TOJNED
THE ONLINE JOURNAL
OF NEW HORIZONS IN EDUCATION

ISSN: 2146-7374

The Online Journal of New Horizons in Education

Volume 13 Issue 1
January 2023

www.tojned.net
January 2023

Contact Address:
Prof. Dr. Aytekin İŞMAN
TOJNED, Editor in Chief
Sakarya-Turkey

Published in TURKEY

Hello from TOJNED

TOJNED welcomes you. TOJNED looks for academic articles on the issues of education science and may address assessment, attitudes, beliefs, curriculum, equity, research, translating research into practice, learning theory, alternative conceptions, socio-cultural issues, special populations, and integration of subjects. The articles should discuss the perspectives of students, teachers, school administrators and communities. TOJNED contributes to the development of both theory and practice in the field of education science. TOJNED accepts academically robust papers, topical articles and case studies that contribute to the area of research in education science.

The aim of TOJNED is to help students, teachers, school administrators and communities better understand the new developments about teacher education. Submitted articles should be original, unpublished, and not in consideration for publication elsewhere at the time of submission to TOJNED. TOJNED provides perspectives on topics relevant to the study, implementation, and management of learning with technology.

I am always honored to be the editor in chief of TOJNED. Many persons gave their valuable contributions for this issue.

TOJNED and Sakarya University will organize the INTE-2023 (www.int-e.net) in July, 2023 in Roma, Italy.

Call for Papers

TOJNED invites article contributions. Submitted articles should be about all aspects of teacher education and may address assessment, attitudes, beliefs, curriculum, equity, research, translating research into practice, learning theory, alternative conceptions, socio-cultural issues, special populations, and integration of subjects. The articles should also discuss the perspectives of students, teachers, school administrators and communities.

The articles should be original, unpublished, and not in consideration for publication elsewhere at the time of submission to TOJNED.

For any suggestions and comments on the international online journal TOJNED, please do not hesitate to fill out the comments & suggestion form.

January 01, 2023

Editor,
Prof. Dr. Aytekin İŞMAN
Sakarya University

Table Of Contents

BEING AN UNIVERSITY STUDENT DURING THE COVID-19 PANDEMIC PROCESS IN THE PSYCHOSOCIAL ASPECT

Şenol GÜVEN
Ministry of Education, Aydın, Turkey
senolguv@gmail.com

Erman DOĞAN
Girne American University, Faculty of Sport Sciences, Kyrenia, North Cyprus
Ermandogan82@gmail.com

Atakan YAZICI
Gazi University, Faculty of Sport Sciences, Ankara, Turkey
atakanyazici1989@gmail.com

ABSTRACT
After the pandemic caused by Covid-19, many countries stopped face-to-face education activities and started the distance education process. Accordingly, university students left the provinces where their schools were located and returned to their families. An individual who steps into university life may have different academic, social, and psychological expectations such as specializing in the professional field, acquiring a new social environment, and freedom of individual life. It can be thought that students may have been affected psychosocially as a result of the changing education and living conditions consequence of distance education. Therefore, this study, it was aimed to examine the psychosocial status of students who went to another city to get a university education but had to return to their families' homes due to the pandemic. A total of 23 students from the Faculty of Sport Sciences; 13 female and 10 male, between the ages of 18-24, who had to return to their families' homes due to the pandemic participated in this study, in which the qualitative research method was applied. Personal information form and semi-structured interview form prepared by the researchers were used to collect data. Content analysis was performed to analyze the data. As a result, it was observed that university students who had to return to their families had a decrease in their sense of belonging. They felt anxious and stressed as a result of academic, economic, and family matters, thus their motivation in life declined. In addition, it was found that they could not realize their goals and dreams regarding their social life. That is to say; they broke away from social life, got disappointed with campus life because of not experiencing it thoroughly, and lacked participation in various activities.
Keywords: Distance learning, Covid-19, university students, psychosocial change, qualitative research.

INTRODUCTION

Due to the global effects of Covid-19, the World Health Organization declared a pandemic in March 2020 (World Health Organization, 2020). After the declaration of the pandemic, many countries stopped face-to-face education activities and started the distance education process (Strzelecki, Azevedo, & Albuquerque, 2020). Face-to-face education activities at the higher education level in Turkey were suspended in March 2020. With this decision, the Council of Higher Education (YÖK) announced that educational activities in universities would be carried out remotely (YÖK, 2020). There are approximately 8,2 million higher education students in Turkey (YÖK, 2021). It is estimated that the majority of these students study in a city other than the place where their families live. Therefore, the aforementioned students were expected to leave the cities where they studied and returned to their families after the distance education decision. An individual who steps into university life might have various academic, social, economic, and psychological expectations such as specializing in his/her field, joining a new social environment, and having freedom. It may be thought that the changing education and living conditions as a result of distance education may have affected the expectations of students from university life.

This change, with distance education becoming a compulsory practice, has forced both lecturers and students to adapt to a new reality (Cicha, Rizun, Rutecka, & Strzelecki, 2021). Therefore, it could be considered that this compulsory process change may affect the psychosocial lives of students positively or negatively. Some studies conducted to investigate the impact of these effects on students focused on the life quality of students (Aristovnik, Keržič, Ravšelj, Tomaževič, & Umek, 2020; Wu, Chang, & Sun, 2020) and student mobility in the distance education process (Mok, Xiong, Ke, & Cheung, 2021). In a study examining students from a psychosocial perspective during the pandemic period, it was suggested that students experienced mild to severe depressive symptoms as well as negative emotions such as boredom, anxiety, frustration, anger, hopelessness, and shame (Aristovnik, Keržič, Ravšelj, Tomaževič, & Umek, 2020; Islam, Barna, Raihan, Khan, & Hossain, 2020). It was stated that this emotional state was the result of social isolation (Asanov, Flores, McKenzie, Mensmann, & Schulte, 2021). It was concluded that a long quarantine period was associated with increased

anxiety and depression among people (Hawryluck, Gold, Robinson, Pogorski, Galea, & Styra, 2004). The Covid-19 pandemic has brought out a psychosocially chaotic situation since a dramatic increase in mental health problems such as anxiety, depression, stress, sleep disturbance, and fear was reported (Xiao, Zhang, Kong, Li, & Yang, 2019; Gritsenko, Skugarevsky, Konstantinov, Khamenka, Marinova, Reznik, & Isralowitz, 2020). Besides, most of the students expressed that their workload increased due to distance education (Barada, Doolan, Burić, Krolo, & Tonković, 2020). There are also some studies showing that students tightened their ties with family members and friends during the social isolation period (Olmos-Gómez, 2020).

Because of all the psychological and social changes mentioned above, the changes experienced by university students during the Covid-19 pandemic and how their expectations about university life were affected have become important questions to be answered.

Motivation is one of the factors that affect participation and continuation in distance education. It was stated that there are differences in terms of motivation between the students who started distance education later on, and those who took distance education classes from the beginning of their university education (Pasion, Dias-Oliveira, Camacho, Morais, & Campos, 2020). As the researchers stated, the need to adapt to different working conditions in a short time, as well as the lack of experience in working online, could lead to a decrease in participation in the process. This situation brings the idea that the educational life of the students might have been adversely affected during the distance education process. Investigation of the psychological and social conditions of students whose educational life was affected negatively due to the process is important in terms of the efficiency of the distance education process.

As mentioned above, it can be thought that the psychosocial life of the students may have been affected due to the mandatory change in conditions and leaving their houses or dormitories, and returning to their families. It was observed that previous studies on this subject focused on variables such as quality of life, student mobility, and psychological symptoms. The fact that the psychosocial status of the students who got back home due to the Covid-19 pandemic was not fully investigated, further increases the importance of the results to be obtained from this research. It is expected that the results of the study will shed light on researchers working in the field of education and psychology, and offer suggestions for increasing the quality of the distance education process. This research aim is to examine the psychological and social state of university students who returned to their families as a result of the Covid-19 pandemic which paved the way for distance education.

METHODS

A total of 23 FSS (Faculty of Sports Sciences) students, 13 female, and 10 male, studying at Gazi University Faculty of Sports Sciences, participated in this research voluntarily in which the qualitative research method was applied. Participants were selected among students who left the city of their families for university education but had to return to their family homes due to the pandemic. Participants are between the ages of 18-24. Ethics committee approval was obtained by the Gazi University Ethics Committee before the research was conducted. Phenomenology design was used in the study. In phenomenological studies, sample selection and application strategies are in a very narrow range and all participants in the sample must have experienced the studied phenomenon (Rolfe, 2006). Qualitative studies generally work with small samples that are interlocked in their context and analyzed in depth (Miles & Huberman, 2016: 27). Phenomenology samples are generally selected from a group with a certain characteristic (Staruss & Corbin, 2014). Researchers conducting phenomenological research generally prefer the purposeful sampling method, as they need items that have experienced a particular phenomenon (Rubin & Babbie, 2016). For this reason, the participants in this study were selected by the convenience sampling method, which is one of the purposeful sampling methods. For the reliability (coherency) of the research, the opinions and suggestions of two experts other than the researchers were provided.

To collect data, a personal information form and a semi-structured interview form that was prepared by the researchers were used. To determine whether the questions in the interview form are understandable and clear, a trial interview was conducted with three FSS students apart from the students participating in the research. In the interview form, there were questions prepared to determine the psychological and social effects of being a university student during the pandemic process. In terms of the reliability of the research, it was mentioned that the identity of the students would be kept confidential, the research questions were asked, and the interview was recorded. The answers given by the participants were later transcribed. Instead of the names of the participants, the participants were coded as P1, P2,….P23.

To analyze the obtained data, descriptive analysis and content analysis were applied. The main purpose of content analysis is to reach the concepts that can explain the data obtained. Yıldırım and Şimşek (2013) stated that the basic process in content analysis is to bring together similar data within the framework of certain

concepts and themes, and they should be arranged understandably and transferred to the reader. The answers given by the participants to the questions in the semi-structured interview form were examined and analyzed, and codes and themes were created from all these data.

RESULTS

As a result of the content analysis made in line with the opinions of the university students who participated in the research, the results of the participants' expectations of university life (Table 1) and the situation they were in due to the pandemic (Table 2) were provided. The themes of psychological state and social state of the students were obtained (Tabe 2).

Table 1. Students' expectations from university life.

Psychological Expectations		**Social Expectations**	
Gaining self-confidence	P4, P5, P9, P14, P15, P16, P19, P22, P23	Establish a wide social environment and circle of friends	P2, P3, P4, P6, P7, P8, P9, P10, P11, P12, P13, P15, P16, P17, P21, P22, P23
Self-realization	P1, P2, P4, P6, P11, P12, P13, P14, P15, P18, P19, P20, P22	Participating in various social events and festivals	P1, P2, P4, P5, P8, P9, P10, P11, P12, P14, P15, P16, P17, P18, P19, P21, P22, P23
Motivation	P1, P2, P3, P6, P7, P8, P9, P10, P12, P17, P18, P21, P22	Socialization	P3, P7, P10, P11, P13, P15, P16, P17, P18, P20
Sense of belonging	P3, P5, P7, P10, P11, P14, P16, P17, P19, P20, P23	Experiencing the campus life	P1, P2, P5, P6, P8, P9, P11, P12, P13, P15, P18, P19
Psychological well-being	P5, P15, P17, P18	Taking part in activities that can be enjoyed	P1, P2, P4, P5, P8, P9, P10, P11, P12, P13, P15, P16, P17, P21, P22, P23
		To have a friend group that understands them better	P2, P3, P4, P5, P8, P9, P10, P12, P13, P14, P15, P16, P17, P21, P22

Psychological State Theme

It was found that the psychological state of university students who had to return to their family homes due to the pandemic was affected by this compulsory change. When the psychological expectations of the participants from university life without a pandemic were examined, it was concluded that they had expectations of gaining self-confidence, self-realization, psychological well-being, a sense of belonging, gaining the necessary motivation to specialize in their profession, and having freedom (Table 1).

In addition, it was determined that the participants who moved away from the university environment due to the pandemic had difficulties in expressing themselves in the presence of their families, experienced anxiety related to their profession because of the weakening of educational efficiency, had conflict and pressure within the family as a consequence of the restriction of their freedom, and had an excessive loss of motivation and hopelessness (Table 2).

Social State Theme

The theme of social status consists of two sub-themes: social environment and participation in various activities. It was seen that social expectations were to establish a wide social environment and circle of friends, to socialize with people who can be beneficial to them professionally, and to have a friend group that understands them better (Table 1).

Moreover, it was seen that participating in various social events and festivals, experiencing campus life, and taking part in activities that can be enjoyed, create great expectations for the participants (Table 1).

It was concluded that the social life of the participants, who moved away from the university environment due to the pandemic and returned to their family home, was adversely affected; their social life came to an end, having financial difficulties as a result of the disappearance of the opportunity to work part-time and their freedom being restricted under family pressure (Table 2).

Table 2. Students' feelings due to the pandemic

Psychological state theme		**Social state theme**	
Difficulties in expressing themselves in the presence of their families	P1, P2, P4, P9, P10, P13, P15, P16, P19	End of social life	P1, P2, P3, P4, P5, P6, P8, P9, P10, P12, P13, P14, P15, P16, P18, P21, P22, P23
Anxiety	P2, P3, P5, P6, P7, P10, P13, P17, P18, P19, P20, P21	Having financial difficulties	P7, P16
Conflict and pressure within the family	P5, P11, P14, P17, P19, P20	Restriction of freedom	P2, P3, P5, P11, P13, P14, P17, P19, P20, P22
Excessive loss of motivation	P3, P4, P5, P6, P7, P8, P9, P11, P12, P14, P15, P16, P18, P21, P22, P23	Negatively affected social life	P1, P2, P3, P4, P5, P6, P7, P8, P9, P10, P11, P12, P13, P14, P15, P16, P17, P18, P19, P20, P21, P22, P23
Hopelessness	P1, P2, P6, P7, P11, P12, P16		

DISCUSSION

In this study, the psychosocial state of university students who had to return to their family homes due to the Covid-19 pandemic was examined. When the results of the research were investigated, the themes of psychological state and social state related to the lives of the students during the pandemic were obtained.

It was observed that students' expectations of university life are in two groups psychological and social. A sense of belonging, gaining self-confidence, self-actualization, psychological well-being, and freedom are among the psychological expectations. It was seen that social expectations are; to establish a wide social environment and friend environment, to socialize with people who can be useful to them professionally, to live the campus life, and to participate in various social activities and festivals. As can be understood from the statements above, it is seen that university students have psychological and social expectations from university and campus life.

The concept that the participants, who moved away from the university environment due to the pandemic, expressed the most about the situation they were in was the loss of sense of belonging. It is known that the sense of belonging has social and psychological effects on university students. It also significantly affects academic success (Gopalan & Brady, 2020). Studies are showing that a weak sense of belonging negatively affects mental and physical health (Gummadam, Pittman, & Ioffe, 2016), while a strong sense of belonging is an indicator of development (Fink, 2014). For this reason, it can be thought that the sense of belonging lost during the pandemic process may cause a chain reaction and cause students to lose academically, psychologically, and socially.

It was seen another concept that was emphasized by the participants was anxiety. It was concluded that the students participating in the study experienced academic anxiety due to the decrease in educational efficiency and that their stress and anxiety increased thanks to the increase in family conflicts because of being at the family home. It is known that university students especially suffer from depression and anxiety (Lipson, Lattie, & Eisenberg, 2019). Russell and Topham (2012) also revealed that an increase in students' anxiety levels negatively affects their learning. In addition, the participants working part-time jobs in the campus environment stated that they experienced economic stress as a result of the disappearance of this opportunity. It was reported that mental health problems, like stress and anxiety, negatively affect students' academic success (Eisenberg, Golberstein, & Hunt, 2009).

It was found that the social life of the participants, who moved away from the university environment due to the pandemic and returned home, were negatively affected, their social life came to an end, and their freedom was restricted due to family pressure. When the expectations of the participants from university life are examined, it is very important for them to have a wide circle of friends and to express themselves comfortably in this social environment. However, these expectations of the participants were in vain due to the pandemic. There are studies on the effect of social factors on the academic achievement of university students (Leafgran, 1989; Pritchard, & Wilson, 2003). In addition, it is known that anxiety disorders are more likely to occur and worsen in the absence of interpersonal communication (Xiao, 2020). In this context, while the anxiety of university students who had to leave the campus environment due to the pandemic increased, their academic success was also at risk. Furthermore, it was reported that the lack of social interaction in the distance education process might have caused a lack of motivation (Güven, Yazıcı, & Doğan, 2021). Motivation is an important part of the learning

process in distance education (Khan, 2009). For this reason, contrary to their expectations, it is thought that students who came to the end of their social lives had problems such as self-confidence and disappointment.

It was seen that some of the expectations of the students participating in the research from university life are to live campus life and to participate in various social activities and festivals. On the other hand, the fact that students found themselves in an environment where campuses were closed, all activities were restricted, and they did not have the opportunity to socialize and make new friendships let all their expectations down from university life. University campuses are communities where students live, learn, work and establish a connection with each other (ACHA, 2019a). Students who lack the chance to live in this environment will inevitably have a weakening in their sense of belonging, and experience academic anxiety, and those working in part-time jobs will suffer from economic difficulties. These conditions can be expected to bring some negativities. Some previous studies on university students revealed that campus life has a direct impact on students' academic achievement (Bergen-Cico & Viscomi, 2012; Kulp, Pascale, & Grandstaff, 2021). Therefore, it can be expected that all these social changes will bring along psychological and academic negativities. This situation has become unbearable for many students participating in the research.

CONCLUSIONS

As a result, it was concluded that university students who had to return to their families' homes had a decrease in their sense of belonging; they felt anxious and stressed due to academic, professional, economic, and family reasons, and thus they were faced with problems such as uncertainty about the future. In addition, it was observed that the lack of social commitment and their motivation toward life diminished. In addition, it was found that they could not realize their goals and dreams regarding their social life, their social life came to an end, and they were disappointed with campus life and participation in various activities.

To prevent these negative situations experienced by the students, to gain decreased motivation, or minimize the losses, it may be beneficial for distance education to be carried out fluently and technically without any problems. On the other hand, comprehensive plans should be designed to respond to the negativities experienced due to the closure of campuses and the fact that students had to return to their family homes. The fact that the necessary psychosocial support can be provided by the relevant institutions to the students who request it can also positively affect the lives of university students.

Declaration of conflicting interests

The authors declared no potential conflicts of interest concerning the research, authorship, and/or publication of this article.

Funding

The authors received no financial support for the research, authorship, and/or publication of this article.

REFERENCES

American College Health Association. (2019a). *ACHA guidelines: Standards of practice for health promotion in higher education* (4th ed.). https://www.acha.org/documents/resources/guidelines/ACHA_Standards_of_Practice_for_Health_Promotion_in_Higher_Education_October2019.pdf

Asanov, I.; Flores, F.; McKenzie, D.; Mensmann, M.; Schulte, M. Remote-learning, time-use, and mental health of Ecuadorian high-school students during the COVID-19 quarantine. *World Dev.* 2021, *138*, 105225.

Aristovnik, A.; Keržič, D.; Ravšelj, D.; Tomaževič, N.; Umek, L. Impacts of the COVID-19 pandemic on life of higher education students: A global perspective. *Sustainability,* 2020, *12*, 8438.

Barada, V., Doolan, K., Burić, I., Krolo, K., Tonković, Ž, (2020). Student Life during the COVID-19 Pandemic Lockdown: Europe-Wide Insights. Available online: http://www.ehea.info/Upload/BFUG_DE_UK_73_11_6_students_Covid_19_survey_results.pdf (accessed on 5 December 2020).

Bergen-Cico, D., & Viscomi, J. (2012). Exploring the association between campus cocurricular involvement and academic achievement. College Student Retention, 14(3), 329–343.

Cicha, K., Rizun, M., Rutecka, P., & Strzelecki, A. (2021). COVID-19 and Higher Education: First-Year Students' Expectations toward Distance Learning. Sustainability, 13(4), 1889. https://doi.org/10.3390/su13041889

Eisenberg, D., Golberstein, E., & Hunt, J. B. (2009). Mental health and academic success in college. *The B.E. Journal of Economic Analysis & Policy*, *9*(1), 1–37. https://doi.org/10.2202/1935-1682.2191

Fink, J. E. (2014). Flourishing: Exploring predictors of mental health within the college environment. *Journal of American College Health*, *62*(6), 380–388. https://doi.org/10.1080/07448481.2014.917647

Gritsenko V, Skugarevsky O, Konstantinov V, Khamenka N, Marinova T, Reznik A, & Isralowitz R. (2020). COVID 19 fear, stress, anxiety, and substance use among Russian and Belarusian university students. International Journal of Mental Health and Addiction. https://doi.org/10.1007/s11469-020-00330-z

Gopalan, M., & Brady, S.T. (2020). College students' sense of belonging: A national perspective. *Educational Researcher*, *49*(2), 134–137. https://doi.org/10.3102/0013189X19897622

Gummadam, P., Pittman, L. D., & Ioffe, M. (2016). School belonging, ethnic identity, and psychological adjustment among ethnic minority college students. *Journal of Experimental Education*, *84*(2), 289–306. https://doi.org/10.1080/00220973.2015.1048844

Güven, Ş., Yazıcı, A. & Doğan, E. (2021). Uzaktan Eğitimin Akademik Başarıya Etkisi Hakkında Spor Bilimleri Fakültesi Öğrencilerinin Beklentileri. *Beden Eğitimi ve Spor Bilimleri Dergisi, 23*(4), 119-130.

Hawryluck L, Gold WL, Robinson S, Pogorski S, Galea S, Styra R. SARS control and psychological effects of quarantine, Toronto, Canada. Emerg Infect Dis. 2004;10(7):1206–12.

Islam, M.A., Barna, S.D.; Raihan, H.; Khan, M.N.A.; Hossain, M.T. Depression and anxiety among university students during the COVID-19 pandemic in Bangladesh: A web-based cross-sectional survey. *PLoS ONE,* 2020, *15*, e0238162.

Khan, I. M., (2009). An analysis of the motivational factors in online learning. Doctoral Dissertation. Phoenix:University of Phoenix.

Kulp, A. M., Pascale, A. B., & Grandstaff, M. (2021). Types of extracurricular campus activities and first-year students' academic success. *Journal of College Student Retention: Research, Theory & Practice*, *23*(3), 747-767.

Lipson, S. K., Lattie, E. G., & Eisenberg, D. (2019). Increased rates of mental health service utilization by U.S. college students: 10-year population-level trends (2007-2017). *Psychiatric Services*, *70*(1), 60–63. https://doi.org/10.1176/appi.ps.201800332

Leafgran, F. A. (1989). Health and wellness programs. In M. L. Upcraft & J. N. Gardner (Eds.), The freshman year experience (pp. 156-167). San Francisco: Jossey-Bass.

Miles, M. B., Huberman, A. M. (2016). Nitel veri analizi. Ankara: Pegem Akademi.

Mok, K.H.; Xiong, W.; Ke, G.; Cheung, J.O.W. Impact of COVID-19 pandemic on international higher education and student mobility: Student perspectives from mainland China and Hong Kong. *Int. J. Educ. Res.* 2021, *105*, 101718.

Olmos-Gómez, M.D.C. Sex and careers of university students in educational practices as factors of individual differences in learning environment and psychological factors during COVID-19. *Int. J. Environ. Res. Public Health,* 2020, *17*, 5036.

Pasion, R., Dias-Oliveira, E., Camacho, A., Morais, C. and Campos Franco, R. (2020), "Impact of COVID-19 on undergraduate business students: a longitudinal study on academic motivation, engagement and attachment to university", *Accounting Research Journal*, Vol. ahead-of-print No. ahead-of-print. https://doi.org/10.1108/ARJ-09-2020-0286

Pritchard, M. E., & Wilson, G. S. (2003). Using emotional and social factors to predict student success. *Journal of college student development*, *44*(1), 18-28.

Rolfe, G., (2006). Validity, Trustworthiness And Rigour: Quality And The Idea Of Qualitative Research. *Journal of Advanced Nursing*, *53*(3), 304-310.

Rubin, A. & Babbie, E. R. (2016). *Empowerment Series: Research Methods For Social Work*. Boston: Cengage Learning.

Russell, G., & Topham, P. (2012). The impact of social anxiety on student learning and well-being in higher education. *Journal of Mental Health*, *21*(4), 375-385.

Strauss, A. & Corbin, J. (2014). *Basics Of Qualitative Research Techniques*. New York: Sage Publications.

Strzelecki, A., Azevedo, A., & Albuquerque, A. (2020). Correlation between the Spread of COVID-19 and the Interest in Personal Protective Measures in Poland and Portugal. Healthcare ,*8*, 203.

Xiao, C. (2020). A novel approach of consultation on 2019 novel coronavirus (COVID-19)-Related psychological and mental problems: structured letter therapy. *Psychiatry Investigation. 17*(2), 175–176.

Xiao H, Zhang Y, Kong D, Li S, Yang N. Social capital and sleep quality in individuals who self-isolated for 14 days during the coronavirus disease 2019 (COVID-19) outbreak in January 2020 in China. Med Sci Monit. 2020;26:e923921–e. pmid:32194290.

World Health Organization. WHO Director-General's opening remarks at the media briefing on COVID-19–11 March 2020 Geneva, Switzerland: World Health Organization; 2020 [cited 2020 18 April]. https://www.who.int/dg/speeches/detail/who-director-general-s-opening-remarks-at-the-media-briefing-on-covid-19-11-march-2020.

Wu, S.-J.; Chang, D.-F.; Sun, F.-R. Exploring college student's perspectives on global mobility during the COVID-19 pandemic recovery. *Educ. Sci.* 2020, *10*, 218.

Yıldırım, A., Şimşek, H. (2013). Sosyal Bilimlerde Nitel Araştırma Yöntemleri (9. baskı). Ankara: Seçkin Yayıncılık.

YÖK. (2020). Yüksek Öğretim Kurulu - Basın Açıklaması, BA03. https://basin.yok.gov.tr/AciklamaBelgeleri/2020/03-uzaktan-egitime-iliskin-alinan-karar.pdf
YÖK (2021). Yükseköğretim Bilgi Yönetim Sistemi. Erişim adresi: https://istatistik.yok.gov.tr/

CONSTRUCTION AND VALIDATION OF PROBLEM-SOLVING ABILITY TEST

Ishfaq Ahmad Bhat, Ph.D.
Research Scholar, Department of Education, Annamalai University, Tamilnadu in India
ishfaqbhat099@gmail.com

Dr. G. Arumugam, Associate Professor
Department of Education, Annamalai University, Tamilnadu in India

ABSTRACT
The study focused on the construction and validation of a problem-solving ability test. The test consists of 36 multiple choice items regarding numerical and reasoning ability tested on 810 students. The preliminary instrument consists of 46 multiple choice items was tested on 352 secondary school students. After the refinement of items using different procedures, 36 items were selected. The construction and development of the test was done by expert review, preliminary draft, item analysis, selection of items, preparation of final test, norms, validity, and reliability of the test. The Cronbach's (α) and split-half reliability of the test as found 0.909 and 0.890 respectively with the intrinsic and criterion validity of the test was found to be 0.953 and 0.781.
Keywords: Construction, Problem-solving, Reliability and Validity.

