International Journal of Emerging Research in Engineering, Science, and Management
Vol. 2, Issue 1, pp.25-32, Jan-Mar 2023.
www.ijeresm.com eISSN – 2583-4894

A Differential Study of Compulsive Usage of WhatsApp

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Abstract: There are several kinds of compulsive usage of "a mobile phone" by youngsters around the world, which can be called mobile phone addiction/misuse. The more specific area of mobile usage is "WhatsApp's addiction/misuse" which has prompted health officials around the world to consider this quickly expanding issue. The research study aimed to determine WhatsApp usage patterns among primary educators and students, as well as the influence of those patterns on their personal lives. From December 1, 2021, to May 1, 2022, A cross-sectional study was undertaken among primary educators and students of the Meerut region. The information was gathered using a standardized questionnaire. The sociodemographic profile, usage pattern, and impact are all included in the proforma. The overuse of WhatsApp has an adverse influence as well as an extreme effect on study time, educational achievement, and relaxation. Educators utilize WhatsApp groups for academic purposes, which disrupts and demolish their personal lives even after they have finished their professional work. WhatsApp users have enhanced their social lives in the virtual world. The findings of this research study are limited to the specific region and not generalized to other sectors and regions of the world. Further research can be carried out with more sample size considering different variables.

Keywords: impact, pattern, primary educators, students, WhatsApp usage,

1 BACKGROUND OF THE STUDY

Addiction is considered by World Health Organization as dependence and the continuous use of something for the reduction of misery and/or stress, which often causes cravings when it is absent. Addiction is a maladaptive behavior that is considered crucial to release stress or uneasiness. Peele defined addition as any kind of over-activity or activity that seems to be compulsory [1]. The two major categories of addiction involve either substance addiction or behavioral addiction such as mobile phone addiction. In general, mobile phones are commonly used either to use mass media or to use them as personal communication devices.

According to Pewresearch, Adolescents looks for the support of friends to eliminate negative feelings, such as grief, envy, distress, or loneliness [2]. Church, K. & de Oliveira, R. explored the developmental phase of adolescence that gives the space for teenagers to create a balance between friends and family [3]. In the universal context, children look for guidance and learn from their parents and as they develop, the level of bonding increases with friends. This leads to an increase the independence and a decrease in family dependence. There are numerous studies in the global and Indian context; that explore the results of the drawbacks of WhatsApp usage conducted on adolescents. Yeboah, J., & Ewur, G.D. found that using pervasive communication methods like WhatsApp has a harmful effect on teenagers' academic performance [4]. The psychological impact found in the study was the loss of focus in the classrooms and time management, diversion from the task assigned, and inability to learn words and sentence making.

Mobile phone addiction/misuse is one of the forms of compulsive behavior to use "mobile phones" by youth across the world. This behavior of compulsion and inability to tolerate withdrawal symptoms contributes to a new kind of health in accordance to Smartphone users. In the light of psychiatry studies, the overuse of phones is not a formal diagnostic category; however, shows many similarities with behavior disorders. "WhatsApp's addiction/misuse" has started to act as a challenging task for health policymakers globally. In addition, educators and students are also influenced by the high mobile phone engagements or dependence on them. School and teachers are the second important area for students' cognitive and emotional development. In the initial development stage, primary school teaching is the first formal educator. Technically, the primary educator is an individual who teaches in Classes I to VIII. Primary education in India is divided into two parts, namely Lower Primary (Class I-IV) and Upper Primary (Middle school, Class V-VIII). The Indian government emphasizes primary education (Class I-VIII) also referred to as elementary education, to children aged 6 to 14 years old.

According to the BACKLINKO survey (2022), WhatsApp has 200 crore, consistent users, worldwide [7]. It is ranked as the most used mobile messenger application in the world. India has the most WhatsApp monthly consistent users i.e., 39.01 crores. As per the WORLDMETER survey (2022), the current population of India is 140.59 crore. According to the survey of STATISTA (2021), there are 487 million (48.7 crores) WhatsApp users in India [8]. It is clear from the above statistical data that out of the total population, 27.74% are active users while 34.63% are total users of WhatsApp in India. Using social networking apps like WhatsApp can be beneficial for one's health. The "Psychosocial Outcomes Associated with Engagement with Online Chat Systems" study came to the conclusion that group chat features in messaging apps had a good effect on psychological health. However, this couldn't be further from the truth.

