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Research Article

A Study to Asses Effectiveness of Group Intervention on Parental Knowledge and Attitude Regarding Impact of Online Teaching on Physical, Psychosocial Growth and Development of School Children

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Abstract

Aim: The aim of this study was to assess the effectiveness of group intervention on parental knowledge and attitude regarding the impact of online teaching on physical, psychosocial growth, and development of school children at selected schools in Nasik, Maharashtra.

Materials and Methods: In this study, the research design adopted by the researcher is the pre-experimental research design with one group pre-test and post-test design. The proposed study was carried out at a selected school in Maharashtra. The mixed research approach and both quantitative research approaches used in the study. The sample size comprised approximately 422 Parents of children who attend the online teaching who met the inclusion criteria. The probability and purposive sampling technique has been utilized.

Results: The effectiveness of group intervention on online teaching knowledge was a mean of 6.74 and standard deviation (SD) 3.25 pre-test and mean of 13.26 and SD of 3.22 post-test. The t-test value was 29.24, df = 421, and $P < 0.00001$. The results indicate significant efficacy ($P < 0.05$). The group intervention improved attitude toward online teaching: Pre-test mean of 40.28 and SD 13.68 and post-test mean of 59.35 and SD of 22.14. The *t*-test value was 15.04, df = 421, and $P < 0.00001$. The results indicate significant efficacy ($P < 0.05$). Pre-test and post-test parental attitudes on the effects of online teaching on schoolchildren's physical, psychological, and development will be significantly effective.

Conclusion: The study's finding was concluded that after group intervention, most parents had adequate knowledge and positive attitudes about the impact of online teaching on physical growth and psychosocial development of school. The group intervention improves parents' knowledge and attitudes.

Keywords: Effectiveness, group intervention, knowledge, online learning, online teaching

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Introduction

Teaching can be regarded as a science and as an art. It stresses the teacher's artistic and creative ability in establishing a positive learning environment in the classroom for pupils to study art as a medium of expression. It is a science that explains the logical, mechanical, or procedural processes that must be taken to achieve a successful goal.[1] Online teaching is a way to educate individuals using the internet that is through

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online teaching. Individual online conversations, group video calls, and webinars are a few of the potential methods. Online learning is becoming more and more popular in the realm of modern international education, thanks to significant advancements in computer technology and improvements in internet infrastructure.[2]

Working parents benefited greatly from this because it made it easier for them to balance job and school. Many parents had able to juggle education and work due to this. Virtual PTA meetings allowed more parents to attend at lunch. The outbreak showed parents and administrators how easy it was to switch from a location-based to a home-based approach without additional expenditures.[3] According to Pew Research Center statistics from parents of K-12 students, 65% of parents are afraid that their children would fall behind academically as a result of school interruptions and online learning.

The online teaching impacted on children's development. Children do not acquire the same social benefits from online schooling as they do from interacting with peers or teachers. Families are concerned that youngsters would become socially isolated while learning online. Group projects, presentations, and class debates may be interesting for students. They lose motivation while working alone.

Parents may wonder what effect online education has on their children's mental well-being. Online learning can isolate children, leading to sadness. Children who build confidence from school may struggle without specific instructor feedback. Children may fear catching COVID-19 and exposing themselves or others. They may have diseased or deceased relatives. Due to COVID-19, several parents have lost their jobs or money, causing stress on the whole family, including children.[4]

Parents struggle to optimize the advantages of internet use while reducing the hazards for young children and teens.[5] About 60% of parents worry about their kids' ability to keep up social relationships. About 59% of parents are concerned about the emotional health of their kids.[6] Parents' attitudes, knowledge, and experience with the internet have an impact on their impression of virtual classes, which are increasingly the norm. Furthermore, technology is limited to the most vulnerable members of society.[7]

Objectives

The objectives of this study were as follows:

- To assess pre-intervention knowledge regarding the impact of online teaching on the physical growth and psychosocial development of school children
- To assess pre-intervention parental attitude regarding impact of online teaching on physical growth and psychosocial development of schoolchildren
- To provide group intervention regarding physical growth and psychosocial development of school children
- To assess post-intervention knowledge regarding the impact of online teaching on the physical growth and psychosocial development of school children
- To assess post-intervention parental attitude regarding the impact of online teaching on the physical growth and psychosocial development of school children.

Hypothesis

- H_0-There will be no significant difference in pre-intervention and post-intervention knowledge regarding the impact of online teaching on physical growth and psychosocial development of children at 0.05 level of significance
- H_1-There will be a significant difference in pre-intervention and post-intervention knowledge regarding the impact of online teaching on physical growth and psychosocial development of children at 0.05 level of significance
- H_{02}-There will be no significant difference in pre-intervention and post-intervention attitude regarding the impact of online teaching on physical growth and psychosocial development of children at 0.05 level of significance
- H_2-There will be a significant difference in pre-intervention and post-intervention attitude of parents regarding the impact of online teaching on the physical growth and psychosocial development of children at 0.05 level of significance.

