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EXAMINING THE RELATIONSHIP BETWEEN INTERNET ADDICTION AND AGGRESSIVE BEHAVIORS IN INDIVIDUALS WITH SPECIAL NEEDS (PARENTAL ASSESSMENT)

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Abstract

The aim of this research is to examine the relationship between internet addiction and aggressive behaviors among individuals with special needs attending special education in the Turkish Republic of Northern Cyprus (TRNC) and to determine whether this relationship varies according to various variables. A correlational survey model was employed in the study. The parents (either mother or father) of 239 individuals with special needs who were enrolled in special education schools and institutions during the 2022-2023 academic year participated in the research. With the necessary permissions obtained from the institutions, the parents who voluntarily agreed to participate were administered a "Socio-Demographic Information Form", "Parent-Child Internet Addiction Scale" and "Aggression Scale for Children Parent Form". Statistical Package for Social Sciences (SPSS) 26.0 software was used for the statistical analysis of the collected research data. Results of the study showed that internet addiction levels of individuals with special needs were low based on the total scores of the Parent-Child Internet Addiction Scale, but the Difficulty in Control subscale of the scale was found to be high. The total scores of the Aggression Scale for Children Parent Form were found to be average, while the scores of the Verbal Aggression subscale of the scale were high. Significant correlations were found between the Parent-Child Internet Addiction Scale and the Aggression Scale for Children Parent Form and its subscales. It was also found that the Withdrawal subscale scores of the Parent-Child Internet Addiction Scale predicted the scores of the Aggression Scale for Children Parent Form. The results of the study are considered significant for professionals in the field of special education, as well as for families and researchers. It is believed that this research could provide guidance for future studies in the field.

Keywords: Internet addiction, aggressive behavior, individuals with special needs.

INTRODUCTION

Individuals with special needs are those who exhibit significant differences in learning and/or physical characteristics compared to their peers (Akçamete, 2019). The type and severity of these differences determine their specific needs and requirements for special education services. Therefore, considering individual differences is crucial for the successful integration of individuals with special needs into the educational system. Taking into account these individual differences, the educational system should be organized to best meet their personal, social and educational needs (Ataman, 2011; Kara

and Nuri, 2023). In line with this approach, the term special education refers to the educational services provided to individuals with special needs (Akçamete, 2019).

When examining the fundamental objectives of special education, it is observed that it aims for individuals with special needs to benefit optimally from educational and learning opportunities, to enhance their independent living skills, to cope more effectively with external barriers and to acquire skills in various disciplines. Therefore, the identification of the educational needs of individuals with special needs and the fulfillment of these needs through specially designed programs and educators are of paramount importance (Borova, Nuri, & Bağlama, 2023). In this manner, these individuals can be more rapidly integrated into society by receiving education in behavioral, physical, sensory and cognitive domains (Tsampalas, Dimitrios, Papadimitropoulou, Vergou, & Zakopoulou, 2018).

In today's technological era, the use of the internet holds significant importance for all age groups (Arnavut, Nuri, & Direktor, 2018; Sakallı Demirok, Haksız, & Nuri, 2019). The internet offers a range of functions from accessing information to social interaction (Ceyhan, 2008). However, the widespread use of the internet has also brought about some negative consequences. Internet addiction emerges as one of these adverse outcomes, increasingly becoming a prevalent issue among individuals. Individuals with special needs exhibit noticeable differences in learning or physical characteristics compared to their peers. These individuals require special education services to integrate into the education system and be integrated into society. However, the impacts of internet use and potential addiction problems on these individuals are still not sufficiently understood (Alyanak, 2016). Providing technology-supported educational services to individuals with special needs, implementing therapies involving various methods based on the internet and facilitating access to support groups via the internet demonstrate the advantages of the internet for individuals with special needs (Altınyay, 2016; Şentürk & Keskin, 2018; Karabıyık, Nuri, Baglama, & Haksız, 2023). Additionally, acquiring skills necessary for individuals requiring special education to communicate with their social environment can be internet-based. Utilizing technology is crucial for overcoming communication difficulties and accelerating development due to the limitations associated with disabilities.

The phenomenon of internet addiction has emerged alongside the widespread use of the internet, leading researchers in this field to develop various diagnostic criteria to define this addiction. Shapira et al. (2000) defined internet addiction based on impulse control criteria and Young's pathological gambling criteria in DSM-IV (Diagnostic and Statistical Manual of Mental Disorders – 4th Edition) (Young, 2009; Shapira, Goldsmith, Keck, Khosla, & McElroy, 2000). Griffiths (2005) conceptualized internet addiction as a subtype of technology addiction and identified criteria for addictive behavior as follows: Tolerance, withdrawal, conflict, mood changes and relapse. While internet gaming disorder is included as an additional section in DSM-V (Diagnostic and Statistical Manual of Mental Disorders – 5th Edition), the debate over whether internet addiction should be recognized as a behavioral addiction has been ongoing for a long time.

