor that causes prospective teachers to experience anxiety is their image of an uncertain future if they are not appointed. Mutlu et al. (2019) determined that the career planning of 80% of the prospective teachers primarily included being appointed to public schools. Another finding obtained in the same study was that only 19% of the prospective teachers did not experience career uncertainty. According to Mutlu et al. (2019), not knowing what to do in case of not being appointed is a great career uncertainty for prospective teachers. When this finding and the findings obtained in our study are evaluated together, it can be said that prospective teachers who do not know what to do if they are not appointed make appointment a very important goal, this leads to the anxiety of not being appointed and that they, therefore, believe that if they are not appointed, they will experience economic and psychological problems. Ince-Aka and Yılmaz (2018) listed the reasons underlying the prospective teachers' anxiety of not being appointed as the thought of being unemployed, the status of not being prepared enough for the test, the high number of candidates, and high scores necessary for appointment. The thought of being unemployed and not being ready for the test, which are among the findings of Ince-Aka and Yılmaz, are remarkable facts that play a role in experiencing anxiety. Facing a highly difficult test to overcome is likely to lead prospective teachers to career uncertainty and the thought of being unemployed as a natural consequence. Not being ready for the test affects anxiety, and this can be explained by the concept of low self-efficacy expectations, the theoretical background of which was established by Bandura. According to this concept, low self-efficacy expectation increases anxiety. According to Bandura, the developer of the self-efficacy theory, as self-efficacy expectations increase, anxiety decreases, and as they decrease, anxiety increases (Taylor & Betz, 1983). Prospective teachers who have low self-efficacy expectations for both being successful in the common test and finding a good job experience career uncertainty. A natural consequence of career uncertainty and low self-efficacy expectations is anxiety. It is thought that this approach makes the anxiety of not being appointed more intelligible.

Career uncertainty is closely related to future anxiety, and it is supported by academic studies that a career choice with only one option at its focus increases anxiety (Mutlu et al., 2019). According to Cüceloğlu (2006), future uncertainties lead to anxiety (cited in Eskici, 2016). In this context, the uncertainty about whether the teachers will be successful in the common test and the uncertainty in career choices to be made due to the failure to be appointed to public schools are among the reasons for the intense anxiety of prospective teachers. On the basis of this uncertainty lies the preferred model of teacher recruitment in Turkey and inadequate social and economic conditions of the private institutions employing teachers. Akoğlan, Kozak and Dalkıranoğlu (2013) found that a significant proportion of university students tended to turn to graduate education before entering working life. Mutlu et al. (2019) revealed that students primarily aimed to be appointed to public schools, and if they failed to do so, they wanted to do graduate education. Similarly, in our study, it was understood that the primary goal of the students was to be appointed to public schools and that most of these students considered the failure in this goal as an important loss.

_____

References

Akoğlan Kozak, M., & Dalkıranoğlu, T. (2013). Career perceptions of new graduates: Anadolu University example. *Anadolu University Journal of Social Sciences*, *13*(1), 41-52.

Akpınar, B. (2013). Analysis of candidate teachers' stress level in terms of different variables. *Dicle University Journal of Ziya Gökalp Education Faculty*, *21*, 229-241.

Anthony, M., & Swinson, R. (2000). *Phobic disorders and panic in adults*. Washington, DC: American Psychological Association.

Arı, E. & Yılmaz, V. (2015). Hopelessness levels of teachers who follow kpss preperation courses. *Gaziantep University Journal of Social Sciences*, *14*(4), 905-931.

Beck, A. T., Rush, A. J., Shaw, B. F., & Emery, G. (1979). *Cognitive therapy of depression*. New York: The Guilford Press.

Burns, D. D. (2014). *Feeling good: New mood therapy*. İstanbul: Psikonet Publications.

Creswell, J. (2016). *Research design: Qualitative, quantitative, mixed methods approaches*. University of Nebraska-Lincoln.

Cüceloğlu, D. (2016). *Human and its behavior: Basic concepts of psychology*. Istanbul: Remzi Publishing

Çokluk, Ö. (2000). *Burnout in organizations: Contemporary approaches in management*. (Eds.: C. Elma & K. Demir). Ankara: Anı Publishing

Eskici, M. (2016). Determine the anxiety of pre-service teachers' not to be appointed to teachership in the light of some variables. *Turkish Studies*, *11*(19), 361-378.

Fair, S. E. (1986). *Cognitive content and distortion associated with mood-induced depressive and anxious states*. Arizona: Arizona State University.

Guay, F., Senécal, C., Gauthier, L., & Fernet, C. (2003). Predicting career indecision: A self-determination theory perspective. *Journal of Counseling Psychology*, *50*(2), 165-191.

Hızlı Sayar G., & Omay, O. (2019). What is interpersonal psychotherapy? In N. Aydın & O. Omay (Eds), *Interpersonal relations psychotherapy*. Ankara: Turkey Clinics.

İnce-Aka, E., & Yılmaz, M. (2018). A study on the examination of the unemployment anxiety of prospective science teachers. *Journal of Research in Education and Society*, *5*(1), 105-123.

Johnson, R. B., & Christensen (2014). *Educational research: Quantitative, qualitative and mixed approaches* (5th edit.). Los Angeles: Sage.

Johnson, S. B., & Melamed, B. G. (1979). The assessment and treatment of children's fear. In B. B. Lahey & A. E. Kazdin (Eds.), *Advances in clinical child psychology* (pp. 107-139). New York: Plenum Press.

Kiraz, Z. (2014). *Unemployment of teachers in Turkey and analysıs of unassigned teachers' act* (Unpublished doctoral dissertation). Ankara University Institute of Educational Sciences, Ankara.

_____

Manav, F. (2010). *The concept of anxiety in Soren Kierkegaard* (Unpublished Master's Thesis). Gazi University Institute of Educational Sciences, Ankara

Mckenzie, K. (2006). *Anxiety and panic attack* (Translation: Ü. Şensoy). Istanbul: Morpa Cultural Publications.

