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# Parents' perceptive regarding the effect of internet use on students with and without learning difficulties

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### **ABSTRACT**

In the recent digital era, the use of the internet worldwide has become vital in almost all fields of life, and no one can deny its significant impact on activities of different age groups. The current study investigated the effect of internet usage on students with/without learning difficulties in Jordanian primary schools from point of view of their parents. For this purpose, a questionnaire consisting of 21 items was built by the researchers including these areas: social interactions, communication, health, entertainment, learning, academic activities, behavior, and security. The targeted population was the parents of students with/without learning difficulties in public and private schools. The findings indicated that parents perceive a moderate level of effect of internet usage on their children's most activities except entertainment and security which have a high impact. Moreover, parents of students with learning difficulties perceive a positive impact of the internet in enhancing their children's learning abilities.

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## 1. INTRODUCTION

Technological advancements have influenced all activities of life; however, the education sector is not a different case. So, like all other fields implementing technologies, the use of the internet has become a vital part of the education system. It was found that the internet has a significant positive impact on enhancing the quality of education and students' learning [1], [2] as it facilitates students searching for required information related to their education and improves their knowledge. Furthermore, it facilitates the process of knowledge sharing and idea exchange among students and teachers even in remote regions. So, there is a large strong association between internet usage and student learning, however, different students have varying learning abilities, and some of them face learning difficulties as well. As a result, the use of the internet has diverse consequences on students with varying learning skills. [3].

Recently, the number of students with learning difficulties has risen dramatically, hence, most of the countries have sought to enhance the learning of this category of students [4]. Although it has been found that the majority of children with learning disabilities perform rather well on intelligence assessments, a considerable proportion of them do not obtain proper schooling due to challenges in learning math, writing, and reading skills. In fact, students with learning difficulties require extra attention, support, and assistance in learning different skills. The use of the internet has played a significant role in designing and disseminating knowledge and skills to such students [1]. The use of technology has created awareness among students as well as educators about special needs to enhance the learning abilities of such students. So like all other

students the use of the internet, if accessed appropriately, can assist in enhancing the learning of the students with learning difficulties [5].

The term learning difficulties have varying concepts due to its wide usage in different fields like education and psychology. In psychology, learning disabilities are defined as disorders in few psychological processes related to the consideration and usage of written and spoken language that eventually has a significant impact on thinking, reading, listening, speaking, spelling, writing, or arithmetic operations [6]. The concept also indulges reading difficulties, sensory impairment, and verbal aphasia [1]. Students with learning difficulties are heterogeneous; having varying characteristics so symptoms also vary among different students. However, some characteristics are found to be common and prominent in most of the students such as academic issues in writing, reading, and mathematics along with difficulties in motor perception, sensory perception, attention disorders, synergy, hyperactivity, social and emotional problems, motivation issues and memory issues [6], [7]. Such concerns have an impact on students' learning activities, and they are identified as having a stationary learning process and a lack of the necessary skills and abilities for using strategies to boost their learning. As a result, their efficiencies are underestimated since they lack significant metacognitive skills, and such perceptions impede their ability to work autonomously, particularly in academic settings [8].

Recently, the emphasis has shifted toward using technologies such as computers and the internet in education, so it has become a part of all recent educational movements and reforms; however, it also requires certain skills and abilities of users such as using computers' hardware and software, as well as searching for and understanding information and knowledge from the internet [5]. As a result of technological advancements and the increased number of students with learning disabilities, it has become necessary to investigate whether there are significant differences in the effect of internet use among students with learning disabilities and students without learning disabilities. Such research is necessary to determine if students with learning disabilities can reap the same benefits from internet use as students without learning disabilities. As a result, the current study seeks to answer the following research question: what is the parents' perspective about the effects of the use of the internet by students with and without learning difficulties in the Jordanian primary schools? By addressing this question, the current study contributes significantly to literature as well as practically in highlighting the effect of internet usage on students' learning. Since the study incorporates the viewpoints of parents, who are the primary observers of such effects, it effectively highlights the necessity and successful use of the internet in the school system for all children, including those with learning disabilities.