Studies focusing on internet addiction reveal that individuals with internet addiction face a myriad of challenges. These studies indicate that individuals experiencing internet addiction encounter difficulties in interpersonal relationships and face hurdles in face-to-face communication. Moreover, they exhibit underdeveloped social and emotional skills, high levels of neuroticism with low self-control, a propensity towards aggressive behavior, a predisposition to engage in arguments and even resort to using derogatory language. Furthermore, they tend to experience high levels of dissatisfaction and low self-esteem, along with feelings of loneliness. Their lack of social adjustment and participation skills, associated with difficulties in adapting to work life, are also evident. Additionally, numerous studies have identified that excessive internet use leads to severe emotional loneliness (Moody, 2001; Engelberg and Sjövberg, 2004; Caplan, 2005; Kurtaran, 2008; Durak Batıgün and Kılıç, 2011; Cam & Isbulan, 2013; Bozoglan, Demirer, & Sahin, 2013; Odaci &

TIJSEG
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Berber-Çelik, 2013; Van Der Merwe, 2014; Ogelman, Körükçü, Güngör, & Körükçü, 2015). These findings emphasize the adverse impact of internet addiction on individuals' social, emotional and psychological well-being.

The social learning theory posits that aggression is not inherent to human nature but rather acquired through learning. According to this theory, aggressive behaviors emerge through reinforcement and modeling. However, experimental and observational studies on how media content containing aggression can influence behaviors in both the short and long term present a different perspective on this issue (Gümüş, Şıpkın, Tuna, & Keskin, 2015). Furthermore, it is noted that due to the lack of oversight and the ambiguity of boundaries on the internet, it has significant effects on children and adolescents, thereby rendering them more vulnerable to content containing violence (Bozkurt, Şahin, & Zoroğlu, 2016). A study conducted by Lim, Gwak, Park, Kwon, Lee and Jung (2015) found that aggression and internet addiction are mutually influencing phenomena.

In today's digital age, the accessibility and use of the internet are rapidly increasing. Particularly, adolescents and children are engaging more with the internet through social media, online games and other digital platforms. However, this rapid technological advancement poses both significant challenges and opportunities for individuals with special needs. In this context, the relationship between internet addiction and aggressive behaviors among individuals with special needs is gaining increasing importance. These individuals exhibit differences in learning and physical characteristics compared to their peers, implying that they may respond to online content and interactions with different sensitivities. It is crucial to clearly understand the relationship between internet addiction and aggressive behaviors among individuals with special needs. Indeed, compared to typically developing individuals, individuals with special needs often encounter difficulties in education, communication and social life, which may lead them to become withdrawn and consequently turn to the internet, thereby increasing their risk of addiction. Based on this, it is believed that examining the relationship between internet addiction and aggressive behaviors among individuals requiring special education from various perspectives will reveal the underlying causes of internet addiction. In this context, this research aims to investigate the relationship between internet addiction levels and aggressive behaviors among individuals with special needs attending special education schools in the Turkish Republic of Northern Cyprus (TRNC). In line with this objective, answers to the following research questions were addressed in the study.

1. What is the level of internet addiction and aggressive behaviors among individuals with special needs?

2. Is there a relationship between perceived internet addiction levels and aggressive behaviors among individuals with special needs?

3. Do perceived internet addiction scores in individuals with special needs predict aggressive behaviors?

METHOD

Research Model

This research was conducted using a correlational survey model. The correlational survey model is utilized to determine the presence and degree of variation between two or more variables. Accordingly, correlational analysis can be conducted in two ways, namely, correlation-type relationships and relationships obtained through comparison. Thus, it enables the determination of attitudes and tendencies (Creswell, 2017; Karasar, 2007).

TIJSEG
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Population and Sample

In research, the term "population" refers to the entirety to which the data obtained is intended to be generalized. In other words, the population is defined as the group that allows validity and interpretations to be made based on the results of the analyses conducted on the data obtained from the research (Büyüköztürk, 2010). The population of this study comprises the parents of individuals who continue their education in special education schools and institutions in TRNC during the 2022-2023 academic year. When it comes to sampling, it appears as a phenomenon aimed at obtaining information about existing characteristics and constitutes a limited part of the population. Indeed, sampling is a concept representing the process of selecting appropriate samples for determining and predicting existing characteristics, along with all the procedures carried out in this process (Büyüköztürk, 2010).

A total number of 239 parents (mothers or fathers) participated in the study including 102 (42.68%) parents of individuals with autism spectrum disorder, 63 (26.36%) parents of individuals with learning disabilities, 20 (8.37%) parents of individuals with intellectual disabilities, 14 (5.86%) parents of individuals with hearing impairments, 4 (1.67%) parents of individuals with physical disabilities, 2 (0.84%) parents of individuals with visual impairments, 11 (4.60%) parents of individuals with multiple disabilities and 23 (9.62%) parents of individuals with other types of disabilities who are currently enrolled in special education schools and attending educational activities in TRNC. Non-probabilistic sampling techniques, specifically the convenience sampling method, were utilized in the selection of parents (mothers or fathers) of individuals with special needs for this study. In this method, the researcher begins to form the sample by starting with the most accessible respondents until reaching the desired size of the group (Cohen, Manion and Morrison, 2005). While using the convenience sampling method, efforts were made to reach parents of children attending different special education schools to ensure strong representation of the main population. The socio-demographic characteristics of the children of the parents included in the study are provided in Table 1.

Table 1. Socio-demographic characteristics of the children.