INTRODUCTION

With the advancement in socio-economic and technological fields, the life of the individual is growing more and more complex fraught with a range of problems that the individual and society have to face in long run. The ability to solve problems is one of the basic skills everyone needs in order to face the increased demands in a complex life. Generally, problem-solving skills development is one of the focuses on the 21st-century educational goals (Gongden, 2016; Kivunja,

2015; Wang, et al., 2018), especially in physics education (Shishigu et al. 2009; Taasoobshirazi & Farley, 2013). Apart from understanding concepts (Docktor et al., 2016; Yuliati et al. 2018), physics aim at improving the problem-solving skills of individuals (Harjono, 2012; Soetopo, 2016). Problem-solving is a cognitive process of finding means to achieve goals (Mefoh et al. 2017; OECD, 2014) which depends on the ability to compile and process information (Sujarwanto & Hidayat, 2014). The stages involved in addressing problems are often covered in physics education (Gunawan et al. 2015).

Problem solving ability has played a critical role in human history (Chi & Glaser, 1985; Ohlsson, 2012). Problem solving involves people's efforts to find a solution to a problem using analytical thinking, critical thinking, creativity, reasoning, and experiences along with available information (Chi & Glaser, 1985; Schunk, 2004; Reeve, 2013). Since childhood, we actively solve problems presented by the world. We acquire information about people, objects, events, or phenomena and organise the information into the structure of knowledge that is stored in our memory. The structure of knowledge contains bodies of understanding, mental models, convictions, and beliefs, and influences how we relate our experiences together and how we solve problems that we encounter in everyday life at school, work, even at play (Resnick & Glaser, 1975; Chi & Glaser, 1985). Problem-solving is the mental process of Assessing a Circumstance, learning what Choices are available, and then choosing the alternative Which will result in the desired Result (Investigator).

Problem-solving may be defined as a process of raising a problem in the minds of students in such a way as to stimulate purposeful, reflective thinking for arriving at a rational solution Risk, (2000). Hafner and Stewart (1995) defined, "Problem Solving is a complex, multilayered skill." According to them the process of problem-solving depends on Fluidity of thinking (Guilford 1986) Generation of mental elements (Johnson-Laird 1993) and Continuous search of new ideas.

Studies Supporting Problem Solving Ability Test

Olivares et. al (2000). Studied Psychometric properties of the Spanish adaptation of the Social Problem-Solving Inventory-Revised (SPSI-R). The Social Problem Solving Inventory-Revised (SPSI-R) has been translated and adapted to a Spanish population. Covariance structure analysis was used to replicate the factor model for this questionnaire and to assess whether the Spanish and English versions were factorially invariant. The questionnaire was found to be only partially factorially invariant, as one of the dimensions measured by the questionnaire, impulsivity/carelessness style (ICS), appears to be measured differently across populations.

Effandi et. al (2004). The Reliability and Construct Validity of Scores on the Attitudes toward Problem Solving Scale. The Attitudes Toward Problem Solving Scale (ATPSS) has received limited attention concerning its

reliability and validity with a Malaysian secondary education population. Subjects were 233 secondary school students. Reliability coefficients of the three subscales and the total score were high, indicating that the scale is stable and reliable in measuring Attitudes Toward Problem Solving. Results from factor analysis imply that the ATPSS measures more of various traits in Malaysian culture.

Behera (2009) studied the problem solving skills in mathematics learning. The study revealed that the mean difference between high and low ability groups, between boys and girls and within each ability group is quite large. Students with high mathematical ability are far superior in mathematical problem-solving skill to their counter parts in the lower ability irrespective of their gender.

Pitma et. al (2009) studied the factors influencing mathematic problem-solving ability of sixth grade students. This study revealed that teachers‟ behaviours took both direct and indirect effects on the students‟ mathematic problem solving.

Huang and Flores (2011). Exploring the Validity of the Problem-Solving Inventory with Mexican American High School Students. The Problem-Solving Inventory (PSI; Heppner & Petersen, 1982) was developed to assess perceived problem-solving abilities. Using confirmatory factor analysis, results supported a bilevel model of PSI scores with a sample of 164 Mexican American students. Findings support the cultural validity of PSI scores with Mexican Americans and enhance the generalizability with culturally diverse samples.

Dubey (2011). Developed Problem solving ability test (PSAT) in 1988 and it was revised in 2011. There are 20 items in a test. The problem-solving ability has been standardized over a sample of 1640 students between the age group of 12 to 17 years. The reliability of the test is .0.78 & 0.76 (Spearman Brown & Kuder Richardson) with validity 0.85. The duration of the test is 40minutes and is available in Hindi language only.

Garg (2012). Developed Problem Solving Ability (PSA) scale. The test contains 22 problems along with alternative answers, except item number 2 and 20, in which only one answer is correct. The reliability of the test is .683 & .791 (Spearman Brown & Kuder Richardson) on a sample of 280. The duration of the test is 30 minutes and is available in Hindi language only.

Guven and Cabakcor (2013) studied the factors influencing mathematical problem-solving achievement of seventh grade Turkish students. This study revealed that the difference between male and female students' problem-solving achievement is not statistically significant.

Kumar and Singhal (2014) Conducted a study of academic achievement in relation to problem solving ability. In this study a sample of 200 students from classes VI to X was taken from government schools in urban area. A problem solving ability test was administered and academic achievements of only those students were recorded form school records. It was found that those students having better problem solving ability were the better performers.

Beyazsacli (2016) Studied Relationship between Problem Solving Skills and Academic Achievement. The results of this paper indicate that the ability scores of the senior primary school students relating to problem solving does not create a significant difference at a statistical level, from the point of view of the intervening variable of gender.

Singaravelu (2017) Examined Problem Solving Ability of Higher Secondary Chemistry Students. The result of the study reveals that the higher secondary chemistry students have low level of problem solving ability. Teacher should give practice on problems of a huge variety to develop creative thinking in his students to increase the problem solving ability.

Kanmani and Nagarathinam (2017) Examined Problem Solving Ability and Academic Achievement of Higher Secondary Students. The study revealed that Problem solving ability of the higher secondary students is average and there was a high positive correlation between problem solving ability and achievement in mathematics.

Teo et. al (2018) Psychometric properties of the problem solving inventory in a Singapore young male adult sample. The aim of the study was to evaluate the psychometric properties of the PSI with a Southeast-Asian sample made of 342 young adult males living in Singapore. The findings showed that the PSI with a three factors solution was a valid and reliable scale for use with young male Singaporeans.

Gunawan et. al (2020) Improving Students’ Problem-Solving Skills Using Inquiry Learning Model Combined with Advance Organizer. Based on the result, it was found that the students in the experimental class who used a

combination of inquiry learning models and advance organizer had significantly problem-solving skills' improvement than the control class that only used inquiry learning models.

Fülöp (2021) Developing Problem-Solving Abilities by Learning Problem-Solving Strategies: An Exploration of Teaching Intervention in Authentic Mathematics Classes. This study presents relevant implications to practitioners and other educational designers on how to enhance problem-solving ability by focusing on teaching problems-solving strategies integrated throughout the curriculum.

Construction of Problem solving ability Test
A good test is prepared through a systematic process. The process of test development was completed through different steps namely: test conceptualization, test construction, item scoring and analysis, reliability and validity and test standardization.

Preparation Draft for Problem solving
After the review of literature, Problem solving ability test was prepared from the contents numerical and reasoning ability. The preliminary draft was given to experts in education, psychology, statistics and experienced mathematics teachers. After receiving their opinions, items in difficult language were modified to simple language statement and 10 items were eliminated from the draft.

Purpose of the Test
The main purpose of the test was to measure the Problem-Solving Ability of students studying at Secondary, Under Graduate and University level.

Operational Definition
Problem solving ability is a score obtained by the students in Problem Solving Ability Test (PSAT) against the learning and understanding of concepts of numerical and reasoning ability of given below contents.

Content areas of Problem Solving Ability Test
It was important to identify the dimensions of Problem Solving Test before constructing it. In this study, Problem Solving has been conceptualized in terms of broad areas of numerical and reasoning ability. These areas of test are Time, Speed, Work and Distance, Profit, Loss and Discount, Coding- Decoding, Simple and Compound interest. Averages and Percentages Ratio and Proportion, Blood Relations, Direction Sense and Problems based on Age.

The Item Pool
The researcher has adopted multiple choice items, because these items are regarded as the most valuable and most generally applicable to all test forms.

For the purpose of item pool, initially a list of '56 statements distributed over the above nine contents of numerical and reasoning ability' were prepared. Then, the draft items were given to a group of 10 select experts in the field of mathematics and reasoning and scale construction, with a request to review the statements and evaluate their content accuracy and coverage, their repetition, editorial quality with suggestions for additions, deletions and modifications of items. Based on 80% unanimity of the experts, 46 statements were included in the 'try-out form' of the scale.

Initial Try-out of the Test
The 46-items were "randomized and were provided with standard directions and administered" on a sample of 352 secondary, college and university level students of Jammu and Kashmir.

Item Analysis
Item analysis is a statistical technique which is used for selecting and rejecting the items of the test on the basis of their difficulty value and discriminated power or index. **(investigator).** Item analysis is a technique of item validation (**Ebel, 1966**).

In the present test Item analysis was done after arranging total scores of all the students in ascending order. For the purpose of item analysis 27% subjects from highest scoring group and 27% subjects from lowest scoring group were selected. Each group consisted of 95 students.

Item Discrimination
Index of discrimination is that ability of an item on the basis of which discrimination is made between superiors and inferiors **(Blood & Bud, 1972).**

Discriminating Index was calculated for each item. Following formula was used to calculate the Discrimination Index of an item.

$$D.I = \frac{RU - RL}{NU + NL} \times 100$$

Difficulty Index of an Item

The difficulty value of an item may be defined as the proportion of a certain sample of subjects who actually know the answer of an item **(Frank S. Freeman).**

It was calculated using the following formula,

$$\text{Item difficulty (D.V)} = \frac{RU + RL}{NU + NL} \times 100$$

Item Selection

According to Ebel, (1966), any item having the discriminating power of above 0.30 should be considered as a reasonably good item.

In the present study, only such items have difficulty indices ranging from 30 to 60 and those items of discriminating power ranging from 0.30 to 0.45 were selected. The difficulty index and the discrimination power values are given in table 1.

Table: 1 *Indices of Item Difficulty and Discrimination Power of Items of Problem-Solving Ability Test*

Item No.	RU	RL	D.I= $\frac{RU - RL}{NU + NL} \times 100$	D.V = $\frac{RU + RL}{NU + NL} \times 100$	Decision
1	85	20	0.34	55.26	Selected
2	82	21	0.32	54.21	Selected
3	90	45	**0.23**	**71.00**	**Rejected**
4	91	13	0.41	54.73	Selected
5	71	14	0.30	44.73	Selected
6	90	9	0.42	52.10	Selected
7	48	6	**0.22**	**28.42**	**Rejected**
8	76	15	0.32	47.89	Selected
9	70	12	0.30	43.15	Selected
10	87	7	0.42	49.47	Selected
11	85	50	**0.18**	**71.00**	**Rejected**
12	88	9	0.41	51.05	Selected
13	85	8	0.40	48.94	Selected
14	91	13	0.41	54.73	Selected
15	79	11	0.35	47.36	Selected
16	45	8	**0.19**	**27.89**	**Rejected**
17	84	8	0.40	48.42	Selected
18	91	10	0.42	53.15	Selected
19	83	10	0.38	48.94	Selected
20	81	5	0.40	45.26	Selected
21	69	10	0.31	41.57	Selected
22	90	50	**0.21**	**73.68**	**Rejected**
23	91	12	0.41	54.21	Selected
24	89	6	0.43	50.00	Selected
25	76	19	0.30	50.00	Selected
26	87	9	0.41	50.52	Selected
27	92	7	0.44	52.10	Selected
28	41	9	**0.16**	**26.31**	**Rejected**
29	88	10	0.41	51.57	Selected
30	86	10	0.40	50.52	Selected
31	70	11	0.31	42.63	Selected
32	89	13	0.40	53.68	Selected
33	88	47	**0.21**	**71.05**	**Rejected**
34	73	9	0.33	43.15	Selected
35	89	7	0.43	50.52	Selected

36	72	9	0.33	42.63	Selected
37	46	9	**0.19**	**28.42**	**Rejected**
38	83	7	0.40	47.36	Selected
39	92	8	0.44	52.63	Selected
40	80	12	0.35	48.42	Selected
41	83	67	**0.08**	**78.94**	**Rejected**
42	78	17	0.32	50.00	Selected
43	87	8	0.41	50.52	Selected
44	43	8	**0.18**	**26.84**	**Rejected**
45	82	13	0.36	50.00	Selected
46	86	9	0.40	50.00	Selected

From the above table, based on Ebel **(1996),** it is evident that out of the 46 items, 10 items were eliminated which were not significant on the basis of item difficulty and item discrimination index. Hence, 36 items were included in the final form of the scale. The total 36 number of items with their serial numbers and their distribution over different areas/ dimensions in the final scale after analysis are given in the table 2 below.

Table 2 *Number of Items under different areas of Problem-solving ability Test*

S. No	Name of the Content area	Item No.	No. of Items
A	Time, Speed, Work and Distance	4, 5, 6, 16, 24, 33, 36	7
B	Profit, Loss and Discount	2, 3, 15, 23, 31, 32	6
C	Coding- Decoding	9, 10, 19, 26	4
D	Simple and Compound interest	13, 22, 29, 35	4
E	Averages and Percentages	1, 14, 30	3
F	Ratio and Proportion	7, 17, 34	3
G	Blood Relations	11, 20, 27	3
H	Direction Sense	12, 21, 28	3
I	Problems based on Age	8, 18, 25	3
		Total Number of Items	**36**

Scoring of Items

Score '1' for correct answer and '0' for incorrect answer. Total score of the respondent could range from 0 to 36 in a given test.

Standardization of the Problem Solving Ability Test

The final manuscript with 36 items was administered to a representative sample of 810 (Secondary/ College/ University) level students of Jammu and Kashmir. The total score of the scale varied from 0 to 36 and can be inferred as higher the score higher the individual has capacity to solve numerical and reasoning problems and vice-versa. The mean age of the students participated in the development of scale was 17.5 years with 14 years as minimum and 21 years as maximum.

Reliability

The consideration of reliability of a scale viewed as essential elements for determining the quality of any standardized test. Cronbach's alpha was also used for determining the internal consistency reliability of the scale.

Table 3 *Descriptive statistics of Items, Scale and Cronbach's Alpha*

Item No.	Descriptive statistics for item				Descriptive statistics for scale		
	Mean	Variance	SD	N	Scale Means if item Deleted	*Corrected Item-Correlation	Cronbach's Alpha if Item Deleted
1	2.17	1.08	1.04	810	78.13	.466	.906
2	2.29	1.12	1.06	810	78.00	.516	.905
3	2.11	1.27	1.13	810	78.19	.514	.905
4	2.20	1.16	1.08	810	78.10	.338	.908

5	2.28	1.10	1.05	810	78.01	.490	.906
6	1.95	1.10	1.05	810	78.35	.546	.905
7	1.88	1.29	1.14	810	78.42	.433	.907
8	2.42	1.08	1.04	810	77.88	.492	.906
9	2.26	1.21	1.10	810	78.04	.489	.906
10	2.22	1.18	1.09	810	78.07	.520	.905
11	2.31	1.16	1.08	810	77.99	.468	.906
12	1.92	1.02	1.01	810	78.38	.254	.909
13	2.19	1.06	1.03	810	78.11	.400	.907
14	2.12	1.21	1.10	810	78.18	.421	.907
15	2.39	1.18	1.09	810	77.90	.430	.907
16	2.21	1.27	1.13	810	78.09	.374	.907
17	2.34	1.10	1.05	810	77.95	.379	.907
18	1.95	1.10	1.05	810	78.35	.546	.905
19	1.88	1.29	1.14	810	78.42	.433	.907
20	2.21	1.36	1.17	810	78.09	.359	.908
21	2.40	1.23	1.11	810	77.90	.290	.909
22	2.68	.990	.955	810	77.62	.345	.908
23	2.01	1.08	1.04	810	78.29	.562	.905
24	2.36	1.12	1.06	810	77.94	.489	.906
25	2.21	1.36	1.17	810	78.09	.440	.906
26	2.29	1.46	1.21	810	78.00	.514	.905
27	2.31	1.14	1.07	810	77.98	.497	.906
28	2.02	1.08	1.04	810	78.27	.484	.906
29	2.30	1.14	1.07	810	78.00	.462	.906
30	2.38	1.16	1.08	810	77.91	.503	.906
31	2.17	1.08	1.04	810	78.13	.466	.906
32	2.23	.919	.959	810	78.06	.487	.906
33	2.43	1.32	1.15	810	77.86	.426	.907
34	2.22	1.02	1.01	810	78.08	.507	.906
35	2.42	1.04	1.02	810	77.88	.263	.909
36	2.39	.994	.977	810	77.91	.381	.907

** r=0.21 (p<0.001) two tailed*

Content (Face and logical) Validity

The content (Face and logical) validity of the scale was verified by number of experts and academicians. There are various methods to establish content validity of the tool. Data screening was carried out in order to overcome existence of multicollinearity and singularity in the scale. For testing multicollinearity and singularity 'Determinant' of the R-matrix was estimated and it was greater than in both cases 0.00001. Sampling adequacy was also carried out and found to be greater than 0.50 as required.

Intrinsic Validity

The formula used to determine the intrinsic validity is the square root to its reliability. Thus, the intrinsic validity of this test is

$V = \sqrt{R}$ $V = \sqrt{0.909}$ $V = 0.953$

Criterion Validity

The criterion validity of the problem-solving ability test was examined by using Pearson Product Moment Correlation (zero-order) with the problem-solving ability test designed by (Dr. Roop Rekha Garg with n= 150) and was found to be 0.781 ($p<0.001$) two-tailed. It confirms that the criterion validity of the problem-solving ability test is excellent.

Norms

The standard score (more commonly referred to as Z-Score) is very useful statistics, as it enables us to compare scores that are from a normal distribution. Standard Scores (Z- score) were calculated by using the descriptive statistics (**Mean = 19.54, SD=8.68, N=810**).

$$Z = (X - \mu) \div \sigma$$

Where X is the raw score of the problem-solving ability scale, μ is the mean and σ is the standard deviation. On the basis of descriptive statistics, the Z -score norms have been prepared which are valid for secondary school students and shown in Table 4.

Table 4 *Z-score norms for the Problem-Solving Ability Test*

Mean = 19.54 SD=8.68 N=810

Raw Score	Z-Score	Raw Score	Z-Score
3	-1.905	**20**	0.052
4	-1.790	**21**	0.168
5	-1.675	**22**	0.283
6	-1.559	**23**	0.398
7	-1.444	**24**	0.513
8	-1.329	**25**	0.629
9	-1.214	**26**	0.744
10	-1.099	**27**	0.859
11	-0.983	**28**	0.974
12	-0.868	**29**	1.089
13	-0.753	**30**	1.205
14	-0.638	**31**	1.320
15	-0.523	**32**	1.435
16	-0.407	**33**	1.550
17	-0.292	**34**	1.665
18	-0.177	**35**	1.781
19	-0.062	**36**	1.896

The Z- score norms have been categorized labeled and interpreted in reference to problem-solving ability in Table 7.

Table 5 *Classification of Norms for Interpretation of the Problem-solving ability on the basis of Z-Score*

S. N0	Range	Level	Problem-solving ability
1	+1.50 and above	A	Extremely- High
2	+0.51 to +1.49	B	High
3	-0.50 to +0.50	C	Average
4	-1.49 to -0.51	D	Low
5	-1.50 and below	E	Extremely- Low

SUMMARY

The problem-solving ability test has excellent internal consistency, split-half reliability (Guttman) and followed by the use of the Spearman-Brown prophecy formula. The face, content, intrinsic, and criterion validities were also high and are in an acceptable range. Thus, it can be concluded that the scale is highly reliable and valid for the measurement of the problem-solving ability of the 13 and above years of age group.

REFERENCES

Behera, B. (2009). Problem-solving skills in mathematics learning. Edu tracks, 8(7), 31-34.

Beyazsacli, M. (2016). Relationship between problem solving skills and academic achievement. *The Anthropologist*, *25*(3), 288-293. https://doi.org/10.1080/09720073.2016.11892118

Blood, D.F. and Budd, W.C. (1972). Educational measurement and evaluation. New York: Harper and Row.

CHI, M. T. H., & Glaser, R. (1985). Problem solving ability. In R. J. Sternberg (Ed.), human abilities: An information-processing approach (pp. 227-257). San Francisco, Ca: W. H. Freeman & Co. (2019, April 10). Mary Lou Fulton Teachers College. https://education.asu.edu/chi-m-t-h-glaser-r-1985-problem-solving-ability-r-j-sternberg-ed-human-abilities-information

Docktor, J. L., Dornfeld, J., Frodermann, E., Heller, K., Hsu, L., Jackson, K. A., Mason, A., Ryan, Q. X., & Yang, J. (2016). Assessing student written problem solutions: A problem-solving rubric with application to introductory physics. *Physical Review Physics Education Research*, *12*(1). https://doi.org/10.1103/physrevphyseducres.12.010130

Dubey, L. N. (2011). Manual of Problem Solving Ability for school student (PSAT). Agra: National Psychological Corporation.

Ebel, R. L. (1972). *Essentials of educational measurement*. Prentice Hall.

Effandi, Z., Zolkepeli, H., & Yusuf, D. (2004). The Reliability and Construct Validity of Scores on the Attitudes toward Problem Solving Scale. Journal of Science and Mathematics Education in Southeast Asia, 27(2), 81-91.

Field, A. (2017). *Discovering statistics using IBM SPSS statistics*. SAGE.

Freeman. (2007). *Theory and practice of psychological testing, 3/E*. Oxford and IBH Publishing.

Fülöp, É. (2021). Developing problem-solving abilities by learning problem-solving strategies: An exploration of teaching intervention in authentic mathematics classes. *Scandinavian Journal of Educational Research*, *65*(7), 1309-1326. https://doi.org/10.1080/00313831.2020.1869070

Garg, R. R. (2012). Manual of Problem-Solving Ability (PSA) scale, Uttar Pradesh: Agra National Psychological Association.

Gongden, E. J. (2016). The effects of analogy on male and female chemistry students' problem-solving ability in electrolysis. Int J of Scientific Research in Edu, 9(1), 1-6.

Gunawan, G., Harjono, A., Nisyah, M., Kusdiastuti, M., & Herayanti, L. (2020). Improving students' problem-solving skills using inquiry learning model combined with advance organizer. *International Journal of Instruction*, *13*(4), 427-442. https://doi.org/10.29333/iji.2020.13427a

Gunawan, G., Harjono, A., & Sahidu, H. (2017). Studi Pendahuluan Pada Upaya Pengembangan Laboratorium virtual bagi Calon guru Fisika. *Jurnal Pendidikan Fisika dan Teknologi*, *1*(2), 140-145. https://doi.org/10.29303/jpft.v1i2.250

Guven, B., & Cabakcor, B. O. (2013). Factors influencing mathematical problem-solving achievement of seventh grade Turkish students. *Learning and Individual Differences*, *23*, 131-137. https://doi.org/10.1016/j.lindif.2012.10.003

Hafner, R., & Stewart, J. (1995). Revising explanatory models to accommodate anomalous genetic phenomena: Problem solving in the "context of discovery". *Science Education*, *79*(2), 111-146. https://doi.org/10.1002/sce.3730790202

Harjono, A. (2012). Perbedaan strategi pembelajaran Dan pemberian advance organizer pengaruhnya terhadap hasil belajar fisika siswa kelas X. *Jurnal Pijar Mipa*, *7*(1). https://doi.org/10.29303/jpm.v7i1.87

Huang, Y., & Flores, L. Y. (2011). Exploring the validity of the problem-solving inventory with Mexican American high school students. *Journal of Career Assessment*, *19*(4), 431-441. https://doi.org/10.1177/1069072711409720

Implementing science, technology, mathematics, and engineering (STEM) education in Thailand and in ASEAN. (n.d.). Enjoy free comfortable tools to publish, exchange, and share any kind of documents online!. https://docplayer.net/17179389-Implementing-science-technology-mathematics-and-engineering-stem-education-in-thailand-and-in-asean.html

Kanmani, M., & Nagarathinam, N. (2017). Problem solving ability and academic achievement of higher secondary students. *International Journal of Advanced Research*, *5*(11), 871-876. https://doi.org/10.21474/ijar01/5842

Keraro, F. N., & Shihusa, H. (2009). Using advance organizers to enhance students' motivation in learning biology. *EURASIA Journal of Mathematics, Science and Technology Education*, *5*(4). https://doi.org/10.12973/ejmste/75290

Kivunja, C. (2015). Exploring the pedagogical meaning and implications of the 4Cs "Super skills" for the 21st Century through Bruner's 5E lenses of knowledge construction to improve pedagogies of the new learning paradigm. *Creative Education*, *06*(02), 224-239. https://doi.org/10.4236/ce.2015.62021

Kumar, A., & Singhal, P. P. (2014). Study of Academic Achievement in Relation to Problem Solving Ability. International Journal of Research in Social Sciences and Humanities, 3(1).

MAYDEUOLIVARES, A., RODRIGUEZFORNELLS, A., GOMEZBENITO, J., & DZURILLA, T. (2000). Psychometric properties of the Spanish adaptation of the social problem-solving inventory-revised (SPSI-R). *Personality and Individual Differences*, *29*(4), 699-708. https://doi.org/10.1016/s0191-8869(99)00226-3

Mefoh, P. C., Nwoke, M. B., Chukwuorji, J. C., & Chijioke, A. O. (2017). Effect of cognitive style and gender on adolescents' problem solving ability. *Thinking Skills and Creativity*, *25*, 47-52. https://doi.org/10.1016/j.tsc.2017.03.002

Ohlsson, S. (2012). The problems with problem solving: Reflections on the rise, current status, and possible future of a cognitive research paradigm. *The Journal of Problem Solving*, *5*(1). https://doi.org/10.7771/1932-6246.1144

Pimta, S., Tayruakham, S., & Nuangchale, P. (2009). Factors influencing mathematic problem-solving ability of sixth grade students. *Journal of Social Sciences*, *5*(4), 381-385. https://doi.org/10.3844/jssp.2009.381.385

Resnick, L.B., & Glaser, R. (1975). Problem solving and intelligence. The Education Resources Information Center.

Schunk, D. H. (2019). *Learning theories: An educational perspective*. Pearson.

Singaravelu, S. (2017). Problem Solving Ability of Higher Secondary Chemistry Students. Journal of Research & Method in Education, 7(4),19-22.