Materials and Methods

Research design

In this study, research design adopted by the researcher is the pre-experimental research design with one group pre-test and post-test design approach in which the investigator evaluates the effect group intervention on parental knowledge and attitude regarding the impact of online teaching on physical psychosocial growth and development of school children.

Research approach

The researcher adopted the mixed research approach both quantitative research approaches for the study.

Population

Target population

Parents of children who attend the online teaching.

Accessible population

Parents of school children who attend the online teaching at Fravashi Academy school, Nasik District.

Setting of the study

The proposed study was carried out at a selected school in Maharashtra.

Sampling size and technique

The probability, purposive sampling technique has been utilized to meet criteria for selection and was chosen according to their availability. The sample size comprised approximately 422 parents of children who attend the online teaching.

Variables

Independent variable

Group intervention on parents regarding the impact of online teaching.

Dependent variables

Knowledge and attitude of parents regarding the impact of online teaching on physical and psychosocial growth and development.

Extraneous variable

Is sociodemographic variables.

Criteria for the sample collection

Inclusion criteria

The following criteria were included in the study:

- Parents of children from the age group of 6 to 12 years
- Parents of children who are attending online teaching at selected school
- Parents of children who are assisting their children with online teaching
- Parents who are willing to participate in the study and understand English language.

Exclusion criteria

The following criteria were excluded from the study:

- Parents who are not willing to participate
- Parents who are absent during the period of data collection.

Results

Table 1 shows that the majority of samples 178 (42%) belong to the 8.1–10 years age group. The majority of samples 235 (56%) were male. Two hundred and sixty-eight (63%) samples belong to 4th and above standard. Samples 250 (59%) were interested in online teaching and 172 (41%) were not interested in online teaching. The samples 193 (46%) having height between 65.1 and 70 cm majorly. Most of the samples 178 (42%) having a weight between 10.1 and 12 kg. The majority of samples 181 (43%) having a body mass index in the overweight category. Samples (parents) 208 (49%) belong to 25.1–30 years of age. The majority of samples of parents 280 (66%) were male and 142 (34%) were female. Most of the samples 257 (61%) were father. The majority of the education status of parents 269 (64%) were graduate. Occupation status of parents 130 (31%) were housewife. The majority of samples 145 (34%) were having income between 21,001 and 30,000 Rs. Majorly 280 (66%) samples did buy new mobile/gazette. Most parents 239 (57%) did not afford online teaching and 183 (43%) did afford online teaching. The majority of samples 198 (47%) somewhat satisfied followed by 123 (29%) did not satisfied with online learning and 101 (24%) satisfied with online teaching is helpful for your child.

Table 2 depicts that, pre-interventional knowledge level, the majority of 316 (75%) of the sample having inadequate knowledge, followed by 98 (23%) having average knowledge level and 8 (2%) having adequate knowledge level regarding the impact of online teaching on physical growth and psychosocial development of school children.

Table 3 depict that, pre-interventional attitude level, the majority of 353 (84%) sample having a negative attitude and

Table 1: Frequency and percentage distribution of demographic variables (n=422)

Characteristics	Category	Respondents	
		Frequency	%
Age of child (years)	6–8 years	130	31
	8.1–10 years	178	42
	10.1–12 years	114	27
Gender of child (years)	Male	235	56
	Female	187	44
	Total	422	100
Standard of studying	1st std.	105	25
	2nd and 3rd std.	49	12
	4th and above std.	268	63
Interested in online teaching	Yes	250	59
	No	172	41
Height in cm	<60	97	23
	60.1–65 cm	79	18
	65.1–70 cm	193	46
	70.1–75 cm	43	10
	75.1 cm and above	10	3
Weight in kg	6–8 kg	78	18
	8.1–10 kg	164	39
	10.1–12 kg	178	42
	12.1kg and above weight	02	1
BMI status	Underweight	70	16
	Normal range	168	40
	Overweight	181	43
	Obese	03	1
Age in year	18–20 year	19	4
	20.1–25 year	83	20
	25.1–30 year	208	49
	30.1 year and above	112	27
Gender	Male	280	66
	Female	142	34
Relation of the parent	Mother	125	30
	Father	257	61
	Grandmother	17	4
	Grandfather	23	5
Educational status of parents	Primary	00	00
	Secondary	35	8
	Graduation	269	64
	Post-graduation and above	118	28
Occupation status of parents	Farmer	45	11
	Housewife	130	31
	Government employee	85	20
	Private employee	107	25
	Business	55	13
Monthly income of parents	<15,000 Rs.	100	24
	15,001–20,000 Rs.	104	25
	21,001–30,000 Rs.	145	34
	30,001 Rs. and above	73	17
Need to take new mobile/gazette for online teaching	Yes	255	60
	No	167	40
Online teaching is affordable	Yes	183	43
	No	239	57
Parents opinion regarding online teaching is helpful for your child	Yes	101	24
	Somewhat	198	47
	No	123	29