MEB (2017). *Official letter dated 06.06.2017 sent from the Ministry of National Education to the Higher Education Council*. Retrieved from http://oygm.meb.gov.tr/meb_iys_dosyalar/2017_12/06164534_YYretmenlik_uygulamasY.pdf.

Merriam, S. B. (2013). *Qualitative research: A guide to design and implementation* (3rd Edition, Translation: S. Turan). Ankara: Nobel Publishing.

Ministry of National Education (2017). *Teacher strategy document 2017-2023*. Ankara.

Mutlu, T., Korkut-Owen, F., Özdemir, S., & Ulaş-Kılıç, Ö. (2019). Career plans, career ındecision and strategies for coping with career ındecision among teacher candidates. *Journal of Career Counseling*, *2*(1), 1-31.

Öner, N., & Le Compte, A. (1998). *Discontinuous state / Trait anxiety inventory handbook*. Istanbul: Boğaziçi University Publications.

Özden, M., & Saban, A. (2017). Paradigm and theoretical foundations in qualitative research. A. Saban & A. Ersoy (Eds.). In *qualitative research designs in education* (pp. 1-29). Ankara: Anı Publishing.

Scovel, T. (1978). The effect on foreign language learning: A review of the anxiety resarch. *Language Learning*, *28*(1), 129-142.

Semerci, B. (2007). *Exam stress and ways to cope*. Istanbul: Central Publishing.

Smith, C., & Lazarus, R. (1990). *Emotion and adaptation*. L.A.: Pervin

Spielberger, C. D. (1972). Current trends in theory and research on anxiety. In C. D. Spielberger (Ed.), *Anxiety*. New York: Academic Press.

Süner, Ş., & Eskici, M. (2020). The anxiety of pre-service teachers' not to be appointed to teachership in terms of level of hopelessness, gender, school type. *Celal Bayar University Journal of Social Sciences*, *18*, 357-372.

Tarhan, N. (2012). *My young friend*. İstanbul: Timaş Publishing.

Taylor, K. M., & Betz, N. E. (1983). Applications of self-efficacy theory to the understanding and treatment of career indecision. *Journal of Vocational Behavior*, *22*(1), 63-81.

Yeni Çağ (2018, 18 Nisan). The news titled "He ended his life because 42 teachers could not be appointed in 2 years.". Retrieved from https://www.yenicaggazetesi.com.tr/2-yilda-42-ogretmen-atanamadigi-icin-hayatina-son-verdi-190060h.htm.

Yerkes, R. M., & Dodson, J. D. (1908). The relation of strength of stimulus to rapidity of habit-formation. *J. Comp. Neurol. Psychol.*, *18*, 459-482.

Yıldırım, A., & Şimşek, H. (2000). *Qualitative research methods in the social sciences*. Ankara: Seçkin Publishing.

Zaleski, Z. (1996). *Future anxiety: Concept, measurement, and preliminary research*. Lublin. Poland: Psychology Department, Catholic University of Lublin, Al. Raclawickie.

_____

The TOEFL as Exit Criteria in English as a Foreign Language (EFL) Programs in Mexico: A Discourse Historical Analysis (DHA) Approach

Isaac Frausto Hernandez

University of Texas at El Paso, Department of Education, UNITED STATES

Abstract

The purpose of this article is to explore the TOEFL (Test of English as a Foreign Language) assessment under its Institutional Testing Program (ITP) modality as it acts as a curriculum artifact along Mexican undergraduate degree programs considered within the exit criteria. A discourse historical approach (DHA) (Wodak, 2008; Wodak & Meyer, 2009) is taken in analyzing the TOEFL ITP assessment to further understand its implementation. The analysis helps reveal the many linguistic and metalinguistic skills and elements that extend beyond what may be traditionally taught in English courses or programs. The analysis also calls for further questioning of how suitable the TOEFL ITP may be in aiming to assess the proficiency level or development of English learners along undergraduate degrees in Mexico. Alternative types of assessment may better aid in providing a different perspective on the knowledge or progress of these students.

Keywords: TOEFL, assessment, curriculum artifact, discourse historical approach, English as a Foreign Language.

1. Introduction

The Test of English as a Foreign Language (TOEFL) is a means of assessment that is widely used throughout the world to evaluate the English proficiency of English Language Learners (ELLs) and users of English as a second or additional language. This assessment is used mainly in English as a Foreign Language (EFL) contexts (Kachru, 1982, 1985). The TOEFL under its Institutional Testing Program (ITP) modality is the most commonly used due to the ease of its application. This test consists of three sections: listening comprehension, structure and written expression, and reading comprehension, with a total of 140 multiple choice questions to be administered within a time frame of 115 minutes. This time is allocated to assessing grammar and vocabulary knowledge in the English language, along with the receptive skills (listening and reading).

As many English instructors may be faced with engaging in teaching TOEFL ITP preparation courses, the content may create many conflicts for the instructors and for the students as well. The weight is on the shoulders of the instructors, as students are expected to comply with a proficiency score according to content that may be limited throughout their curriculum, amongst other elements that may be present within the TOEFL ITP evaluation. It becomes critical, then, to

Correspondence: Isaac Frausto Hernandez, University of Texas at El Paso, Department of Education, UNITED STATES. E-mail: ifraustohe@miners.utep.edu.

question whether or not, and to what degree the TOEFL is a suitable assessment to consider as exit criteria in undergraduate programs throughout the Mexican EFL context.

- The TOEFL ITP assessment acts as a curriculum artifact considered within exit criteria along the Mexican EFL context in undergraduate degree programs.

- The TOEFL ITP assessment encompasses many linguistic and metalinguistic skills and elements that extend beyond traditional EFL instruction.

- Alternative assessments to the TOEFL ITP may provide unique insights on the English proficiency of EFL students in Mexico.

An array of educational undergraduate degrees throughout Mexico considers a certain score on the TOEFL ITP assessment as exit criteria. This is done so with the attempt to demonstrate that there has been improvement in the proficiency of the English language from the learners along a given English course or program. This artifact within the larger curriculum is important due to the weight it has as a high stakes test, and also due to the widespread use it has gained throughout the world, mainly along EFL settings. The purpose of this article centers on exploring the TOEFL ITP assessment in terms of how it acts as a curriculum artifact along the larger curriculum of Mexican undergraduate school programs which consider it as a crucial element within their established exit criteria.