Variable	Category	Number (n)	Percentage (%)
Age of the child	1-5 years	64	26,78
	6-10 years	89	37,24
	10 years and above	86	35,98
Gender of the child	Boy	171	71,55
	Girl	68	28,45
People the child lives with	Parents	222	92,89
	Social institution	6	2,51
	Relatives	11	4,60
Type of disability of the child	Autism Spectrum Disorder	102	42,68
	Learning Disabilities	63	26,36
	Intellectual Disability	20	8,37
	Hearing Impairment	14	5,86
	Physical Disability	4	1,67
	Visual Impairment	2	0,84
	Multiple Disabilities	11	4,60
	Other	23	9,62
	Total	239	100,00

When examining Table 2, it is observed that among the children included in the study, 26.78% were aged between 1-5 years, 37.24% were aged between 6-10 years and 35.98% were aged 10 years and above. It was found that 71.55% were boys and 28.45% were girls. Moreover, 92.89% of the children lived with their parents, 2.51% lived in social institutions and 4.60% lived with relatives. Regarding

TIJSEG
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www.tijseg.org
Turkish International Journal of Special Education and Guidance & Counseling 2025, volume 14, issue 1

their disabilities, 42.68% had autism spectrum disorder, 26.36% had learning difficulties, 8.37% had intellectual disabilities, 5.86% had hearing impairments, 1.67% had physical disabilities, 0.84% had visual impairments, 4.60% had multiple disabilities, and 9.62% had other disabilities. The socio-demographic characteristics of the parents included in the study are provided in Table 2.

Table 2. Socio-demographic characteristics of the parents.

Variable	Category	Number (n)	Percentage (%)
Participant	Mother	195	81,59
	Father	44	18,41
Age of the mother	20-30 years	66	27,62
	31-40 years	114	47,70
	41 years and above	59	24,69
Age of the father	20-30 years	34	14,23
	31-40 years	109	45,61
	41 years	96	40,17
Parents' perceptions on the child's internet addiction	Yes	135	56,49
	No	104	43,51
Child's daily internet usage time	1 hour	100	41,84
	2-3 hours	96	40,17
	4 hours and above	43	17,99
The social networks your child uses most on the phone	Game	97	40,59
	Music (Youtube, Spotify)	116	48,54
	Social networks (Facebook, Instagram, Twitter)	20	8,37
	Homework and courses	6	2,51
	Total	239	100,00

When Table 2 is examined, it is observed that among the parents included in the study, 81.59% were mothers and 18.41% were fathers. Regarding the mothers, 27.62% were between the ages of 20-30, 47.70% were between 31-40 and 24.69% were 41 years and older. Regarding the fathers, 14.23% were between the ages of 20-30, 45.61% were between 31-40 and 40.17% were 41 years and older. It was found that 56.49% of parents believed their child to be addicted to the internet, while 43.51% did not perceive their child as internet addicted. Additionally, 41.84% of the children were reported to use the internet for 1 hour, 40.17% for 2-3 hours and 17.99% for 4 hours or more. Furthermore, 40.59% of the children were found to mostly play games on their phones, 48.54% were primarily interested in music (YouTube, Spotify), 8.37% were most engaged with social media platforms (Facebook, Instagram, Twitter) and 2.51% were mostly engaged in homework or research on their phones.

Research Exclusion Criteria

- Individuals with severe disabilities (due to communication difficulties)
- Those exhibiting problem behaviors
- Forms with incomplete responses (for the reliability of the study)
- Individuals who have not yet adapted to the educational process (those who have not completed the orientation process)
- Families experiencing communication difficulties and those unwilling to participate were not included in the study.

Data Collection Tools

Socio-Demographic Information Form

The Socio-demographic Information Form was developed by researchers. It was filled out by the parents of individuals with special needs who participated in the research. The form content includes demographic information about the parents and their children who participated in the study.

TIJSEG
ISSN: 1300 – 7432
www.tijseg.org
Turkish International Journal of Special Education and Guidance & Counseling 2025, volume 14, issue 1

Parent-Child Internet Addiction Scale

The adaptation of the Parent-Child Internet Addiction Scale (PCIAT-20), originally developed by Young (1998) and subsequently adapted into Turkish by Eşği (2014), aimed to ensure its validity and internal consistency. The study included parents (mothers or fathers) of 480 children aged between 8 and 17 years residing in Tokat province, comprising 250 females and 230 males. The scale, consisting of 20 items, was structured under four different factors: Factor 1: Social Withdrawal, Factor 2: Dysfunction, Factor 3: Deprivation and Factor 4: Control Difficulty. The Parent-Child Internet Addiction Scale, a Likert-type scale, was prepared for participants to mark with options including "Not Applicable", "Rarely", "Occasionally", "Mostly", "Very Often" and "Always". It was noted that the options corresponded to scores of 0, 1, 2, 3, 4, and 5, respectively. Participants scoring 80 points or above were defined as "internet addicted", those scoring between 50 and 79 points were classified as having "limited symptoms", while those scoring 49 points or below were categorized as "symptom-free". Following the translation of the scale into Turkish by five different experts, conceptual, idiomatic, experiential and semantic criteria were compared. It was found that all five translations were consistent; however, the simplest expressions were preferred to enhance comprehensibility. After the completion of the Turkish translation, the scale was presented again to four different experts and 11 parents for validation of the understandability of the items, which were approved by both experts and parents.