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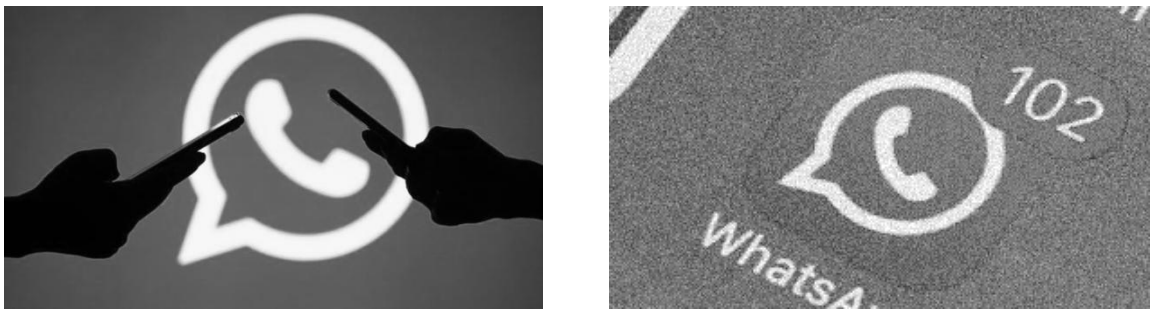

Fig. 1. Overuse of WhatsApp [5][6]

Various studies have highlighted that mental health is being harmed by the dependency on social networking apps. The displacement hypothesis and the stimulation hypothesis are the two main competing hypotheses discussed in the study. The displacement hypothesis contends that internet use diverts time away from more meaningful, high-quality "real-world" interaction, leading to psychological problems like depression and loneliness.

Regulating one's use of social media apps like WhatsApp has good and discernible impacts on mental health, as demonstrated by several other researchers. Nobody's health benefits from the daily barrage of messages and forwards that we see on WhatsApp [9]. On the other hand, WhatsApp's features, like Status, which allows users to publish photographs as tales, don't do much to combat shyness and self-doubt. The comparison with WhatsApp "contacts" and admiring their beautifully composed photographs and flawless profile pictures won't do much to boost confidence.

People are addicted to phone screens, especially in India, and prefer messaging their "contacts" to speaking to them in person [10]. WhatsApp groups made up of old friends are undoubtedly a fantastic way to reconnect and wistfully recall the past, but they can also influence and distort memories of those experiences. Social media may encourage "existing relationships," but it is also well known that WhatsApp is a significant source of "false news [11]." Because it inadvertently comes from dependable friends or family members and might weaken the link more than strengthen it, this false information is frequently difficult to combat [12].

The question of how long it is too long to message someone on WhatsApp is also up for dispute. Talking with friends and in groups keeps our minds active and prevents us from dozing off. The light coming from the phone doesn't help either, nor does it add much. Finally, removing WhatsApp entirely is not the solution because it offers many advantages like inexpensive, easy-to-share multimedia information, ease to use, backup chat history, rapid updates, and Unified Payment Interface (UPI) wallet.

Avoid impulsively accessing apps, and refrain from instantly responding to notifications on mobile phones. As long as one understands how these applications fit into their communication hierarchy, sending jokes or peculiar selfies to a group of family members or a friend is acceptable. The objectives of the research are:

- To determine the WhatsApp usage pattern among primary educators and students.
- To find the influence of WhatsApp usage patterns on their personal lives.

2 MATERIALS & METHODS

A prevalence/transverse descriptive research study was undertaken among primary educators and students of the Meerut region. The information was gathered from December 1, 2021, to May 1, 2022, by using a standardized questionnaire. The snowball sampling technique with dichotomous questions was used by the researcher to collect the data from the participants. The data were analysed by using SPSS V 26 and Ms-Excel 2019. The sample size for the research study is 231 (134 are educators and 97 are students).

3 ACADEMIC AND INSTITUTIONAL OR INSTITUTE LIBRARY OPERATIONAL PLAN

Demographic profile of the educators

Participants were 134 primary educators, among them 64.28% female and 35.72% male. The average age of the participants in the three categorized fields viz 20 to 29 years, 30 to 40 years, 41 years, and above is 31 years.

Demographic profile of the students

Participants were 97 students between the age group 10-14 years who filled out the survey form. The average age of the students is 13 years.

Pewresearch highlighted that 74% of adolescents between the age group of 12-17 years are mobile internet users who said they regularly or occasionally access the internet by using their digital devices [2].

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Table 1. Design of WhatsApp usage among primary educators and students.