2. Literature review

The following section depicts the theoretical framework and the approach to curriculum.

2.1 *The curriculum*

The curriculum is believed to be the core of education. The curriculum refers to what should be taught, and incorporates thought, action, and purpose (Null, 2011). Moreover, the curriculum refers to the overall plan or design for a course and how the content of a course is transformed into a plan for teaching and learning which allows for the desired learning outcomes to be achieved (Richards, 2013). The curriculum takes content and shapes it into a plan for how to carry out effective teaching and learning; it functions as a map of how to achieve desired outputs of student performance, in which suitable learning activities and assessments are suggested to make it more likely that the students achieve the desired expectations (Wiggins & McTighe, 2006), This leads to the development of curriculum traditions. The systematic curriculum tradition is worthy to highlight due to its relevance with the TOEFL and its application.

2.2 *The systematic curriculum and social efficiency*

The systematic curriculum views schools as places that produce students or student learning; teachers and workers mold students into a finished product with the hope of increasing efficiency (Null, 2011). This system of learning places emphasis on preparing students to be productive citizens. The school curriculum views how the students deal with standards in order to adjust instruction for maximum capacity. Thus, the creation of standards is understood as a way to establish what students should know and what students should be able to do. An initial challenge lies in identifying who should determine what these curricular aims ought to be, what they should include, and how they should be implemented.

The goal of the creation of curriculum standards was initially to increase educational opportunity for the goal of providing all students with access to a curriculum of high quality (Ravitch, 1995). The idea of curriculum standards may be traced back to the essentialist movement in education which began in the late 1930s. The father of essentialism is considered to be William C. Bagley, who led the movement of a group of people, referred to as essentialists, as they believed that the teaching of certain core content is essential for any curriculum to be considered solid (Null, 2011). Thus, essentialism refers to a traditional approach to education that strives to impart students with the essentials of academic knowledge and character development (Cohen, 1999; Shaw, 1995). This in turn aligns with a social efficiency curriculum ideology, which refers to the idea that that "a good curriculum should result in harmonious, well-functioning, and balanced society" (Kridel, 2010: 789). The social efficiency curriculum ideology believes that an initial purpose of schooling is to take advantage of its power with the purpose of meeting the needs of the society by training pupils as future adults who will contribute to a given society (Schiro, 1978).

The work of John Franklin Bobbitt (1918) is considered a central view amongst systematic curriculists. The core of his work envisions that curriculum developers look into the social activities of adults when deciding what should be taught. The aim was to better understand the abilities and qualities that were considered necessary for the proper performance or efficiency of a person within society. The work of Werrett Wallace Charters (1923, 1927, 1928) follows up on that of Bobbit. The work of Charters (1923, 1927, 1928) was believed to bring status to teachers and to the teaching profession as a whole. He aimed to bring modern content into the teacher training curriculum in what would be seen as standards that were demanded and seen as useful. This was sought to help prepare the student to be an efficient citizen.

2.3 *Curriculum research in Mexico*

Both Angel Diaz Barriga (2003) and Frida Diaz Barriga (2003) discuss curriculum research within Mexico. Frida Diaz Barriga (2003) admits how research on curriculum in Mexico has derived from its link to an array of social problems and demands that pertain to the country. In this sense, it appears that the development of university curricula in recent years has aimed to respond to the idea of satisfying the social needs (Frida Diaz Barriga, 2003). Angel Diaz Barriga (2003) reminds us to keep in mind how the study plans of the Mexican educative system are characterized by their centralization, except at the level of public universities and in the private system of higher education in which each university or institution establishes the curricular proposal for the different specializations that it offers. He further acknowledges how the demands of better qualification in the work area are one of the elements in the conceptualization of competencies as an instrument that helps to articulate academic preparation with practical knowledge to facilitate the acquisition of certain skills. When referring to the flexible curriculum (Diaz Barriga, 1999), one of its many understandings emphasizes the adaptation of the curriculum to the changes that arise and are generated within the labor world, leaning for modifications to suit the socially efficient and productive citizen.

3.1 *Methodology*

Language is a core element within communication. When making use of language in a communicative setting, one is relying on discourse. Discourse analysis examines how language in its full, textual, social, and psychological context become meaningful and unified for its users (Cook, 1989). As Lemke (1995) further notes, discourse usually refers to the social activity of meaning-making with language and other symbolic systems in a given setting. Discursive practices may have major ideological effects in the sense that they can produce and/or reproduce unequal relations of power amongst people (Wodak & Fairclough, 1997). Moreover, power becomes a

_____

fundamental factor in society, as society is defined around values and institutions; power enables a social actor to influence in the decisions of other social actors to favor the will of the more empowered (Castells, 2009).

The discourse historical approach (DHA) is characterized by plurality as the overarching goal in the tradition of critical theory is to highlight the discursive aspects of social differences and inequalities (Wodak & Meyer, 2009). The core to address within the DHA is the relationship between conceptual tools and the social problem and its context (Wodak, 2008). Wodak (2008) further views the historical, political, sociological, and/or psychological dimensions of context as important as the linguistic dimension when analyzing a specific discursive event. The importance of the context arises within the following levels: (a) the immediate language or text; (b) the intertextual and interdiscursive relationship between utterances, texts, genres, and discourses; (c) the extralinguistic social and/or sociological variables and institutional frames of a specific context of situation; and (d) the broader sociopolitical and historical contexts that the discursive context is embedded in and to which it may be related (Wodak, 2004).

The next section discusses the analysis of the TOEFL ITP as a curriculum artifact.

3.2 *The analysis of the TOEFL ITP as a curriculum artifact*

The TOEFL began its implementation in 1964, and has developed since then from the original paper-based test (pBT), to the computer-based test (cBT), to the internet-based test (iBT) (ETS, 2011). The pBT was initially based on the early structural view of language which views language as a set of discrete elements that aimed to analyze accuracy over fluency. The structure consists of listening comprehension, grammar and written expression, and reading comprehension under a traditional four option multiple-choice question format with a possible score ranging from 310 to 677. This test is now commonly known as the TOEFL Institutional Testing Program (ITP), and is the most widely used due to the ease of its applicability that does not require internet connectivity, but rather a device able to play CDs and for the test takers to be able to listen to the audio.