Aggression Scale for Children Parent Form

The adaptation of the ASC-PF into Turkish was initially conducted by Ercan, Ercan, Ardıç and Uçar (2016) following the acquisition of necessary permissions from Psychological Assessment Resources (PAR), the developer and copyright holder of the scale. The first phase of adapting the scale into Turkish commenced with the translation of the items by two experts, one proficient in English and Turkish. The two translations were compared and discrepancies were resolved through consensus, resulting in the initial version of the ASC-PF. This initial version, along with the original scale, underwent scrutiny by an expert in the field and seven different faculty members. Following feedback from the faculty members, necessary adjustments were made and the scale was revised. Subsequently, to assess the clarity of the items and their expressions across sub-scales, three faculty members specializing in measurement evaluation and psychometrics re-evaluated the scale. Based on the experts' feedback, amendments were made to items perceived to have clarity issues, resulting in the final version of the scale. The scale was developed to measure the prevalence, frequency, variety and severity of aggressive behaviors (Ercan et al., 2016). The CSA-BPA comprises a total of 33 items and five sub-scales (verbal aggression, aggression towards objects and animals, provoked physical aggression, unprovoked physical aggression, total family aggression score). The scale was administered to the parents of 473 primary school children referred to a psychiatric clinic for diagnosis and treatment of aggressive behaviors. The validity of the scale was assessed through its relationships with criterion measures and confirmatory factor analysis was conducted to assess structural validity. Reliability was determined through internal consistency analysis. The findings yielded consistent results compared to previous studies, confirming the internal structure of the CSA-BPA through confirmatory factor analysis. The study concluded that the adaptation of the ASC-PF into Turkish yielded a reliable and valid measurement tool suitable for research and therapeutic purposes (Ercan et al., 2016).

Data Collection and Analysis

In this study, data collection was facilitated through the use of a socio-demographic information form developed by the researcher, alongside the "Family-Child Internet Addiction Scale" and the "Aggression Scale for Children Parent Form", whose applicability had been established through prior validity and reliability studies. The data collection process commenced with the completion of scale forms by the parents (either mother or father) of 239 students attending special education schools in TRNC, based on permissions obtained and voluntary participation principles between October 15,

TIJSEG
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www.tijseg.org
Turkish International Journal of Special Education and Guidance & Counseling 2025, volume 14, issue 1

2022 and March 15, 2023. Subsequently, the collected data were subjected to analysis. Statistical Package for Social Sciences (SPSS) 26.0 software was employed for the statistical analysis of research data. Statistical procedures pertaining to the sub-objectives of the study are outlined below. The reliability of responses provided by participants on the Family-Child Internet Addiction Scale and the Aggression Scale for Children Parent Form was examined through Cronbach's Alpha test, yielding alpha coefficients of 0.978 and 0.980, respectively. This high reliability coefficient indicated the reliability of the responses. Descriptive statistics were provided for scores on the Family-Child Internet Addiction Scale and the Aggression Scale for Children Parent Form. The results of the Kolmogorov-Smirnov test conducted to assess the normality of scores on the Family-Child Internet Addiction Scale and the Aggression Scale for Children Parent Form are presented in Table 3.

Table 3. Normality tests of scale scores.

	Kolmogorov-Smirnov		
	Value	**sd**	**p**
Social withdrawal	0,148	239	0,000
Dysfunction	0,115	239	0,000
Deprivation	0,129	239	0,000
Control difficulty	0,129	239	0,000
Parent – Child Internet Addiction Scale	0,113	239	0,000
Verbal aggression	0,167	239	0,000
Aggression towards objects and animals	0,195	239	0,000
Provoked physical aggression	0,193	239	0,000
Provoked physical aggression	0,238	239	0,000
Aggression Scale for Children Parent Form	0,177	239	0,000

According to Table 3, it was determined that the scores on the Parent-Child Internet Addiction Scale and the Aggression Scale for Children Parent Form did not exhibit a normal distribution. Due to the non-normal distribution of the data, nonparametric tests were employed. The Spearman test was utilized to assess the relationships between scores on the Parent-Child Internet Addiction Scale and the Aggression Scale for Children Parent Form. Additionally, the predictive capacity of Family-Child Internet Addiction Scale scores on Aggression Scale for Children Parent Form scores was investigated through multivariate regression analysis.

Research Ethics

This study was conducted in accordance with publication and research ethics. Ethical approval for this study was obtained from the Cyprus International University Scientific Research and Publication Ethics Committee under decision number EKK22-23/07/001 on January 23, 2023. Data collected from participants on a voluntary basis were treated with confidentiality.

RESULTS

This section of the study presents the findings obtained from the research. Table 4 displays the scores on the Family-Child Internet Addiction Scale and the Aggression Scale for Children Parent Form.

Table 4. Parent-child internet addiction scale and aggression scale for children parent form scores.

	n	$\bar{x}$	**SD**	**Min**	**Max**
Social withdrawal	239	7,77	6,73	0	25
Dysfunction	239	7,91	6,59	0	25
Deprivation	239	6,51	5,45	0	20
Control difficulty	239	9,45	8,36	0	30
Parent – Child Internet Addiction Scale	239	31,65	26,11	0	100
Verbal aggression	239	12,51	12,94	0	48

TIJSEG
ISSN: 1300 – 7432
www.tijseg.org
Turkish International Journal of Special Education and Guidance & Counseling 2025, volume 14, issue 1

Aggression towards objects and animals	239	3,62	4,21	0	16
Provoked physical aggression	239	5,70	6,58	0	24
Unprovoked physical aggression	239	4,71	6,61	0	24
Aggression Scale for Children Parent Form	239	26,54	28,63	0	112