Teo, D. C., Suárez, L., & Oei, T. P. (2018). Psychometric properties of the problem solving inventory in a Singapore young male adult sample. *Current Psychology*, *40*(3), 1420-1428. https://doi.org/10.1007/s12144-018-0073-7

Wahyuni, S., Kosim, Gunawan, & Husein, S. (2019). Physics learning devices based on guided inquiry with experiment to improve students' creativity. *Journal of Physics: Conference Series*, *1233*(1), 012034. https://doi.org/10.1088/1742-6596/1233/1/012034

DETERMINING TEACHERS' OPINIONS ON TECHNOLOGY LEADERSHIP ROLES OF SCHOOL HEADS DURING THE COVID-19 PANDEMIC PROCESS

Görkem KARAOĞLAN
KKTC MEB, North Cyprs,
gork.gs.96@gmail.com
Orcid no: 0000 0003 0897 097X

Figen YAMAN LESINGER
Cyprus Health and Social Science University, North Cyprus, figen.yaman@kstu.edu.tr
Orcid no: 0000-0002-9556-4305

ABSTRACT
The purpose of this research; to determine the opinions of teachers about the proficiency levels of technology leadership behaviors of school administrators during the Covid-19 pandemic process. This research was conducted with the descriptive survey model, one of the quantitative research models. The sample of the research consists of 500 primary school teachers working in schools affiliated to the Turkish Republic of Northern Cyprus Ministry of Education, Primary Education Department, in the 2021-2022 academic year. Research data were analyzed with SPSS 25.0 (Statistical Package for Social Science) program. According to the teachers' opinions, it was concluded that primary school administrators exhibited their technology leadership roles adequately in the dimension of human-centeredness, communication and cooperation and support, and partially in the dimension of vision. According to the variables of gender, age and professional seniority; There was no significant difference between teachers' views on human-centeredness, vision, communication and cooperation, and support dimensions of school administrators' technology leadership roles.
Keywords: Technology leadership, school administrators, coronavirus pandemic

Introduction

Covid-19, which affects all areas of life and makes it necessary to make some changes, has made it necessary to discuss different applications in education activities (Bozkurt,2020).

WHO (2019) has prepared a series of recommended plans in order to prevent the further spread of coronavirus in countries and to prepare countries against this epidemic. According to these plans; In order to narrow the impact of the epidemic and reduce its spread, changes have been made such as partial or full-time curfews applied in all countries of the world, restriction of collective and institutional activities, quarantine and isolation practices for international flights, alternating working hours, alternative education practices (WHO, 2019).

As of March 10, the date of the first coronavirus case in the TRNC, education was temporarily suspended; The distance education system has been in a position to support the existing education system. (KKTC MEB, 2020). Distance Learning; It is an interactive and economic education model in which time and space are made independent and realized through information and communication technologies (Toker Gökçe, 2008).

With the inclusion of information technologies in the education process, school administrators are responsible for evaluating the technological infrastructure of the educational institution, creating the necessary planning for the development of this infrastructure, integrating educational technologies into the curriculum, informing teachers and students about the process (Özkan et al., 2017).

Considering that the leader determines the corporate policies and must adopt universal policies while determining these policies; It is necessary to have knowledge about the benefits of technology. At this point, the concept of "technology leadership" emerges (Sincar, 2009).

Technology leadership; It is defined as the ability to support the use of educational technology in schools and to ensure its continuity. Technology leader; In order to ensure this continuity, it exhibits behaviors such as providing a support training program to the employees, analyzing the technical infrastructure of the school according to needs, closely following the technological developments and evaluating whether the institution achieves its goals (Okeke, 2010).

Conducting education from technological environments during the pandemic process; It is an indication that the technology leadership role of school administrators is an essential need. School administrators, who have

technological equipment and assume the role of technology leadership during the pandemic process, can make their educational institutions more qualified (Öztaban, 2020).

In this direction, the aim of the research is to determine the teachers' opinions on the proficiency levels of technology leadership behaviors of school administrators during the Covid-19 pandemic process.

Aim

The purpose of this research is to determine the opinions of teachers on the proficiency levels of technology leadership behaviors of school administrators during the Covid-19 pandemic process. In line with the purpose of the research, answers to the following questions will be sought;

1. What are the technology leadership competency levels of school administrators during the pandemic process?
2. In the pandemic process, is there a significant difference between the technology leadership competency levels of school administrators and the gender variables of teachers?
3. Is there a significant difference between the technology leadership competency levels of school administrators and the age variables of teachers during the pandemic process?
4. Is there a significant difference between the technology leadership competency levels of school administrators and the variables of professional seniority of teachers during the pandemic process?

Methods

Research and Design

In this study, descriptive survey model, one of the quantitative research methods, was used. Quantitative research is a research model in which statistical results are obtained from the data obtained in line with the purpose of the research by examining a specific sample of the universe (Lowhorn, 2007). The descriptive survey model aims to explain and describe the researched subject in detail (Büyüköztürk et al., 2018).

Sample and Data Collection

Simple (random) sampling method was preferred in order to reach the number of samples. Simple (random) sample; It is a sample type that assumes that every individual in the universe has an equal probability of being selected (Baltacı, 2018). In other words; Individuals who define the universe are equally likely to form the research sample (Kabakçı Yurdakul, 2013).

The sample group of the research consists of 500 primary education teachers working in schools affiliated to TRNC Ministry of Education, Primary Education Department in the 2021-2022 education period. The demographic characteristics of the teachers participating in the research are given in Table 1.

Table 1. *Demographic Characteristics Of The Teachers Participating İn The Research*

Variables		f	%
Gender	Female	294	58.8
	Male	206	41.2
Age	20-30 years	161	32.2
	31-40 years	191	38.2
	41-50 years	131	26.2
	51 years and over	17	3.4
Professional Seniority	0-5 years	122	24.4
	6-10 years	141	28.2
	11-15 years	70	14.0
	16-20 years	103	20.6
	21 years and over	64	12.8
TOTAL		500	100

The scale used to reach the data within the scope of the research consists of two parts. “Personal Information Form” prepared by the researcher in the first part; In the second part, the “Technology Leadership Roles Scale of Primary School Administrators” developed by Sincar, M. (2009) was used.

Personal Information Form
The "Personal Information Form" used within the scope of the research was prepared by the researcher. In the content of the personal information form, there are questions about teachers' gender, age and professional seniority.

Technology Leadership Roles Scale of Primary School Administrators
The "Technology Leadership Roles Scale of Primary School Administrators" developed by Sincar, M., (2009) to analyze the technological leadership behaviors exhibited by school administrators was used. The scale is a 5-point Likert-type scale consisting of 29 items. Scale; It consists of four sub-dimensions: human-centeredness, vision, communication and cooperation and support. The reliability coefficient of the scale was determined by the Cronbach Alpha value and the reliability coefficient was found to be .97.

Data Analysis
The data obtained during the research process; It was analyzed with SPSS 25.0 statistical program.
Demographic characteristics of teachers obtained during the research process; Frequency and percentage calculations, which are descriptive statistics types, were used to analyze it. The data obtained from the scale used in the research (n>50), the normality distributions of the scale and its sub-dimensions were analyzed using the Kolmogorov-Smirnov test. With the Kolmogorov-Smirnov test; It was concluded that the research data were not normally distributed ($p<0.05$). In line with this result; It was decided to apply non-parametric tests and Mann-Whitney U and Kruskal Wallis H tests were used

Findings

Table 2. Descriptive Statistics of Teachers' Views on Technology Leadership Roles of School Administrators by Scale Sub-Dimensions

	Number of Items	$\bar{x}$	sd
Human Centricity	11	3.56	.602
Vision	7	3.35	.723
Communication and Cooperation	6	3.40	.681
Support	5	3.47	.667
General	29	3.44	.668

When the mean values of the scale sub-dimensions in Table 2 are examined; according to the teachers' opinions, school administrators exhibits technology leadership roles mostly in the "Human Centricity" dimension ($\bar{x}$ =3.56), secondly in the "Support" dimension ($\bar{x}$ =3.47), and thirdly in the "Communication and Cooperation" dimension ($\bar{x}$ =3.40) , and finally, in the "Vision" dimension ($\bar{x}$ =3.35). When the general average value of the data ($\bar{x}$ =3.44) is examined; It is thought that school administrators exhibit their technology leadership roles during the pandemic process.

Table 3. Descriptive Statistics of Teachers' Views on the Technology Leadership Roles of School Administrators on Scale Items

Scale Items	$\bar{x}$
Items related to the "Human Centricity" sub-dimension	
1. Together with all members of the school, they determine the ethical situations regarding the use of technology at school.	3.67
2. They determine the needs of students and teachers while bringing educational technologies to the school.	3.87
3. They encourage teachers to receive training on the use of educational technologies.	3.69
4. Evaluate teachers' use of educational technologies in the learning-teaching process.	3.19
5. They support teachers to use internet services to communicate among themselves.	4.01
6. They benefit from internet services to ensure in-school communication with all members of the school.	4.24
7. Evaluate the effects of educational technologies on students' school success.	3.07
8. They ensure that all members of the school benefit equally from educational technologies in the school.	3.72

9. They solve the problems related to the use of educational technologies by ensuring the participation of all individuals in the school.	3.48
10. They seek the opinions of the students for the effective use of educational technologies at school.	2.35
11. They seek the opinions of teachers for the effective use of educational technologies at school.	3.79
Items related to the "Vision" sub-dimension	
12. They have a vision regarding the effective use of educational technologies at school.	3.38
13. They share their vision of the effective use of educational technologies at school with the educational staff.	3.46
14. They have long-term technological development plans.	3.04
15. They support the views on the implementation of educational technology plans at school.	3.63
16. They follow the developments in the use of educational technologies and advocate continuous renewal.	3.30
17. They conduct research on the educational technology needs of the school.	3.22
18. They determine the appropriate educational technologies that will facilitate educational activities.	3.39
Items related to the "Communication and Cooperation" sub-dimension	
19. They benefit from internet technologies in communication and cooperation with parents.	3.93
20. They benefit from internet technologies in communication and cooperation with the social environment of the school.	3.97
21. They use technology to ensure the development and innovation of the school.	3.58
22. They generate ideas on how to adapt technological developments to learning-teaching processes with all members of the school.	3.33
23. They form a technology committee to represent all the members of the school in order to implement the plans for educational technologies in the learning-teaching processes.	2.37
24. They use educational technologies to collect data on students' progress.	3.21
Items related to the "Support" sub-dimension	
25. They support the organization of learning-teaching environments according to the developments in educational technologies.	3.55
26. They organize technological environments that will meet the needs of students.	3.30
27. They support the use of educational technologies that will contribute to the development of students' thinking skills on a subject.	3.48
28. They enable teachers to benefit from the opportunities brought by technology in order to enrich the learning-teaching environments.	3.58
29. In the use of educational technologies, they exhibit behaviors that will set an example for the educational and auxiliary personnel in the school.	3.42

When Table 3 is examined, "They benefit from internet services to provide in-school communication with all members of the school." item has the highest arithmetic mean value ($\bar{x}$=4.24). When the arithmetic mean values are examined, the lowest value ($\bar{x}$=2.35) is “They seek the opinions of the students for the effective use of educational technologies at school.” appears to belong to the article.

When the arithmetic mean values of the items in the "vision" sub-dimension are examined, "They support the views on the implementation of educational technology plans at school." item has the highest arithmetic mean value ($\bar{x}$=3.63). When the arithmetic mean values are examined, the lowest value ($\bar{x}$=3.04) is "They have long-term technological development plans." appears to belong to the article.

When the arithmetic mean values of the items in the "Communication and Cooperation" sub-dimension are examined, "They benefit from internet technologies in communication and cooperation with the social

environment of the school." item has the highest arithmetic mean value ($\bar{x}$=3.97). When the arithmetic mean values are examined, the lowest value ($\bar{x}$=2.37) is "They form a technology committee that will represent all the members of the school so that the plans for educational technologies can be applied to the learning-teaching processes." appears to belong to the article.

When the arithmetic mean values of the items in the "Support" sub-dimension are examined, "They enable teachers to benefit from the opportunities brought by technology in order to enrich the learning-teaching environments." item has the highest arithmetic mean value ($\bar{x}$=3.58). When the arithmetic mean values are examined, the lowest value ($\bar{x}$=3.30) is "They organize technological environments that will meet the needs of the students." appears to belong to the article.

Table 4.
Mann-Whitney U Test Results Regarding the Differences in the Technology Leadership Roles of School Administrators in the Sub-Dimensions of the Scale by Gender of the Teachers during the Covid-19 Pandemic Process

	Gender	N	Average of Ranks	Sum of Ranks	U	p.
Human Centricity	F	294	259.13	76185.50	27743.500	.110
	M	206	238.18	49064.50		
	Total	500				
Vision	F	294	256.91	75530.50	28398.500	.234
	M	206	241.36	49719.50		
	Total	500				
Communication and Cooperation	F	294	253.45	74515.00	29414.000	.584
	M	206	246.29	50735.00		
	Total	500				
Support	F	294	257.73	75771.50	28157.500	.177
	M	206	240.19	49478.50		
	Total	500				

As a result of Mann-Whitney U test in Table 4; According to the gender variable, there was no statistically significant difference between teachers' opinions in all sub-dimensions of the scale ($p>0.05$).

Table 5.
Kruskal Wallis H Test Results Regarding the Differences in the Technology Leadership Roles of School Administrators in the Sub-Dimensions of the Scale by Age of the Teachers during the Covid-19 Pandemic Process

	Age	N	Average of Ranks	X^2	p.
Human Centricity	**20-30 years**	161	244.16	2.819	.420
	31-40 years	191	248.02		
	41-50 years	131	254.99		
	51 years and over	17	303.79		
Vision	**20-30 years**	161	242.63	.867	.833
	31-40 years	191	253.21		
	41-50 years	131	257.13		
	51 years and over	17	243.50		
Communication and Cooperation	**20-30 years**	161	245.73	3.733	.292
	31-40 years	191	247.61		
	41-50 years	131	252.14		
	51 years and over	17	315.50		

Support	**20-30 years**	161	249.39	1.420	.701
	31-40 years	191	244.97		
	41-50 years	131	255.52		
	51 years and over	17	284.53		

As a result of Kruskal Wallis H test in Table 5; According to the age variable, there was no statistically significant difference between teachers' opinions in all sub-dimensions of the scale (p>0.05).

Table 6.
Kruskal Wallis H Test Results Regarding the Differences in the Technology Leadership Roles of School Administrators in the Sub-Dimensions of the Scale by Professional Seniority of the Teachers during the Covid-19 Pandemic Process

	Professional Seniority	**N**	**Average of Ranks**	**X²**	**p.**
Human Centricity	**0-5 years**	122	248.66	3.569	.467
	6-10 years	141	253.15		
	11-15 years	70	225.89		
	16-20 years	103	252.33		
	21 years and over	64	272.16		
Vision	**0-5 years**	122	231.61	4.340	.362
	6-10 years	141	266.50		
	11-15 years	70	260.72		
	16-20 years	103	245.52		
	21 years and over	64	248.09		
Communication and Cooperation	**0-5 years**	122	244.00	5.310	.257
	6-10 years	141	261.06		
	11-15 years	70	239.34		
	16-20 years	103	233.70		
	21 years and over	64	278.87		
Support	**0-5 years**	122	236.29	4.549	.337
	6-10 years	141	265.95		
	11-15 years	70	239.30		
	16-20 years	103	242.85		
	21 years and over	64	268.12		

As a result of Kruskal Wallis H test in Table 6; According to the professional seniority variable, there was no statistically significant difference between teachers' opinions in all sub-dimensions of the scale (p>0.05).

Discussion and Conclusion

Considering the changing education policies with the developing technology; School administrators or candidates to become school administrators are required to have certain technological competence. At this point, the decisive criterion is the technology leadership roles displayed. Similar results, as in this research, that school administrators exhibit their technology leadership roles in all sub-dimensions "sufficiently"; It has also been reached in the researches conducted by Baş (2012), Gerçek (2016), Çıkrık (2020), Öztaban (2020), Öztürk (2021). Unlike the results of this research, in the related literature; There are also studies conducted by Irmak (2015), Teke (2019), Deniz and Teke (2020) using the same scale, and it has been concluded that school administrators exhibit these roles at a “moderate level” within the framework of technology leadership.

When we examine the highest and lowest average values in the "Human Centricity" sub-dimension; according to the opinions of the teachers, we can be said that the technology leadership roles of school administrators during the pandemic process are at a good level in providing in-school communication with all members, but they are insufficient in taking student opinions on the effective use of technology.

When we examine the highest and lowest average values in the "Vision" sub-dimension; according to the opinions of the teachers, we can be said that during the pandemic process, school administrators supported the plans and practices to be carried out in educational activities and partially followed the developing and changing technological applications.

When we examine the highest and lowest average values in the "Communication and Cooperation" sub-dimension; according to the opinions of the teachers, we can be said that school administrators make use of the internet when communicating effectively, especially with the social environment of the school. Again, in line with the values obtained, it can be said that school administrators are insufficient in forming a technology committee that can guide teachers and students in providing technology information in in-school education activities. It is important that school administrators provide technological information support to education stakeholders. School administrators; It is in a position to coordinate the exchange of technological information within the institution. School administrators can benefit from the technological committee to be established at the school while providing information exchange. According to the results of the research; teachers think that the formation of technology committee at school is not sufficient. Elimination of this deficiency; It is important for analyzing the missing infrastructure and for the development of the institution. It is thought that the existence of a committee to consult with teachers or students regarding the lack of technological knowledge will eliminate the reservations regarding the use of technology.

When we examine the highest and lowest average values in the "Support" sub-dimension; according to the opinions of the teachers, we can be said that school administrators encourage and support teachers in the use and provision of educational technologies in the classroom environment; It can be said that school administrators are partially involved in the organization of classroom environments.

As a result of the analyzes made based on the second sub-problem of the research; There is no significant difference between the opinions of the teachers according to the gender variable for all sub-dimensions of the scale. In an other saying; The opinions of female and male teachers do not make a significant difference between the scale sub-dimensions regarding the technology leadership roles of school administrators during the pandemic process. In the studies conducted by Uysal Balaban (2012); Gençay and Balyer (2019); Deniz and Teke (2020); Öztaban (2020); Tezel (2020); Çıkrık (2020), it was concluded that gender difference does not create a difference of opinion among teachers. Unlike the result of this research, in the related literature; made by Gerçek (2016); There are also studies that have found that the gender variable creates a difference between the opinions of teachers.

As a result of the analyzes made based on the third sub-problem of the research; The opinions of teachers do not show a significant difference for all sub-dimensions of the scale according to the age variable. There is no difference of opinion among teachers with age ranges (20-30, 31-40, 41-50, 51 and above) that determine the variable, regarding the technology leadership roles of school administrators during the pandemic process. It is also seen in the same results of the research conducted by Teke (2019) and Çıkrık (2020).

As a result of the analyzes made based on the fourth sub-problem of the research; teachers' opinions do not show a significant difference for all sub-dimensions of the scale according to the variable of professional seniority. In an other saying; It is thought that the differences in professional seniority among teachers do not have an effect that will differentiate teachers' views on technology leadership of school administrators. In the studies conducted by Teke (2019); Gençay and Balyer (2019); Çıkrık (2020); Deniz and Teke (2020); Tezel (2020), it was concluded that professional seniority variable does not create a difference of opinion among teachers. Unlike the result of this research, in the related literature; made by Sincar (2009); Baş (2012); Uysal Balaban (2012); Öztaban (2020); Gerçek (2016); There are also studies that have found that the professional seniority variable creates a difference between the opinions of teachers.

As a conclusion of the research, when the general average value of the scale sub-dimensions is examined; It has been evaluated by the opinions of the teachers that the technology leadership competencies of the school administrators in the pandemic process are at a good level and that they are at a sufficient level to fulfill these roles. With this; according to the variables of gender, age and professional seniority, there was no significant difference between the teachers' opinions, in the sub-dimensions of the technology leadership roles displayed by school administrators during the pandemic process.

Recommendations

In order to adapt to the developing and changing conditions and not to stay away from these conditions, in-service trainings in the field of technology should be organized for school administrators. It is an important condition for

teachers who are school administrator candidates to have technology proficiency. Therefore; Educational policies of institutions undertaking a teacher training mission should be regulated by including technology leadership issues. It is important for school administrators to provide technological information support to education stakeholders. School administrators; It is in a position to coordinate the exchange of technological information within the organization. School administrators can benefit from the technological committee to be established at the school while providing information exchange. According to the research results; teachers think that the formation of technology board at school is not sufficient. Elimination of this deficiency; It is important for analyzing the missing infrastructure and for the development of the institution. It is thought that the existence of a committee to consult with teachers or students regarding the lack of technological knowledge will eliminate the reservations regarding the use of technology. School administrators; determining the technology needs of teachers and students in educational activities; They need to analyze the effect of technology use on student learning. It is thought that the results obtained through this analysis will play a role in the formation of education policy.

References

Baltacı, A. (2018). Nitel Araştırmalarda Örnekleme Yöntemleri ve Örnek Hacmi Sorunsalı Üzerine Kavramsal Bir İnceleme. Bitlis Eren Üniversitesi Sosyal Bilimler Enstitüsü Dergisi, 7(1), 231-274.

Baş, D. E. (2012). The Relationship Between Elementary School Administrators' Technology Leadership Roles And School Climate [Master Thesis], Maltepe University, Social Sciences Institute, İstanbul.

Büyüköztürk, Ş., Kılıç Çakmak, E., Akgün, Ö. E., Karadeniz, Ş., & Demirel, F. (2018). Eğitimde Bilimsel Araştırma Yöntemleri (25.Baskı ed.). Pegem Akademi.

Çıkrık, S. (2020). Teachers Examining the Technology Leadership Competencies of School Principals. [Master Thesis], Pamukkale University, Department of Education Management, Denizli.

Deniz, L., & Teke, S. (2020). Okul Yöneticilerinin Teknoloji Liderliği Rollerinin Öğretmen Görüşleri Doğrultusunda Değerlendirilmesi. Yüzüncü Yıl Üniversitesi Eğitim Fakültesi Dergisi, 17(1), 351- 373.

Gençay, A. & Balyer, A. (2019). İlkokul ve Ortaokul Yöneticilerinin Teknoloji Liderliğine İlişkin Yeterlikleri. YILDIZ Journal of Educational Research, 4(1), 38-57.

Gerçek, M, M. (2016). The Investigation Of The Correlation Between School Administrators' Level Of Technological Leadership And Their Effectiveness, As Measured By The Perception Of Teachers In Private Schools. [Master Thesis], Afyon Kocatepe University, Afyon.

Irmak, M. (2015). İlkokul ve Ortaokul Öğretmenlerinin, Yöneticilerinin "Teknoloji Liderliği" Düzeylerine İlişkin Algıları. [Yüksek Lisans Tezi], T.C Pamukkale Üniversitesi, Denizli.

Kabakçı Yurdakul, I. 4.Ünite: Evren ve Örneklem. Bilimsel Araştırma Yöntemleri. Ed.

KKTC Milli Eğitim Bakanlığı. (b.t.). www.mebnet.net

Lowhorn, G. (2007). Qualitative and Quantitative Research: How to Choose the Best Design. Presented at Academic Business World International Conference. Nashville, Tennessee.

Okeke, N. L. (2019). School Technology Leadership: A New Concept. International Journal of Innovative Development and Policy Studies, 7(2), 50-56.

Özkan, T., Tokel, A., Çelik, M., & Öznacar, B. (2017). Evaluation of Technology Leadership in the Context of Vocational School Administrators. Proceedings of the 9th International Conference on Computer Supported Education, 1, 727-731.

Öztaban, A. (2020). Fulfilment Levels Of School Administrators' Technology Leadership Roles. [Master Thesis], Aydın Adnan Menderes University, Aydın.

Öztürk, D. (2021). Examining The Technological Leadership Self-Competences Of High School Principles. [Master Thesis], Bursa Uludağ University, Bursa.

Sincar, M. (2009). An Analysis of Turkish Elementary School Administrators' Technology Leadership Roles. [Doctoral Thesis]. İnönü University / Social Sciences Institute, Malatya.

Teke, S. (2019). Okul Yöneticilerinin Teknoloji Liderliği Rollerinin Öğretmen Görüşleri Doğrultusunda Değerlendirilmesi. [Yüksek Lisans Tezi], Marmara Üniversitesi, İstanbul.

Tezel, B. (2020). Okul Yöneticilerinin Gösterdiği Teknoloji Liderliği Biçimi İle Okul Başarısı ve Öğretmenlerin Akademik İyimserliği Arasındaki İlişkinin İncelenmesi. [Yüksek Lisans Tezi], Recep Tayyip Erdoğan Üniversitesi, Rize.

Toker Gökçe, A. (2008). Distance Education in the Process of Globalization. Journal of Ziya Gökalp Faculty of Education, (11), 1-12.

Uysal Balaban, N. (2012). Okul yöneticilerinin teknoloji liderliği rolleri ile bilgisayar kaygı düzeyleri arasındaki ilişkinin belirlenmesi (Yayımlanmamış Yüksek Lisans Tezi). Anadolu Üniversitesi, Eğitim Bilimleri Enstitüsü. Eskişehir.

World Health Organization. (2019). Health Topics. Timeline: WHO's COVID-19 response.https://www.who.int/emergencies/diseases/novel-coronavirus-2019/ interactive-timeline#category-Advice

EXAMINING LEARNER AUTONOMY IN EFL LEARNING OF THE UNDERGRADUATE STUDENTS

Dr. Mohammad Arshad Ali
Professor & Head, Department of English & Dean of the Faculty of Arts and Social Sciences, Prime University

Md. Alaul Alam
Lecturer of English, Prime University
Email: malaulalam@gmail.com

ABSTRACT:
The study examined the learner autonomy in EFL learning at the undergraduate level in the context of Bangladesh. It investigated the effectiveness of learner autonomy on EFL learning. Besides, it explored the factors affecting autonomous learning in English language class. This study adopted a mixed- method approach. Data were collected from 60 students who had just completed their second semester at a private university in Dhaka city. The respondent students attended the compulsory English foundation course including their two semesters. Data were also collected from 12 ELT teachers teaching at the tertiary education level. Five EFL classes were observed following a sample of classroom observation schedule. Both open-ended and closed-ended questionnaires were used by the researchers for collecting the data from the students and teachers. Major findings of the study showed that lack of confidence, teachers' dependency, lack of motivation, short-term goals in learning, huge confusions and confinement in memorization, tendency of using mother tongue and unawareness to self-evaluation of students affected learner autonomy in EFL learning of the undergraduate students. However, the study revealed that motivated students hardly faced any difficulties in achieving maximum outcomes with autonomous learning in the EFL class. Finally, the researchers gave a number of recommendations to bring out effective EFL learning with learner autonomy.
Keywords: EFL learning, learner autonomy, undergraduate education level

INTRODUCTION:

Learner autonomy has been an issue of great interest in the field of EFL teaching and learning in the recent years. It has had a very significant influence on the nonnative speakers in learning English though the context of learner autonomy may differ from one country to another. The term 'learner autonomy' was first introduced by Henry Holec in 1981, which refers to the ability to take charge of one's own learning. Benson and Voller (1997) stated the term more precisely that it "is not inborn but must be acquired either by 'natural' means or (as most often happens) by formal learning, i.e. in a systematic, deliberate way''. According to Scharle & Szabo (2000), there is a close affinity between autonomy and learners' sense of responsibility and for the want of one the other will be affected and due to that, misconception regarding learner autonomy prevails. To make the context of learner autonomy more obvious, again they used an English saying that "you can bring the horse to water, but you cannot make him drink". The very saying indicates that autonomous learning can never be effective until the learners are spontaneous to take their responsibilities.