The use of the internet in the education process has increased many folds in recent years. It was found that the internet has a significant positive impact on the learning and outcomes of students. Most institutions implement the method of online homework so the use of the internet by students is considered a serious concern as it has significant influences on enhancing curriculum robustness and the effectiveness of lesson structures [9]. Moreover, it was found that the use of the internet enhances students' understanding of the lessons and enables them to achieve higher grades compared to traditional strategies. It has also increased students' interest in their academic activities like their lessons and homework by simplifying their task accomplishment and improving an effective interaction among students and teachers [10]. However, learning to use the internet is a challenge for some students at the initial learning stages. Students may face difficulties in learning how to search, acquire and obtain the required information through search engines along with the validity of information sources [11], such difficulties are faced by all students either having learning difficulties or not. Therefore, parents must be fully informed about the value and application of e-learning, as well as the impact of internet usage for academic purposes. As a result, parents are not only responsible for motivating and encouraging their children to learn, but they are also accountable for providing support to them by providing adequate time and facilities [1].

Children's education and learning could not be achieved by the mere contribution of their teachers unless their parents are dedicatedly involved in enhancing their children's learning. So parents also help their children using the internet to facilitate their academic learning process and they are the key observer to notice the effect of internet usage on their children's learning abilities [12]. Students' learning abilities are different in general terms but these are quite different in students with learning disabilities as compared to students without learning difficulties. Parents can better recognize and elaborate on the influence of internet usage on students' learning, whether they have learning disabilities or not [13].

Although parents provide internet facilities to their children as an effective facilitating tool in their academic learning, most of them are also concerned about the privacy issues related to the use of the internet by their children [10]. Some sites, used by their children, require accessing the personal information of users, and required data could not be accessed unless such information is provided, so they are highly concerned about the authenticity of such platforms. Hence, the privacy issue is among one of the drawbacks being considered by parents of students using the internet [9].

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Parents of students with learning difficulties need extra support in dealing with their children and in enhancing their learning abilities. However, the internet provides a solution to their problem by providing various options that motivate children's interest in the presented academic activities. The internet provides attractive videos, games, and other attractive activities that work to engage children in learning and to achieve better education. Students learn lots of things while having fun with them, which facilitates parents' efforts in enhancing their children's learning and releases their stress as well [12].

Whether typical education systems or virtual ones, parents are highly still concerned about their children's learning. The increasing usage of technologies in the academic process forced parents to facilitate their children accessing and using computers and the internet for having positive influences on their children's learning. The use of the internet is considered a facilitator for easy access to a proactive and comprehensive learning environment, and this perspective has enhanced the students' use of the internet [14]. It was found that the internet has a significant positive impact on students' learning styles and motivation [15]. As it is used as a means of information exchange and communication for users of varying age groups, therefore, it significantly influences the learning of students by enhancing their social interactions, communication, searching abilities, information circulation, personal growth, and education [10].

The use of the internet is not only good in improving the learning abilities of young students. However, it also considerably improves the learning abilities of students in pre-school classes, kindergartens, and primary schools. Instead of traditional educational activities, the use of tape recordings and movies downloaded or live streamed via the internet not only increases students' interest and motivation to learn new concepts, but it also simplifies the learning process for youngsters [16].