When Table 4 is examined, it can be seen that participants scored an average of 7.77±6.73 points on the Social Withdrawal subscale of the Parent-Child Internet Addiction Scale, with a minimum score of 0 and a maximum score of 25. Similarly, on the Dysfunction subscale, participants obtained an average score of 7.91±6.59 points, ranging from 0 to 25. Regarding the Deprivation subscale, the average score was 6.51±5.45 points, ranging from 0 to 20, while on the Control Difficulty subscale, participants scored an average of 9.45±8.36 points, ranging from 0 to 30. For the overall Parent-Child Internet Addiction Scale, participants obtained an average score of 31.65±26.11 points, with scores ranging from 0 to 100. Furthermore, participants scored an average of 12.51±12.94 points on the Verbal Aggression subscale, 3.62±4.21 points on the Aggression towards Objects and Animals subscale, 5.70±6.58 points on the Provoked Physical Aggression subscale and 4.71±6.61 points on the Unprovoked Physical Aggression subscale of the Aggression Scale for Children Parent Form. The overall score on the Aggression Scale for Children Parent Form was found to be 26.54±28.63 points, with scores ranging from 0 to 112.

Table 5. Correlations between parent – child internet addiction scale and aggression scale for children parent form scores.

		Verbal aggression	Aggression towards objects and animals	Provoked physical aggression	Unprovoked physical aggression	**Aggression Scale for Children Parent Form**
Social withdrawal	r	0,681	0,629	0,692	0,708	0,723
	p	0,000*	0,000*	0,000*	0,000*	0,000*
	N	239	239	239	239	239
Dysfunction	r	0,673	0,629	0,682	0,688	0,712
	p	0,000*	0,000*	0,000*	0,000*	0,000*
	N	239	239	239	239	239
Deprivation	r	0,715	0,677	0,725	0,715	0,754
	p	0,000*	0,000*	0,000*	0,000*	0,000*
	N	239	239	239	239	239
Control difficulty	r	0,715	0,674	0,691	0,705	0,744
	p	0,000*	0,000*	0,000*	0,000*	0,000*
	N	239	239	239	239	239
Parent – Child Internet Addiction Scale	r	0,723	0,678	0,723	0,731	0,761
	p	0,000*	0,000*	0,000*	0,000*	0,000*
	N	239	239	239	239	239

*p<.05

TIJSEG
ISSN: 1300 – 7432
www.tijseg.org
Turkish International Journal of Special Education and Guidance & Counseling 2025, volume 14, issue 1

Table 5 presents the correlations between scores on the Parent-Child Internet Addiction Scale and the Aggression Scale for Children Parent Form. It was found that there were statistically significant positive correlations ($p<0.05$) between the general scores on the Parent -Child Internet Addiction Scale and its subscales including Social Withdrawal, Dysfunction, Deprivation and Control Difficulty, as well as the general scores on the Aggression Scale for Children Parent Form and its subscale scores including Verbal Aggression, Aggression towards Objects and Animals, Provoked Physical Aggression and Unprovoked Physical Aggression. Accordingly, as the general scores and subscale scores of the Parent-Child Internet Addiction Scale increase, the scores on the Aggression Scale for Children Parent Form also increase positively and significantly at a statistical level. This suggests that as the general scores and subscale scores of the Parent-Child Internet Addiction Scale increase, the scores on the Aggression Scale for Children Parent Form increase positively and significantly.

Table 6. Results regarding whether parent-child internet addiction scale scores predict aggression scale for children parent form scores.

	Non-standardized		Standardized	t	p	F	R^2
	β	Standard error	β			p	Adj. R^2
(Constant)	0,03	1,90		0,018	0,986		
Social withdrawal	0,79	0,50	0,19	1,600	0,111	84,637	0,591
Dysfunction	-0,11	0,53	-0,03	-0,211	0,833	0,000*	0,584
Deprivation	2,12	0,60	0,40	3,515	0,001*		
Control difficulty	0,79	0,42	0,23	1,862	0,064		

**p<.05*

Table 6 provides the results of the multivariate regression analysis examining the predictive capacity of Parent-Child Internet Addiction Scale scores on Aggression Scale for Children Parent Form scores. According to Table 6, it was determined that the scores on Social Withdrawal ($\beta=0.19$; $p>0.05$), Dysfunction ($\beta=-0.03$; $p>0.05$) and Control Difficulty ($\beta=0.23$; $p>0.05$) in the Parent-Child Internet Addiction Scale did not significantly predict the scores on the Aggression Scale for Children Parent Form. However, it was found that scores on Deprivation in the Parent-Child Internet Addiction Scale significantly and positively predicted the scores on the Aggression Scale for Children Parent Form at a statistical level ($\beta=-0.40$; $p<0.05$).

DISCUSSION and CONCLUSION

The results of the present study showed that total scores on the internet addiction scale indicate low levels of internet addiction among individuals with special needs. This result, contrary to expectations, was obtained despite the fact that individuals from various age groups and backgrounds engage in internet use for a variety of purposes (Korkmaz, 2013). It was initially assumed that this result might be applicable to the individuals comprising the research sample; however, it was unexpectedly found that individuals with special needs exhibited low levels of internet addiction based on total scale scores. Consistent with findings from a study by Korkmaz (2013), examining internet addiction among individuals with physical disabilities, the participants included in this study were also found to have low levels of internet addiction. Similarly, in a study conducted by Üdücü (2019), investigating internet addiction among individuals with and without learning disabilities, it was concluded that individuals exhibited low levels of internet addiction. The averages of the Social Withdrawal and Dysfunction subscales fell within similar ranges, with low scores on the Deprivation subscale and high scores on the Control Difficulty subscale. Müezzin (2017), in a study focusing on determining internet addiction among high school students in the Turkish Republic of Northern Cyprus (TRNC), found high levels of Control Difficulty. It can be said that the high scores obtained by individuals with special needs on the Control Difficulty subscale in the current study may stem from the fact that their internet usage levels are not completely eliminated.

