IMPACT OF MOTIVATIONAL INTERVIEWING ON ATTITUDE AND BEHAVIOURAL OUTCOME OF INTERNET GAMING ADDICTION (IGA) AMONG ADOLESCENTS.

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ABSTRACT:

OBJECTIVE: To assess the impact of motivational interviewing on attitude and behavioural outcome among adolescents regarding IGA at selected schools of Patiala city of Punjab.

METHODS: This was an experimental research design with two group pre-test post-test control group design. The samples were recruited by opting probability sampling technique. The study samples were the adolescents with age group of 15 to 18 years old who have met the eligibility criteria. Total 300 adolescents were recruited based on power analysis. The research instruments were the **Structured Attitude Rating Scale on IGA (SARS-IGA)** and **Structured Behavioural Outcome check list on IGA (SBOC-IGA)**. The collected data were organised logically and data was analysed by SPSS-22.

RESULTS: The mean difference of experimental group was 18.89 while in control group it was 2.96. F ratio identified as 10.10 which reflected that among both the group, there is significant difference in terms of attitude of adolescents regarding internet gaming addiction. The mean difference of experimental group was 12.80 while in control group it was 4.27. F ratio identified as 10.40 which reflected that among both the group, there is significant difference in terms of behavioural outcome of adolescents regarding internet gaming addiction. The finding suggested that the provided motivational interviewing technique is effective to enhance attitude and behavioural outcome of IGA victims.

CONCLUSION: findings of the study suggested that internet gaming disorder or dependency has reached to significant level and motivational interviewing is helping adolescents to improve their attitudes and enhanced their behaviour outcome regarding internet gaming disorders.

KEYWORDS: internet gaming disorder, motivational interviewing, adolescents.

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INTRODUCTION:

Internet considered as one of extraordinary innovation of people, since it made things simple and the information recovery is so OK with the assistance of web. It improved the information on individuals which they utilized in everyday life. Existing electronic games or web playing are tremendously affecting existence of individuals in present period. As this century considered as innovation driven century where innovation will be at driving seat and every individual needs to run over with it. At the point when we talk about then there will be a serious high number of positive variables examined yet every coin has two sections, likewise this innovation additionally have some of negative focuses. (1)

The telecom innovation has made our life so basic and advantageous that it is assisting individuals with living easily and speak with relatives, companions, experts, partners and designated crowd at very simplicity level. At the point when we watch out for it then we will understand that mobile phones particularly of keen classification and online world has had gigantic effect. (2) As per National Centre of Education Statistic preliminary studies at America has concluded that the adolescents aged 5 to 17 years are accessing internet services in very young age and a very high number among these users are involved in internet gaming. (3)

The Diagnostic and Statistical Manual of Mental Disorders (DSM-V) will come to fruition as the American Psychiatric Association accepted to include Internet use disorder as mental health problem worthy of further scientific investigation. The over-the-top utilization of the Internet has been connected to an assortment of negative psychosocial results. (4) Gaming disorder is defined in the 11th Revision of the International Classification of Diseases (ICD-11) as a pattern of gaming behaviour ("digital-gaming" or "video-gaming") characterized by impaired control over gaming, increasing priority given to gaming over other activities to the extent that gaming takes precedence over other interests and daily activities, and continuation or escalation of gaming despite the occurrence of negative consequences. (5)

Various elements assume a crucial part in the effect of computer games on a person. A portion of the effects are for genuine, for example, upset rest designs, similar to abstain from food issues, similar to an insufficiency in the active work while some are potential. Somewhat certain gamers don't see their propensity for gaming as a danger to their physical or mental prosperity. Though some gamers recognize their falling apart public activity as a notable endowment of steady gaming. Certain examinations demonstrate that gaming has been a most loved break technique from the truth and stressors of day-by-day life. (6)

Psychological factors such as using internet to escape from self-dissatisfaction, to deal with stress, emotional regulation along with individual temperaments are the strands in connection with solid association with enhancing condition of internet gaming addiction and high-risk behaviours among adolescents. This same study found that owning a personal device, use of smart phones, browsing, craze of social media friendship, online purchasing, web series, online play was significantly associated with internet addictions. (7)

The MI treatment is advising treatment in which the individual will be controlled to move towards fortify of own to defeat from the habit. Devotion, responsibility and assurance are three essential mainstays of Inspirational talking strategy. System of this treatment is chipping away at example of engaging the customer to bring wanted changes and become director for claims movement. This treatment is working when individual is resolved to make changes in their dependent conduct in light of the fact that the necessary adjustment comes from the inside so comprehend that the individual the person in question is totally prepared for conduct alteration. (8)