69 (16%) had a positive attitude regarding impact of online teaching on physical growth and psychosocial development of school children.

Table 4 depicts that, post-interventional knowledge level, the majority of 249(59%) of sample having adequate knowledge level followed by 135(32%) having average knowledge level and 38(9%) having inadequate knowledge level regarding the impact of online teaching on physical growth and psychosocial development of school children.

Table 5 depicts that, post-interventional attitude level, majority of 247 (59%) sample having positive attitude and 175 (41%) had negative attitude regarding impact of online teaching on physical growth and psychosocial development of school children.

Table 6 depicts the effectiveness of group intervention on knowledge level regarding the impact of online teaching where findings pre-test shows mean of 6.74 and SD of 3.25, whereas post-test shows mean of 13.26 and SD was of 3.22, respectively. The *t*-test value was 29.24 with df was 421 and $P < 0.00001$. The results show significant effectiveness ($P < 0.05$).

Table 2: Assessment of pre-intervention knowledge level (*n*=422)

S. No.	Pre-intervention level of knowledge	Frequency	Percentage	Mean	SD
1.	Adequate	08	2	14.87	0.83
2.	Average	98	23	10.96	1.41
3.	Inadequate	316	75	5.22	1.98

SD: Standard deviation

Table 3: Assessment of pre-interventional attitude level (*n*=422)

S. No.	Pre-intervention level of attitude	Frequency	Percentage	Mean	SD
1.	Positive attitude	69	16	35.62	8.67
2.	Negative attitude	353	84	64.13	8.92

SD: Standard deviation

Table 4: Assessment of post-intervention knowledge level (*n*=422)

S. No.	Post-intervention level of knowledge	Frequency	Percentage	Mean	SD
1.	Adequate	249	59	15.54	1.21
2.	Average	135	32	11	1.41
3.	Inadequate	38	9	6.42	1.10

SD: Standard deviation

Table 5: Assessment of post-interventional attitude level (*n*=422)

S. No.	Post-intervention level of attitude	Frequency	Percentage	Mean	SD
1.	Positive attitude	247	59	75.10	14.14
2.	Negative attitude	175	41	37.12	7.40

SD: Standard deviation

Table 7 depicts the effectiveness of group intervention on attitude level regarding the impact of online teaching where findings pre-test shows a mean of 40.28 and SD of 13.68, whereas the post-test shows a mean of 59.35 and SD was 22.14, respectively. The *t*-test value was 15.04 with df was 421 and $P < 0.00001$. The results show significant effectiveness ($P < 0.05$), that is, there will be significant effectiveness between pre-test and post-test parental level of attitude regarding the impact of online teaching on physical, psychosocial growth, and development of school children.

Discussion

The researcher found that there had been a noticeable increase in parents' knowledge and attitude regarding the impact of online instruction on physical and psychological growth and development following the intervention after analyzing and interpreting the sample data. The discussion was solely based on the objectives and hypotheses specified in this present study.

These findings were supported by a study in which it was found that perceived gain and loss were subjective dimensions for parents, and instructor impact and online comments were social factor dimensions. The research looked at how parents felt about online learning for middle school students. Perceived value has the biggest impact on parents' attitudes toward secondary school pupils using online learning platforms. Perceived risk has a negative and significant effect on parents' attitudes, whereas perceived usefulness and platform knowledge have a positive and significant impact. In the area of social variables, teachers have a favorable impact on parents' attitudes, and online comments can control how much perceived value influences parents' attitudes.[8]

A study on the effects of online learning on students' education and health. The survey found that, despite being a viable alternative to traditional classroom instruction during this difficult pandemic moment, online teaching and learning have a number of drawbacks and negative impacts as well. Hence, while it might be a short-term answer to handling and

Table 6: Evaluation of effectiveness of group intervention on the parental level of knowledge regarding the impact of online teaching on physical, psychosocial growth, and development of school children (*n*=422)

Test	Mean	SD	*t*-test	DF	*P*-value	Result
Pre-test	6.74	3.25	29.24	421	<0.00001	Significant
Post-test	13.26	3.22				