The TOEFL cBT is the computer version of the TOEFL which was used from 1998 to 2005 (ETS, 2011). The structure adheres to the TOEFL pBT as it consists of listening comprehension, grammar and written expression, and reading comprehension under a traditional four option multiple-choice question format with a possible score ranging from 0 to 300. The TOEFL cBT became to be known not as an alternative modality of the traditional TOEFL pBT, but as an innovative adaptive test in which the following test items were adapted in difficulty based on the ability of each student in selecting the correct or incorrect answer (ETS, 2011).

The TOEFL iBT is the latest version of this test, and was introduced in 2005 (ETS, 2011). This new version adopts the premise of looking at language from a more communicative stance, and aims to explore what the test takers can do with the language. Unlike previous TOEFL tests, this test focus on the productive skills by implementing speaking and writing alongside listening and reading comprehension with a possible score ranging from 0 to 120. In this sense, the TOEFL became a more integrated approach to test language reception and production.

As a proficiency test aiming to measure the general ability in the target language (Brown, 2005), the TOEFL assessment is a norm-referenced test designed to determine the test taker's ability in relation to that of other test takers (Brown & Hudson, 2002).

3.2.1 *The TOEFL incorporating "academic content" and "standard English"*

An initial focus of attention is how this language assessment presents itself using "100 percent academic content to evaluate the English language proficiency of non-native English speakers" (ETS, 2017: 3). The question arises as to whether or not academic content is taught in the English language in places where English is considered as a foreign language, and where the TOEFL ITP assessment may be applied. Furthermore, as this English assessment openly admits to relying on the use of academic English, doubts arise in terms of whether or not this assessment can be seen as the most suitable for ELLs, and/or English as a second/ additional language users.

This language assessment also presents itself as relying on the understanding of English as used in colleges and universities as follows: "Listening comprehension measures the ability to understand spoken English as it is used in colleges and universities" (ETS, 2017: 3). A further question arises as the English used in colleges and universities varies from one major or discipline to another. Furthermore, there is a jargon that pertains to each field that may not be generalizable as it aims to be. This is further expanded as the assessment also pertains to academic content as it states: "Reading Comprehension measures the ability to read and understand academic reading material written in English" (ETS, 2017: 3). As mentioned previously, the academic content of each discipline varies, which questions how to establish a common basis for all the test takers.

Similarly, "standard" English aims to be presented as: "Structure and Written Expression measures recognition of selected structural and grammatical points in standard written English" (ETS, 2017: 3). Further doubts arise concerning the foundation for relying on standard English, as the test argues, and what "standard" English means for those who design this assessment. As an implicit aim of the TOEFL may be to lead to the standardization of English (Wardhaugh & Fuller, 2015), this denies the change that the English language may go through as a result of its spread in which new Englishes may appear (Cook, 2003).

3.2.2 *The TOEFL listening comprehension section and what it entails*

Within the TOEFL listening comprehension section, three modalities are presented: (a) short conversations between two people, (b) longer conversations, and (c) monologic talks.

It is important to highlight how this section presents an array of idiomatic sentences, or idioms. These elements are continuously found along this section. This seems to be closely tied to aspects of pragmatic knowledge, one of the components of language competence and proficiency. Pragmatic knowledge, previously neglected in the scope of language learning and teaching, has gained more attention in recent years (Bachman, 1990; Garcia, 2004). This calls for the need of a language learner or user to not only have grammatical, lexical, and phonological awareness, but also to possess pragmatic knowledge (Corsetti, 2010). Pragmatics involves using language use to show the linguistic roles increased by the functions of language in social settings (Brown & Levinson, 1987; Tan, 1994). Crystal (2008) presents a recent view on pragmatics as the study of language from the point of view of the users upon the choices they make and the constraints they encounter when using language in social interaction. Thus, pragmatics refers to the use of language and meaning making in given social domains.

According to Jung (2001), for a person to considered pragmatically competent in using a language, he or she should hold the following aspects: (1) the ability to perform speech acts (see Austin, 1962; Yule, 2000); (2) the ability to express and interpret non-literal meanings; (3) the ability to carry out politeness strategies (see Holmes, 2008; Lakoff, 1973); (4) the ability to carry out discourse functions (see Fraser, 1999; Yule & Brown, 1989); and (5) cultural knowledge (see Quinn & Holland, 1987; Wardhaugh, 2008). In addition, the schemata, frames, and scripts become crucial when constructing interpretations of past events or experiences being exposed to

(Yule, 2000). Karbalei and Rahmanzade (2015) carried out an analysis of various English proficiency tests with special emphasis on pragmatic knowledge. They arrived to the conclusion that, to some extent, the TOEFL test is designed to assess the test takers' pragmatic knowledge. Apart from the many pragmatic aspects to consider, an early analysis of factors that played a role in determining the difficulty for listening comprehension within the TOEFL listening comprehension section revealed seventeen possible elements that may interfere in making a given construct more challenging on the test taker (Nissan et al., 1996).

It becomes noticeable how an array of elements pertaining to pragmatic competence are embedded into the TOEFL assessment. Much of pragmatic awareness and competence may result from being directly exposed to social settings in which certain linguistic and meaning making elements are used. Although the classroom may lend itself to superficially touch on theses aspects, it is still an artificial environment that arises due to the content to be presented.

3.2.3 *The TOEFL structure and written expression section, prescriptivism and complexity*

In the structure and written expression section, the aim is to measure the ability to recognize the more appropriate language concerning standard written English (ETS, 2017). The structure section provides sentences with a missing element (or set of elements). The missing element pertains to what can complete the sentence and make it grammatically correct. For the written expression section, sentences are presented and four elements are highlighted. The aim is for the test taker to identify the element that is grammatically incorrect.