The internet gaming compulsion is very comparative with different addictions like substance habit. Additionally, as other habit the web-based gaming enslavement is likewise a diligent, broad and rehashed scenes of utilizing internet gaming administrations which have huge connection with compromised existence with family, companions, and relative and helpless work execution. (9)

There is a new flood and pattern in on the web and disconnected computer games and particularly fight games. Since the beginning of these games fundamentally two assessments have continually begun with it one is there are unsafe results of playing videogames on the web and second is computer games assist the person with adapting up to specific stressors throughout everyday life. Therefore, this study designed by researcher to plan out and visualize the impact of motivational interviewing technique on attitude and behavioural outcome of adolescents suffering with Internet gaming dependency.

MATERIALS AND METHODS:

This study identified following objectives to investigate:

1. To assess the pre- and post-intervention attitude among adolescents in line with IGA.
2. To assess the pre- and post-intervention behavioural outcome among adolescents about IGA.
3. To assess the impact of motivational interviewing on attitude and behavioural outcome among adolescents regarding IGA.

Present study formulated following hypothesis to test at the level of significance $p < 0.05$:

- H₁** There will be a significant effectiveness of motivational interviewing on attitude of early adolescents regarding internet gaming addiction.
- H₂** There will be a significant effectiveness of motivational interviewing on behavioural outcome of early adolescents regarding internet gaming addiction.

The research team have conducted a experimental research study to assessing the impact of motivational interviewing on attitude and behavioural outcome among adolescents regarding IGA at selected schools of Patiala city of Punjab. The adolescents aged in between 15 to 18 years were considered as a population of the study and based on eligibility criteria the participants were recruited. Based on previous study findings on similar investigation, the present research has calculated total 300 sample size. We have used probability simple sampling technique to recruit all 300 participants and then randomly allocated to experimental and control group of investigation. Adolescents, who were willing to participate, known to English/ Punjabi language, aged in between 15 to 18 years and of any gender with minimum playing of ≥ 2 hours per day internet games were only recruited in the study and Participants were informed about their role as a participant and requested them to sign informed consent. Institutional ethical permission obtained well in advance and participants who have signed informed consent were introduced to study tools.

The study tools comprise with two sections, in which first sections cover the socio-demographic variables, second section comprise with Structured Attitude Rating Scale on IGA (SARS-IGA) and Structured Behavioural Outcome check list on IGA (SBOC-IGA). Complete tool was validated by experts from nursing fraternity. The pilot study was conducted on 30 participants and the reliability of tools was computed by using s using spearman brown split half method. The attitude and behavioural outcome score regarding IGA, the score was found to be 0.82 and 0.81 respectively.

RESULTS AND DISCUSSION:

The gathered data were organized in logical systematic manner and SPSS 22 version were used to analyse. The analysed data presented in following manner:

Table: 1 Frequency and percentage wise distribution of adolescents based on pre-test and post-test attitude level regarding IGA among experimental group: N-150

Level of Attitude		Pre-test		Post-test	
		Frequency	Percentage	Frequency	Percentage
Positive Attitude	Experimental group	19	12.66	115	76.66
	Control group	27	18	48	32
Neutral Attitude	Experimental group	78	52	29	19.33
	Control group	81	54	69	46
Negative Attitude	Experimental group	53	35.33	6	4
	Control group	42	28	33	22

Table 1 stated that in experimental group prior to intervention the majority of adolescents 52% (78) were having neutral attitude towards online gaming dependency, then 35.33% (53) were having negative attitude towards online gaming (Means they were not ready to agree that they are addicted and it harm to them), and rest 12.66% (19) were having positive attitude. Then after motivational interviewing technique intervention highest number of adolescents 76.66% (115) were shown positive attitude, 19.33% (29) remain as neutral attitude and only 4% (6) adolescents found with negative attitude, whereas among control group during pre-test the majority of adolescents 54% (81) were having neutral attitude towards online gaming dependency, then 28% (42) were having negative attitude towards online gaming and rest 18% (27) were having positive attitude. In post-test highest number of adolescents 46% (69) were having neutral attitude, then 32% (48) were having positive attitude and rest 22% (33) were having negative attitude.

This is reflecting that the intervention is keeping impact to improve the attitude of adolescents regarding internet gaming addiction, but without any intervention, there were no much change noticed in the attitude of adolescents regarding internet gaming addiction.