However, though many non-English countries are prioritizing one of the most popular theories 'Learner Autonomy' in fostering English language learning, learner autonomy has still been a controversial issue in applied linguistics. Studies in many non-native countries found that students relied more on their teachers even if they were autonomous in their learning. Though most teachers in Bangladesh are well aware of learner autonomy, classroom in most cases are teacher-centered and students and teachers like to be habituated with traditional approaches of teaching and learning in schools and colleges. Even in the universities teachers follow lecture-based education (Bashir, 2012). According to Gardner (1985), the success of language learning lies in the spontaneity and autonomy of the learners.

However, a substantial number of studies on learner autonomy have not been carried out yet in Bangladesh , especially in the field of EFL teaching and learning. Again, there is hardly any study accomplished to investigate learner autonomy in fostering EFL learning at undergraduate level of education. In this consideration the present study will certainly add new dimension in the field of pedagogical practice as it examines learner autonomy in EFL learning of the undergraduate level students. Besides, a list of recommendations has been presented for enhancing pedagogical practices on learner autonomy at the undergraduate level.

Literature review:

The researchers reviewed a number of previous studies conducted on learner autonomy in language teaching and learning. The findings of the most of the studies revealed that learner autonomy fostered language learning and

created positive influences among the learners to learn a language effectively. Qi (2011) found the more the learners were autonomous, the more the possibility of achieving language proficiency. Kohonen (2003**),** Yaşar & Tüm (2021) stated that learner autonomy contributed to enhancing language efficiency of the learners. However, it was found from some studies that learner autonomy could not be an ultimate advantage to language learning.

Umeda (2007) emphasized three reasons to make autonomous learning significant i.e. keeping stick to rapid social changes, maturing learners' individual attitude and improving the diversity of learner's cultural and educational background.

Similarly, Dickinson (1987) outlined five reasons such as motivation, practical reasons, individual differences, educational aims, and learning to upgrade learner autonomy in language learning. Benson (2001) stated learner autonomy as the capacity to take control of one's own learning and prioritized three things, i.e. control over learning management, control over cognitive process, and control over learning content for giving an adequate description of autonomy in language learning.

Yildirim (2008) conducted a study through a forty three item questionnaire. The questions focused on students' and teachers' roles, students' confidence level and students' actual learning practice outside the class. The study was carried out among 103 Turkish students studying English in Anadolu University, Faculty of Education in Turkey and found that autonomous learners took the responsibility but they thought that teachers were more responsible than they were to enhance their learning outcomes.

According to the study conducted by Little (1991), learner autonomy can, depending on the age of the learners, be found in different forms like how far they have progressed with their learning, what they perceive their immediate learning needs to be.

Further, Khenoune (2007) showed that the outcome and the strategies of learner autonomy were related to culture and learning background of the learners and the term 'autonomy' was subject to change in different contexts.

Dang (2012) in a study found that learner autonomy was shaped socially. Again, he recommended the combination of socio-cultural theory and community of practice to investigate the concept of learner autonomy. He also suggested that the contextual aspects and the interactions among the people should be considered for fostering learner autonomy.

Oxford (2003) provided a systematic model for learner autonomy in second language learning. The model includes four perspectives, i.e. technical, psychological, sociocultural, and political-critical. Each of these perspectives has four strands or themes which are context, agency, motivation, and learning strategies. They have claimed that if any of the issues and perspectives remain absent, the model of learner autonomy will be incomplete.

The studies of Benson (2007) & Spratt, Humphreys and Chan (2002) found that learner autonomy hardly contributed to language learning unless there was the presence of motivation.

Again the study conducted by Zarei and Elekaie (2012) found that there was the existence of low but positive relationship between motivation and autonomy. However, Vandergrift (2005) found that autonomy led motivation and thus autonomous learners were endowed with motivation.

Najeeb (2013) conducted a study and found that the learners not only must have their willingness to adjust themselves to an autonomous method of learning but also monitor their own learning for gaining confidence to reach their desired achievement.

However, Macaro (2008) found that there was a risk of both error and comprehensibility when second language learners settled everything in their learning procedures. Again, he stated that risk could be minimized by the learner's strategic behavior along with the role of teachers in facilitating and coordinating learning strategies.

The previous studies show that in most cases their research findings reveal some strategies and recommendations to foster language learning with learner autonomy. They find positive influence between learner autonomy and language learning. Again, it is found that no substantial number of studies have been accomplished yet on learner autonomy. Besides, there is hardly any studies conducted to examine learner autonomy in EFL learning of the undergraduate students in the context of Bangladesh. Based on the above, this study makes an attempt to add to the existing literature.

Objectives of the study

a) To reveal the perceptions of students and teachers regarding learner autonomy in EFL learning
b) To find out the factors affecting autonomous learning in English language classroom

Rationale of the study:

Learner autonomy is considered one of the most popular and well-discussed issues in EFL learning context. The previous studies found that learner autonomy had positive effect to language learning (Rebenius, 2003**,** Kohonen, 2003 & Qi, 2011). However, in the name of learner autonomy students were found to be more dependent on their teachers than they were on themselves (Yildirim, 2008). Besides, Hudson (2011) showed that factors like traditional student, teacher and parental expectations brought limited success from learner autonomy. In Bangladesh mentionable studies on learner autonomy have not been conducted yet and it is hypothesized that in the practical sense, the theory of learner autonomy cannot work well to achieve maximum outcomes in EFL learning. So, it needs to be rational to investigate the learner autonomy in EFL leaning and the factor affecting autonomous learning in the EFL class. The researchers have chosen the undergraduate level for their study which is yet to be explored.

Research methodology:

The study was a mixed method approach (Bryman, 2006) followed by the convergent parallel design in which quantitative study followed qualitative one. Data were collected from the students and teachers of a private university in Dhaka city. 60 students from 5 departments i.e. Law, English, EEE, CSE and Business were selected randomly, who had completed their second semester in the university. The respondent students attended the compulsory English foundation course included in their two semesters. The number of students was 12 from each department, their age range being 20 to 22 years and the ratio of the male and female students 2:1.

The number of ELT teachers responded to the study was 12. Both open-ended and closed –ended questionnaires were used by the researchers for collecting the data from the students and teachers. Besides, five EFL classes were attended and observed by the researcher following a sample of classroom observation schedule. The duration of each class was 1.30 hours and the class size was medium. The teachers' mode of delivery was English-Bengali mixed. To measure the frequency of the outcome of the study quantitatively, five point Likert scale was introduced and the measuring options included *Always, Often, Sometimes, Rarely and Never***.** The collected qualitative data were presented in the thematic form whereas for quantitative data descriptive and inferential statistics were used**.** The separate findings and results from qualitative and quantitative approach were presented in a befitting manner. Triangulation was carried out by comparing the participants' responses and observations to identify what was common and to recognize the gaps that might be there in the collected data.

Data analysis:

Students' closed questionnaire:

Statement of the students	Always	Often	Sometimes	Rarely	Never
1. Getting engaged in cooperative learning	13.33%	13.33%	50%	23.34%	0
2. Following different learning styles and strategies by self	00	8.33%	10%	58.33%	23.34%
3. Getting interested to take own responsibility of learning the target language	00	8.33%	20%	50%	21.67%
4. Depending on teachers' strategies and styles	75%	10%	15%	00	00
5. Being nervous while practicing in a group	25%	8.33%	50%	6.67%	10%
6. Feeling embarrassed while learning from the peers	16.67%	56.66%	13.33%	00	13.34%
7. Intending to use Bangla, no pressure to use English	56.66%	00	26.67%	16.67%	00
8. Giving preference to achieving good grades in the exam	73.33%	3.33%	00	16.67%	6.67%
9. Learning English being lifelong goal oriented	00	00	8.33%	38.33%	53.34%
10. Enhancing skills through self-motivation	00	21.67%	20%	58.33%	00

11. Appreciating to collect learning materials more from teachers than other sources	38.33%	20%	33.33%	8.34%	00

Table 1

The findings presented in the first statement showed that the majority (50%) of the students sometimes got engaged in cooperative learning and a small number of students were almost positive to cooperative learning though 23.34% of the students were hardly interested in cooperative learning. The second statement in the table revealed that the highest number (58.33%) of students hardly adopted learning styles and strategies by themselves and another 23.34% chose the option 'never' while a small number of students took learning styles and strategies by themselves.

From the third statement it was found that the majority (50%) of the students rarely showed interest to take their own responsibility over learning the target language and another 21.67% never took their own responsibility in learning the target language while a small number of students were found somehow positive in this regard.

The fourth statement demonstrated that 75% of the respondent students were always dependent on their teachers and the rest of the students were often or sometimes dependent. The fifth statement showed that the majority (50%) of the students were sometimes demotivated while practicing in a group and the other (25%) of the respondents always showed lack of confidence but there were a small number of students who showed their courage while working in a group.

It was found from the sixth statement that 56.66% of the respondents often got embarrassed, followed by 16.67% respondents who expressed the option 'always' and 13.33% of the respondents chose the option 'sometimes' while learning from the peers. However, a small number of students were never embarrassed to learn from the peers.

In response to statement no.7, it was found that the majority of the students became intended to speak Bangla in the class while a small number of students hardly spoke Bangla in their English class.

The statement no.8 revealed that the majority (73.33%) of the students had their preference to achieving good grades in the examination but 16.67% of the students rarely did it.

The statement no. 9 showed that 53.34% of the students never had lifelong goal with English learning and 38.33% rarely had. However, a small number of students sometimes took long-term target with language learning.

With regard to statement no. 10, it was found that 58.33% of the respondent students were rarely self-motivated to enhance their English skills while 21.67% and 20% students respectively chose the options 'often' and 'sometimes' in response to the statement. From the last statement by the respondents it was found that the majority of the students were fond of collecting learning materials from their teachers.

Teachers' closed questionnaire:

Teachers' statements regarding students	Yes	Sometimes	No
1. Depending on teachers in the class	66.66%	33.34%	00
2. Getting involved in peer discussion for self-assessment	00	33.34%	66.66%
3. Showing interest to traditional teaching and learning	58.33%	25%	16.67%
4. Giving preference to obtaining good grades in language achievement	75%	16.67%	8.33%
5. Getting ready to take the responsibility by self	00	25%	75%
6. Giving preference to speaking Bangla in the class	66.66%	25%	8.34%
7. Taking preparation on the selected topics for the exam	25%	66.66%	8.34%
8. Getting inclined to long-term success	16.67%	25%	58.33%
9. Huge confusions in the right choices	33.34%	66.66%	00
10. Confinement in memorization and lecture-based learning	66.66%	16.67%	16.67%

Table 2

The findings presented by teachers regarding students in case of learner autonomy in language class are shown in the table above. In the first statement it was found that majority of the students were dependent on teachers in the class and the second highest percentage of students were sometimes dependent on teachers. Importantly, there were no students who were autonomous in the class, as stated by the teachers.

With reference to statement no. 2, there was a negative response about students' involvement in peer discussion for self-assessment though a number of students were sometimes referred positively.

The third statement by the teachers confirmed that majority of the students had preference to traditional language learning though a small number of students did not choose the approach. In regard to statement no. 4, teachers opined that majority of the students had preference to obtaining good grades in language achievement but there were a small number of students as found by the respondent teachers, who focused on language achievement.

The fifth statement showed that majority of the students did not get ready to take the responsibility by themselves while a small number of students were found motivated to take the responsibility of their own learning.

In response to statement no. 6, the majority of the teachers claimed that students preferred to speak Bangla in the class though there were a few respondent teachers who did not agree to the statement. From the statement no. 7, it was found that students were found to take preparation on the selected topics for the examinations though a small number of teachers disagreed. In statement no.8, the majority of the teachers claimed that students showed no interest in achieving long-term goal with language learning but a number of teachers stated that students had an inclination to achieve long-term achievement with language learning. The statement no. 9 revealed that students had huge confusions in the right choices of learning English language. In the last statement, the highest number of teachers opined that students had the confinement in memorization and lecture-based learning though a small number of teachers differed.

Qualitative data from the students categorized with codes

Students' attitude to autonomous learning:
The qualitative data from the students revealed that the majority of the respondent students at undergraduate level neither took the responsibility by themselves to learn English spontaneously, nor were proficient enough to take the charge of learning. Besides, they thought that the role of teachers was much more than anything else in the class. Things in the class were made easy when teachers taught them through clarifications, explanations and feedback.

Moreover, there were some students who had misconception regarding autonomous learning that in this learning approach, they have to be instructed by themselves where teachers would have no role in the class. Considering this, they were scared to learn with autonomy. Although learner autonomy focuses on learners' freedom where teachers will be none but the model facilitators intended to provide all the facilities for the students required in the class. One of the students responded,

> *I intend to depend on teachers as I think, teachers are more authentic in providing knowledge than any other sources. Besides, I am not confident enough to take any strategy or style of learning by myself lest it should not be scientific.*

Views about teachers' responsibility:
Majority of the students stated that the responsibility of a teacher should not be confined merely to teaching students. Besides, he/she must be liable to ensure a congenial atmosphere for the students in the class where they will feel relaxed to take the lessons. Some students complained that teachers were not student-friendly and throughout the classes they would follow lecture-based teaching, which made the students demotivated to learn. Besides, they focused on completing the syllabus and hardly had time to teach their students spontaneously.

One respondent stated,

> *I have teacher fear that restrains me to ask any questions in the class even if I do not understand and also I dare not enter teachers' room to have any suggestions about my improvement.*

Perceptions on motivation:
Majority of the students stated that they felt lack of motivation in the language class. They were more enthusiastic to achieve good grades than to achieve language skills. Besides, some of the students opined that sometimes excessive freedom in the name of autonomous learning may lead them to misconception and have the chance of making a mess. However, there were a number of students who were motivated and influenced by the teachers. Finally, they achieved maximum language proficiency.

One student stated,
My teacher told me many successful stories that made me inspired to learn English with motivation. In my school and college I was not a motivated learner and so my English was poor. Now I am very enthusiastic to learn English and trying to remove my obstacles and even I am far better than previously I was.

Qualitative data from the teachers categorized with codes

Students' learning tendency:
The qualitative data from the teachers indicated that majority of the students developed the habit of dependency on their teachers in the class. Most of the teachers claimed that confusion and lack of motivation among students created huge obstacles in ensuring learner autonomy in the class. Teachers found that in most cases students were reactive towards the accomplishment of the class work as well as home work. Most of the students wanted to be rewarded only with good grades by the teachers and were not intrinsically motivated enough to take any initiative for the development of their language skills.
One teacher responded,

> *I found many of my students in English class remained inactive and not interested to participate in peer activities though they seemed reactive when they were given any suggestion for the upcoming examination.*

Influence of motivation in autonomous learning:
Majority of the teachers opined that there was a close affinity between learner autonomy and motivation. They found that learner autonomy never achieved any positive outcome unless there was motivation. Majority of teachers realized the importance of learner autonomy but they found freedom of the learners devastating without the direct control of their teachers. However, some teachers opined that learner autonomy may differ from context to context in respect of how much it would be effective for developing language skills. Moreover, all the teachers pointed out that intrinsically motivated learners had every chance to be autonomous learners.

Strategies of effective autonomous learning:
Teachers stated that learner autonomy is a very problematic concept and because of it misconception prevails in the field of teaching-learning. They opined that to achieve the maximum outcome from student-centered class there would be a teacher playing role as a moderator as well as a facilitator to assist and guide the students. However, most of the teachers found a balance between motivation and autonomy in learning a language.
One of the teachers stated,

> *As a teacher I have every responsibility to make my students motivated first before making them autonomous, then there will be an atmosphere appreciative for the learners to go a long way overcoming all the obstacles of learning English language.*

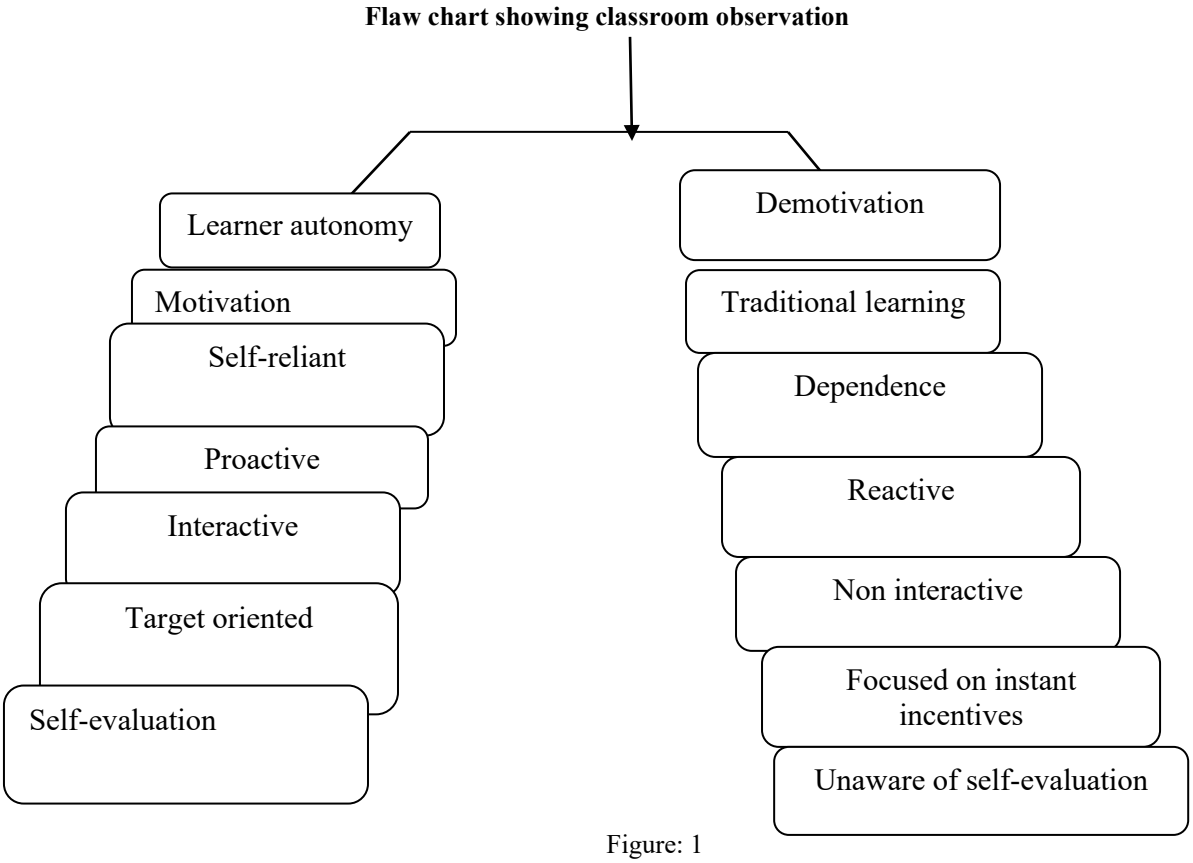

Figure: 1

Major findings and discussions:

The data drawn from the survey analysis and in-depth interview revealed that students were somehow cooperative in their learning process but felt lack of confidence and also embarrassed to learn from the peers though peer evaluation was thought helpful for students to accelerate EFL learning. The findings from Khan (2003) found the same as were experienced here.

In another phase it was found in most cases that students hardly followed any learning style by their own and were not interested to take the responsibility of learning EFL language by themselves, rather they were found to depend on teachers in the class. This created a one-way approach of learning and student-centeredness could hardly contribute to it.

Besides, students were habituated to collect learning materials from the teachers as they considered teachers as the most authentic source of knowledge. Impliedly, they supported teacher-centeredness approach. These findings were supported by Khenaune (2007) & Yildirim (2008)**.** The study revealed that students prioritized on obtaining good grades than achieving life-long language skills. Again, students were not interested to enhance skills through self-motivation causing huge confusions leading them to the confinement in memorization as well as lecture based traditional learning. It was worth noticing that students got involved in classroom activities in considering the fact of accomplishing the tasks assigned by the teachers for gaining instrumental rewards. This context may be considered as reactive approach taken by the students in the class. The findings from Mehrin (2017) & Littlewood (2000) stated the same as those were found in this connection. From the study it was revealed that students were not motivated enough to speak English in the class, rather they were found habituated to speak Bangla as they hardly got pressurized from their teachers and peers to speak English in the EFL class.

Khan (2017) expressed the similar view in this regard. The researchers found that communicative teaching and learning was still confined inside the class. Findings showed that students had misconception between teacher-dependent learning approach and autonomous learning approach. Students were not conscious enough to develop their English language skills being autonomous. Thus, learner autonomy did not bring maximum outcomes on EFL context at undergraduate level.

However, the study found that motivation was one of the prime contributors of bringing outcomes from learner autonomy to an optimum level. Cotteral (1999) stated the same as found in this study with the power of motivation. Moreover, in most cases, autonomous learning was found effective for those who were intrinsically motivated apart from a few motivated extrinsically. In this connection, Noels et al. (2003) found the same findings in their study that students' internal desire was required to achieve long-term goal of language learning.

Recommendations:

Based on the qualitative and quantitative data drawn from the respondents i.e. students and teachers, the following recommendations are put forth to ensure effective autonomous learning which is of great significance in the field of EFL learning:

1. Student-centered classroom should be ensured where teachers will be in the role of model facilitators. Autonomous learning strategies should be followed in the class.
2. All the misconceptions regarding leaner autonomy should be clarified by the teachers.
3. Students should be encouraged to participate in classroom activities as well as cooperative learning while lecture-based teaching should be discouraged.
4. Teachers' responsibility should be to make the students motivated towards autonomous learning and help them realize the importance of taking their own responsibility over successful language learning.
5. Maintaining English speaking environment should be mandatory for all concerned.
6. The focus of the teachers should be towards the enhancement of self-motivation of the students intrinsically and extrinsically by encouraging them about the incentives or rewards of English language learning.
7. At the top of all, there should have accountability among teachers and students to confirm maximum outcomes from learner autonomy.

Conclusion:

The study has explored the findings about learner autonomy on EFL context at undergraduate level. The perceptions of students and teachers about learner autonomy in EFL learning have been explored using different lenses in this study. Findings elicited from different angles of the study have confirmed that learner autonomy as an approach to language learning can be effective. But to ensure maximum outcomes through autonomous learning it is very imperative to address the affecting factors which have been explored in this study. Finally, a number of recommendations have been given that will help students and teachers ensure effective autonomous learning in EFL context.

References

Alam, A. (2019). The role of instrumental motivation in English Language Learning (ELL) at Tertiary Level. *NAEM Journal*, 13 (25), 111-120.

Allwright, D. (1990). Autonomy in language pedagogy. *CRILE Working Paper*, 6. University of Lancaster, UK

Bashir, A. (2012). Promoting learner autonomy through learner training in English Language classroom. *The Arts Faculty Journal,* July 2012-June 2013, 23-41.

Brown, H. D. (2001). *Teaching by principles*. Longman, New York.

Benson, P., & Voller, P. (1997). *Autonomy and independence in language learning*. Longman, London.

Benson, P. (2001) *Teaching and Researching Autonomy in Language Learning*, Longman, London.

Chan, V. (2002). Autonomous language learning: Hong Kong Tertiary students' attitudes and behaviors. *Journal of Evaluation and Research in Education*.16 (1), 1-18.

Deci, E. L. & Ryan, R. M. (1985). *Intrinsic motivation and self-determination in human behavior*. Plenum Press, New York.

Dickinson, L. (1987). *Self-instruction in language learning*. Cambridge University Press, Cambridge.

Gardner, R. C. (1985). *Social psychological and second language learning: The role of attitudes and motivation*. Edward Arnold, London.

Khan, R. (2003). Responding to student writing in the TESOL environment: Some feedback options. *The Dhaka University Studies*, 1-16.

Khan, R. (2017). *Developing learner autonomy in the South Asian context. Best practices in ELT* (ed). BELTA, Bangladesh.

Little, D. (1991). *Learner autonomy: Definitions, issues and problems*. Authentik, Dublin, Irland.

Littlewood. W. (2000). Do Asians really want to listen and obey? *ELT Journal*, 54(1), 31-36.

Mehrin, I. (2017). Autonomous language learning: Bangladeshi undergraduates' attitudes and perceptions. *BELTA Journal*, 1(1), 124-138.

Qi, A. (2011). On the relationships between learner autonomy and language proficiency: An investigation of Chinese English majors. *Energy Procedia*, 13, 9976-9982.

Yaşar, Ü. & Tüm, G. (2021). EFL teachers' perceptions on learner autonomy. *The Journal of Limitless Education and Research*, 6 (3), 316-33.

Scharle, A. & Szabo. A. (2000). *Learning autonomy: A guide to developing learner responsibility*. Cambridge University Press, Cambridge.

Umeda, Y. (2007). "The teacher's role in Japanese language attaching importance to learner autonomy", available athttp://leo.aichi_u.ac.jp/%7Egoken/bulletin/pdfs/NO12/04_Umeda.pdf.

Vandergrift, L. (2005). Relationships among motivations, orientations, meta-cognitive awareness and proficiency in L2 listening', *Applied Linguistics,* 26 (1), 70-89.

Yildirim,O. (2008). Turkish EFL learners 'readiness for learner autonomy. *Journal of Language and Linguistic Studies*, 4 (1), 65-80.

Zarei, A. A., & Elekaei, A. (2012). *Learner autonomy and language learning strategies: An empirical analysis*. Lambert Academic Publishing, Germany.

IMPACT OF COVID-9 AND RECOMMENDATIONS FOR NAVIGATING THE UNCERTAINTIES OF THE NEW NORMAL

Sharon Alston, PhD, COI
Assistant Professor of Social Work, Norfolk State University, 700 Park Ave Norfolk, VA 23504
stalston@nsu.edu

ABSTRACT
In March 2020, the world came to a halt. What began as a two-week stay-at-home order resulted in 52 weeks of social distancing, quarantining and social isolation. Universities worldwide closed their doors to re-examine higher education in the wake of the Covid-19 pandemic. This article describes how the COVID-19 pandemic impacted student learning. The article further describes how students' mental health was exacerbated because of COVID-19. The authors contribute to the recent research on the impact of the pandemic by providing recommendations for how institutions of higher education can support students during the uncertain times we can expect as the pandemic continues to pose threats to the health and safety of the students across the world.

OVERVIEW

In March 2020, the world came to a halt. What began as a two-week stay-at-home order resulted in 52 weeks of social distancing, quarantining, and social isolation. Universities worldwide closed their doors to re-examine higher education in the wake of the Covid-19 pandemic. For the first time ever, universities had to make immediate decisions about how to administer educational courses in ways that protected the health and safety of its students, staff, and Faculty. Schools became creative in how they would keep their doors open and keep everyone safe (Gleason, 2021). Some schools allowed students to stay on campus but prohibited them from interacting outside (Zhou & Zhang, 2021). Other schools allowed students to remain on campus but attend classes remotely; others closed completely.