It is pertinent to highlight how this section adopts a prescriptive approach to grammar. A prescriptive view on grammar aims to specify how a language should be used aligned with grammar rules to be followed (Greenbaum, 1996). Thus, this view on grammar implies a distinction between "good/correct grammar", and "bad/incorrect grammar". As Odlin (1994) notes, many times, decisions about what is good and bad grammar are arbitrary. The aim for the TOEFL to adopt a prescriptive approach is perhaps linked to the idea of standardizing the English language (Wardhaugh & Fuller, 2015), denying again the power of the English speakers throughout the world in adopting the English language to a local variation, referred to as new Englishes (Cook, 2003). Nonetheless, as Hung (2003) sustains, the grammar of a given language resides not in grammar books or dictionaries, but in the minds of its speakers and how they use it to suit their needs. Thus, this may call for the TOEFL to consider adopting varieties of the English language as well as linguistic elements that can be used from a non-prescriptivist view on language.

The task of answering the TOEFL increases as an array of elements pertain to the structure of a sentence. It becomes crucial, then, for the test taker to initially recognize the function and category of each element within the sentence, along with identifying the way the elements are organized, and how each element within the sentence may have its own structure. Within the sentence, the first task is for the test taker to identify and analyze the noun phrase, the verb phrase, and the adjective phrase along with other elements that pertain to each phrase such as: auxiliaries, adverbs, prepositions, and any comparative and superlative modifications made to adjectives. As it is known, most sentences in the English language vary in structure, and usually combine various phrases within a sentence, or mix sentences to form compound and complex sentences. Apart from the previous tasks, the test taker should also be alert for the combination of more than one phrase or more than one sentence through the use of cohesive devices, conjunctions, clauses, and phrases. This is all linked to overall understanding of vocabulary in line with the content that is presented within the test. Ananda (2016) recently analyzed the many complexities that students face in answering the section on structure and written expression. He found that the students encountered problems in answering questions related to inversion of a sentence (or phrases within

_____

a sentence), subject-verb agreement, adverb clause connectors, the use of the passive voice, reduced instances of adjective clause, parallelism structures, and the use of verbs in the different grammatical tenses. These challenges add up to the ones previously mentioned.

The task complexity increases as time is initially limited within the TOEFL test. Additionally, multiple challenges may arise within a single construct. A construct may require the test taker to analyze the sentence from the many different linguistic angles at his/her knowledge. Moreover, the TOEFL may not always respect the boundaries of a sentence, phrase, or clause within a construct. This ties with the complexity of the TOEFL presenting a possible answer to a given construct that may present grammar as it is used, challenging the prescriptive approach (Greenbaum, 1996). While it may be considered language that may be used or has the possibility of being used in common language practices, it is considered incorrect as it deviates from "standard" English (Wardhaugh & Fuller, 2015).

3.2.4 *The TOEFL reading comprehension section, contextual issues, topic familiarity, and critical thinking*

The last section is the reading comprehension section. In this section, the ability to read and understand short passages that are similar in topic and style to those found in undergraduate and graduate education is measured (ETS, 2017). The test takers read a number of passages on academic content, and answer a number of questions about the text. The passages provide the line numbering to the left for quicker access for the test taker when needed to recall specific information or retrieve a word as indicated by the constructs. An inquiry carried out by Enright et al. (2000) organized the reading tasks around four academic reading purposes as established within the TOEFL as: (1) Reading to find information, (2) Reading for basic comprehension, (3) Reading to learn new information, and (4) Reading to integrate information across multiple texts.

As discussed previously concerning the listening comprehension section within its three modalities, the reading comprehension section also includes some elements related to pragmatics such as cultural knowledge (Jung, 2001; Quinn & Holland, 1987; Wardhaugh, 2008). The schematic knowledge and script knowledge (Yule, 2000), in particular, become crucial when interpreting the passages that the test taker is being exposed to.

The TOEFL argues that it provides sufficient context so that no familiarity on a given subject matter is required; this is done so to avoid creating an advantage of some test-takers over others in terms of content familiarity (ETS, 2017). An initial doubt questions who selects the content and with what criteria. An early analysis by Norton Pierce (1992) challenged how the TOEFL test developers strive to include authentic reading passages within the TOEFL, arguing that the texts are extracted from authentic texts in which modification is avoided. She further argued that if a passage is extracted from a larger text, the extract would have little resemblance to the original source. Norton Pierce (1992) further notes how background knowledge plays a crucial factor in answering the TOEFL assessment correctly.

Dechant (1991) claimed that readers construct meaning from the text with aid from their background knowledge. Moreover, Freedle and Kostin (1993) developed an argument of the many variables that may influence reading item difficulty, specifically within a multiple-choice format. As Jennings et al. (1999) have further noticed, factors such as the test taker's interest on the topic, prior knowledge on the content, the relevance of the topic, and the test taker's opinions or perspectives on the topic may have a crucial effect on the performance of the test taker. Additionally, the patterns of lexis in terms of lexical cohesion and how they link one phrase of a sentence to another (Hoey, 1991, 201) also call for awareness from the test taker.

Recent emphasis has also been given to the relationship between critical thinking and reading comprehension. Early definitions of critical thinking refer to the ability to discipline thinking through information processing that is efficient (Paul, 1985). Pithers and Soden (2000) relate critical thinking to a number of abilities, including: uncovering assumptions underlying a problem, focusing the problem, inferencing, inductive and deductive reasoning, and judging the validity and reliability of assumptions and sources of information. Ku (2009) further adds that critical thinking entails a strong intention to recognize the importance of thinking along with an initiative to seek further judgment. In this sense, reading is not a linear process, but one in which readers continuously form hypothesis, test predictions, and use their knowledge of the world and language to construct meaning (Sheorey & Mokhtari, 2001). As can be observed, there exist an array of elements that ought to be taken into consideration by who is taking the TOEFL assessment.

The following section depicts the significance of this analysis, as well as the key findings.