Table:2 Frequency and percentage wise distribution of sample based on pretest and post-test behavioural outcome level regarding IGA:

Behavioural Outcome Level		Pre-test		Post-test	
		Frequency	Percentage	Frequency	Percentage
No IGA	Experimental group	1	0.66	49	32.66
	Control group	8	5.33	12	8
Mild IGA	Experimental group	36	24	67	44.66
	Control group	49	32.66	51	34
Moderate IGA	Experimental group	89	59.33	26	17.33
	Control group	76	50.66	77	51.33
Severe IGA	Experimental group	24	16	8	5.33
	Control group	17	11.33	10	6.66

Presented table communicated that in experimental group prior to intervention the majority of adolescents 59.33% (89) were facing moderate level of IGA, then 24% (36) were facing mild IGA, 16% (24) were faced severe IGA and remaining 0.66% (1) considered as not having any IGA. Then after motivational interviewing technique intervention highest number of adolescents 44.66% (67) were shown mild IGA, 32% (49) reflected as no IGA, 17.33% (26) were still facing moderate IGA and 5.33% (8) adolescents were facing severe IGA. Whereas in control group during pre-test the majority of adolescents 50.66% (76) were facing moderate level of IGA, then 32.66% (49) were facing mild level of IGA, 11.33% (17) faced severe level of IGA and rest 5.33% (8) were facing no IGA. While in post-test highest number of adolescents 51.33% (77) were facing moderate level of IGA, then 34% (51) were facing mild level of IGA, 8% (12) faced no IGA and rest all 6.66% (10) faced severe level of IGA.

This is reflecting that the intervention is keeping impact to improve the behavioural outcome of adolescents regarding internet gaming addiction, while without any intervention, there were no much change noticed in the behavioural outcome of adolescents regarding internet gaming addiction.

Table: 3 Comparing Mean, Standard Deviation, Mean Difference, 't' value and p-value of pre-test and post-test of level of attitude regarding internet gaming addiction among experimental and control group:

Two Groups	Mean		Mean Difference	d.f.	F Ratio
	Pre-test	Post-test			
Experimental Group	19	2.56	18.89	1	10.1*
Control Group	21.12	18.16	2.96		

* Significant at level of <0.05

Table 3 clearly stated that a comparison among experimental group and control group. It found that the mean difference of experimental group was 18.89 while in control group it was 2.96. and F ratio identified as 10.10 which reflected that among both the group, there is significant difference in terms of attitude of adolescents regarding internet gaming addiction.

Therefore, the research hypothesis H_1 accepted at 0.05 level of significance. This helped to stating that the provided intervention motivational interviewing found effective to improve the attitude of adolescents about internet gaming addiction.

Table: 4 Comparing Mean, Standard Deviation, Mean Difference, 't' value and p-value of pre-test and post-test of level of behavioural outcome regarding internet gaming addiction among experimental and control group:

Two Groups	Mean		Mean Difference	d.f.	F Ratio
	Pre-test	Post-test			
Experimental Group	18.53	5.73	12.8	1	10.4*
Control Group	19.48	15.21	4.27		

* Significant at level of <0.05

Present reflected a comparison among experimental group and control group. It found that the mean difference of experimental group was 12.80 while in control group it was 4.27. and F ratio identified as 10.40

which reflected that among both the group, there is significant difference in terms of behavioural outcome of adolescents regarding internet gaming addiction.

Therefore, the research hypothesis H_2 accepted at 0.05 level of significance. This helped to stating that the provided intervention motivational interviewing found effective to improve the behavioural outcome of adolescents about internet gaming addiction.

DISCUSSION

Internet gaming dependency is increasing in rapid manner and among adolescents it is at very high prevalent. In present study the aim was to evaluate the impact of motivational interviewing on attitude and behavioural outcome among adolescents regarding IGA at selected schools of Patiyala city of Punjab.

In present study researcher revealed that the in experimental group prior to intervention the majority of adolescents 52% (78) were having neutral attitude towards online gaming dependency and after intervention highest number of adolescents 76.66% (115) were shown positive attitude. While in control group in pre -test 54% (81) and post-test 46% (69) the majority of participants have shown neutral attitude towards internet gaming addiction.

A similar finding was observed by a study of Lancy D'souza who have mentioned that among Indian students the majority of samples 54.3% are showing average level of PUBG addiction, while 6.2% found definitely addicted. Here the average category of addiction is similar with mild level of addiction and definitely addiction is equal to severe addiction in this present study. (10) Similarly a study by Adithya Thakur et al has stated that 55% of participants are found with mild internet gaming addicted. (11)

Further in experimental group prior to intervention the majority of adolescents 59.33% (89) were facing moderate level of IGA, then after motivational interviewing technique intervention highest number of adolescents 44.66% (67) were shown mild IGA. Whereas in control group during pre -test the majority of adolescents 50.66% (76) were facing moderate level of IGA, and in post-test also highest number of adolescents 51.33% (77) were facing moderate level of IGA.