It was also found that the use of the internet enhances creative thinking among students due to modified digital learning environments. Recent technical learning environments enhance students' interactive and emotional dimensions of interactions through the establishment of new means of communication, enhancing its accuracy, speed, and efficiency, providing and enhancing the level of information, and assisting the communication processes. Such facilitations enhance the learning process of students and provide more learning opportunities to them [12]. Despite having several advantages of the use of the internet by students, but it has several disadvantages as well. Increased use of the internet also increases the spread of cybercrimes, facilitates weapons trafficking and drugs smuggling. Moreover, its frequent use in academic as well as routine activities leads towards addiction of its usage, along with health risks like effect on skeleton and eyesight [1]. It was also found that increased use of the internet and computers leads to psychological difficulties and poor social connections. Increased use of the internet is also found to have a significant impact on users' behavior and their interactions with people surrounding them, including enhanced violence and aggressiveness in their communication and perceptions [9]. But at the same time, all these effects vary among children depending upon their activities, age, and the number of hours spent on the computer or using the internet. So, like all other technologies having advantages and disadvantages in their usage, the use of the internet also has its pros and cons, which require keen observations and control by teachers and especially parents. It is evident that if used effectively and in an appropriate manner, the use of the internet has significant positive effects on students' learning [15].

Students with learning disability (LD) experience obstacles in a variety of tasks, and using computers and the internet is one of them. On the other hand, it has been revealed that using a computer and the internet has a substantial impact on developing writing, reading, and speaking skills. Furthermore, the internet has been shown to have a considerable positive impact on improving the learning capacities of students with learning disabilities [11]. Students with LD require appropriate support and facilitation in their learning processes and the increased use of technologies like the internet has played a significant role in providing such support and facilitation. Although students having learning difficulties have varying characteristics and different types of difficulties being faced by them, in terms of academic learning they have common issues like difficulties in learning writing skills, reading skills, math, and most importantly communication with their peers and teachers; and this may be a problem not only for students with learning difficulties, but also for students who have other types of disabilities, especially when it comes to internet use [17], [18]. Policies and different tools are introduced and implemented to indulge such students in regular classrooms. Just like its positive impact on the learning of students without difficulties in all educational stages [19], [20]. The internet was found to have a significant positive effect on enhancing the learning abilities of students with learning difficulties. Challenges faced by students with LD vary from the challenges faced by students without LD, but certain tools and techniques can facilitate them coping with their challenges without segregating them from their peers. The use of the internet is among one of the effective tools having certain advantages in enhancing learning abilities of students having learning difficulties like provision of sufficient time to grasp a new concept and creating an understanding about it [5]. Moreover, the use of the internet also facilitates students' learning process by having access to information from their homes, which allows those students to do their tasks with the help of their parents as well. Online tools available at different websites help student coping their difficulties in writing, reading, spelling, because it provides additional time to practice various activities that could not be provided at regular class settings [1].

#### 2. RESEARCH METHOD

The main research question of the current study is: what is the parents' perspective about the effects of the use of the internet by students with and without learning difficulties in the Jordanian primary schools? To find an answer to the proposed research question, the researchers developed a questionnaire consisted of 21 items, and responses are measured on three-level (Yes, no, and sometimes). Parents' perspective about the effect of internet usage on their children is measured through these items mentioning the effect of the internet on students' study time, communication with siblings, behavior, and interaction with friends, physical activities, health problems, worship, learning, and privacy. Targeted population of current research was the parents of students from private and public schools in Jordan. The sample consisted of 112 parents (51 parents of students with learning difficulties and 61 parents of students without learning difficulties).

#### 3. RESULTS

To gather the information from collected data it is statistically analyzed through SPSS and results are presented in Table 1. The table indicates the mean, standard deviation, and degree of parents' perspective about the use of the internet, for students with and without learning difficulties. It is evident from the table that the effects of using the internet on students with learning difficulties from the parent's point of view came on average to a moderate level, as the arithmetic average was (2.3007), and the arithmetic averages for all items ranged between (1.9412-2.6275), as the level of most of the skills with a moderate level. This indicates an average level of effects of Internet use on students with learning difficulties from the parents' point of view.