Individuals with special needs exhibit average scores on the verbal aggression, aggression towards objects and animals, provoked physical aggression and unprovoked physical aggression subscales, as

well as on the overall Aggression Scale for Children Parent Form. It was found that scores on the aggression towards objects and animals subscale were low, while scores on the verbal aggression subscale were high. Caca (2020), in a doctoral thesis focusing on inclusive practices, noted that students with special needs participating in inclusive settings demonstrated high scores on the aggression towards objects and animals subscale, attributing this to the lack of engagement in leisure activities. Consequently, the low scores on the aggression towards objects and animals subscale among individuals with special needs participating in the current study may be associated with their engagement in activities. According to Moeller (2001), verbal aggression is preferred by individuals when they do not opt for physical aggression. Accordingly, individuals may intend to harm others using certain words. Therefore, it can be inferred that individuals requiring special education participating in the study prefer verbal aggression over physical aggression.

As the overall scores on the Parent-Child Internet Addiction Scale and its subscales of Social Withdrawal, Dysfunction, Deprivation and Control Difficulty increase, the scores on the Aggression Scale for Children Parent Form also increase positively and significantly at a statistical level. This phenomenon may be attributed to the possibility that individuals with internet addiction may exhibit aggressive behaviors when faced with any form of obstruction or limitation. Additionally, inadequate communication and social isolation may also be factors contributing to the escalation of individuals' levels of aggression. The findings of the study are consistent with existing research from the related literature (McRae, Stoppelbein, O'Kelley, Fite, & Smith, 2017; Carli et al., 2012; Sanbay, 2021).

It was found that scores on the Deprivation subscale of the Parent-Child Internet Addiction Scale significantly and positively predicted scores on the Aggression Scale for Children Parent Form at a statistically significant level. Deprivation is defined as the physical or emotional symptoms that occur in an individual following the sudden cessation of a substance or behavior that has become addictive (American Psychiatric Association, 2013). These effects can influence an individual's level of aggression and may also lead to experiencing stress. Toma et al. (2022) indicated that individuals experiencing deprivation may experience anger and anxiety. As the stress level of an individual experiencing deprivation increases, they may not refrain from displaying aggressive behaviors. Studies demonstrating the potential emotional consequences of internet deprivation support the research findings (Wang, Ho, Chan, & Tse, 2015; Kuss & Griffiths, 2017).

Based on the results obtained from the research, practical implications can be drawn for implementation. Informative programs on internet addiction and aggressive behaviors can be organized for parents by guidance services. These programs can offer practical strategies to parents on managing, balancing and intervening in their children's internet usage and negative behaviors. Programs focusing on enhancing emotional skills of individuals with special needs can be developed. Parents should be guided on recognizing their children's emotional needs and how to provide support for these needs. Guidance services can provide support in establishing technology usage rules that are applicable at home in collaboration with families. These rules can cover topics such as screen time, content control and regulating online interactions. Campaigns can be organized to raise social awareness about internet addiction and aggressive behaviors. Awareness-raising activities can be conducted through media channels and social media platforms. Furthermore, prospective research can be designed to longitudinally monitor changes in internet usage and aggressive behaviors of individuals requiring special education over a specified period. Research examining the effectiveness of technology education and support programs for families of individuals with special needs can be conducted. The effectiveness of these programs in intervening in children's internet addiction and aggressive behaviors can be evaluated. Expanding the scope of the study, other variables influencing the relationship between internet addiction and aggressive behaviors can be examined. For example, factors such as individuals' social skills, levels of emotional intelligence and learning abilities could be taken into account.

Ethics and Conflict of Interest

This study was conducted according to ethical and research standards. All participants participated to study were volunteers. Information about study subject, aim and researchers were given to the participants. As the authors of this study, we declare that we collected data in accordance with ethical rules during the research process and acted in accordance with all ethical rules. This study was conducted in accordance with publication and research ethics. Ethical approval for this study was obtained from the Cyprus International University Scientific Research and Publication Ethics Committee under decision number EKK22-23/07/001 on January 23, 2023. Data collected from participants on a voluntary basis were treated with confidentiality. We also declare that there is no conflict among the authors.

REFERENCES

Akçamete, G. (2019). Individuals with special needs. *Special Education and Inclusion*, *2*, 2-31.

Altınyay, Ş. (2016). Individuals with hearing impairment and technology. In *Technology-supported teaching in special education* (Ed: Eliçin, Ö.). Ankara: Vize Publishing.

Alyanak, B. (2016). Internet addiction. *Journal of Clinical Medicine Pediatrics, 8*(5), 20-24. Retrieved from: https://dergipark.org.tr/en/pub/ktpd/issue/47771/595721

American Psychiatric Association, (2013). *Diagnostic and statistical manual of mental disorders* (5th ed.). Arlington, VA: American Psychiatric Publishing.