4. Discussion

The purpose of analyzing the TOEFL ITP test within a CDA approach was done to better understand it as a curriculum artifact. From its early implementation, the TOEFL in all of its modalities has carried an array of implicit elements that test beyond the linguistic knowledge of the test taker. The same calls for the TOEFL ITP version, which has been the focus of analysis of this article. Whether the stakeholders are aware or not of the many elements tested within the TOEFL ITP, it becomes crucial to become more familiar with the different features that this assessment encompasses.

An initial concern is the academic content presented within the TOEFL ITP assessment. As is the case of many English instruction programs throughout Mexico, the syllabus types being adopted relate to a notional-functional syllabus, a structural syllabus, a skill-based syllabus, or a combination from all three. The notional-functional syllabus aims to present the different language sets pertaining to the usage of language along with the communicative purposes (White, 1988; Nunan, 1988). The structural syllabus targets the teaching of grammatical items or structures presented in a specific order (Ellis, 1993). The skill-based syllabus depicts the specific abilities that play an important role in using the language (Rahimpour, 2010). When combining both grammatical elements of the English language with a set of skills to use such aspects of the language, a notional-functional syllabus may develop. This also relates to how English courses or programs tend to adopt the Common European Framework of Reference for Languages (Council of Europe, 2001), or use it as a resource in measuring the proficiency and expected outcomes of the English learners. As such, this framework entails certain linguistic and structural notions that pertain to functioning of the language learner through an array of skills referred to as competencies to describe what the learner can do with the language. However, this may deviate from the communicative needs that the TOEFL attempts to measure, as it relies mainly on assessing the receptive skills (listening and reading) in addition to knowledge of written expression (focused mainly on grammatical structure).

A second concern leads to how the TOEFL ITP assessment aims to promote "standard" English through a prescriptive grammatical approach. As such is the case, any English varieties that deviate from the grammar presented in dictionaries and grammar books are considered wrong or incorrect. This reduces the scope of English usage for the test taker to recall correct grammatical sentences and utterances only. This contradicts an approach from an English instructor who may lean more towards a descriptive approach to teaching grammar (Greenbaum, 1996) that entails varieties and allows for students to experiment with the English language when aiming to convey meaning. It is worth considering how English instructors may further raise

awareness of the different ways in which sentences and the elements pertaining to a sentence may be arranged.

The listening section presents artificial language in the sense of omitting false starts, fillers, repetition, and interruptions among other elements that are used in actual every day conversation. The contextual cues are mainly limited in shorter conversations. An array of idiomatic sentences, along with vast pragmatic elements, are presented. This calls for English instructors to notice the importance of raising pragmatic awareness within their practices as it becomes a core component to be assessed within English proficiency tests (Brown, 2005) considered to be high stakes.

In terms of reading comprehension, there are a number of tasks to be carried out by the test taker when reading a passage. Topic familiarity and how the content is contextualized become central in terms of how the test taker will go about the reading comprehension task. Pragmatic knowledge may also become highly useful when aiming to understand the content of a passage. The development of critical thinking skills may also facilitate the comprehension of a passage.

In sum, the TOEFL ITP does not seem like the most suitable assessment to implement when aiming to assess the proficiency level or the development of English learners after a given course within undergraduate degrees in a Mexican EFL context. As the analysis suggests, there are many elements that are brought into the assessment of language proficiency, increasing the complexity of the assessment. This in turn questions the performance of the test taker according to the many implicit elements that are also assessed.

5. Conclusion

The focus of this article was to explore the TOEFL ITP assessment in terms of how it acts as a curriculum artifact within Mexican EFL contexts which establish such assessment as a crucial component of the exit criteria of undergraduate educational programs.

The theoretical framework was developed from the systematic curriculum (Null, 2011) and essentialism (Cohen, 1999; Shaw, 1995), the social efficiency curriculum ideology (Kridel, 2010; Schiro, 1978), and the work of John Franklin Bobbit (1918) and Werret Wallace Charters (1923, 1927, 1928). The works of Angel Diaz Barriga (2003) and Frida Diaz Barriga (2003) were also explored to locate curriculum work done in Mexico.

Concerning the methodology, A DHA (Wodak, 2008; Wodak & Meyer, 2009) was used in exploring the pertinent discourse within the TOEFL ITP, to further understand its implementation as an artifact within the larger Mexican EFL curriculum.

The analysis of the TOEFL ITP helped reveal the many linguistic and metalinguistic skills and elements that may go beyond what is traditionally taught in line with a syllabus that results of the combination of elements from a notional-functional syllabus (see White, 1988; Nunan, 1988), a structural syllabus (see Ellis, 1993), and a skill-based syllabus (see Rahimpour, 2010). As the Common European Framework of Reference for Languages (Council of Europe, 2001) is commonly taken as the basis to align the desired outcomes of the course accordingly, the courses tend to focus on the linguistic aspects (or structures and notions) and leave little space for the uses of these linguistic aspects (or the skills or functions). As the list of linguistic elements to be taught is rather long, this limits the space for instruction pertaining to academic content.

_____

6. Implications

Concerning possible implications that derive from this analysis, it becomes crucial to explore some concerns. As properly preparing students for the TOEFL assessment is considered highly important from both students and instructors, the instructor is faced with complying to adapting the pedagogical strategies to suit the needs that the TOEFL preparation entails. It becomes worthy to explore how instructors are going about with this practice. In addition, it is pertinent to note the degree of familiarity that the instructors have with the many linguistic and metalinguistic elements that are presented either implicitly or explicitly throughout the TOEFL. A crucial analysis pertains to how instructors better inform the students on aspects related to pragmatics, as well as the strategies that they use to further develop the learners' pragmatic awareness. A further inquiry that would be of great benefit would be to explore how more academic content is being implemented along EFL learning contexts.

It is important to mention that a possible implication could also be to eradicate the use of the TOEFL assessment as exit criteria due to the extensive knowledge required from the student that its application entails, and how it calls for many instructional changes from the instructor as well. In line with the flexible curriculum that may prevail within higher education in the Mexican educational system (Diaz Barriga, 1999), English instructors throughout Mexico and higher stakeholders may view alternative assessment types to suit the needs of the changes that arise from the labor world that the students may soon develop in. In this sense, alternative assessment types may help in providing a distinct perspective of the progress of a student through the English courses, and/or their readiness for English usage beyond the formal academic setting, though this may also entail a shift in perspectives in the practice of teaching EFL in a Mexican setting.