Table 1. Statistical results of parent's perspective

Stud	dents with	learning dif	fficulties	Students without learning difficulties				
Item	Mean	SD	Degree	Item	Mean	SD	Degree	
17	2.6275	.69169	High	17	2.6393	.75350	High	
4	2.5882	1.69913	High	20	2.4754	.82879	High	
21	2.4902	.73137	High	21	2.4098	.82416	High	
20	2.4902	.70349	High	5	2.3279	.90777	Moderate	
5	2.4902	.78416	High	6	2.2787	.87809	Moderate	
16	2.4902	.75822	High	9	2.1475	.87247	Moderate	
13	2.4118	.75303	High	2	2.1148	.77671	Moderate	
15	2.3725	.87088	High	3	2.0328	.85571	Moderate	
8	2.3725	.79902	High	16	2.0000	.98319	Moderate	
9	2.3529	.79558	High	8	1.9836	.76358	Moderate	
6	2.3333	.71181	Moderate	10	1.9672	.77389	Moderate	
1	2.2941	.80732	Moderate	1	1.9508	.86460	Moderate	
18	2.2745	.80196	Moderate	7	1.9344	.57355	Moderate	
14	2.2353	.83877	Moderate	14	1.9016	.85059	Moderate	
10	2.2157	.67272	Moderate	13	1.8852	.87747	Moderate	
2	2.1765	.84157	Moderate	15	1.8689	.95700	Moderate	
7	2.0980	.72815	Moderate	11	1.8361	.71134	Moderate	
3	2.0980	.80635	Moderate	19	1.8197	.69542	Moderate	
19	2.0196	.78715	Moderate	12	1.7541	.78858	Moderate	
11	1.9412	.61357	Moderate	4	1.7377	.75059	Moderate	
12	1.9412	.83455	Moderate	18	1.6230	.71096	Moderate	
Total	2.3007	.34213	Moderate	Total	2.57	0.49	Moderate	

On the other hand, the results mentioned in the table indicate that the effects of the use of the Internet on students without learning difficulties from the point of view of their parents came to a moderate level, as the arithmetic average was (2.57), and the arithmetic averages for all items ranged between (1.6230-2.6393), where the level of almost all skills came with a moderate level. Overall, the results indicate a moderate level of effects of internet use on students with and without learning difficulties from the parents' point of view. More question is: Are there statistically significant differences at the level ( $\alpha$ =0.05) in the effects of students' use of the internet from the parent's point of view due to the classification variable (with and without learning difficulties)? To answer this question, a t-test is conducted for independent samples to detect differences in the effects of internet use according to the classification variable (with and without learning disabilities), as shown in Table 2. The table shows that there are statistically significant differences

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in the degree of the effects of internet use on students from the point of view of parents according to the classification variable (without and without difficulties) in favor of students with learning difficulties, where the value of t is 3.714, which is statistically significant at the level;  $\alpha$ =0.05. This indicates that parents' assessment of the effects of students' use of the internet was higher among students with learning difficulties compared to students without learning difficulties, which indicates that there are negative effects that result from the use of the internet and social networking sites by students with learning difficulties.

Table 2. Results of t-test

Effect	Classification	Number	Mean	SD	T	DF	Sig.
Total	With learning difficulties	51	2.3007	.34213	3.714	110	.000
	Without learning difficulties	61	2.0328	.40904			

#### 4. DISCUSSION

The core purpose of current research is to investigate the perceptions of parents about the effect of internet usage on students with learning difficulties and students without learning difficulties. As parents are the key observers of their children so they can provide effective feedback about the effect of internet usage on their children in different aspects. So, data collected from parents of Jordanian students with and without learning difficulties provide significant information indicating a moderate level of effect of internet usage on both types of students. But analysis of individual items indicates that parents of students without learning difficulties demonstrated a high degree to the items related to the use of the internet as entertainment and cyber security. The parents indicate that the use of the internet has a moderate effect on all other aspects of their children like their communication, social interactions, and learning. However, they perceive higher effects of internet usage on children's entertainment fulfillment and cyber security. Parents perceive the negative effect of employing the internet in a way that their children are more exposed to strangers who can harm their children and their privacy. This result is consistent with the results of previous research [21]–[23], which indicate that parents are responsible for protecting their families from cyber security threats.