While many States were prepared for online learning (Zhou & Zhang, 2021), most schools struggled to support students, Faculty, and staff. Among the three groups, students experience the most personal, social, emotional, and financial hardship (Deng & Sun, 2022). With the universities closing, nearly 80% of college students worldwide were somehow impacted (Zhou & Zhang, 2021). Some students were forced to return to their homes, and others began their first semester of college remotely.

Universities had now been forced to make immediate and more permanent decisions about how they would provide educational content during the pandemic. The resolution to teaching during the pandemic resulted in alternative learning modalities—remote synchronous, remote asynchronous, and hybrid while some courses remained in face-to-face formats (Bullock et al., 2022; Rudenko et al., 2020; Zhou & Zhang, 2021). While these modalities accomplished the goal of providing alternative teaching modes, they also significantly impacted students and their learning (Ensmann et al., 2021).

There is an abundance of valuable research on Covid-19. This paper seeks to contribute to the literature by further discussing the pandemic's impact on students' mental health and learning and making recommendations for how universities can support faculty and students in these uncertain times.

IMPACT ON STUDENTS

Emotional Distress (Fear, Stress, or Anxiety)

The pandemic exacerbated the stress already associated with college attendance (Livingston, Bost, & Copeland, 2022; Mannah-Blankson & Asiseh, 2021; Wang et al., 2020). The most immediate impact was the fear of contracting the COVID-19 virus. Most college students were unvaccinated when the pandemic first appeared in the United States (Zhou & Zhang, 2021). For obvious reasons, students feared for their health as many people died from the virus. When schools closed, many students were forced to leave university and college campuses and return to their places of residence. Students who relocated (i.e., left school to either return home or another domicile) experienced mental health problems. For example, Conrad et al. (2021) reported students who were forced to relocate off campus were more likely to report feelings of grief, loneliness, and anxiety than students who did not relocate.

Research confirms an increase in depression, stress, and anxiety related to the pandemic (Hickey et al., 2021). Hickey and colleagues studied 743 students' experiences with Covid-19, including their expressed concerns and fears. They reported that 25% of students expressed personal fear of contracting the virus, 60% of students feared family or close friends would contract the virus, and 87% feared a resurgence of the virus (2021). Moye et al. (2021) reported that 63% of their sample (N=397) were concerned about contracting the virus. Finally, Odriozola-

González (2020), in their study on the psychological impact of COVID, reported within their sample of university workers and students, "34.19% of participants reported moderate to extremely severe depression symptoms; 21.34% of participants reported moderate to extremely severe anxiety symptoms; and 28.14% reported moderate to extremely severe stress symptoms" (p. 5). However, students reported higher scores on all measures of the psychological impacts than workers did.

Students also reported feeling anxious, worried, and fearful about failing classes and daily life stressors because of the COVID-19 virus (Conrad et al., 2021; Prowse et al., 2021; Singh & Quraishi, 2021; Cao et al., 2020; Nakhostin-Ansari et al., 2020). For example, (Allah et al., 2021) reported that 59% of their students had anxiety, and 19.2 had moderate to severe anxiety. Hickey et al. (2021) reported that 54% of students expressed anxiety or stress related to failing classes. Kan et al. (2021) reported that students reported success was impacted by the psychological trauma they experienced during the pandemic. They also concluded that students' motivation for distance learning decreased.

Transitioning to Alternative Modalities

When universities replaced traditional face-to-face learning with alternative learning modes, students were forced to learn in spaces and places where they had limited experience and confidence (Tuğutlu & Kavaz, 2022). Students with different learning styles struggled to connect to course material, especially for visual and kinesthetic learners (Stamm et al., 2021). One student quoted in a mixed-method study of undergraduates reporting students' feelings of anxiety and stress stated, "E-learning didn't meet what I needed in the sense of hands-on learning" (Stamm et al., 2021, p. 22).

With the absence of visual aids such as writings on blackboards and whiteboards and hands-on exercises, visual and kinesthetic learners struggled to understand course content. Further, students found online materials were difficult to understand, and assignments became more of a burden (Keržič et al., 2021).

The opportunity for students to have peer interaction was also limited, and students faced challenges with engaging in group work and group assessments (Rudenko et al., 2020). Some of the cited barriers were also related to fear and anxiety about contracting the virus (Hickey et al., 2021). Elmer et al. (2020) reported that students in their study reported having fewer positive interactions and study partners during the pandemic than before. They further concluded that students had fewer face-to-face interactions during the pandemic and felt more socially isolated.

For non-traditional students, the learning curve for transitioning to remote learning was more challenging than for traditional students (Livingston, Nevels, Chung, et al., 2022). Millennials were more familiar with using technology but were least pleased with transitioning to remote learning environments (Crawford, 2021). A study of more than ten thousand students assessed students' perception of their learning during the pandemic. Forty percent of students agreed that online was a suitable alternative to face-to-face learning. However, 82% of the students reported online learning was more difficult than traditional face-to-face learning. Students also reported that the quality of the online course and online interaction with peers and teachers impacted their overall performance in their respective courses (Keržič et al., 2021).

Students' motivation for learning also was impacted. In a study of 282 university students, Tan (2020) concluded a significant difference in students' motivation for learning before and after the onset of the pandemic. They reported decreases in learning motivation, social presence, cognitive presence, teaching presence, and learning performance from pre- to post-pandemic.

Students were also impacted by the Faculty's inability to teach in online modalities (Bullock et al., 2022; Patra et al., 2021). Keržič et al. (2021) reported that 60% of students felt that faculty lectures in online spaces were not "optimal." On the other hand, (Gibson & Shelton, 2021) reported that 80% of their sample were slightly to extremely satisfied with teacher access and availability. Students reported that the flexibility of the Faculty was supportive; however, some desired more emotional support (Gibson & Shelton, 2021).

Engagement and Loss of Learning

Engaging students in the new learning modalities has had varying impacts on engagement and learning. For example, a study by Ensmann et al. (2021) examined community cohesion and affective association among 405 students. The authors reported a lack of human interaction, stating students felt alone and were not learning the required content. They further reported that students felt online classes were inauthentic and awkward, missed their peers, and felt disconnected from the class (Ensmann et al., 2021). Similarly, Rudenko et al. (2020) reported student engagement decreased in online courses. Further, in a study of 844 college students by Singh et al. (2021), 71% of the students expressed a lack of enthusiasm for online classes. Razzak et al.(2022) reported students did feel connected to their instructor. Conversely, Razzak et al. ((Gibson & Shelton, 2021) 2022) also concluded that

there were no significant differences between pre-COVID and post-COVID exams in a sample of medical students; however, students preferred face-to-face learning.

Loss of learning was also a challenge for students and Faculty (Colclasure et al., 2021). Mannah-Blankson and Asiseh (2021) describe this as COVID-induced disabilities (p.110). The authors report that 87.5% of undergraduate students experienced disruption in enrollments, 9.5% withdrew from school, 3.8% took a leave of absence, and 12% of 1,564 students in one institution impacted their choice of major. The authors further report for students who persisted in their studies, their academic performance was adversely impacted.

Students of Color

Further, students of color were the most impacted (Deng & Sun, 2022; Huang et al., 2022). Of the 95.5% of students who withdrew from school, Black students had the highest rate (Mannah-Blankson & Asiseh, 2021). Research already confirms that students of color and from underserved populations have historically been less prepared for post-secondary education (Darden-Woody & Bryant-Shanklin, 2018). In addition to the challenges underserved and minority low-income students already face, Covid-19 exacerbated those conditions and created additional risk (Mannah-Blankson & Asiseh, 2021). Black and economically disadvantaged students face a range of barriers, including work demands, the digital divide, limited online education, and access to broadband (Gleason, 2021; Patra et al., 2021). These risks presented additional barriers to learning (Deng & Sun, 2022) (Davis et al., 2020).

Disparities in employment, wages earned, and access to social capital already exist between White and Blacks (Couch et al., 2020; Hassan & Daniel, 2020). However, the effects of the disparities were further evidenced during the pandemic. For example, in April 2020, the unemployment rate for Blacks was 17% compared to 13% for Whites (Couch et al., 2020). White economically advantaged students could access resources and support from their parents, peers, and significant others to support the transition and acclamation to the new normal presented by the pandemic (Quach & Chen, 2021). At the same time, Black economically disadvantaged students had limited financial and social capital (Couch et al., 2020).

The lack of financial resources also presented barriers for many students to secure stable internet connections and access reliable technology (Martinez & Nguyen, 2020). The pandemic required the world to interact in online spaces. Some students who had to return home did not have access to reliable technology with which they could complete coursework or log onto their learning management systems (Mannah-Blankson & Asiseh, 2021).

Limited access to technology also increased social isolation (Mannah-Blankson & Asiseh, 2021). Without dependable technology, students could not engage in online social activities (Hickey et al., 2021). For example, colleges and universities held graduation ceremonies and social events via platforms such as Zoom, Teams, and Blackboard Collaborate (Ensmann et al., 2021). Access to such activities was rare for Black and minority students with limited finances. When they could access the platform, limited bandwidth for connection prevented them from fully engaging in the activity. Gleason (2021) reported that “Black students still struggle with the ‘digital divide’ 25 years after the term was coined. Only 66% of Black households have access to broadband (p. 1).

Further increasing social isolation was the lack of access to or hesitancy to take the Covid 19 vaccination. Even when the vaccination became available Black students were less likely to receive the vaccine than their white counterparts (Kecojevic et al., 2021; Moye et al., 2021). Further, Moye et al. (2021) reported that 37% of their sample indicated that they would not get vaccinated when it became available.

RECOMMENDATIONS

Student Support

Higher education worldwide is experiencing significant changes in how we teach in traditional spaces (Hamann et al., 2021). As the current year brings a glimpse of hope that we will return to a place of normalcy, the fact remains there is still considerable risk for the transmission and spread of COVID-19 (Leal Filho, 2021). If we are to support our students, Faculty must anticipate the needs of our students. We must also consider how we can best support students through the uncertainties of the years to come (Baker, 2020). We can expect that students will continue to need assistance in the identified areas of challenges.

As the most reported challenges were transitioning to remote learning spaces, either hybrid, synchronous, or asynchronous, institutions should make sure that all students have access to reliable technology (Alston et al., 2017). Universities may want to invest in extra equipment such as laptops, web cameras, and headsets that students can borrow and use to access the course materials. In addition, additional technological support for remote learners will be essential. Consistent with García and Weiss (2020), as students continue to learn in online spaces and as

the need for new technology arises, students will need to have access to technical support for downloading learning resources, accessing video recordings, and uploading their own digital work.

Another challenge identified was the mental health of students. Mental health treatment is available on most college campuses, and many students are either unaware, refuse treatment, or hesitate to seek services out of fear of stigma (Livingston, Chung, Davis-Wagner, et al., 2022). Providing alternative treatment modalities may be an effective strategy for addressing students' mental health. For example, providing mental health treatment services in cohorts of interdisciplinary students (psychology, social work, sociology, nursing) can help students understand how prevalent mental health is among the helping professions. Also, virtual counseling sessions can be of value as students do not wish to be seen entering the counseling centers.

Also, using social media as a tool to create awareness, promote mental health, and socialize the academic community on the signs and symptoms of mental illness is recommended. Universities can send announcements about the availability of mental health counseling over their social media platforms. This strategy is consistent with Livingston, Bost, et al. (2022) (2022), who suggest counseling centers develop media campaigns to mediate the stigma associated with the mental illness of students on college campuses.

Faculty can also support students experiencing mental health challenges. Faculty can include a wellness check at the beginning of the classes to gauge where students are emotionally. Livingston, Bost, Kerr et al. (2022)report that wellness checks have provided social work students with opportunities to adjust to virtual learning. An interesting approach to emotionally engaging students is reported by Koob et al. (2021). They recommend universities offer “social support system[s]” that would include formal and informal approaches for informational, emotional, and instrumental support through digital and hybrid modalities.

Student engagement will also be of significance. Martin et al. (2018) suggest student engagement increases motivation and student satisfaction with course material. Draves (2013) asserts, “when students are socially engaged in the course, it will enhance their learning and your teaching” (p.22). Ensmann et al. (2021) reported that students felt disconnected from the class, and creating opportunities for social cohesion is recommended. As many students use social media or have social media accounts, social media is also recommended to increase student engagement. For example, using social media such as Twitter, Instagram, and Facebook in courses remote and face-to-face is said to increase student engagement (Kunka, 2020). As an assignment, Faculty can instruct students to follow one or more Twitter accounts in their discipline and report back to the class. Another social media strategy is to ask students to share their assignments vis social media and seek feedback. A final use of social media is using Twitter to create awareness or advocate for a cause they feel strongly about.

Such group activities and crossed-referenced partnerships are recommended for learner-to-learner engagement. Learner-to-learner engagement leads to increased student engagement Martin et al. .. Faculty must develop innovative ways to increase engagement among and between learners. Darden-Woody (2018) and Martin et al. (2018) recommend collaborative learning activities to increase student engagement. In the absence of face-to-face courses, breakout rooms are invaluable resources to enhance student engagement. One approach is using breakout rooms in zoom or other learner management systems for students to engage in intellectual conversations with each other about their course content (Rudenko et al., 2020). Darden-Woody (2018) asserts that learner-to-learner engagement, such as group activities during which students can share and compare information, helps students retain course information (p.110).

Increased learner-to-learner engagement presents greater opportunities for student-to-instructor engagement (Martin & Bolliger, 2018). Students are eager to confirm the opinions they discuss with their peers with their instructors. Interaction between students and teachers is paramount (Alston et al., 2017). Instructors can build on students’ discussion, which allows students to engage further with the course content and think more critically. In doing so, we develop more critical thinkers and engage students with the course content.

Finally, as Faculty, we can simply show compassion and empathy for our students regardless of the social context of the world. Darden-Woody (2018) recommends showing students you care. She further asserts Faculty should be encouraging students through positive motivation can be beneficial to all students, specifically underprepared students (p. 111)

Faculty Support

In addition to student support, Universities must be equally committed to addressing the faculty and staff's needs with technology training, assistance with redesigning face-to-face courses, and training in innovative advising. These needs and strategies are not necessarily new; however, they are essential if we are to support our students in this new normal.

Training in Technology

Faculty, regardless of teaching modality, should receive extensive training in the use of technology in online teaching. This is consistent with Rudenko et al. (2020) and Patra et al. (2021), who suggest faculty training in the use of technology is essential to student learning. Universities should provide extensive professional development to all teaching faculty (Alston et al., 2017). If Faculty are better prepared and knowledgeable on navigating online spaces, this could improve students' experience as the pandemic forces universities to teach online. Darden-Woody (2018) recommends training faculty on how to record their lectures and activities. She asserts that this strategy effectively increases student learning and should be continued in future teaching environments.

In addition to supporting Faculty through professional training, supporting Faculty socially and psychologically can prevent burnout and Zoom fatigue. The health and mental health of university faculty and staff will inevitably impact their work performance in the classroom. Universities should begin adopting the culture of care concepts and promote health and wellness among their faculty. Some examples are beginning meetings with mindful meditation, instituting a wellness program for all Faculty, reducing the time and frequency of virtual meetings, and offering mental health days throughout the academic year.

Redesigning Face-To-Face Course

Effective course design requires careful instructional planning and responding to students' individual needs (Chierichetti & Backer, 2021). Corse design and delivery are essential to online teaching (Alston et al., 2017). As we return to face-to-face instruction and the threat of COVID transmission remains, redesigning face-to-face courses so that the courses are easily transformed into online courses is an excellent strategy for the continuity of course instruction and preventing student learning loss. For example, using digital learning resources such as MindTap. MindTap, and Webex in your face-to-face courses. DLR can be easily incorporated into your learning management systems such as Blackboard, Moodle, or Canvas. Students can easily transition to remote learning if there is a COVID outbreak or any other health concern.

Building opportunities for authentic dialogue between Faculty and students are also recommended. These opportunities allow students to receive clear and timely information regarding the expectations about course assignments, attendance, and other course-related announcements. As cited by Alston et al. (2017), building time and space when designing courses can be accomplished through scheduled synchronous meetings.

Training in Innovative Advising

Advising is key to students' success. Research confirms that students who are supported by their advisors will likely succeed in the course. In our current social environment (i.e., the pandemic), Faculty must be more innovative in how we advise students and in what capacity. Pre-pandemic advisement consists of academic advisements; in some instances, professional or career advisement would be required. Given our reality, Faculty would be remiss if they did not consider students' health and mental health as they advise students on course selection and career trajectories. They may consider how to assess students for students their propensity to experience future mental health problems or how the course content can exacerbate current mental health conditions of students and help students to develop a plan for how they can navigate the course with minimal to no adverse impact on their academic performance.

Research on student learning suggests we begin to use student data to make decisions on how to advise students. As reported in the Chronicle for Higher Education (2022), colleges and universities are collecting data beyond attendance, grades, and demographics. They are now including questions about basic needs, health, and holistic needs such as access to childcare.

Along this line of thinking, Faculty should use available data when advising students. In doing so, we may be able to provide more useful and practical advice to our students as they navigate the social and political world in which we now live.

CONCLUSION

The information presented in this paper, along with the recent research on COVID-19, suggests that institutions must be vigilant in our efforts to support our students in these uncertain times. In doing so, we can expect that our students and Faculty will be able to successfully navigate the uncertainties of the next few years.

REFERENCES

Abdul Razzak, R., Al-Shaibani, T., & Naguib, Y. (2022). Do students effectively learn physiology through distance online instruction? Medical students' perceptions and academic performance. *Advances in Physiology Education*, *46*(1), 65–70. https://doi.org/10.1152/advan.00098.2021

Allah, A., Algethami, N., Algethami, R., ALAyyubi, R., Altalhi, W., & Ahmed Atalla, A. (2021). Impact of COVID-19 on psychological and academic performance of medical students in Saudi Arabia. *Journal of Family Medicine and Primary Care*, *10*(10), 3857. https://doi.org/10.4103/jfmpc.jfmpc_1004_21

Alston, S. T., Moore, C. S., & Thomas, M. (2017). Strategies for enhancing online teaching in social work education. *Journal of Human Behavior in the Social Environment*, 1–10. https://doi.org/10.1080/10911359.2017.1311817

Baker, R. (2020). What students need most as they join the register. *Nursing Children and Young People*, *32*(3), 13–13. https://doi.org/10.7748/ncyp.32.3.13.s11

Bullock, A., Colvin, A. D., & Jackson, M. S. (2022). Zoom fatigue in the age of COVID-19. *Journal of Social Work in the Global Community*, *6*(1). https://doi.org/10.5590/JSWGC.2022.07.1.01

Cao, W., Fang, Z., Hou, G., Han, M., Xu, X., Dong, J., & Zheng, J. (2020). The psychological impact of the COVID-19 epidemic on college students in China. *Psychiatry Research*, *287*, 112934. https://doi.org/10.1016/j.psychres.2020.112934

Chierichetti, M., & Backer, P. (2021). Exploring faculty perspectives during emergency remote teaching in engineering at a large public university. *Education Sciences*, *11*(8), 419. https://doi.org/10.3390/educsci11080419

Chronicle of Higher Education. (2022). *Why Student Data is More Valuable Than Ever [Inforgraphic]*.

Conrad, R. C., Hahm, H. "Chris," Koire, A., Pinder-Amaker, S., & Liu, C. H. (2021). College student mental health risks during the COVID-19 pandemic: Implications of campus relocation. *Journal of Psychiatric Research*, *136*, 117–126. https://doi.org/10.1016/j.jpsychires.2021.01.054

Couch, K. A., Fairlie, R. W., & Xu, H. (2020). Early evidence of the impacts of COVID-19 on minority unemployment. *Journal of Public Economics*, *192*, 104287. https://doi.org/10.1016/j.jpubeco.2020.104287

Crawford, J. (2021). During and beyond a pandemic: Publishing learning and teaching research through COVID-19. *Journal of University Teaching and Learning Practice*, *18*(3), 6–13. https://doi.org/10.53761/1.18.3.2

Darden-Woody, B., & Bryant-Shanklin, M. (2018). Ten simple tips for teaching underprepared students in college classrooms. *The Online Journal of New Horizons in Education*, *8*(2), 108–112.

Deng, X. "Nancy," & Sun, R. (2022). Barriers to e-learning during crisis: A capital theory perspective on academic adversity. *Journal of Information Systems Education*, *33*(1), 75–86.

Draves, W. (2013). *Advanced teaching online*. Lern Books.

Elmer, T., Mepham, K., & Stadtfeld, C. (2020). Students under lockdown: Comparisons of students' social networks and mental health before and during the COVID-19 crisis in Switzerland. *PLOS ONE*, *15*(7), e0236337. https://doi.org/10.1371/journal.pone.0236337

Ensmann, S., Whiteside, A., Gomez-Vasquez, L., & Sturgill, R. (2021). Connections before curriculum: The role of social presence during COVID-19 emergency remote learning for students. *Online Learning*, *25*(3). https://doi.org/10.24059/olj.v25i3.2868

García, E., & Weiss. (2020). *COVID-19 and student performance, equity, and U.S. education policy: Lessons from pre-pandemic research to inform relief, recovery, and rebuilding*. Economic Policy Institute. https://epi.org/205622

Gibson, J. P., & Shelton, K. (2021). Introductory biology students' opinions on the pivot to crisis distance education in response to the COVID-19 pandemic. *Journal of College Science Teachin*, *51*(1). https://www.nsta.org/journal-college-science-teaching/journal-college-science-teaching-septemberoctober-2021-0

Gleason, B. (2021). Expanding interaction in online courses: Integrating critical humanizing pedagogy for learner success. *Educational Technology Research and Development*, *69*(1), 51–54. https://doi.org/10.1007/s11423-020-09888-w

Hamann, K., Glazier, R. A., Wilson, B. M., & Pollock, P. H. (2021). Online teaching, student success, and retention in political science courses. *European Political Science*, *20*(3), 427–439. https://doi.org/10.1057/s41304-020-00282-x

Hassan, S., & Daniel, B.-J. (2020). During a pandemic, the digital divide, racism and social class collide: The implications of COVID-19 for black students in high schools. *Child & Youth Services*, *41*(3), 253–255. https://doi.org/10.1080/0145935X.2020.1834956

Hickey, S. E., Hebert, E. P., & Webb, N. (2021). College student experiences of the COVID-19 pandemic: Concerns, preventive behaviors, and impact on academics and career choice. *American Journal of Health Studies*, *36*(2), 76–87. https://doi.org/10.47779/ajhs.2021.647

Huang, H. Y., Li, H., & Hsu, Y. (2022). Coping, COVID knowledge, communication, and HBCU student's emotional well-being: Mediating role of perceived control and social connectedness. *Journal of Community Psychology*, *50*(6), 2703–2725. https://doi.org/10.1002/jcop.22824

Kan, Ş. G., Çaltıkuşu, Ç., & Şensoy, Ş. (2021). The views of university students about the achievements and motivations of the distance education process during the pandemic period. *Propósitos y Representaciones*, *9*(SPE3). https://doi.org/10.20511/pyr2021.v9nSPE3.1165

Kecojevic, A., Basch, C. H., Sullivan, M., Chen, Y.-T., & Davi, N. K. (2021). COVID-19 Vaccination and Intention to Vaccinate Among a Sample of College Students in New Jersey. *Journal of Community Health*, *46*(6), 1059–1068. https://doi.org/10.1007/s10900-021-00992-3

Keržič, D., Alex, J. K., Pamela Balbontín Alvarado, R., Bezerra, D. da S., Cheraghi, M., Dobrowolska, B., Fagbamigbe, A. F., Faris, M. E., França, T., González-Fernández, B., Gonzalez-Robledo, L. M., Inasius, F., Kar, S. K., Lazányi, K., Lazăr, F., Machin-Mastromatteo, J. D., Marôco, J., Marques, B. P., Mejía-Rodríguez, O., … Aristovnik, A. (2021). Academic student satisfaction and perceived performance in the e-learning environment during the COVID-19 pandemic: Evidence across ten countries. *PLOS ONE*, *16*(10), e0258807. https://doi.org/10.1371/journal.pone.0258807

Koob, C., Schröpfer, K., Coenen, M., Kus, S., & Schmidt, N. (2021). Factors influencing study engagement during the COVID-19 pandemic: A cross-sectional study among health and social professions students. *PLOS ONE*, *16*(7), e0255191. https://doi.org/10.1371/journal.pone.0255191

Kunka, B. A. (2020). Twitter in higher education: Increasing student engagement. *Educational Media International*, *57*(4), 316–331. https://doi.org/10.1080/09523987.2020.1848508

Leal Filho, W. (2021). COVID-19, sustainable development and higher education: Towards a recovery path. *International Journal of Sustainability in Higher Education*, *22*(1), 138–141. https://doi.org/10.1108/IJSHE-10-2020-0364

Livingston, V., Bost, A., & Copeland, A. (2022). Exploring Black students' mental health characteristics by field of academic study utilizing a critical race lens. *Journal of Human Behavior in the Social Environment*, *32*(6), 738–753. https://doi.org/10.1080/10911359.2021.1956394

Livingston, V., Bost, A., Kerr, B., & Wilson, K. (2022). Teaching and learning in the midst of COVID-19: The impact of locus of control on emotional and professional survival during a global pandemic. *Reflections: Narratives of Professional Helping*, *28*(1), 21–34.

Livingston, V., Chung, I., Davis-Wagner, D., Ericksen, K. S., Jenkins, V., Nevels, B., & Neely-Goodwin, S. (2022). An examination of the help-seeking behaviors of HBCU students by gender, classification, referral source, and mental health concerns. *Social Work in Mental Health*, *20*(3), 334–349. https://doi.org/10.1080/15332985.2021.2011823

Livingston, V., Nevels, B. J., Chung, I., Ericksen, K. S., Duncan, E., Manley, C. K., Merriwether, H., & McCullar, J. (2022). The enigma of resilience at an HBCU during a global pandemic. *Journal of Human Behavior in the Social Environment*, 1–21. https://doi.org/10.1080/10911359.2022.2100028

Mannah-Blankson, T., & Asiseh, F. (2021). Insights into learning disabilities. *Insights into Learning Disabilities*, *18*(2), 109–119.

Martin, F., & Bolliger, D. U. (2018). Engagement matters: Student perceptions on the importance of engagement strategies in the online learning environment. *Online Learning*, *22*(1). https://doi.org/10.24059/olj.v22i1.1092

Martinez, A., & Nguyen, S. (2020). *The impact of COVID-19 on college student well-being*. The Healthy Minds Network.

Moye, R., Skipper, A., Towns, T., Rose, D., Department of Behavioral Sciences, Winston Salem State University, Winston Salem, NC, USA, & Gerontology Institute, Georgia State University, Atlanta, GA, USA. (2021). Attitudes toward vaccines during the COVID-19 pandemic: Results from HBCU students. *AIMS Public Health*, *9*(1), 155–172. https://doi.org/10.3934/publichealth.2022012

Nakhostin-Ansari, A., Sherafati, A., Aghajani, F., Khonji, M., Aghajani, R., & Shahmansouri, N. (2020). Depression and Anxiety among Iranian Medical Students during COVID-19 Pandemic. *Iranian Journal of Psychiatry*, *15*(3), Article 3.