Acknowledgements

The author declares no competing interests.

References

Ananda, R. (2016). Problems with section two ITP TOEFL test. *Studies in English Language and Education*, *3*(1). 35-49. https://doi.org/10.24815/siele.v3i1.3387

Austin, J. L. (1962). *How to do things with words*. Oxford University Press.

Bachman, L. F. (1990). *Fundamental considerations in language testing*. Oxford University Press.

Bobbitt, J. F. (1918). *The curriculum*. Macmillan.

Brown, J. D. (2005). *Testing in language programs: A comprehensive guide to testing language assessment*. McGraw-Hill.

Brown, J. D., & Hudson, T. (2002). *Criterion-referenced language testing*. Cambridge University Press.

Brown, P., & Levinson, S. (1987). *Politeness: Some universals in language usage*. Cambridge University Press.

Castells, M. (2009). *Communication power*. Oxford University Press.

Charters, W. W. (1923). *Curriculum construction*. Macmillan.

Charters, W. W. (1927). *How to teach ideals*. Methodist Publishing House.

Charters, W. W. (1928). *The teaching of ideals*. Macmillan.

Cohen, L. (1999) *Philosophical perspectives in education*. http://oregonstate.edu/instruct/ed416/PP3.html.

Cook, G. (1989). *Discourse*. Oxford University Press.

Cook, G. (2003). *Applied linguistics*. Oxford University Press.

Corsetti, C. R. (2010). Pragmatic competence in the listening paper of the certificate of proficiency in English. *BELT Journal*, *1*(1), 14-25.

Council of Europe (2001). *The Common European Framework of Reference for Languages: Learning, teaching, and assessment*. Language Policy Division.

Crystal, D. (2008). *A dictionary of linguistic and phonetics*. Blackwell Publishing.

Dechant, E. (1991). *Understanding and teaching reading: An interactive model*. Lawrence Erlbaum.

Díaz Barriga, A. (1999). *La flexibilización profesional y su impacto en los planes de estudio*. Paper presented at the 5th Congreso Nacional de Investigación Educativa, Consejo Mexicano de Investigación Educativa, Aguascalientes.

Díaz Barriga, A. (2003). Curriculum research: Evolution and outlook in Mexico. In W. F. Pinar (Ed.), *International handbook of curriculum research* (pp. 443-456). Lawrence Erlbaum Associates.

Díaz Barriga, F. (2003). Main trends of curriculum research in Mexico. In W. F. Pinar (Ed.). *International handbook of curriculum research* (pp. 457-470). Lawrence Erlbaum Associates.

Educational Testing Service (ETS). (2011). *TOEFL program history. TOEFL iBT Research Insight Series. 6*. http://www.ets.org/s/toefl/pdf/toefl_ibt_insight_s1v6.pdf.

Educational Testing Service (ETS) (2017). *TOEFL ITP Test Taker Handbook*. New Jersey.

Ellis, R. (1993). The structural syllabus and Second Language Acquisition. *TESOL Quarterly*, *27*(1), 91-113.

Enright, M. K., Grabe, W., Koda, K. Mosenthal, P. B., Mulcahy-Ernt, P., & Schedl, M. A. (2000, March 01). *TOEFL 2000 Reading Framework: A Working Paper* (Report No. RM-00-04). https://www.ets.org/research/policy_research_reports/publications/report/2000/iciv.

Fraser, B. (1999). What are discourse markers? *Journal of Pragmatics, 31*, 931-952.

Freedle, R., & Kostin, I. (1993). The prediction of TOEFL reading item difficulty: Implications for construct validity. *Language Testing*, *10*, 133-170. https://doi.org/10.1177/026553229301000203.

Garcia, P. (2004). Pragmatic comprehension of high and low level language learners. *TESL-EJ*, *8*(2), 1-15.

Greenbaum, S. (1996) *The Oxford English grammar*. Oxford University Press.

Hoey, M. (1991). *Patterns of lexis in text*. Oxford University Press.

Holmes, J. (2008). *An introduction to sociolinguistics*. Pearson Education Limited.

Hung, T. T. N. (2003). How linguistics can contribute to the teaching of grammar. In J. E. James (Ed.), *Grammar in the language classroom* (pp. 41-61). SEAMEO Regional Language Center.

Jennings, M., Fox, J., Graves, B., & Shohamy, E. (1999). The test-takers choice: an investigation of the effect of topic on language-test performance. *Language Testing*, *16*(4), 426-456. https://doi.org/10.1177/026553229901600402.

Jung, J. Y. (2001). Issues in acquisitional pragmatics. *TESOL & Applied Linguistics*, 2(3), 1-13.

Kachru, B. B. (1982). *The other tongue. English across cultures*. University of Illinois Press.

Kachru, B. B. (1985). Standards, codification, and sociolinguistic realism: The English language in the outer circle. In R. Quirk, & H. Widdowson (Eds.). *English in the world: Teaching and learning the language and the literature*. Cambridge University Press.

Karbalaei, A., & Rahmanzade, M. K. (2015). An investigation into pragmatic knowledge in the reading section of TOLIMO, TOEFL, and IELTS examinations. *English Language Teaching*, *8*(5), 208-221. http://dx.doi.org/10.5539/elt.v8n5p208

Kridel, C. (Ed.). (2010). Social efficiency tradition. In *Encyclopedia of curriculum studies* (pp. 789-791). SAGE.

Ku, Y. L. K. (2009). Assessing students' critical thinking performance: Urging for measurements using multi-response format. *Thinking Skills and Creativity*, *4*, 70-76.

Lakoff, R. (1973). The logic of politeness: Or minding your p's and q's. *Chicago Linguistic Society*, *9*, 292-305.

Lemke, J. L. (1995). *Textual politics*. Taylor & Francis.

Null, W. (2011). *Curriculum: From theory to practice*. Rowman & Littlefield.

Nissan, S., DeVincenzi, F., & Tang, K. L. (1996). An analysis of factors affecting the difficulty of dialogue items in TOEFL listening comprehension. *[Educational Testing Service] Research Reports,* *51*(February), 1-42.