On the other hand, parents of children with learning difficulties respond to a moderate degree to most of the items but they respond to a high degree towards children's health issues, behavior, entertainment, cyber security, and academic learning. Although parents perceive a moderate level of effect of internet usage on various aspects of their children like social interactions and communications. They perceive a high level of effect on children's health due to decreased physical activities i.e., exercise that enhances health problems in their children. These results consisted of results from studies conducted by different scholars [24]-[29] which indicate that there are negative outcomes of internet use on children's wellbeing. As parents of children without learning difficulties, parents of children with learning difficulties also perceive a higher concern about cyber security and an increased risk of harm from strangers to their children. It was also indicated that parents perceive the use of the internet as entertainment to fill their free time and to improve their communication with their friends, so the use of the internet has a higher influence on entertainment and social interactions of students with learning difficulties. Most importantly, it is indicated that parents perceive a high degree of effect of internet usage on academic and social learning of students with learning difficulties. The findings suggest that internet users have a significant positive impact on enhancing the learning abilities of students with learning difficulties [30]. Hence, the internet can be used as an effective tool in enhancing the learning abilities of students with learning difficulties.

#### 5. CONCLUSION

Technological advancement has increased the use of the internet in education, which is found to have a significant impact on students' learning, behaviors, and other skills. On the other hand, the number of students with learning difficulties is increasing across the globe, so there is a need to explore different tools and techniques that could facilitate enhancing the learning abilities of students with learning difficulties. Parents' perception is the factor in following up their children, therefore, their opinions contribute significantly in highlighting the importance of the use of the internet and enhancing the learning of students. Statistical analysis of the perceptions of parents of both types of students indicated a moderate level of effectiveness of the use of the internet on students in most aspects such as their social interactions, behaviors with family and friends, and their social and religious activities. On the other side, a significant impact is indicated on students' physical activities, health concerns, entertainment needs, and cyber security. Parents of both categories of students report a higher level of concern about their children's security as a result of their children's increased exposure to strangers via the internet. Furthermore, parents of students with learning

disabilities discovered a significant impact of internet usage on their children's health and conduct. The internet has a major favorable impact on the learning capacities of students with learning disabilities. Parents believe that their children's learning abilities in general, as well as academic activities, are aided by internet use. The usage of the internet improves such students' academic learning, allowing them to receive a quality

The current research suggests that using the internet as an effective facilitating tool in education could improve the learning capacities of kids with learning disabilities. The current research has significant implications for parents, teachers, and other educationists about the effect of the use of the internet for enhancing students' learning abilities, especially for students with learning disabilities. More research is needed in this area to investigate the effectiveness of using the internet and other technologies to improve the learning capacities of students with learning disabilities. Other technologies, such as the internet, can also boost learning processes and abilities, but there is a need to emphasize the relevance of such technologies and their efficient implementation. The results of the current study are limited to the conditions by which the study was conducted and can be generalized only if the same conditions are employed in terms of the research method, the sample, the study tool, and the data collection analysis.