Odriozola-González, P., Planchuelo-Gómez, Á., Irurtia, M. J., & de Luis-García, R. (2020). Psychological effects of the COVID-19 outbreak and lockdown among students and workers of a Spanish university. *Psychiatry Research*, *290*, 113108. https://doi.org/10.1016/j.psychres.2020.113108

Patra, S. K., Sundaray, B. K., & Mahapatra, D. M. (2021). Are university teachers ready to use and adopt e-learning system? An empirical substantiation during COVID-19 pandemic. *Quality Assurance in Education*, *29*(4), 509–522. https://doi.org/10.1108/QAE-12-2020-0146

Prowse, R., Sherratt, F., Abizaid, A., Gabrys, R. L., Hellemans, K. G. C., Patterson, Z. R., & McQuaid, R. J. (2021). Coping with the COVID-19 pandemic: Examining gender differences in stress and mental health among university students. *Frontiers in Psychiatry*, *12*, 650759. https://doi.org/10.3389/fpsyt.2021.650759

Quach, A., & Chen, V. T. (2021). Inequalities on the digital campus. *Dissent*. https://www.dissentmagazine.org/article/inequalities-on-the-digital-campus

Rudenko, E., Bachieva, R., Aligadzhieva, A., Temirhanova, Z., & Archilaeva, A. (2020). Distance learning during the pandemic: Managing the challenges. *E3S Web of Conferences*, *210*, 18038. https://doi.org/10.1051/e3sconf/202021018038

Singh, G., & Quraishi, S. (2021). COVID-19 lockdown: Challenges faced by Indian students. *Psychological Studies*, *66*(3), 303–307. https://doi.org/10.1007/s12646-021-00608-9

Stamm, M., Francetic, K., Reilly, R., Tharp, A., Thompson, N., & Weidenhamer, R. (2021). Kinesthetic learners during the COVID-19 pandemic: Occupational therapy students' perspective on e-learning. *Journal of Occupational Therapy Education*, *5*(2). https://doi.org/10.26681/jote.2021.050203

Tuğutlu, Ü., & Kavaz, O. (2022). The impact of the distance education on students during pandemic process and the opinions of the parents. *The Online Journal of New Horizons in Education*, *12*(1).

Wang, C., Pan, R., Wan, X., Tan, Y., Xu, L., Ho, C. S., & Ho, R. C. (2020). Immediate psychological responses and associated factors during the initial stage of the 2019 coronavirus disease (COVID-19) epidemic among the general population in China. *International Journal of Environmental Research and Public Health*, *17*(5), 1729. https://doi.org/10.3390/ijerph17051729

Zhou, J., & Zhang, Q. (2021). A survey study on U.S. college students' learning experience in COVID-19. *Education Sciences*, *11*(5), 248. https://doi.org/10.3390/educsci11050248

PERCEPTION OF POPULATION EDUCATION TEACHER ON CONTINUOUS ASSESSMENT SYSTEM

Pradeep Kumar Bohara, Lecturer
Tribhuvan University, Sanothimi Campus,Bhaktapur
pbohara99@gmail.com

Rekha Raut, Lecturer
Tribhuvan University, Sanothimi Campus,Bhaktapur
Rautrekha93@gmail.com

ABSTRACT

Background: This study provides the insights of teachers in the significance of continuous assessment system (CAS) for students. Continuous assessment means 'the regular evaluation of the learning process'. This form of testing can be counted in whole, in part or not at all in the students' final scores. The ultimate objective of continuous assessment is to increase the learning effect. Research (Dochy & McDowell, 1997) has indicated that continuous assessment has a greater learning effect than does test only at the end of the learning process. Objectives of this study are to find out the perception of population teachers on continuous assessment system practice, to explore the problems in the implementation of CAS and to recommend pedagogical implications based on the findings of the study.

Methods: This study is based on analytical research design. Data was collected from informants by using questionnaire (structured and semi-structured). Out of 35 community schools 40 teachers were selected using simple random sampling procedure. There are 40 teachers who are teaching population education in 35 community schools. Responses of each open ended question was collected, listed, and analyzed separately.

Results: Majority of the respondents 57.5 percent strongly agreed to the statement that CAS decreased the students absent rate in class. Similarly, 50 percent of the teachers strongly agreed with the statement that CAS reduced the dropout rate of students. Data shows that highest percentage (45%) strongly agreed with the statement that CAS helped in effective in teaching learning activities, whereas only 2.5 percent of them totally disagreed. Maximum percentage (65%) of the teachers agreed with the statement that CAS is effective for the encouragement and inspiration of students.

Conclusion: The data reveals that the continuous assessment system (CAS) is very effective to enhance the achievement of the learners. Besides, it helps in decreasing the students absent rate as well as reducing the dropout rate. In making teaching learning effective CAS plays a vital role. Portfolio of each student proved to be very influential in the remedial feedback to learners which helps to improve their learning level. Insufficient resources (e.g., human, financial) are the challenging factors for effective CAS program which needs to be conquered.

Keywords: Assessment**,** Curriculum, Evaluation, Perception, portfolio

Introduction

Continuous assessment of a learner's progress could be defined as a mechanism whereby the final grading of learners in the cognitive, affective, and psychomotor domains of learning systematically takes place account of all their performances during a given period of schooling (Anikweze, 2005). Airasian, (1991) describes continuous assessment as an approach that should depict the full range of sources and methods teachers use to gather, interpret and synthesize information about learners; information that is used to help teachers understand their learners, plan and monitor instruction and establish a viable classroom culture. Formative assessment has been an informal activity for a very long time in some classrooms and countries around the world. In 1971, Bloom et al;(1971) moved formative assessment into a more formal space when they wrote a book entitled 'Formative and Summative Evaluation of student learning' in which they described a view of education in which the primary purpose of schooling was the development of the individual. In their view, assessment and evaluation were a part of learning, and classroom teachers played a prominent role in using evaluation to improve and extend student learning. In the last two decades, formative assessment has been taken up in practice and policy around the world. In-country after country, formative assessment or assessment for learning has been infused into or adopted for educational assessment and evaluation policies or practices. Since 2001 a group of researchers, policymakers and professional development facilitators from several countries have been meeting every three or four years to share, examine and explore assessment for learning a wide range of contexts (Klenowski, 2009).

Historical Review of CAS in Nepal

There is no long history of CAS practice in Nepal. Periodic exams did not fully reflect the capacities and skills of the learners. Learners often dread these periodic tests. CAS is an ongoing process of assessing student achievement and progress. It provides information to develop good results for students and helps to improve the current state of the teaching process. Nepal has been involved in Education for All and has improved the quality of education for the past four and a half decades. There have been several attempts to implement this slogan although it has not materialized yet. Nepali,P. (2012) carried out research on "Challenges in Implementing Continuous Assessment System". The main purpose of the study was to find out the teachers' challenges on implementation of a continuous assessment system. The sampling population of this study were 60 primary level teachers of the government aided schools.

Results

Data shows that highest percentage (45%) strongly agreed with the statement that CAS helped in effective in teaching learning activities, whereas only 2.5 percent of them totally disagreed. Maximum percentage (65%) of the teachers agreed with the statement that CAS is effective for the encouragement and inspiration of students.

CAS and Students' Absent Rate

To find out the relationship between CAS and students' absence rate, teachers were asked if CAS reduced students' absence rate. The responses found are presented in the following table:

Table 1: CAS and Students' Absent Rate

Statements	Respondents	Percentage
Strongly Agree	23	57.5
Agree	15	37.5
Undecided	1	2.5
Disagree	1	2.5
Strongly Disagree	0	0.0
Total	40	100

Note: Res. = Response, % = Percent

Table no. 1 shows that, 57.5 percent of the total respondents strongly agreed to the statement that CAS decreased the students' absent rate in class. Likewise, 37.5 percent of them only agreed to the statement, 2.5 percent of them were undecided and the equal percentage (2.5%) disagreed with the statement. So, it can be concluded that the continuous assessment system decreases the students' absent rate in class.

Role of CAS in Reducing the Dropout Rate

In order to find out the role of CAS in reducing the dropout rate, they were asked whether the CAS reduced students' dropout rate or not. The responses found are presented in the following table:

Table 2: Role of CAS in Reducing the Dropout Rate

Statements	Respondents	Percentage
Strongly Agree	20	50
Agree	18	45
Undecided	1	2.5
Disagree	1	2.5
Strongly Disagree	0	0.0
Total	40	100

Table no. 2 Shows that, 50 percent of the teachers strongly agreed with the statement that CAS reduced the dropout rate of students and 45 percent only agreed, whereas 2.5 percent disagreed. 2.5 percent of them were undecided about the statement. This shows that most of the teachers agree CAS reduces the dropout rate of students.

Role of CAS in Effective Teaching Learning Activities

In order to find out the role of CAS in effective teaching learning activities, the teachers were asked whether CAS helped in effective teaching learning activities or not. The responses found are presented in the table below:

Table 3: Role of CAS in Effective Teaching Learning Activities

Statements	Respondents	Percentage
Strongly Agree	18	45.00
Agree	19	47.5
Undecided	2	5.00
Disagree	1	2.5
Strongly Disagree	0	0.00
Total	40	100

Table no. 3 shows that, 45 percent of the respondents strongly agreed with the statement that CAS helped in effective in teaching learning activities, whereas only 2.5 percent of them totally disagree. Majority of them, 47.5 percent agreed with this statement but 5 percent of them were not sure. Thus, it can be concluded that CAS makes teaching learning effective.

Role of CAS for Students' Encouragement and Inspiration

In order to find out the role of CAS for students' encouragement and inspiration, the teachers were asked whether CAS helped in the encouragement and Inspiration to the students or not. For this statement the responses found are presented in the table below:

Table 4: Role of CAS for Students' Encouragement and Inspiration

Statements	Respondents	Percentage
Strongly Agree	11	27.5
Agree	26	65.5
Undecided	1	2.5
Disagree	2	5
Strongly Disagree	0	0.0
Total	40	100

Table no. 4 Shows that, 27.5 percent of answerers strongly agreed to the statement Encouragement and Inspiration are the key points for the progress of the students in CAS but 2.5 percent of them were undecided. Up to 65 percent of them agreed with the statement, whereas 5 percent of them strongly disagreed with the statement.

Continues assessment system is compulsion for better progress in teaching learning activities in every teaching institution. Every teacher should take their teaching profession as their passion and they must be responsible towards pupil and nation as well. Modern evaluation system and technology is essential in teaching.

Conclusion

The outcome of the study is that the teachers claim that the continuous assessment system (CAS) decreases the student's absent rate, dropout rate and repetition rate in the class room. But several factors like inadequate training, monitoring, supervision, and technical knowledge are making it complicated while practicing by the teachers. Similarly, huge number of students, unwillingness of teachers, disinterested students, parents, and other concerned stakeholders are also a big challenge. Insufficient resources (e.g., human, financial) are also challenging factors for effective CAS program.

Methods like observation, project work, portfolio, attendance, class work and behavior change are applied while practicing CAS. Encouragement and inspiration are the key points of CAS and the teachers are using different sorts of tests (e.g., diagnostic test, class test, objective test, class work, tuition) to assist the weak learners. The more flexible CAS is, the more risky it can be (i.e., promotion of weak students without adequate knowledge).Even though CAS is very effective in maintaining the details of students which further helps in motivating them, it is difficult to put into the practice. This requires a lot of time and hard work that can be very demanding to the practitioners.

References

Airasian, P. (1991). *Classroom assessment.*New York: McGraw-Hill.
CDC (1997-2002). *Basic and primary education project.*Sanothimi: Bhaktapur.
CDC (2003).*National curriculum draft.*Sanothimi: Bhaktapur.
CDC(2067).Nirantarbidhyarthimulyankankaryanwayanpustika.Sanothimi: Bhaktapur.
CDC (2049).*Primary curriculum.*Sanothimi: Bhaktapur.
CDC (2062/65).*Primary education curriculum.*Sanothimi: Bhaktapur.

Continuous Assessment System (2003).*A study report.*
Curriculum Development Center (2049).*Curriculum Instance*, Sanothimi, Bhaktapur.
Curriculum Development Center (2056).*CAS teacher training book.*Sanothimi: Bhaktapur.
Curriculum Development Center (2056).*Students Continuous assessment manual.*Sanothimi: Bhaktapur.
Government of Nepal (2063-066). *Interim plan.*
Khaniya, T.R. (2005). *Examination for enhanced learning.*Lalitpur: Millennium Publication.
Ministry of Education (2067-072). *School sector reform program.*Kesharmahal: Kathmandu.
Ministry of Education (MOE) (2059).*CAS manual.*Kesharmahal: Kathmandu
Ministry of Education (MOE) (2067).*CAS implementing manual.*
National Institute for Educational Development (NTED) (1996).Towards improving continuous assessment in schools: A policy and information guide. Namibia: NTED.

PROFESSIONAL BURNOUT LEVELS OF PHYSICAL EDUCATION AND SPORTS TEACHERS'; NORTH CYPRUS CASE

Dilek DÜLGER [1]
Graduate student of the Faculty of Sports Sciences, Girne American University
dilek.dulger00@gmail.com

Çiğdem KARAGÜLMEZ SAĞLAM[2]
Faculty of Sports Sciences, Girne American University
cigdemkgsaglam@icloud.com
ORCID: https://orcid.org/0000-0002-6924-1326

ABSTRACT
It is observed that professional burnout is increasing gradually in teaching, which is one of the difficult and important professions today. It would be correct to say that the level of burnout is higher in physical education and sports teachers than in other branch teachers, since it is an applied field. In this context, the aim of the study is to examine the professional burnout levels of physical education and sports teachers working in the Turkish Republic of Northern Cyprus. The sample of the study consists of a total of 100 physical education teachers selected by random sampling, working in schools affiliated to the Ministry of National Education in the Turkish Republic of Northern Cyprus, Girne, Nicosia and Famagusta regions in the 2021-2022 academic year. In the research, "Maslach burnout inventory" created by Maslach and Jackson (1981) and translated into Turkish by İnce and Şahin (2015) was used to examine the professional burnout of physical education and sports teachers. The data obtained from the study showed that teachers have burnout levels.
Key words: Burnout, Physical education and sports teacher, profession

INTRODUCTION

Teachers may experience exhaustion, depressive mood, low performance and personality disorder due to the stress they experience from working life. Because of this, many teachers change schools or leave their professions (Chambers, Johnson, Jones-Rincon, Tsatenawa & Howard, 2019; Madigan & Kim, 2021).

Burnout is recognized as a work-related illness. Problems arising from the working environment cause burnout by creating a negative situation in individuals (Polatcı, Ardıç, & Türkan, 2014). It is seen that teachers experience more burnout than those working in other professions. Among the main reasons for this situation, it can be said that teachers are in constant communication and make a lot of self-sacrifice with the heavy burden of raising future generations.

Physical education and sports teachers, apart from the course load, can be coaching, refereeing or coaching etc. in sports activities within the school. By taking on roles, they are more physically and psychologically worn out. The fact that these studies have been carried out for many years shows that the level of stress and professional burnout on teachers is more wearisome than other teachers (Odabaş, 2019). Therefore, it is possible to say that physical education and sports teachers feel more stress and burnout than other teachers.
The pressure and tension that individuals feel, especially in business life, drags them to stress. The concept of stress, which enters people's lives more and more every day, affects them negatively. Stress that occurs on people, especially in business life, negatively affects their business and social lives. In particular, the stress and related phenomena in the professional lives of teachers lead them to burnout.

Burnout is known as the most heard work disease today. These are the problems that arise with negative situations arising from relationships in professional life (Polatcı, Ardıç, Türkan, 2014). Burnout can be defined as the mental withdrawal of individuals from the working environment as a result of moving away from the goals required by the profession, being indifferent to those who fulfill their duties, experiencing stress and dissatisfaction (Kaçmaz, 2005).

Teaching is one of the most tiring jobs due to difficult working conditions. Due to the significant pressures in their working conditions and environments, teachers are at a high risk of burnout, so their social relations and the quality of service in teaching are likely to deteriorate.

Burnout is a process that primarily affects individuals emotionally and continues with depersonalization and low personal achievement (Maslach, Schaufeli & Leiter, 2001). The burnout of teachers in educational institutions is seen as a serious problem that should be considered. Teachers are responsible for all educational and instructional

functions in the school. In this context, the low performance of teachers due to burnout will be reflected in the quality of education and some problems will be seen both in terms of quantity and quality.

Physical education and sports teachers have an important place in schools in terms of the physical, mental and healthy development of their students (Gögercin, 2017). For this reason, this research primarily aimed to determine the burnout levels of physical education and sports teachers, and the following two questions were tried to be answered.
1. What are the perceived burnout levels of physical education and sports teachers according to the "Maslach Burnout Inventory-Teacher Form"?
2. According to the perceived professional burnout levels of physical education and sports teachers; Do the variables of gender, marital status, age, administrative duty and years of service show a significant difference?

According to Maslach's definition, it is a state of failure, fatigue, and exhaustion brought on by energy, strength, and potential overstrain. In his later research, he revised his definition and defined it as a sustained response to emotional and interpersonal stressors in the workplace, depending on individual, social, societal, and organizational factors. Later, he simplified this definition by defining it as a psychological state that develops over time in response to variables that cause stress in the workplace. Regardless of the criteria used, burnout focuses on the lack of motivation to do work due to various conditions (Küçükaltan, Tükeltürk, & Gürkan, 2015). Burnout was first discussed in areas such as patient care and social services, and later studies continued on health, clergy, judicial staff, counselors and educators (Maslach and Gomez, 2006).

According to Cooper et al. (2001), burnout is a state of intense psychological stress and exhaustion that occurs when employees in industries dealing with people are exposed to stress factors for a long time and do not have the power and resources to cope with these factors.According to Cherniss, burnout is not a temporary exhaustion or strain, but a permanent state that results in the individual being alienated from his or her job. Cherniss defined burnout as a situation that creates motivational, emotional, attitudinal and behavioral changes in response to work stress (Act. Avşaroğlu et al., 2005).

METHODOLOGY

In this study, descriptive method was used. Personal information form and maslach burnout inventory were applied to 100 randomly selected teachers working in schools affiliated to the TRNC Ministry of National Education, Famagusta, Girne and Lefkosa districts.

Maslach Burnout Scale

The Burnout Inventory, created by Maslach and Jackson (1981) and published as Maslach in the literature, consists of 22 questions with seven-level Likert-type response alternatives and three sub-dimensions. Burnout is measured by the dimensions of emotional exhaustion, depersonalization and personal failure as variables. Scale items were rated from 1 to 7, with 1 being "never" and 7 "always". The burnout status of people working in various occupational groups in Turkey is measured using the Ince and Şahin (2015) inventory translated into Turkish.

Maslach and Jackson (1981) used the test-retest approach to obtain the Cronbach's alpha coefficient to evaluate the reliability of MTE. When the alpha coefficient was used to measure the internal stability of the inventory, it was found 0.77 for depersonalization, 0.74 for personal achievement, and 0.89 for emotional exhaustion. When the test-retest method was applied to administrators working in health institutions and students receiving social care education, a reliability value of 0.80 for personal success, 0.60 for depersonalization and 0.82 for emotional exhaustion factor was obtained. In a survey conducted by Iwanicki and Schwab with 465 teachers to evaluate teacher burnout, it was observed that the Cronbach alpha reliability coefficients were 0.90 for the emotional exhaustion dimension and 0.76 for the depersonalization and personal achievement dimensions (Iwanicki & Schwab; cited in Maslach et al., 2010).

Data Analysis

Statistical Package for Social Sciences (SPSS 26) program was used for data analysis. Descriptive statistics for the responses of Physical Education and Sports teachers to the sub-dimensions of "Maslach Burnout Inventory" are shown.

As a result of the analysis, it was determined that the data were not suitable for normal distribution. During the research, non-parametric tests were applied to compare the scores. In this context, the Mann-Whitney U test or the Kruskal-Wallis H test was used to compare the scores of the teachers from the "Maslach Burnout Inventory" according to their demographic characteristics.

FINDINGS

Table 1. Distribution of teachers according to their socio-demographic characteristics

	Number(n)	Percentile (%)
Gender		
Female	57	56,44
Male	44	43,56
Age		
30 years and under	37	36,63
31-40	32	31,68
41 years and older	32	31,68
Years of service		
5 years and below	45	44,55
6-15 years	34	33,66
16 years and above	22	21,78
Marital status		
Single	49	48,51
Married	52	51,49

When Table 1. is examined, it is seen that 56.44% of the teachers are female and 43.56% are male, 36.63% of them are 30 years old and below, 31.68% are 31-40 years old and 31.68% are of them were in the age group of 41 and over, 44.55% of them were 5 years and below, 33.66% of them were 6-15 years and 21.78% of them were 16 years and more years of service, 48.51% were single and 51.49% were married.

Table 2. Teachers' Maslach Burnout Inventory scores

	n	$\bar{x}$	s	Min	Max
Emotional Exhaustion	101	27,16	10,31	9	58
Depersonalization	101	10,60	5,50	5	30
Personal Accomplishment	101	29,96	11,59	9	56
Maslach Burnout Inventory	101	67,72	15,94	39	132

According to Table 2., it was determined that the teachers included in the study got an average of 27.16±10.31 points from the emotional burnout factor in the Maslach Burnout Inventory, an average of 10.60±5.50 points from depersonalization and 29.96±11.59 points from the decrease in personal achievement. . Teachers received an average of 67.72±15.94 points from the Maslach Burnout Inventory.

Table 3. Comparison of Maslach Burnout Inventory scores by gender of teachers

	Gender	n	$\bar{x}$	s	M	SO	Z	p
Emotional Exhaustion	Kadın	57	27,84	11,24	27,00	52,05	-0,411	0,681
	Erkek	44	26,27	9,03	25,00	49,64		
Depersonalization	Kadın	57	9,67	5,02	9,00	45,89	-2,005	0,045*
	Erkek	44	11,82	5,90	10,50	57,61		
Personal Accomplishment	Kadın	57	31,00	11,24	31,00	53,11	-0,826	0,409
	Erkek	44	28,61	12,03	26,50	48,26		
Maslach Burnout Inventory	Kadın	57	68,51	15,96	70,00	53,35	-0,918	0,359
	Erkek	44	66,70	16,05	65,00	47,95		

$p<0,05$

When Table 3 was examined, it was determined that there was no statistically significant difference between the scores of the teachers in the Maslach Burnout Inventory in general and the emotional burnout and decrease in personal achievement factors in the inventory ($p>0.05$).
It was determined that there was a statistically significant difference between the scores of the depersonalization factor in the Maslach Burnout Inventory according to the gender of the participants, and the depersonalization scores of male teachers were higher than that of females ($p<0.05$).

Table 4. Comparison of teachers' Maslach Burnout Inventory scores by age group

	Age group	n	$\bar{x}$	s	M	SO	X^2	p
Emotional Exhaustion	Age 30 and below	37	24,11	8,32	22,00	42,30	5,284	0,071
	Age 31-40	32	29,53	11,39	29,00	57,33		
	Age 41 and above	32	28,31	10,70	29,00	54,73		
Depersonalization	Age 30 and below	37	9,54	4,44	8,00	46,32	3,416	0,181
	Age 31-40	32	12,63	7,06	10,50	58,73		
	Age 41 and above	32	9,81	4,31	9,50	48,67		
Personal Accomplishment	Age 30 and below	37	31,68	12,40	32,00	55,19	1,999	0,368
	Age 31-40	32	27,34	9,08	25,00	45,30		
	Age 41 and above	32	30,59	12,70	28,50	51,86		
Maslach Burnout Inventory	Age 30 and below	37	65,32	13,09	65,00	47,07	1,080	0,583
	Age 31-40	32	69,50	19,72	70,00	52,67		
	Age 41 and above	32	68,72	14,86	68,50	53,88		

$p<0,05$

Table 4 was determined that there was no statistically significant difference between the scores of the teachers included in the study from the Maslach Burnout Inventory in general and the scores of emotional exhaustion, depersonalization and decrease in personal achievement in the inventory (p>0.05).

Table 5. Comparison of teachers' Maslach Burnout Inventory scores by years of service

	Years of service	n	$\bar{x}$	s	M	SO	X^2	p	Dif
Emotional Exhaustion	5 years and below	45	23,51	8,04	22,00	40,76	10,486	0,005*	1-2
	6-15 years	34	29,38	11,72	30,50	56,90			1-3
	16 year and above	22	31,18	10,08	31,00	62,84			
Depersonalization	5 yıl ve altı	45	9,09	4,00	8,00	44,04	6,298	0,043*	1-2
	6-15 yıl	34	12,94	6,94	11,00	60,63			
	16 yıl ve üstü	22	10,09	4,56	10,00	50,34			
Personal Accomplishment	5 yıl ve altı	45	30,96	11,93	31,00	53,24	0,522	0,770	
	6-15 yıl	34	29,29	11,13	26,00	49,87			
	16 yıl ve üstü	22	28,95	11,96	25,00	48,16			
Maslach Burnout Inventory	5 yıl ve altı	45	63,56	13,21	65,00	43,67	5,100	0,078	
	6-15 yıl	34	71,62	18,09	70,50	57,24			
	16 yıl ve üstü	22	70,23	16,19	70,00	56,36			

**p<0,05*

According to Table 5, it was determined that there was no difference between the scores the teachers got from the Maslach Burnout Inventory in general and the factor of decrease in personal achievement according to the years of service (p>0.05).

The difference between the scores of the teachers' emotional burnout and depersonalization factors in the Maslach Burnout Inventory was statistically significant (p<0.05). The scores of teachers with 5 years of service or less from emotional burnout in the Maslach Burnout Inventory were found to be lower than those of teachers with 6-15 years

of service and 16 years or more. In addition, the scores of teachers with 5 years of service or less from the depersonalization factor in the Maslach Burnout Inventory are lower than teachers with 6-15 years of service.

Table 6. Comparison of Maslach Burnout Inventory scores according to teachers' marital status

	Marital status	n	$\bar{x}$	s	M	SO	Z	p
Emotional Exhaustion	Single	49	24,78	8,82	23,00	44,11	-2,295	0,022*
	Married	52	29,40	11,17	29,00	57,49		
Depersonalization	Single	49	9,61	4,54	8,00	46,61	-1,470	0,142
	Married	52	11,54	6,17	10,00	55,13		
Personal Accomplishment	Single	49	31,37	11,77	32,00	54,93	-1,309	0,191
	Married	52	28,63	11,37	25,00	47,30		
Maslach Burnout Inventory	Single	49	65,76	13,31	65,00	47,82	-1,060	0,289
	Married	52	69,58	18,01	70,00	54,00		

*$p<0,05$

According to Table 7., it was seen that there was no statistically significant difference between the scores of the teachers in the Maslach Burnout Inventory in general and the depersonalization and decrease in personal achievement factors in the inventory according to their marital status ($p>0.05$). The scores of single and married teachers from the Maslach Burnout Inventory in general and the depersonalization and decrease in personal achievement factors in the inventory are similar.

It was determined that the difference between the scores of the emotional burnout factor in the Maslach Burnout Inventory according to the marital status of the teachers was statistically significant ($p<0.05$). The scores of the married teachers on the emotional burnout factor in the Maslach Burnout Inventory were found to be higher than the singles.