These findings supported by a study of R. Publendhi who's research findings were said that 74% of participants are facing little aggressive nature due to PUBG game addiction. (12) Similarly Study by Aditya Thakur et al has stated that majority 86.5% of participants have shown behavioural outcome issues. (11)

Analysed data have found that the mean difference of experimental group was 18.89 while in control group it was 2.96. and F ratio identified as 10.10 which reflected that among both the group, there is significant difference in terms of attitude of adolescents regarding internet gaming addiction. Similarly, the mean difference of experimental group was 12.80 while in control group it was 4.27. and F ratio identified as 10.40 which reflected that among both the group, there is significant difference in terms of behavioural outcome of adolescents regarding internet gaming addiction. These finding suggested that the provided motivational interviewing technique is effective to enhance attitude and behavioural outcome of IGA victims.

One study by Adeline stated in their result that about half the sample reported at least a 50% reduction in alcohol use and slightly more than one in five reported no alcohol use at six-month follow-up with motivational interviewing. They mentioned that MI has been shown to be effective for the management of problem drinking among college students, and homeless persons. They found no evidence of differential efficacy of one-on-one vs group-delivered MI over a nurse-led intervention in reducing alcohol drinking. (13)

In light of the aftereffect of this investigation, there is need to modify the attitude and behavioural outcome of adolescents. The motivational interviewing is a worth therapy to modify the attitude and behavioural outcome of adolescents.

CONCLUSION:

Internet gaming addiction among all age group and especially among adolescent is increasing day by day. The most common symptoms of such addicted person is behavioural deterioration which are similar like substance abuse. The IGA has been added in disease classification, which described its importance. Hence, it is essential to investigate towards this line of area.

The study results revealed that Motivational Interviewing (MI) has positive impact to enhance attitude and behavioural outcome among adolescents having issue with internet gaming addiction.

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REFERENCES:

1. Achab S, Simon O, Martinotti G, Zullino D, Khazaal Y. Textbook of Addiction Treatment: International Perspectives. *TextbAddict Treat Int Perspect*. 2015;1499–513.
2. Shahnaz I, Karim AKMR. The Impact of Internet Addiction on Life Satisfaction and Life Engagement in Young Adults. *UniversJ Psychol*. 2014;2(9):273–84.
3. Qin YS. a Study of Internet Addiction Among Students of Sekolah. 2011.
4. Przybylski AK, Weinstein N, Murayama K. Internet gaming disorder: Investigating the clinical relevance of a new phenomenon. *Am J Psychiatry*. 2017;174(3):230–5.
5. Park C hyun, Chun JW, Cho H, Kim DJ. Alterations in the connection topology of brain structural networks in Internet gaming addiction. *Sci Rep*. 2018;8(1): 1–9.
6. Romano M, Osborne LA, Truzoli R, Reed P. Differential Psychological Impact of Internet Exposure on Internet Addicts. *PLoS One*. 2013;8(2).
7. Nnenna V. Internet Addiction , Neuroplasticity and Education. 2020;(February).
8. Osilla KC, Paddock SM, Leininger TJ, D’Amico EJ, Ewing BA, Watkins KE. A pilot study comparing in-person and web-based motivational interviewing among adults with a first-time DUI offense. *Addict Sci Clin Pract*. 2015;10(1):1–11.
9. Farahani M, Alavi SS, Bafghi MM, Alamuti SE, Mohammadi M, Taghavi Z. Psychological factors including demographic features, mental illnesses, and personality disorders as predictors in internet addiction disorder. *Iran J Psychiatry*. 2018;13(2):104–11.
10. Souza LD, Dolma P. Extent of PUBG Addiction among Indian and Tibetan Students : A Comparative Study. *Int J Indian Psychol*. 2019;7(2):482–8.
11. Thakur A, Peepre K, Vaswani A, Gupta K, Verma A, Singh D, et al. Internet addiction, behavioural aspects, and health related problems associated with it: a cross sectional study among engineering students of Jabalpur district. *Int J Res Med Sci*. 2017;6(1): 253.
12. Pugalendhi R, d sjmp. Impact study of pubg game addiction on consumer culture of chennai urban students. *Int J Sci Technol Manag*. 2019;8(11):57–61.
13. Nyamathi A, Steven Shoptaw, Cohen A, Greengold B, Kamala Nyamathi. Effect of motivational interviewing on reduction of alcohol use. *Drug Alcohol Depend*. 2010;107(1):23–30.