Arnavut, A., Nuri, C., & Direktor, C. (2018). Examination of the relationship between phone usage and smartphone addiction based on certain variables. *Anales de Psicología / Annals of Psychology*, *34*(3), 446–450. https://doi.org/10.6018/analesps.34.3.321351

Ataman, A. (2011). Children with special needs and special education. In: *Children with special needs and introduction to special education* (Ed: Ataman, A.). Ankara: Gündüz Education Publishing.

Borova, M., Nuri, C., & Bağlama, B. (2023). The relationship between special education teachers' attitudes towards assistive technologies and classroom management skills. *Turkish International Journal of Special Education and Guidance & Counselling ISSN: 1300-7432*, *12*(1), 1–14. Retrieved from https://www.tijseg.org/index.php/tijseg/article/view/189

Bozkurt, H., Şahin, S., & Zoroğlu, S. (2016). Internet addiction: A current review. *Journal of Contemporary Medicine, 6*(3), 235-247. https://doi.org/10.16899/ctd.66303

Bozoglan, B., Demirer, V., & Sahin, I. (2013). Loneliness, self-esteem, and life satisfaction as predictors of Internet addiction: A cross-sectional study among Turkish university students. *Scandinavian Journal of Psychology*, *54*(4), 313-319. https://doi.org/10.1111/sjop.12049

Büyüköztürk, Ş. (2010). *Manual of data analysis for social sciences*. Ankara: Pegem Publishing.

Caca, G., (2020). *Examination of the relationship between loneliness and aggression behaviors of students attending inclusive education according to teacher views and students' drawings* (Publication No. 649598) [Master Thesis, Trakya University, Institute of Social Sciences, Edirne]. Turkey National Thesis Center. *https://tez.yok.gov.tr/UlusalTezMerkezi/*

Caplan, S. (2005). A social skill account of problematic ınternet use. *Journal of Communication*, *55*(4), 721-736. https://doi.org/10.1111/j.1460-2466.2005.tb03019.x

Carli, V., Durkee, T., Wasserman, D., Hadlaczky, G., Despalins, R., Kramarz, E., & Kaess, M. (2012). The association between pathological internet use and comorbid psychopathology: A systematic review. *Psychopathology*, *46*(1), 1-13. https://doi.org/10.1159/00033797

Ceyhan, E. (2008). A risk factor for adolescent mental health: Internet addiction. *Journal of Child and Youth Mental Health, 15,* 109-116. Retrieved from: https://earsiv.anadolu.edu.tr/xmlui/bitstream/handle/11421/14907/14907.pdf?sequence=1&isAllowed=y

Cohen, L., Manion, L., & Morrison, K. (2005). *Research methods in education (5th Ed.).* London: Routledge Falmer.

Creswell, J. W. (2017). *Research design qualitative, quantitative and mixed method approaches.* (Ed.: Demir, S. B.). Ankara: Eğiten Publishing.

Çam, E., & Isbulan, O. (2012). A new addiction for teacher candidates: Social networks. *Turkish Online Journal of Educational Technology-TOJET, 11*(3), 14-19. Retrieved from: https://files.eric.ed.gov/fulltext/EJ989195.pdf

Durak Batıgün, A., & Kılıç, N. (2011). The relationships between ınternet addiction, social support, psychological symptoms and some socio-demographical variables. *Turkish Journal of Psychology, 26*(67), 1-10. https://orcid.org/0000-0002-8278-6419

Engelberg, E., & Sjöberg, L. (2004). Internet use, social skills and adjustment. *Cyberpsychology and Behavior, 7*(1), 41-47. https://doi.org/10.1089/109493104322820101

Ercan, E., Ercan, E. S., Akyol Ardıç, Ü., & Uçar, S. (2016). Children Aggression Scale-Parent Version (CAS-P): Turkish validity and reliability study. *Anatolian Journal of Psychiatry, 17*, 77-84. Retrieved from: https://www.alpha-psychiatry.com/Content/files/sayilar/109/77-84.pdf

Eşgi, N. (2014). Adaptation of the Family-Child Internet Addiction Scale into Turkish: Validity and reliability study. *Kastamonu Education Journal, 22*(2), 807-839.

Griffiths, M. (2005). A 'components' model of addiction within a biopsychosocial framework. *Journal of Substance Use, 10*(4), 191-197. https://doi.org/10.1080/14659890500114359

Gümüş, A. B., Şıpkın, S., Tuna, A., & Keskin, G. (2015). The relationship between problematic internet use, violence trend and some demographic variables among university students. *TAF Preventive Medicine Bulletin, 14*(6), 460-467. https://doi.org/10.5455/pmb.1-1433229022

Kara, N., & Nuri, C. (2023). Determining the effect of distance education applications during the Covid-19 process on the social skills development of students requestıng special education according to the opinions of special education teachers. *Life Skills Journal of Psychology, 7*(14), 113-139. https://doi.org/10.31461/ybpd.1351838

Karabıyık, V., Nuri, C., Baglama, B., & Haksız, M. (2023). Teaching spatial concepts to children with intellectual disabilities: A comparison of simultaneous prompting presented via tablets and visual cards. *Pegem Journal of Education and Instruction*, *14*(1), 118–126. https://doi.org/10.47750/pegegog.14.01.14

Karasar, N. (2007). *Scientific research method: concepts, principles, techniques.* Ankara: Nobel Publishing Distribution.