CONCLUSIONS

According to the results obtained from the research findings, the mean score of the teachers in the Maslach Burnout Inventory emotional burnout dimension was 27.16±10.31, the average score they got from the depersonalization dimension was 10.60±5.50, and the average score they got from the dimension of decrease in personal achievement was 29. It was determined as 96±11.59. Teachers received an average of 67.72±15.94 points from the Maslach Burnout Inventory. The maximum that can be obtained in the Maslach Burnout Inventory is 154. When the cut-

off point of the inventory is considered as 77, the burnout experienced by the teachers is seen to be lower than the average.

According to the results of the research findings, it was determined that the dimensions of emotional burnout and decrease in personal achievement, which are among the sub-dimensions of the Maslach Burnout Inventory, did not show a significant difference according to gender. In the study conducted by Odabaş (2019), it was seen that the emotional burnout and personal sub-dimension scores of physical education and sports teachers did not show a significant difference according to gender. It was determined that the depersonalization sub-dimension showed a significant difference according to gender. It was observed that male teachers experienced more burnout than female teachers. It was observed that male teachers received higher scores than female teachers. In the studies conducted by Fejgin (1995) and Özkan (2007), it was determined that the depersonalization sub-dimension of physical education and sports teachers showed a significant difference according to gender, and male teachers experienced more burnout than females. In this context, the findings of the study are similar.

According to the results obtained from the research findings, it was determined that the scores of the teachers from the Maslach Burnout Inventory and its sub-dimensions did not show a significant difference according to age. In the studies conducted by Kurtlar (2009) and Odabaş (2019), it was determined that the burnout levels of physical education and sports teachers did not show a significant difference according to age.

According to the results obtained from the findings of the research, it was determined that the scores of the teachers in the Maslach Burnout Inventory in general and in the decrease in personal achievement sub-dimension did not show a significant difference according to the years of service. However, it was observed that the sub-dimensions of emotional exhaustion and depersonalization showed a significant difference according to the years of service. It was determined that the scores of the teachers with 5 years or less service years in the depersonalization and emotional exhaustion sub-dimension were lower than the teachers with other service years. In the studies conducted by Gündüz (2014) and Cemaloğlu and Şahin (2007), a significant difference was found between the decrease in personal achievement and years of service, which are sub-dimensions of burnout, and it was found that there was no significant difference between depersonalization and emotional exhaustion.

According to the results obtained from the research findings, the scores that the teachers got from the "Maslach Burnout Inventory" emotional burnout sub-dimension showed a significant difference according to marital status. Married teachers had higher scores than single teachers. It was determined that the overall Maslach Burnout Inventory and the sub-dimensions of "personal achievement" and depersonalization did not show a significant difference. Cemaloğlu and Şahin (2007) found a significant difference between teachers' emotional burnout and marital status, while no significant difference was found in depersonalization and decrease in personal achievement. Ayvaz (2015) did not find a significant difference between the marital status of teachers and the decrease in personal achievement sub-dimension. In this context, the findings of the study are similar.

REFERENCES

Avşaroğlu, S., Deniz, M.E. and Kahraman A. (2005). Teknik öğretmenlerde yaşam doyumu, iş doyumu ve mesleki tükenmişlik düzeylerinin incelenmesi.[Investigation of life satisfaction, job satisfaction and professional burnout levels of technical teachers.] *Selçuk University Journal of Social Sciences Institute,* (14), 115-129.

Ayvaz, U. (2015). Beden eğitimi öğretmenlerinin tükenmişlik düzeylerinin bazı değişkenler açısından incelenmesi (İstanbul İli Kadıköy ve Ataşehir İlçeleri Örneği), [Examination of physical education teachers' burnout levels in terms of some variables (The Case of Istanbul Province Kadıköy and Ataşehir Districts)]. Master Thesis, Yeditepe University, İstanbul.

Cemaloğlu, N. and Erdemoğlu Şahin, D. (2007). Öğretmenlerin mesleki tükenmişlik düzeylerinin farklı değişkenlere göre incelenmesi, [Examining the professional burnout levels of teachers according to different variables,]. *Kastamonu Journal of Education,* 15(2), 465-484.

Chambers Mack, J., Johnson, A., Jones-Rincon, A., Tsatenawa, V., Howard, K. (2019). Why do teachers leave? A comprehensive occupational health study evaluating intent-to-quit in public school teachers. *Journal of Applied Biobehavioral Research*, 24(1), e12160. https://doi.org/10.1111/jabr.12160

Cherniss, C. ve Cherniss, C. (1980). Staff burnout: Job stress in the human services.

Cooper, C. L., Dewe, P., & O'Driscoll, M.P., (2001). Organizational stress: A review and critique of theory, research and applications. Malden, USA : Sage Publications, Thousand Oaks.

Fejgin, N. Ephraty, N., BenSira, D. (1995). Work environment and burnout of physical education education teachers. Journal of Teaching in Physical Education, 15(1), 64-78.

Gögercin, T. (2017). Beden Eğitimi Öğretmenlerinin İş Tatmini ve Mesleki Tükenmişlik Düzeylerinin İncelenmesi, [Investigation of Physical Education Teachers' Job Satisfaction and Occupational Burnout Levels]. Master Thesis, İstanbul Gelişim University Health Sciences Institute, İstanbul.

Gündüz, B. (2014). Öğretmenlerde tükenmişliğin akılcı olmayan inançlar ve bazı mesleki değişkenlere göre yordanması, [Predicting burnout in teachers according to irrational beliefs and some professional variables]. Master Thesis, Çukurova University, Adana.

İnce, B. N., Şahin, E. A. (2015). Adaptation of Maslach Burnout Inventory – Trainer Form into Turkish, *Journal of measurement and evaluation in education and psychology,* 6(2), 385-399.

Jackson, S. E., Schwab, R. L., ve Schuler, R. S. (1986). Toward an understanding of the burnout phenomenon. *Journal of Applied Psychology,* 71(4). 630-640.

Kaçmaz, N. (2005). "Tükenmişlik (Burnout) sendromu", ["Burnout syndrome"]. *Journal of Istanbul University Faculty of Medicine* 68, 29-32.

Kurtlar, C. (2009). Engelli okullarında görev yapan beden eğitimi öğretmenlerinin tükenmişlik düzeyleri üzerine bir araştırma (Marmara Bölgesi Örneği),[A study on the burnout levels of physical education teachers working in schools for the disabled (Example of Marmara Region)]. Master Thesis, Sakarya University, Sakarya.

Küçükaltan, D., Tükeltürk, Ş. A., & Gürkan, G. Ç. (2015). Örgütsel davranışta güncel konular., [Current issues in organizational behavior.].Ankara: Detay Publishing.

Odabaş, İ. (2019). Beden eğitimi ve spor öğretmenlerinin mesleki tükenmişlik düzeylerinin incelenmesi (Tokat İli Örneği), [Examining the professional burnout levels of physical education and sports teachers (Example of Tokat Province)]. Master Thesis, Sakarya University, Sakarya.

Özkan, Ş. Y. (2007). Niğde ilinde görevli beden eğitimi öğretmenlerinin mesleki tükenmişlik düzeylerinin araştırılması, [Investigation of occupational burnout levels of physical education teachers working in Niğde province]. Master Thesis, Niğde University, Niğde.

Madigan, D. J., and Kim, L. E. (2021). Towards an understanding of teacher attrition: a meta-analysis of burnout, job satisfaction, and teachers' intentions to quit. *Teach. Teach. Educ.* 105:103425. doi: 10.1016/j.tate.2021.103425MaslachHuman

Maslach, C., Jackson, S.E., (1981). The measurement of experienced burnout. *Journal of Occopational Behavior,* (2), 99-113.

Maslach, C., Schaufeli, W. B. ve Leiter, M. P. (2001). Job burnout. *Annual review of psychology,* 52(1), 397-422.

Maslach, C., & Gomes, M. E. (2006). Overcoming burnout. In R. M. MacNair (Ed.) & Psychologist for Social Responsibility, *Working for peace: A handbook of practical psychology and other tools* (pp. 43–49)

Melo, M. B., Barbosa, M.A., & Souza, P.R. (2011). Job satisfaction of nursing staff: *İntegrative review.* Rev Lat Am Enfermagem, 19(4), 1047-1055.

Mosadeghrad, A. M., Ferlie, E., & Rosenberg, D. (2011). A study of relationship between job stress, quality of working life and turnover intention among hospital employees. *Health Services Management Research,* 24(4), 170-181.

Polatcı, S. Ardıç, K. Türkan, G. (2O14*).* Bağlılık boyutlarının tükenmişlik boyutları üzerindeki etkisinin incelenmesi, [Investigation of the effect of commitment dimensions on burnout dimensions].*Management and Economics: Journal of Celal Bayar University Faculty of Economics and Administrative Sciences,* 21(2), 283-285.

STUDENTS LEARNING EXPERIENCES ON THE DELIVERY OF E-LEARNING MODALITY DURING THE COVID-19 PANDEMIC: A CASE STUDY OF THE SENIOR HIGHSCHOOL STUDENTS OF MSU-LNCAT (PHILIPPINES)

SINAB P. MUSTARI, Ph.D
Association Professor, Mindanao State University, Lanao National College of Arts and Trade, Philippines
abubakarmama1@gmail.com

ABSTRACT
Purpose: In response to the virus's spread, school administrators joined the call to cancel physical education classes after President Rodrigo Duterte imposed a lockdown during the early Covid-19 outbreak in the Philippines. As a result, the classes were converted to online classes. However, there are difficulties and challenges in terms of student and teacher experiences with the aforementioned online classes. This study was conducted to determine the awareness and knowledge of senior high school students about e-platforms that teachers use to deliver classes during school closures. Additionally, this study is designed to also learn about the students' practices when using the electronic platforms mentioned. Students' challenges and difficulties were also taken into account when using the platform. A change in learning motivation in the electronic environment was also provided. **Methodology**: This study used a quantitative approach with a descriptive design. Descriptive statistical tools were used in order to provide descriptive analysis of the data. The instrument used is a researcher's made survey questionnaire which has undergone a pilot test to assess its reliability and accuracy. **Findings** findings revealed that the majority of respondents were aware of and informed about the possibility of using social media apps to continue their classes. With the exception of utilizing headphones, the students demonstrate positive practices in using the e-platform during their online class. The experiences and difficulties students had during online classes, as well as their preference between traditional and online classes, were also addressed. **Implications** This study **implies** that the school and its administrators should, whenever possible, enhance their instructional approaches for online classes. In order for teachers to make the most of the online class, school administrators should also increase teachers' readiness, particularly their knowledge of social media tools. **Originality** This is likely the first published study that discusses the use of electronic platforms used in online classes and the experiences and difficulties faced by the students. Up until this point, no study had been published that examined the experiences and challenges of online classes in Marawi City, Philippines.
Keywords: E-Learning Platforms, Covid-19, Learning Motivations, Distance Learning, E-Learning, Lesson Delivery

INTRODUCTION

In response to the surge in Covid-19 virus infections, the Philippine government ordered the closure of all public and private schools in the nation in March 2020 (Cuaton, 2020). In order to avoid exposing themselves and their children to the aforementioned virus, the directive compelled school administrators to immediately cease all physical class activities for an indeterminate period of time. Everything related to school and the classroom has been modified or postponed. Due to the increasing number of infected people, local authorities have made the decision to rigidly maintain the enforcement order for the upcoming months.

Meanwhile, school officials and administrators have supported government policies to delay the start of in-person classes, urging them to use technology such as social media apps instead of physical classes. The use of these technologies such as Zoom Meeting App and Facebook Messenger, is massive and is used by almost every educational institution around the world (Mishra, Gupta, & Shree, 2020).. Students on the other hand are also users of these apps because they already have smartphones for communication and socialization purposes.

However, not all students use these platforms to their full potential. This is especially true for students in areas where internet access is very slow and power shortages are common. Marawi City is no exception, in fact students living in the city and neighboring communities are also struggling to take online courses as they struggle to access the internet on their mobile phones. Mindanao State University – Lanao National College of Arts and Trades (MSU-LNCAT), where this study was conducted, is located in the center of Marawi City, Lanao del Sur. Most of its students live within the city. Many of them had to return to their places of origin and stay with their parents because their school was closed due to the pandemic. During class, they experienced no electricity and slow internet access. As a result, the administrators of the aforementioned institution have discovered a way to use mobile applications to continue running their operations even while it is online. They looked for the benefits of using social media because it was readily available on students' smartphones, and was widely used by students.

The scope of this study was restricted only to Zoom Meeting and Facebook Messenger apps, which were utilized by the teachers for online classes. Zoom Meeting app is not new; corporations and government organizations already utilize them for online meetings. Facebook Messenger is also a popular instant messaging app. Although it is utilized in online classes as an online classroom, file sharing, interactive interpersonal contact, an attendance system, etc., students are unaware of its many other functions.

In order to understand senior high school students' awareness of and familiarity with the E-Platforms that teachers utilize during online classrooms, this study was devised. Second, it also attempted to learn about their practices when utilizing the aforementioned platforms and the challenges and difficulties hey had when using the applications during online classes. Also, this study was to determine whether students' motivation for learning has changed from regular physical classes.

LITERATURE REVIEW

Our desire to learn and be educated at our educational institutions was one of the many effects of the COVID-19 pandemic on our daily life. As a part of government initiatives to restrict the virus's spread, many schools were compelled to cease operations. Many students were forced to switch to online classrooms as a result of this occurrence and quit attending physical classes. With this situation at hand, the global research community grew interested in this circumstance.

Online learning is believed to be easily accessible and capable of reaching even rural and isolated regions. It is seen as a somewhat more affordable kind of education due to the lower costs of travel, lodging, and institution-based education as a whole. Another intriguing feature of online learning is flexibility; students can arrange or manage their time to finish online courses. Flipped classrooms and blended learning are learning environments that combine in-person lectures with technology to maximize students' learning potential. Students can learn at any time, anyplace, and gain new abilities that will help them learn for the rest of their lives. The government also acknowledges the dynamic's growing significance of online education (Dhawan, 2020).

However, according to Harefa and Sihombing (2022), the covid-19 pandemic has caused numerous changes in all spheres of life, particularly in the area of education. It can be difficult, though, as some students, especially those in rural areas, do not respond favorably to the new adjustments. They argued that students in remote places perceive online learning to be less effective than it is; this is because their access to communication networks and infrastructure makes it difficult for them to follow online learning. Teachers must review their teaching methods and redesign the models and learning strategies that will be used. Similar findings were made in Adnan and Awar's (2020) research, which showed that online learning cannot achieve the expected outcomes in impoverished nations when the vast majority of students lack access to the internet due to technical and financial difficulties. Other problems experienced by developing nations included reaction times, a lack of typical classroom socializing, and a lack of face-to-face engagement with the instructor.

Additionally, the case study conducted by Yusuf and Ahmad (2020) about the difficulties in online learning in a private higher education institution during the Covid-19 outbreaks in Malaysia revealed that students were less focused on online teaching and learning; Learning platform/medium was not satisfactory; Students were without basic learning tools, such as books and laptops (which were left behind in their residential colleges); Internet access was not satisfactory to the extent that lectures needed to be extended from the actual lecture period; Poor internet access to educators causing disruption to learning time; and Students did not attend the online lectures. As stated by Jalli (2020), it is extremely difficult for students in Southeast Asia to pursue online education due to a lack of internet connection. Online learning is challenging, if not irritating, for many people because teachers and students, especially in rural regions, lack access to reliable internet and are unable to use emerging technology.

On the other hand, Noneey and Vidal (2022) in their study about the perception of students about online course delivery revealed that the students agreed that the online course delivery method improved their interaction with peers, appreciation of the materials and learning tools used in class, and engagement with lecturers.

Thus, it is recommended that educational institutions get more involved in providing comfortable online teaching and learning settings for both teachers and students in order to help the school improve their online education.The information technology skills of educators need to be strengthened in order to make teaching in the future more effective and interesting.

METHODOLOGY:

Methods:
This study was conducted using a quantitative approach to research methods and employing descriptive design. This study was conducted at the Mindanao State University - Lanao National College of Arts and Trades (MSU-LNCAT) located in Marawi City, Philippines. Specifically, this study was conducted during the Academic Year 2021-2022. The researcher chose this setting because this school was one of the many schools within the city that was greatly affected by the government policies such as "Stay-at-home" and "School Closure". Many students were forced to stay at home with their family and attended their classes on an online/electronic mode.

PARTICIPANTS
As to the official respondents of this study, the researcher chose the 96 Senior High School students which were selected on the basis of a Purposive Sampling. This sample procedure was adopted in this study because the numbers of these students were manageable to handle, hence, all of the students were treated as the official respondents of this study.

RESEARCH INSTRUMENT
The instrument that the researcher used in this study was a researcher-designed questionnaire divided into five parts. The first part deals with the respondent's profile. The second part focused on respondents' perceptions and knowledge of e-platforms used by teachers during online teaching. The third part aims to collect data about students' practices when using the above platforms. Part 4 dealt with student challenges and difficulties in using the platform. Finally, the last part was used to collect data on whether there were changes in students' motivation to learn in an online/electronic environment compared to traditional/physical instruction. All questions in the above survey can be answered using the Liker scale.. Regarding the effectiveness of the questionnaire, the researcher decided to test the questionnaire first before distributing it to the students. Using the Alpha-Cronbach measure of reliability and consistency, the questionnaire returned all positive scores above 0.70. According to the authors and editors, a score of 0.70 or higher is considered reliable and valid (Spiliotopoulou, n.d.).

STATISTICAL TOOLS
The researcher also employed descriptive statistical tools like frequency counts, percentage, mean, and standard deviation because this was a quantitative descriptive study. With the aid of these tools, the researcher ranked each question's responses from highest to lowest. The average response to each question was also given using percentages.

DATA COLLECTION PROCEDURE
Regarding data collection procedures, the researchers informed the Principal, Dean, and Chair of the High School Division of MSU-LNCAT about this study. A letter of approval was also sent to them so that the researchers could collect the questionnaire and distribute it to the targeted respondents of this study. Questionnaires were taken immediately after students answered all the questions listed in the questionnaire. Responses were counted and processed using MS Excel to perform the necessary statistical tools, namely frequency counts and percentages.

DATA ANALYSIS
The responses of the senior high school students were analyzed quantitatively using the Jamovi Statistical Software employing frequency, percentage, mean, and standard deviation. The data were interpreted based on the mean and percentage of each indication. In terms of the students preference regarding physical and online classes, the percentage score was used to analyze the results.

FINDINGS

TABLE 1
AWARENESS AND KNOWLEDGE OF THE RESPONDENTS ON E-PLATFORMS

Indicators	N	Mean	SD	interpretation
During a school lockdown, e-platforms like social media platforms are viewed as a potential option for online classes.	96	4.30	0.66	Aware and knowledgeable
Social media applications cannot be used for online classes without an internet connection	96	4.23	0.62	Aware and knowledgeable

Social media applications can accommodate large groups of students during an online lesson.	96	4.29	0.61	Aware and knowledgeable
Using social media apps, file sharing is possible during online classes	96	4.30	0.69	Aware and knowledgeable
Social networking apps can enable the multimedia presentation of lessons.	96	4.23	0.73	Aware and knowledgeable

The information in the table above shows how the senior high school pupils felt about the potential use and adoption of social media and other online platforms during the school's closure due to the COVID-19 pandemic. As can be seen above, the students are aware and knowledgeable about both the possibility of using social media programs to continue their classes during the pandemic and the capability of these apps to share files (m=4.30). Furthermore, they are aware that these apps cannot be used without an internet connection (m=4.23) and that it can accommodate a large number of students during an online course (m=4.29). These apps also have a feature that allows them to deliver the lesson in a multimedia format (m=4.23).

TABLE 2: STUDENTS' PRACTICES IN USING E-PLATFORM DURING DELIVERY OF LESSON

Indicators	**N**	**Mean**	**SD**
Assuring that my smartphone is either connected to the internet or has a mobile data plan	96	4.69	0.46
I'm wearing headphones to concentrate on the lecture.	96	3.94	0.77
locating a quiet spot before the class begins	96	4.15	0.88
ensuring that my phone has a sufficient battery charge before the class begins	96	4.51	0.66
During an online class, I usually take screenshots of the most important parts of the lecture	96	4.16	0.74
I request a copy of the lesson and download it after each online class.	96	4.03	0.83

Table 2 depicts senior high school students' practices of the e-platform during online classes. Students, as shown above, ensure that their smartphone is connected to the internet or has a mobile data plan before class starts (m=4.69). Furthermore, students ensure that their smartphones have enough battery power to participate in the online class (m=4.51). During online classes, students typically took screenshots of the most important parts of the lesson (m=4.16). They also look for a quiet place to sit before the online class begins (m=4.15). After class, students frequently request a copy of the lesson (m=4.03). Finally, headphones are not required for students to participate in the event.

TABLE 3:
DIFFICULTIES AND CHALLENGES FACED BY THE STUDENTS DURING ONLINE CLASS

Indicators	**N**	**Mean**	**SD**	**interpretation**
Learning Environment at home	96	4.62	0.54	Strong Agree
Technological literacy and competency	96	4.30	0.75	Agree
Mental health problems	96	4.11	0.86	Agree
Self-regulation	96	4.35	0.68	Agree
Lack of appropriate devices	96	4.18	0.79	Agree

The challenges and difficulties that the senior high school students are experiencing during their online classes are displayed in Table 3. As can be seen above, the students firmly concurred that one of their worries while taking an online course is the learning environment at home (m=4.62). Due to factors that make it difficult for students to focus on their classes, schedules, and schoolwork, self-regulation is also a concern (m=4.35). The students also face difficulties with technological literacy and competency (m=4.30). Students also face difficulties because they lack the better and more appropriate devices needed to take part in online classes (m=4.18). Last but not least, having mental health issues while taking an online course is also a concern (m=4.11).

TABLE 4
Students Preference between Online and Physical Classes

Indicators	N	Online	%	Physical	%
Participation in classroom activities	96	12	12.5	84	87.5
Engagement with course materials	96	63	65.2	33	34.3
Instructors presence	96	9	9.3	87	90.6
Socialization and group engagement	96	2	2.0	94	97.9
School requirements completion	96	65	67.7	59	61.4

Table 4 compares senior high school students' preferences for online versus traditional classes. According to the indicators discussed above, the majority of students prefer in-person classes to online courses. Students prefer physical classes (97.9%) to online classes (2%), in terms of socialization and group participation. Additionally, students prefer having the instructor present in a physical class (90.6%) over an online one (9.3%). Additionally, more students (87.5%) participate in classroom activities in physical classes compared to online classes (12.5%). However, for a variety of reasons, including finishing school requirements (67.7%) and being engaged with the course materials (65.2%), students preferred online classes.

SUMMARY AND DISCUSSION

As a result of school closures due to the covid-19 pandemic, there was a massive shift from physical to online classes. Mobile phones have become popular because they are required to participate in online classes. Even before the pandemic, the use of social media apps such as Zoom Meeting and Facebook Messenger became widespread due to their popularity. Students, on the other hand, are already acquainted with these social media applications, particularly Facebook Messenger, which is one of the most popular and downloaded apps on any mobile phone. However, as used in online classes, students are struggling to meet the requirements of the online classes, particularly given the technological infrastructures available in the Philippines.

The study's findings provide an understanding of the students' awareness and knowledge, practices, as well as the difficulties and challenges faced by MSU LNCAT senior high school students during school closure due to the covid-19 pandemic. The data above clearly shows that the majority of students were aware of the possibility of switching to online classes via social media apps in order to continue their studies. They are also aware of the technical requirements for using these apps as a substitute for traditional classroom instruction. Because of the popularity and widespread use of these apps, students had already acquired skills and mastery in their use prior to the Covid-19 pandemic. As a result, using these apps appears adaptable.

Except for wearing headphones during online class, the students' practices in using social media apps during online class yielded positive results from the indicators. The majority of the indicators listed above received positive responses, most likely as a result of their daily use of mobile phones for online socialization. Prior to the pandemic, the students had been practicing techniques that they can now use in their online class.

However, there are challenges and difficulties that students face while taking online classes. According to the indicators in table 3, the learning environment at home is one of the most concerning challenges, most likely due to the difficulty in finding a nice and quiet spot before the class begins. Technological literacy and competency, as well as self-regulation, are also issues that students face, most likely because not all students are technologically equipped with skills in using mobile phones, particularly those from remote areas of the province. Self-regulation is another issue that students face, most likely as a result of distracting factors that contribute to the focus and

attention given to online learning. The Filipino family is characterized by an extended family in which the majority of family members, including in-laws, live in the same house, which may contribute to students' lack of self-regulation while learning online. Students' mental health is also a concern as a result of the amount of time they spend on their phones throughout the day.

Surprisingly, as shown in table 4, students consistently preferred the physical class over the online class. Except for engagement with course materials and completion of school requirements, the majority of students preferred physical class. Participation in classroom activities, teacher presence, socialization, and group engagements are higher in physical classes. Students in online classes, on the other hand, prefer engagement in course materials, most likely because they are already using their mobile phones to view and study course materials. Completing school assignments is also preferred in online classes because students are already using their mobile phone, which contains dedicated apps for technical processes, to complete such assignments. Because most software is now available on mobile devices, mobile phones today are very similar to personal computers. They can use these apps to process and complete their schoolwork.

CONCLUSION

In times of a global health emergency like the covid-19 pandemic, there is a likelihood that large-scale use of electronic learning platforms will replace traditional classroom settings. Government policies like school closures and social distancing policies caused significantly negative effects on educational institutions. Both teachers and students are carrying the weight of trying to keep their classes going in any way they can. However, government infrastructures are insufficient to meet the needs of educational institutions in order for them to continue operating. This study concludes that students were aware of the social media apps used in online learning; yet, there is a need to increase schools' support for online learning, particularly in terms of pedagogy. School administrators should also maintain a positive attitude toward online learning, especially because some schools are still in the online mode due to circumstances such as student distance from the school. Students should also stay up to date on new upgrades to the apps used for online learning so that they can fully utilize the apps' capabilities.