#### REFERENCES

- Z. J. Rahahleh, M. A. Sakarneh, M. A. Hyassat, and N. S. Al-Zyoud, "Internet Use among Jordanian Students with and without Learning Difficulties at Primary Schools," Journal of Educational and Social Research, vol. 11, no. 2, p. 74, Mar. 2021, doi: 10.36941/jesr-2021-0031.
- A. H. Ziadat, "Online learning effects on students with learning disabilities: Parents' perspectives," Cypriot Journal of Educational Sciences, vol. 16, no. 2, pp. 759-776, Apr. 2021, doi: 10.18844/cjes.v16i2.5656.
- S. E. Stave, A. A. Tiltnes, Z. Khalil, and J. Husseini, "Improving learning environment in Jordanian public schools," Arab [3] Renaissance for Democracy & Development, pp. 1-15, 2017.
- S. Taresh, N. A. Ahmad, S. Roslan, A. M. Ma'rof, and S. Zaid, "Pre-school teachers' knowledge, belief, identification skills, and self-efficacy in identifying autism spectrum disorder (ASD): A conceptual framework to identify children with ASD," Brain Sciences, vol. 10, no. 3, p. 165, Mar. 2020, doi: 10.3390/brainsci10030165.
- S. Ghavifekr and W. A. W. Rosdy, "Teaching and Learning with Technology: Effectiveness of ICT Integration in Schools," [5] International Journal of Research in Education and Science, vol. 1, no. 2, p. 175, Mar. 2015, doi: 10.21890/ijres.23596.
- J. W. Lerner, Learning disabilities: Theories, diagnosis, and teaching strategies. Houghton Mifflin Company, 1981.
- [7] M. A. Sakarneh and M. B. Al-Swelmyeen, "The extent to which the Jordanian inclusive basic school teachers use the constructivism theory in teaching," Journal of Educational and Social Research, vol. 10, no. 1, pp. 182-197, Jan. 2020, doi: 10.36941/jesr-2020-0017.
- T. Adam and A. Tatnall, "The value of using ICT in the education of school students with learning difficulties," Education and [8] Information Technologies, vol. 22, no. 6, pp. 2711-2726, Nov. 2017, doi: 10.1007/s10639-017-9605-2.
- A. A. Alshehri, "The perception created of online homework by a high school student, their teacher, and parents in Saudi Arabia," Journal of Education and Practice, vol. 8, no. 13, pp. 85-100, 2017.
- [10] R. H. Puspita and D. Rohedi, "The Impact of Internet Use for Students," IOP Conference Series: Materials Science and Engineering, vol. 306, no. 1, p. 012106, Feb. 2018, doi: 10.1088/1757-899X/306/1/012106.
- M. J. Erickson and K. H. Larwin, "The Potential Impact of Online/Distance Education for Students with Disabilities in Higher Education: Results from a Meta-Analytic Investigation and Existing Research," International Journal of Evaluation and Research in Education (IJERE), vol. 5, no. 1, p. 76, Mar. 2016, doi: 10.11591/ijere.v5i1.4525.
  [12] F. Begum, "Positive and negative impact of internet use- Parents' perspective," International Journal of Recent Advances in
- Multidisciplinary Research, vol. 6, no. 5, pp. 4889-4892, 2019.
- M. Almasi, H. Machumu, and C. Zhu, "Internet Use Among Secondary Schools Students and Its Effects on Their Learning," in INTED2017 Proceedings, Mar. 2017, vol. 1, pp. 2379–2390. doi: 10.21125/inted.2017.0680.
- [14] J. Castaño-Muñoz, J. M. Duart, and S.-V. Teresa, "Determinants of Internet use for interactive learning: an exploratory study," Journal of New Approaches in Educational Research, vol. 4, no. 1, pp. 24-31, Jan. 2015, doi: 10.7821/naer.2015.1.93.
- [15] F. Akar, "Purposes, Causes and Consequences of Excessive Internet Use among Turkish Adolescents," Eurasian Journal of Educational Research, vol. 15, no. 60, pp. 35-56, Sep. 2015, doi: 10.14689/ejer.2015.60.3.
- J. Castaño-Muñoz, J. M. Duart, and T. Sancho-Vinuesa, "The Internet in face-to-face higher education: Can interactive learning improve academic achievement?" British Journal of Educational Technology, vol. 45, no. 1, pp. 149–159, Jan. 2014, doi: 10.1111/bjet.12007.
- K. Fatema, S. Nasreen, M. S. Parvez, and M. A. Rahaman, "Impact of Using the Internet on Students: A Sociological Analysis at Bangabandhu Sheikh Mujibur Rahman Science and Technology University, Gopalganj, Bangladesh," Open Journal of Social Sciences, vol. 08, no. 12, pp. 71–83, 2020, doi: 10.4236/jss.2020.812007.
- R. Truzoli, C. Viganò, P. G. Galmozzi, and P. Reed, "Problematic internet use and study motivation in higher education," Journal of Computer Assisted Learning, vol. 36, no. 4, pp. 480-486, Aug. 2020, doi: 10.1111/jcal.12414.
- S. M. Ravizza, M. G. Uitvlugt, and K. M. Fenn, "Logged in and Zoned Out," Psychological Science, vol. 28, no. 2, pp. 171-180, Feb. 2017, doi: 10.1177/0956797616677314.
- [20] M. Soleymani, A. Garivani, and A. ZareFarashbandi, "The Effect of the Internet Addiction on the Information-seeking Behavior of the Postgraduate Students," *Materia Socio Medica*, vol. 28, no. 3, p. 191, 2016, doi: 10.5455/msm.2016.28.191-195.