Korkmaz, A. (2013). A research on internet addiction of physically disabled students in special education institutions. *Communication and Diplomacy, 1*(2), 161-178. Retrieved from: https://dergipark.org.tr/en/download/article-file/2154688

Kurtaran, G. T. (2008). *Examinin the variables predicted internet addiction* (Publication No. 227399) [Master Thesis, Mersin University, Institute of Social Sciences, Mersin]. Turkey National Thesis Center. *https://tez.yok.gov.tr/UlusalTezMerkezi/*

Kuss, D. J., & Griffiths, M. D. (2017). Social networking sites and addiction: Ten lessons learned. *International Journal of Environmental Research and Public Health*, *14*(3), 311. https://doi.org/10.3390/ijerph14030311

Lim, J. A., Gwak, A. R., Park, S. M., Kwon, J. G., Lee, J. Y., Jung, H. Y., & Choi, J. S. (2015). Are adolescents with internet addiction prone to aggressive behavior? The mediating effect of clinical comorbidities on the predictability of aggression in adolescents with internet addiction. *Cyberpsychology, Behavior, and Social Networking, 18*(5), 260-267. https://doi.org/10.1089/cyber.2014.0568

Moeller, T. G. (2001). *Youth aggression and violence.* New Jersey: Lawrence Erlbaum Associates Publishers.

Moody, E. (2001). Internet use and its relationship to loneliness. *Cyberpsychology and Behavior*, *4*(3), 393-401. https://doi.org/10.1089/109493101300210303

Müezzin, E. (2017). An investigation of high school students' internet addiction with respect to withdrawal, controlling difficulty, disorder in functionality and social isolation. *Sakarya University Journal of Education, 7*(3), 541-551. https://doi.org/10.19126/suje.323075

Odacı, H., & Berber-Çelik, Ç. (2013). Who are problematic Internet users? An investigation of the correlations between problematic Internet use and shyness, loneliness, narcissism, aggression and self-perception. *Computers in Human Behavior, 29*(6), 2382–2387. https://doi.org/10.1016/j.chb.2013.05.026

Ogelman, H., Körükçü, Ö., Güngör, H., & Körükçü, G. (2015). Examination of the relationship between the social skills and ınternet addiction of preschool teachers. *Journal of Theoretical Educational Science, 8*(3), 380-396. http://dx.doi.org/10.5578/keg.7677

Sakallı Demirok, M., Haksız, M., & Nuri, C. (2019). Attitudes of special education teachers towards assistive technology use. *Life Skills Journal of Psychology, 3*(5), 5-12. https://doi.org/10.31461/ybpd.500699

Sanbay, İ. (2021). *Examining the relationship between internet addiction and aggressive behavior in children* (Publication No. 656361) [Master Thesis, Istanbul Kent University Graduate Education Institute, Istanbul]. Turkey National Thesis Center. *https://tez.yok.gov.tr/UlusalTezMerkezi/*

Shapira, N. A., Goldsmith, T. D., Keck Jr, P. E., Khosla, U. M., & McElroy, S. L. (2000). Psychiatric features of individuals with problematic internet use. *Journal of Affective Disorders, 57*(1-3), 267-272. https://doi.org/10.1016/S0165-0327(99)00107-X

Şentürk, Ş., & Keskin, A. (2018). Flipped learning and some application models. *Gazi Journal of Educational Science, 4*(2), 51-60. Retrieved from: https://dergipark.org.tr/en/download/article-file/515745

Toma, R. A, Anderson, C. A., Matichescu, M., Franţ, A., Almăjan-Guţă, B., Cândea, A., & Bailey, K. (2022). Effects of media use, smart phone addiction, and adult ADHD symptoms on wellbeing of college students during the COVID-19 lockdown: Dispositional hope as a protective factor. *Frontiers in Psychology.* 13:1019976. https://doi.org/10.3389/fpsyg.2022.1019976

Tsampalas, E., Dimitrios, S., Papadimitropoulou, P., Vergou, M., & Zakopoulou V. (2018). Learning paths and learning styles in dyslexia: Possibilites and effectiveness-case study of two elementary school students aged 7 years old. *European Journal of Special Education Research, 3*(1), 25-37. https://doi.org/10.5281/zenodo.1095187

Üdücü, E. (2019). *Difference between internet addiction levels of 10-16 years old students with special learning disabilities and with have no disabilities* (Publication No. 584329) [Master Thesis, Istanbul Gelişim University Institute of Social Sciences, Istanbul]. Turkey National Thesis Center. *https://tez.yok.gov.tr/UlusalTezMerkezi/*

Van Der Merwe, P. (2014). Adolescence, internet use, social adjustment and emotional intelligence. *Mediterranean Journal of Social Sciences, 5*(23), 2327-2339. https://doi.org/10.5901/mjss.2014.v5n23p2327

Wang, C. W., Ho, R. T., Chan, C. L., & Tse, S. (2015). Exploring personality characteristics of Chinese adolescents with internet-related addictive behaviors: Trait differences for gaming addiction and social networking addiction. *Addictive Behaviors, 42,* 32-35. https://doi.org/10.1016/j.addbeh.2014.10.039

Young, K. S. (2009). Internet addiction: The emergence of a new clinical disorder. *Cyberpsycholoy & Behavior, 1,* 237-244. https://doi.org/10.1089/cpb.1998.1.237