Table 7: Evaluation of effectiveness of group intervention on parental level of attitude regarding the impact of online teaching on physical, psychosocial growth, and development of school children (*n*=422)

Test	Mean	SD	*t*-test	DF	*P*-value	Result
Pre-test	40.28	13.68	15.04	421	<0.00001	Significant
Post-test	59.35	22.14				

fulfilling academic responsibilities, it will never be a long-term alternative for the traditional way of teaching and learning.[9]

Researchers looked at how parents' attitudes affected their children's learning effectiveness. When controlling for parents' age, gender, and how long their children had been learning online, the mediating role of parental self-efficacy demonstrates that (1) parents' attitudes toward online learning (PATOL) and parents' self-efficacy (PSE) were both negatively correlated with perceived online learning ineffectiveness (POLI), whereas PATOL was positively correlated with PSE, and (2) the interaction between PATOL and POLI was mediated by PSE. The study also addresses how to help parents support their kids' at-home, online learning. Schools should provide parents with the appropriate instruction. Parents can receive direction and help on how to set up a setting that is suitable for their children's online learning.[10]

According to a systematic review conducted on the COVID-19 pandemic's potential impact on child growth and development. Epidemics can cause parents and kids to experience elevated amounts of stress, which starts with worries about kids getting sick. Only a few of the possible psychological and emotional impacts of pandemics such as COVID-19, H_1N_1, Ebola, and AIDS include depression in children, anxiety disorders, and post-traumatic stress disorder. Extreme sadness or worry can also strike parents. These results might be linked to an increased chance of toxic stress and negative early experiences. With more adverse events, there is a higher chance of developmental delays and health problems in maturity, such as drug addiction, memory loss, depression, and non-communicable diseases.[11]

Impact of parents' behaviors during the COVID-19 epidemic on their kids' distance learning. The results demonstrate that raising children require parents to be very patient and to provide direction. On the other side, facilitatory teachers can collaborate with parents to support students' learning. On the other hand, instructors can assist both parents and children in online learning by having a discussion with students about how they believe that they should learn together. As a result, getting ready for the COVID-19 pandemic can go smoothly, guaranteeing that the outbreak won't interfere with students' ability to learn.[12]

Conclusion

After group intervention, most parents had adequate knowledge and positive attitudes about the impact of online teaching on the physical growth and psychosocial development of school. There was inadequate knowledge and negative attitude before the intervention. Parental knowledge and attitude improve after the group intervention.

Conflicts of Interest

None.

Funding

None.

References

1. Rajagopalan I. Concept of teaching. Shanlax Int J Educ 2019;7:5-8.
2. Law TJ. Online Teaching: Everything you Need to Know in 2022. Oberlo; 2021. Available from: https://www.oberlo.in/blog/online-teaching [Last accessed on 2022 Apr 27].
3. Burciu RB. The Benefits of Online Education from a Parent's Perspective. SPARK; 2021. Available from: https://spark.school/academics/the-benefits-of-online-education-from-a-parents-perspective [Last accessed on 2022 Apr 28].
4. Impact of Online Education on Families. Maryville Online; 2021. Available from: https://online.maryville.edu/blog/impact-of-online-education [Last accessed on 2022 Apr 28].
5. Connell SL, Lauricella AR, Wartella E. Parental co-use of media technology with their young children in the USA. J Child Media 2015;9:5-21.
6. Impact of Online Education on Families. Maryville Online; 2021. Available from: https://online.maryville.edu/blog/impact-of-online-education [Last accessed on 2023 Aug 02].
7. Papagiannidis S, Harris J, Morton D. WHO led the digital transformation of your company? A reflection of IT related challenges during the pandemic. Int J Inf Manage 2020;55:102166.
8. Chen G, Zheng S, He J, Wang X. A study on parents' attitudes towards middle school students' online learning based on statistical analysis. J Environ Public Health 2022;2022:4848738.
9. Ramane DV, Devare UA, Kapatkar MV. The impact of online learning on learners' education and health. Online J Distance Educ E Learn 2021;9:303-9.
10. Liu X, Zhao L, Su YS. Impact of parents' attitudes on learning ineffectiveness: The mediating role of parental self-efficacy. Int J Environ Res Public Health 2022;19:615.
11. De Araújo LA, Veloso CF, de Campos Souza M, de Azevedo JM, Tarro G. The potential impact of the COVID-19 pandemic on child growth and development: A systematic review. J Pediatr (Rio J) 2021;97:369-77.
12. Mardiana H. The impact of parents attitudes on their children's distance learning during COVID-19 outbreak. DWIJA CENDEKIA J Riset Pedagog 2021;5:85-96.

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