Particulars	Response	Educators (%)	Students (%)
WhatsApp visit per day	<=10	17	64
	>=11	83	36
Duration spent per day	<=1 hour	21	34
	>=2 hour	79	66
Number of WhatsApp group	<=6	30	31
	>=7	70	69
Change your display pic	<1 day	7	22
	<1 week	68	69
	<1 month	22	9
	<1 year	3	0
Use WhatsApp before sleep	Yes	93	91
	No	7	9
Use WhatsApp as soon as wake up from sleep	Yes	90	95
	No	10	5
Installed app locks	Yes	49	34
	No	51	66
Use WhatsApp while having food	Yes	72	87
	No	28	13
Keep the internet on 24 hours a day	Yes	99	98
	No	1	2
Can stop using WhatsApp for a duration of	Few hours	80	86
	1 day	17	14
	1 week	3	0
Number of Study groups	<=5	9	7
	6 to 10	54	72
	>=11	37	21

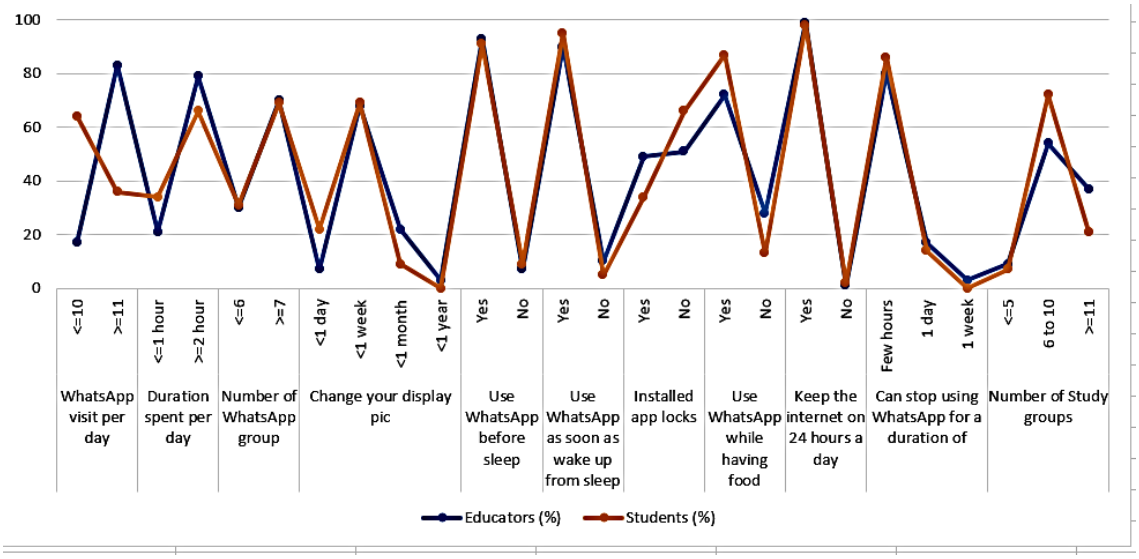

Fig. 2. Design of WhatsApp usage among primary educators and students.

3.1 WhatsApp Usage Design

Among educators, this study points out that 83% of educators had >=11 visits WhatsApp per day, 79% of educators spent more than 2 hours per day on WhatsApp, 70% of educators have >=7 WhatsApp groups, 68% of the educators are changing their display pic in a week, 93% of educators use WhatsApp before going to sleep, 90% of educators use WhatsApp as soon as they wake up, 51% of educators have not installed app locks in their smartphones for privacy, 72% of educators use WhatsApp while having food, 99% of educators connected to the internet for 24 hours, 80% of the educators said that they can stop using WhatsApp only for few hours, and 54% of educators have 6 to 10 study groups in WhatsApp.

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Among students, this study points out that 64% of students visit WhatsApp <=10 times a day, 66% of the students spent >=2 hours per day using WhatsApp, 69% of students have >=7 WhatsApp groups, 69% of the students are changing their display pic in a week, 91% of students use WhatsApp before going to sleep, 95% of students use WhatsApp as soon as they wake up, 66% of students have not installed app locks in their smartphones for privacy, 87% of educators use WhatsApp while having food, 98% of educators connected to the internet for 24 hours, 86% of the educators said that they can stop using WhatsApp only for few hours, and 72% of educators have 6 to 10 study groups in WhatsApp.

Table 2. Impact of WhatsApp usage among Educators.