  [21] P. Nikken and M. Schols, "How and Why Parents Guide the Media Use of Young Children," *Journal of Child and Family*
- Studies, vol. 24, no. 11, pp. 3423–3435, Nov. 2015, doi: 10.1007/s10826-015-0144-4.
  Y. R. Chassiakos et al., "Children and Adolescents and Digital Media," in Pediatric Clinical Practice Guidelines & Policies, American Academy of Pediatrics, 2021, pp. 1394-1395. doi: 10.1542/9781610020862-part05-children\_and.
- K. Muir and A. Joinson, "An Exploratory Study into the Negotiation of Cyber-Security Within the Family Home," Frontiers in Psychology, vol. 11, Mar. 2020, doi: 10.3389/fpsyg.2020.00424.

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[24] R. L. Collins *et al.*, "Exposure to alcohol advertising and adolescents' drinking beliefs: Role of message interpretation," *Health Psychology*, vol. 36, no. 9, pp. 890–897, Sep. 2017, doi: 10.1037/hea0000521.

- [25] A. John et al., "Self-harm, suicidal behaviours, and cyberbullying in children and young people: Systematic review," Journal of Medical Internet Research, vol. 20, no. 4, p. e129, Apr. 2018, doi: 10.2196/jmir.9044.
- [26] N. Stiglic and R. M. Viner, "Effects of screentime on the health and well-being of children and adolescents: a systematic review of reviews," BMJ Open, vol. 9, no. 1, p. e023191, Jan. 2019, doi: 10.1136/bmjopen-2018-023191.
  [27] E. McDool, P. Powell, J. Roberts, and K. Taylor, "The internet and children's psychological wellbeing," Journal of Health
- [27] E. McDool, P. Powell, J. Roberts, and K. Taylor, "The internet and children's psychological wellbeing," *Journal of Health Economics*, vol. 69, p. 102274, Jan. 2020, doi: 10.1016/j.jhealeco.2019.102274.
- [28] E. Chiner, M. Gómez-Puerta, and S. Mengual-Andrés, "Opportunities and Hazards of the Internet for Students with Intellectual Disabilities: The Views of Pre-Service and In-Service Teachers," *International Journal of Disability, Development and Education*, vol. 68, no. 4, pp. 538–553, Jul. 2021, doi: 10.1080/1034912X.2019.1696950.
- [29] D. D. Chadwick, "Online risk for people with intellectual disabilities," *Tizard Learning Disability Review*, vol. 24, no. 4, pp. 180–187, Sep. 2019, doi: 10.1108/TLDR-03-2019-0008.
   [30] S. Eden and T. Heiman, "Computer mediated communication: Social support for students with and without learning disabilities,"
- [30] S. Eden and T. Heiman, "Computer mediated communication: Social support for students with and without learning disabilities," Educational Technology and Society, vol. 14, no. 2, pp. 89–97, 2011.

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