Norton Pierce, B. (1992). Demystifying the TOEFL. *TESOL Quarterly*, *26*(4). 665-691. https://www.jstor.org/stable/3586868.

Nunan, D. (1988). *Syllabus design*. Oxford University Press.

Odlin, T. (1994). *Perspectives on pedagogical grammar*. Cambridge University Press.

Rahimpour, M. (2010). Current trends on syllabus design in foreign language instruction. *Procedia Social and Behavioral Sciences*, *2*, 1660-1664.

Paul, R. W. (1985). Bloom's taxonomy and critical thinking intervention. *Educational Leadership*, *42*(8), 36–39.

Pithers, R. T., & Soden, R. (2000). Critical thinking in education: A review. *Educational Research*, *42*, 237-249.

Quinn, N., & Holland, D. (1987). *Cultural models in thought and language*. Cambridge University Press.

Ravitch, D. (1995). *National standards in American education: A citizen's guide*. Brookings Institution Press.

Richards, J. C. (2013). Curriculum approaches in language teaching: Forward, central, and backward design. *RELC, 44*(1), 5-33. https://doi.org/10.1177/0033688212473293

Schiro, M. (1978). *Curriculum for better schools: The great ideological debate*. Financial Times/Prentice Hall.

Shaw, L. (1995) *Humanistic and social aspects of teaching*. http://edweb.sdsu.edu/LShaw/f95syll/philos/phbehav.html.

Sheorey, R., & Mokhtari, K. (2001). Differences in the metacognitive awareness of reading strategies among native and non-native readers. *System*, *29*, 431-449.

Tan, P. (1994). Key concepts in ELT. *ELT Journal*, *48*(1), 100.

Wardhaugh, R. (2008). *An introduction to sociolinguistics*. Blackwell.

Wardhaugh, R., & Fuller, J.M. (2015). *An introduction to sociolinguistics (7th Ed.)*. Wiley-Blackwell.

White, R. V. (1988). *The ELT Curriculum*. Blackwell Publishers.

Wiggins G., & McTighe, J. (2006). *Understanding by design: A framework for effecting curricular development and assessment*. Association for Supervision and Curriculum Development.

Wodak, R. (2004). The discourse historical approach. In R. Wodak & M. Meyer (Eds.), *Methods of critical discourse analysis* (2nd ed., pp. 63-94). Sage.

_____

Wodak, R. (2008). Introduction: Discourse studies: Important concepts and terms. In R. Wodak & M. Krzyżanowski (Eds.), *Qualitative discourse analysis in the social sciences* (pp. 1-29). Palgrave Macmillan.

Wodak, R., & Fairclough, N. (1997). Critical discourse analysis. In T. A. van Dijk (Ed.), *Discourse as social interaction* (pp. 258-284). Sage.

Wodak, R., & Meyer, M. (2009). Critical discourse analysis: History, agenda, theory and methodology. In R. Wodak, & M. Meyer (Eds.), *Methods for critical discourse analysis* (2nd ed., pp. 1-33). Sage.

Yule, G. (2000). *Pragmatics*. Oxford University Press.

Yule, G., & Brown, G. (1989). *Discourse analysis*. Cambridge University Press.

_____

I. F. Hernandez – The TOEFL as Exit Criteria in English as a Foreign Language...

118

AIMS AND SCOPE

The OJER, as an international multi-disciplinary peer-reviewed *online open access academic journal*, publishes academic articles deal with different problems and topics in various areas of the science of education (theory of education, history of education, preschool education, adult education, learning, development, instruction, teaching, methodology of educational research, etc.).

The OJER provides a platform for the manuscripts from different areas of research, which may rest on the full spectrum of established methodologies, including theoretical discussion and empirical investigations. The manuscripts may represent a variety of theoretical perspectives and different methodological approaches.

The OJER is already indexed in Crossref (DOI), ERIC, BASE (Bielefeld Academic Search Engine), Google Scholar, J-Gate, ResearchBib, WorldCat - OCLC, and OAJI (Open Academic Journals Index), and is applied for indexing in the other bases (Clarivate Analytics – SCIE, ESCI, SSCI and AHCI, Scopus, Ulrich's Periodicals Directory, Cabell's Directory, SHERPA/RoMEO, EZB - Electronic Journals Library, etc.).

The authors of articles accepted for publishing in the OJER should get the ORCID number (www.orcid.org), and Thomson-Reuters' Researcher ID (www.researcherid.com).

The journal is now publishing 2 times a year.

PEER REVIEW POLICY

All manuscripts submitted for publishing in the OJER are expected to be free from language errors and must be written and formatted strictly according to the latest edition of the APA style. Manuscripts that are not entirely written according to APA style and/or do not reflect an expert use of the English language will *not* be considered for publication and will *not* be sent to the journal reviewers for evaluation. It is completely the author's responsibility to comply with the rules. We highly recommend that non-native speakers of English have manuscripts proofread by a copy editor before submission. However, proof of copy editing does *not* guarantee acceptance of a manuscript for publication in the OJER.

The OJER operates a double-blind peer reviewing process. The manuscript should not include authors' names, institutional affiliations, contact information. Also, authors' own works need to be blinded in the references (see the APA style). All submitted manuscripts are reviewed by the editors, and only those meeting the aims and scope of the journal will be sent for outside review. Each manuscript is reviewed by at least two reviewers.

The editors are doing their best to reduce the time that elapses between a paper's submission and publication in a regular issue. It is expected that the review and publication processes will be completed in about 2-3 months after submission depending on reviewers' feedback and the editors' final decision. If revisions are requested some changing and corrections then publication time becomes longer. At the end of the review process, accepted papers will be published on the journal's website.

_____

OPEN ACCESS POLICY

The OJER is an open access journal which means that all content is freely available without charge to the user or his/her institution. Users are allowed to read, download, copy, distribute, print, search, or link to the full texts of the articles, or use them for any other lawful purpose, without asking prior permission from the publisher or the author. This is in accordance with the BOAI definition of open access.