REFERENCES

Adnan, M., & Awar, K. (2020). Adnan, M., & Anwar, K. (2020). Online Learning amid the COVID-19 Pandemic: Students' Perspectives. *Journal of Pedagogical Sociology and Psychology, 2*(1), 45-51. Retrieved from https://eric.ed.gov/?id=ed606496

Cuaton, G. P. (2020). Philippine Higher Education Institutions in the Time of COVID-19 Pandemic. Romanian Journal for Multidimensional Education/Revista Romaneasca Pentru Educatie Multidimensionala, 12. https://web.s.ebscohost.com/abstract?direct=true&profile=ehost&scope=site&authtype=crawler&jrnl=20667329&AN=143717866&h=Tj4yXI9faasZ17Lrn2KbrzM%2frfHGEavW4s%2bEwwtYV7GSMH%2bYKsubqWNUAuHFUn%2fSAjBAhhxMt%2ffvYVwbWjm4lA%3d%3d&crl=c&resultNs=AdminWebAuth&resultLocal=ErrCrlNotAuth&crlhashurl=login.aspx%3fdirect%3dtrue%26profile%3dehost%26scope%3dsite%26authtype%3dcrawler%26jrnl%3d20667329%26AN%3d143717866

Dhawan, S. (2020). Online learning: A panacea in the time of COVID-19 crisis. *Journal of educational technology systems, 49*(1), 5-22. doi:https://doi.org/10.1177/0047239520934018

Georgia Spiliotopoulou (n.d.). Reliability reconsidered: Cronbach's alpha and paediatric assessment in occupational therapy. Retrieved from http://dspace.brunel.ac.uk/bitstream/2438/3260/1/Reliability%20reconsidered%20BURA.pdf

Harefa, S., & Sihombing, G. (2022). Students' perception of online learning amidst the Covid-19 pandemic: A study of junior, senior high school and college students in a remote area. *F1000Research*, 10. doi:10.12688/f1000research.52152.2

Jalli, N. (2020). Lack of internet access in Southeast Asia poses challenges for students to study online amid COVID-19 pandemic. *The Conversation, 17*. Retrieved from https://theconversation.com/lack-of-internet-access-in-southeast-asia-poses-challenges-for-students-to-study-online-amid-covid-19-pandemic-133787

Mishra, L., Gupta, T., & Shree, A. (2020). Online teaching-learning in higher education during lockdown period of COVID-19 pandemic. International Journal of Educational Research Open, 1, 100012. https://www.sciencedirect.com/science/article/pii/S2666374020300121

Dr. Lenin Kumar Nooney, & Mrs. Maria Carmen Lontok Vidal. (2022). Analysis of the Online Course Delivery Method: Students' Perspective. *Researchers World - International Refereed Social Sciences Journal*, *13*(01), 01–16. Retrieved from https://www.researchersworld.com/index.php/rworld/article/view/2149

Yusuf, B. N., & Ahmad, J. (2020). Are we prepared enough? A case study of challenges in online learning in a private higher learning institution during the Covid-19 outbreaks. *Advances in Social Sciences Research Journal, 7*(5), 205-212. doi:DOI:10.14738/assrj.75.8211

USE OF SOCIAL MEDIA FOR PROMOTIONAL PURPOSES IN TOURISM: THE EXAMPLE OF THE MINISTRY OF TOURISM AND ENVIRONMENT OF THE TURKISH REPUBLIC OF NORTHERN CYPRUS

Feride Baykara
Girne American University, Girne, North Cyprus
feridebaykara@gau.edu.tr

Azmiye Yinal
Akdeniz Karpaz University, Lefkoşa, North Cyprus
azmiye.ynl@gmail.com & azmiye.yinal@akun.edu.tr

ABSTRACT
Today, with the development of technology, the methods, tools and techniques used by public and private sector organizations in public relations have begun to change. In addition to the private sector, public institutions and organizations also actively use social media. It has become obligatory to use social media to share the work done with the public, create public opinion, inform the public and get the support of the public. How social media is actively used for communication, interaction, feedback and persuading the target audience is also important. Institutions that actively use social media have a greater chance of being successful today. Institutions need to give more importance to social media, whose agenda-setting features and influence are increasing day by day. This study aims to reveal how social media is used for promotional purposes. For this purpose, how the TR Ministry of Tourism uses Facebook, Instagram and Youtube has been examined. Pages were scanned between September and October 2022 to reveal how and for what purpose the Ministry uses these tools. The data obtained by creating a coding scale were analyzed and the findings were interpreted. As a result of the study, it has been determined that the ministry uses social media as a one-way communication tool within the framework of informing the public, the routine activities of the ministry are shared on social media and it is not used for promotion of the country's historical, cultural and touristic values.
Keywords: TR Ministry of Tourism, social media, Facebook, Instagram, Youtube.

INTRODUCTION

Today, rapid changes in social and economic fields, depending on the developments in the field of technology, affect business life and some of the professional knowledge loses its validity over time. In addition, the new information that emerges changes the functioning of the systems, making the change necessary. It is not possible for businesses that cannot keep up with the changes in today's business environment to maintain their competitive structure. The most effective way to keep up with change is “education” (Lesinger Şahoğlu & Yinal, 2019).

It is now much easier and cheaper to obtain information in a world that has become a global village. People actively use the internet to shop, take a vacation, and visit countries with tourism and cultural values. People who follow the comments about the holiday destinations and the evaluations about the hotels on the internet, therefore on social media, make their decisions based on the comments they read and the ratings of the evaluated hotels. Therefore, the private sector and public institutions and organizations operating in the field of tourism have to update and follow their websites and social media pages more (Özdemir, 2003).

The tourism sector has grown rapidly in recent years and is an important source of income, especially for developing countries such as the Turkish Republic of Northern Cyprus. The tourism sector, with its features, carries developed industrial centres to rural centres and significantly contributes to rural areas' development. Tourism, which has vital importance throughout the world, is an important industry for many countries in terms of ensuring peace between countries, contributing positively to the balance of payments, and employment opportunities and contributing to the area where the promotion is carried out. (Avcikurt and Erdem, 2005).

Giving the necessary importance to tourism, which is very important in supporting and developing the economies of the countries, imposes responsibilities on both public and private sector organizations. It is important to use social media activities while fulfilling this responsibility. Because social media, which is easily accessible to everyone, needs to be used consciously (Safakli, 1998). Social media, which has become an important tool to reach the target audience, also has a huge promotional role. Social media, which is important for reaching the target audience, also offers the advantage of two-way communication. Social media also provides organizations with great tips for measuring the reaction of their audience. Organizations can guide their work by reviewing the complaints, suggestions, and positive or negative comments from the target audience or the public through social networks, taking action by considering the response and following the acclaimed works from the critics. The

correct use of social media, which is so important in both the private sector and public institutions, provides benefits to institutions (Çavuşoğlu & Çavuşoğlu, 2018).

This study reveals the use of social media for promotional purposes. The TR Ministry of Tourism and Environment was chosen for the study. A coding chart was created to determine how the Ministry uses social media (Facebook, Instagram and Youtube). The coding chart was created by scanning the literature and examining the social media contents of the ministry. Content analysis was made through the questions created, the data obtained were evaluated and the findings were interpreted.

PROMOTION AND TOURISM CONCEPTS

The phenomenon of tourism is a system that concerns and affects every part of society. The desire of people to see different places and the desire to know different cultures can be evaluated within the tourism system, as well as travels organized for very different purposes from time to time, finding themselves in the definition of tourism. People have been travelling to many different places for many different purposes over the years. Among them are sea-sand-sun tourism just for vacation and relaxation, as well as cultural tours that help to see different regions, values and social differences. However, today's changing world standards and expectations have also directly affected tourism and given new forms to tourism. These reasons are; the development of industry, increase in welfare level and increase in per capita national income (Kazancı, 2011).

According to Ryan, many approaches can be taken to understand the nature of tourism. The first of these is the acceptance of tourism as an economic activity and industry (Ryan, 1991). Or tourism according to Konstanty; is the sum of phenomena and relationships created by travels that do not aim to earn income by living in a place or area (Konstanty, 1993). The search for a definition of tourism has become a subject that is more and more dealt with as time passes, depending on the rapid technological development, and political and economic transformation in the world. Emphasizing the benefits of tourism beyond the use of leisure time are emphasized in the definitions of tourism. (Rızaoğlu, 2004).

It is possible to see a copy of Konstanty and Ryan's point of view, especially considering the functioning and service understanding of the tourism sector in today's TRNC. Uneven construction, the fact that infrastructure services cannot meet the potential in tourism activity, the total number of tourists rather than the service standard and the plans for profit maximization have started to drag the country's tourism into a bottleneck. Although there are many different opinions about whether business travel activities can be evaluated within the scope of tourism; If the purpose of the trip is to generate income and there is no activity such as turning it into reality, travel for business purposes should be considered within the scope of tourism. For example; to finalize a job or for a conference, panel, congress, etc. Travels for activities are among the tourism activities (Özdemir, 2003).

To promote tourism and cultural values, to raise awareness, and to arouse special interest. Tourism includes social, psychological, cultural and economic interests that facilitate the purchase of goods and services by tourists, provide information and create an image in the mind. The field of tourism in Belgium and abroad is a media event. Every travel facility and organization has specific goals. These organizations aim to promote the touristic assets of the country to achieve their goals. The aims and results of tourism promotion are presented as follows (Tolungüç, 1990):

- If there is an increase in domestic tourism, it can increase the growth rate.
- It helps to remember names, events and places while conveying information.
- It can create a long tradition of tourist migration to the country.
- It can reduce the impact of various negative rumours on tourism.

Social Media and Tourism Relationship

Thanks to the internet, it is possible to reach a large number of target audiences in a short time, the satisfaction or dissatisfaction of the target audience with the company or product can be learned in a short time, and the ability to train, create and transmit information, target the target audience in a short time at a lower cost. As the internet changes how businesses and brands communicate with consumers, social media influences how business is run in many ways. Businesses use social media to reach existing customers, gain new customers, build trust, increase brand awareness and protect brand image (Mills, 2012).

Social media can create information exchange among social units such as individuals, groups and organizations, provide users with the opportunity to share information, thoughts, interests and information, and individuals can create content on social media. Social media, which is considered to be a wide-ranging network that includes blogs, chat rooms, consumer e-mail, product and service evaluation websites, social networking sites, and forums, has a wide range of influences from shopping to politics, from sports, support to activism, from cultural events to voting

behaviour. and the political information process, it shapes many activities and ways of doing business and affects many attitudes and behaviours in social life (Pelenk, 2011).

Social media, which provides an environment where participants can communicate naturally, sincerely and mutually, is also a medium where users can produce content. Social networks are online platforms where users can create profiles, share their comments on written information, share information and maintain communication with people they are connected to (Şafakli & Erkut, 2002).

Social media has greatly affected the tourism and travel industry due to the internet, which has changed the private sector as well as public institutions and organizations in terms of business conduct. Social media has become one of the most effective tools for tourism businesses. Individuals who want to choose any place as a destination can realize their holiday planning through social media, access the information they need, and obtain opportunities such as searching, finding and sharing the information they need for the selection of tourism-related products and destinations (Dina & Sabou, 2012).

People who will participate in touristic activities share their travel experiences, the photos and videos they took during their travels, and the comments they made about their travels on social networking sites. Tourists, who show great interest in shared experience and information, make their travel decisions by being influenced by these shared contents (Atadil, 2011).

In Türkcan's study (2017), 47.5% of the participants stated that they would share their positive or negative experiences about the touristic accommodation facility they preferred through social networks. They listed them as sharing photos and videos that would be pleasant.

In a study conducted by Çakır and Yalçin (2012) in 33 countries, it was researched how people are affected when making holiday and travel decisions. In the study between 2009 and 2011, it was found that people cared most about friend recommendations with 27% when making their holiday decisions, secondly, they used the internet with a rate of 24% in all three years, thirdly personal experiences, fourthly tour agencies, and fifthly brochures. /magazine, and sixthly, they were affected by the media. In another similar study, the effect of social media on holiday preferences was investigated, and it was determined that 32.3% of young people were affected by social media before and changed their holiday schedules.

Another study was conducted with 181 academicians. It accounts for 26% of the academics' behaviours about choosing a holiday destination, 27% of their behaviour about choosing a travel agency, and 28% of their behaviour about choosing an accommodation business. social media has been determined to represent (Aymankuy et al., 2013).

However, it has also been revealed in the studies that social media is not used consciously and is result-oriented in tourism activities. In the study on this subject, it was determined that only 48 of the tourism directorates in the Turkish Republic of Northern Cyprus have Facebook sites. In the study, it has been determined that the directorates do not use the Facebook site, which is one of the most important social media tools, enough, and the Facebook site is mostly used to share photos of the destination, to direct them to their web sites, and to provide contact information such as address and telephone (Çavuşoğlu & Çavuşoğlu, 2018).

The TR Ministry of Tourism, which makes its official promotion via http://turizm.gov.ct.tr/, does not promote official tourism through social media, except for a few special applications. There is a page called "TRNC Ministry of Tourism and Environment" on Facebook and Instagram regarding the promotion of TRNC on social media.
It is important that institutions operating in the tourism sector conduct studies by taking the practices of the most visited countries for tourism purposes as an example. Getting tourists to share their experiences on social media will be a real promotional activity and will encourage and accelerate the arrival of other tourists. Encouraging tourism consumers to share their travel and accommodation experiences on social networking sites will positively change the perspective of the business and gain new customers. Following social networking sites closely will prevent possible negative sharing for businesses and will help prevent the loss of potential customers.

METHOD

This study aims to reveal how the TR Ministry of Tourism uses Facebook, Instagram and Youtube, which are social media tools. Qualitative and quantitative content analysis was conducted to determine how the Ministry uses social media. Document analysis/analysis was carried out in the research, which has a descriptive character in the scanning model (Yıldırım & iimşek, 2011). Content analysis is a research technique that makes objective, systematic and quantitative descriptions of the specific (written or explicit) content of the communication. Content

analysis is the classification and summarization of verbal and written data, and categorizing of certain variables or concepts in the data to measure and make sense of them (Böke, 2009).

The questions of the study were formed as follows:
• What is the distribution of the messages shared by the TR Ministry of Tourism and Environment?
• Which visuals does the Ministry use on social media?
• What is the distribution of the Ministry's domestic and international activities?
• What are the contents of the messages shared on social media?
• Does the Ministry use social media as a two-way communication tool?
• Does the Ministry use social media for promotional purposes?

The study was limited to September-October 2022. Since the contents shared by the Ministry in other months were not different, 2 months were chosen randomly. In these 2 months, how the TR Ministry of Tourism and Environment uses Facebook, Instagram and Youtube, whether there are promotional activities, the content of the photos and texts used, the number of likes, and the content of the comments were examined by the content analysis method. The data obtained with the coding scale consisting of the above questions were analyzed and the findings were determined.

RESULTS

The official Facebook page of the TR Ministry of Tourism and Environment was opened in 2011. The Ministry's Facebook page includes the purpose, mission and general information of the TR Ministry of Tourism and Environment. The Instagram account of the TR Ministry of Tourism and Environment is approved. In the distribution of the Ministry's social media tools and the number of messages, in September and October 34.5% (n=96) were on Facebook, 44.6% (n=124) on Instagram and 20.9% (n=58) were on YouTube. shared has been found. A total of 278 messages were shared in 2 months. Most messages were shared from the Instagram account (Table 1).

Table 1: social media Tools and Number of Messages

	F	**%**
FACEBOOK	96	34,5
INSTAGRAM	124	44,6
YOUTUBE	58	20,9
TOTAL	278	100

The Ministry shared the most photos with 61.5% (n=171) on social media (Facebook, Instagram and Youtube). Secondly, 33.1% (n=92) video was shared, thirdly 3.2% (n=9) poster, and fourthly 2.2% (n=6) without visual elements (Table 2).

Table 2: Images Used

	F	**%**
PHOTO	171	61,5
VIDEO	92	33,1
BANNER	9	3,2
WITHOUT VISUAL	**6**	**2,2**
TOTAL	**278**	**100**

Table 3: Distribution of Images

	PHOTO		**VIDEO**		**BANNER**		**VISUAL**		**TOTAL**	
	F	**%**	**F**	**%**	**F**	**%**	**F**	**%**	**F**	**%**
FACEBOOK	76	79,2	13	13,5	4	4,2	3	3,1	96	100
INSTAGRAM	95	76,6	21	16,9	5	4,0	3	2,4	12,4	100
YOUTUBE	0	0	58	100	0	0	0	0	58	100
TOTAL	**171**	**61,5**	**92**	**33,1**	**9**	**3,2**	**6**	**2,2**	**27,8**	**100**

Photographs were used the most in social media. The photos were shared the most on Instagram by 76.6% (n=95), and secondly by 79.2% (n=76) on Facebook. While the video took first place on YouTube with 100% (n=58), the poster was first place with 4.0% (n=5) on Instagram, and the second social media tool that used the most posters was Facebook with 4.2% (n=4). . It is seen that the Ministry uses the most photographs in its posts (Table 3).

International and domestic events were also shared on social media. It is seen that most activity is done domestically. While domestic activity was shared by 83.9% (n=104) on Instagram, it was shared by Facebook with 78.1% (n=75) in the second place and 79.3% (n=46) on Youtube in the third place. While Facebook was the social media tool with which international activities were shared the most with 21.9% (n=21), Instagram took second place with 16.1% (n=20) and YouTube was the third with 20.7% (n=12) (Table 4).

Table 4: Distribution of Domestic and International Activities

	DOMESTIC		**INTERNATIONAL**		**TOTAL**	
	F	**%**	**F**	**%**	**F**	**%**
FACEBOOK	75	78,1	21	21,9	96	100
INSTAGRAM	10,4	83,9	20	16,1	124	100
YOUTUBE	46	79,3	12	20,7	58	100
TOTAL	**22,5**	**80,9**	**53**	**19,1**	**278**	**100**

Table 5: Content of Shared Messages

	FACEBOOK		**INSTAGRAM**		**YOUTUBE**		**TOTAL**	
	F	%	F	%	F	%	**F**	**%**
Theatre	4	4,2	4	3,2	4	6,9	**12**	**4,3**
Festival	12	12,5	16	12,9	13	22,4	**41**	**14,7**
Conference	16	16,7	23	18,5	8	13,8	**47**	**16,9**
Visit	37	38,5	45	36,3	18	31,0	**100**	**36,0**
Historical	4	4,2	4	3,2	1	3,4	**10**	**3,6**
CELEBRATION/MEMORIAL MESSAGES	10	**10,4**	**10**	**8,1**	**3**	**5,2**	**23**	**8,3**
COMPETITION	3	3,1	3	2,4	0	0	6	2,1
OPERA/BALLET	3	3,1	4	3,2	1	1,7	8	2,9
OTHER	3	3,1	9	7,3	3	5,2	15	5,4
EXHIBITION	4	4,2	6	4,9	6	10,4	16	5,8
TOTAL	**96**	**100**	**124**	**100**	**58**	**100**	**278**	**100**

The Ministry shared the highest number of visit messages on social media. Messages visited by tourism-related associations, organizations, institutions and organizations or visited by the ministry ranked first with 36.0% (n=100). The Ministry was second with 16.9% (n=47) conference, third with 14.7% (n=41) festival/fair, fourth with 8.3% (n=23) congratulatory/commemorative messages, fifth with 5.8% (n=16).) and exhibitions. Other (non-tourism-related party visits and speeches) activities were respectively 5.4% (n=15) sixth, theater activities 4.3% (n=12) seventh, historical studies 3.6% (n=10) eighth, opera and ballet efficacy of 2.9% (n=8) ranked ninth. Competition events are among the messages shared on social media, with the latest 2.2% (n=6) (Table 5).

It was determined that comments were made on various subjects on the social media usage pages of the Ministry. While most comments (n=191) were made on Facebook, the second (n=85) comments were made on Instagram. In the content of the comments, the recruitment of the Ministry (in archaeology, restorer and business fields) %

Questions and comments about 34.7 (n=96) were found. In the comments made, it was stated that the interviews were not fair in general, the exams were announced late, and the Ministry was not very sensitive about this issue. The highest number of comments were shared on Facebook. While the number of people who did not like the work

of the Ministry and the messages shared on social media and criticize it was 44 on Facebook, it was 32 on Instagram. The number of people who commented on the Ministry in terms of criticism was 27.5% (n=76) in total. Criticisms are as follows:
• "The participation of the minister in a technology-related opening, the visit of institutions not related to tourism", where the Ministry conducts studies outside the subject,
• For those who do not like the messages shared on their social media account, "You could find better images, for God's sake, what is this",
• Criticism was expressed about the lack of feedback on the comments on social media, with the comments "We live in the digital age, but, interestingly, we do not get any feedback".

Table 6: Content of Shared Comments

	FACEBOOK		INSTAGRAM	
	F	**%**	**F**	**%**
HISTORICAL PLACES ARE PROTECTED	10	5,2	6	7,0
IŞRELATED QUESTIONS	74	38,8	22	25,9
CRITICISM OF MINISTRY STUDIES	44	23,0	32	37,6
THANKS FOR THE WORK	27	14,1	3	3,5
CONGRATULATIONS	27	14,1	14	16,5
OTHER	9	4,8	8	9,5
TOTAL	**191**	**100**	**85**	**100**

Some followers write positive comments about the work of the Ministry. The following comments were made for the work of the Ministry:
• Those who thank (n=30), "God help you, I love this minister, we follow your beautiful work closely, Thank God",
• Those who congratulate (n=41), "I congratulate you on your holiday, happy holidays, I congratulate you on your work",
• 10 people on Facebook and 6 people (n=16) on Instagram commented on the protection of historical, touristic and cultural values. "Let's protect our Cyprus, protect our history",
• In the section categorized as other, 17 people shared "films and messages that are not related to the ministry…" on Facebook and Instagram (n=17).

CONCLUSION

With the rapid development of technology, social media has become an indispensable part of life. In addition to traditional media, it is used for promotional purposes on social media and comes to the fore. In addition to public institutions and organizations, private sector organizations have to actively use social media for many reasons such as promoting, sharing up-to-date information with the public, keeping the pulse of the target audience, creating public opinion, and adding strength to their image and reputation. The TRNC Ministry of Tourism and Environment also shares its work on social media and informs the public about the work. With this study, it has been revealed how the ministry uses social media. In the study, Facebook, Instagram and Youtube used by the ministry were preferred. In the study, Facebook, Instagram and Youtube were examined, 278 messages were determined, and most messages were shared from Instagram. It was determined that the Ministry shared the most photos visually, and the photos of the events attended by the Minister were shared in the content of the photo. It has been determined that visit messages are given the most content. The Ministry carried out the most activities in the country. Foreign activities are given less space. Therefore, foreign activities are also rarely included in social media.

In a similar study by Cinnioğlu and Polat (2016), the social media accounts of 48 provincial culture and tourism directorates affiliated to the ministry were examined and it was found that these directorates do not use social media actively. In another similar study, the websites of local tourism offices operating in the TRNC were evaluated and it was determined that the websites were not sufficient in terms of content (Giritlioğlu, 2014). In Yatkın's study (2006), it is seen that the ministry uses social media mostly unidirectionally within the framework of the public information model. According to Peltekoğlu, social media has an important place among internet technologies in terms of enabling two-way communication, which is the ideal form of communication in public relations (2012). While social media conveys the activities of the organization to the public through various

methods, it also provides two-way communication and interaction by conveying the expectations, requests and complaints of the public to the institution. As a result of the study, it is seen that the ministry benefits from social media in one way. As a result of the study, the following recommendations are included:

• The number of promotional activities at home and abroad can be increased.
• Impressive photos of historical, touristic and cultural places should be shared on the official website of the ministry and informative messages can be created about these places.
• Comments shared on social media should be taken into account.
• Shared messages can be translated into other languages.
• Various activities can be organized to increase the number of social media followers.
• Promotions can be made using gastronomic items.
• Promotion can be made using famous people. Using these people in promotional posters can be remarkable.
• The Ministry should benefit from the two-way communication feature of social media.
• In future studies, a comparative study can be made about how the TR Ministry of Tourism and Environment and the countries that have an important position in the field of tourism use social media for promotional purposes.

REFERENCE

Atadil, H. A. (2011). Otel İşletmelerinde Sosyal Medya Pazarlaması: Turizm Tüketicilerinin Sosyal Paylaşım Sitelerine İlişkin Algıları Üzerine Bir Alan Çalışması (Doctoral Dissertation, Deü Sosyal Bilimleri Enstitüsü).

Aymankuy, Y., Tetik, N., Girgin, G. K., & Aymankuy, S. (2013). Undergraduate Students And Academicians' Views On İnternship Process İn Tourism Education (A Research İn Btıoyo) Lisans Düzeyinde Turizm Eğitimindeki Staj Uygulamasına Öğrenci Ve Akademisyenlerin Bakışları (Btioyo'da Uygulama). Journal Of Human Sciences, 10(1), 101-128.

Cakir, F. Y., & Gurgan, S. (2012). Effects Of Toothbrushing With Fluoride Abrasive And Whitening Dentifrices On Both Unbleached And Bleached Human Enamel Surface İn Terms Of Roughness And Hardness: An İn Vitro Study.

Çavuşoğlu, M., & Çavuşoğlu, O. (2018). Gastronomi Turizmi Ve Kıbrıs Sokak Lezzetleri Üzerine Bir Araştırma. Güncel Turizm Araştırmaları Dergisi, 2(Ek1), 637-651.

Dina, R., & Sabou, G. (2012). Influence Of Social Media İn Choice Of Touristic Destination. Cactus Tourism Journal, 3(2), 24-30.

Kazancı, Z. (2011). Dynamic Response Of Composite Sandwich Plates Subjected To Time-Dependent Pressure Pulses. International Journal Of Non-Linear Mechanics, 46(5), 807-817.

Konstanty, J. (1993). Hard Tooling: Cobalt Is A Diamond's Best Friend. Cobalt News, 3-5.

Lesinger, F. Y., Şahoğlu, G. P., & Yınal, A. (2019) Application Of Total Quality Management In Educational Administration: Example Of The Nicosia District. "Uluslararası Yükseköğretimde Kalite Kongresi (Icqh)" Ne, 18.

Lesinger, F. Y., Şahoğlu, G. P., & Yınal, A. Application Of Total Quality Management In Educational Administration: Example Of The Nicosia District. "Uluslararası Yükseköğretimde Kalite Kongresi (Icqh)" Ne, 18.

Mills, C. (2012). M1 And M2 Macrophages: Oracles Of Health And Disease. Critical Reviews™ İn Immunology, 32(6).

Özdemir, M. (2003)Kuzey Kıbrıs Turizmi Ve Tanıtım Ağı. Anatolia: Turizm Araştırmaları Dergisi, 14(1), 6-8.

Rızaoğlu, B. (2004). Turizmin Sosyo-Kültürel Temelleri. Detay Yayıncılık.

Ryan, M. G. (1991). A Simple Method For Estimating Gross Carbon Budgets For Vegetation İn Forest Ecosystems. Tree Physiology, 9(1-2), 255-266.

Şafakli, O. (1998). Kuzey Kıbrıs Türk Cumhuriyetinde Turizm Yatırımlarının Finansmanı.

Şafaklı, O., & Erkut, Z. (2002). Kuzey Kıbrıs Türk Cumhuriyeti'nde Özel İlgi Turizminin Karşılaştırmalı Üstünlüğü. Anatolia: Turizm Araştırmaları Dergisi, 13(1), 33-38.

Şimşek, Y. K. (2011). 2011 Erzurum Dünya Üniversitelerarası Kış Oyunlarının Erzurum Şehrine Sosyo-Kültürel Ve Ekonomik Etkisi.

Tolungüç, A., Usta, Ö., Kongresi, L. T. Ö. A., Bülteni, A. T., Seminerleri, A. A. Y., Ödülleri, T. E. H., ... & Arşivi, A. T. B. (1990). Türkiye'nin Dış Tanıtım Ve Turizm Sorunları. Ankara Üniversitesi, Basın Yayın Yüksek Okulu.

Türkcan, B. (2017). Yerli Turistlerin Turistik Konaklama Tesisi Tercihlerinde İnternet Temelli Sosyal Ağların Rolü: İzmir İli Örneği. Ege Stratejik Araştırmalar Dergisi, 8(1), 39-59.