Particulars	**Code**	**Educators**	
		Yes	**No**
Is WhatsApp affecting your personal life?	s1	76	24
Is your concentration reduced upon WhatsApp usage?	s2	80	20
Are your physical activities reduced upon WhatsApp usage?	s3	75	25
Is your social life improved?	s4	82	18
Have you become a multi-tasker?	s5	79	21
Is your sleep hampered?	s6	92	8
Whether you like being solitary.	s7	64	36
Do you feel depressed when your close friends stop texting you on WhatsApp?	s8	56	44
You feel desperate when you misplaced your cell phone.	s9	77	23
Do you feel annoyed when your close friend doesn't respond to your message?	s10	60	40
Can you resist your desire from viewing a message?	s11	15	85
Have you ever developed any kind of repugnance?	s12	17	83

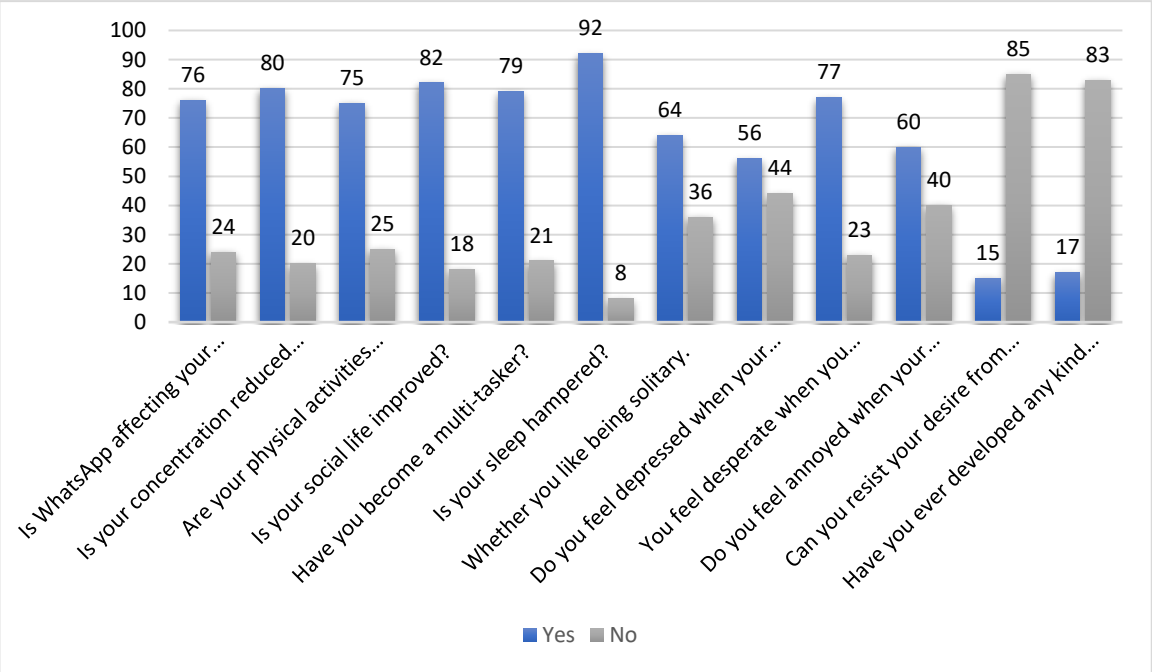

Fig. 3. Impact of WhatsApp usage among Educators.

The Non-Parametric Bivariate correlation analysis highlighted the significant correlation among the parameters. The highest level of significant correlation is as follows:

Table 3. Correlation & Interpretation

Correlated Parameters	Correlation Coefficient	Interpretation
s6 → s11	-0.702**	Moderate negative correlation
s2 → s1	0.890**	High positive correlation
s3 → s1	0.973**	Very high positive correlation
s4 → s5	0.909**	
s5 → s9	0.943**	
s1 → s3	0.973**	
s7 → s10	0.919**	
s8 → s10	0.921**	
s9 → s5	0.943**	
s10 → s7	0.919**	
s11 → s12	0.928**	
s12 → s4	-0.966**	Very high negative correlation

Table 4. Impact of WhatsApp usage among Students

Particulars	Code	Students	
		Yes	No
Is your Study duration impaired?	s1a	79	21
Is your Academic score reduced upon WhatsApp usage?	s2a	86	14
Are your physical activities reduced upon WhatsApp usage?	s3a	35	65
Is your social life improved?	s4a	85	15
Is your educational achievement affected by WhatsApp?	s5a	63	37
Is your sleep hampered?	s6a	58	42
Whether you like being solitary.	s7a	50	50
Do you feel depressed when your close friends stop texting you on WhatsApp?	s8a	90	10
Do you feel desperate when you misplaced your cell phone?	s9a	88	12
You feel annoyed when your close friend doesn't respond to your message.	s10a	70	30
Can you resist your desire from viewing a message?	s11a	8	92
Have you ever developed any kind of repugnance?	s12a	5	95

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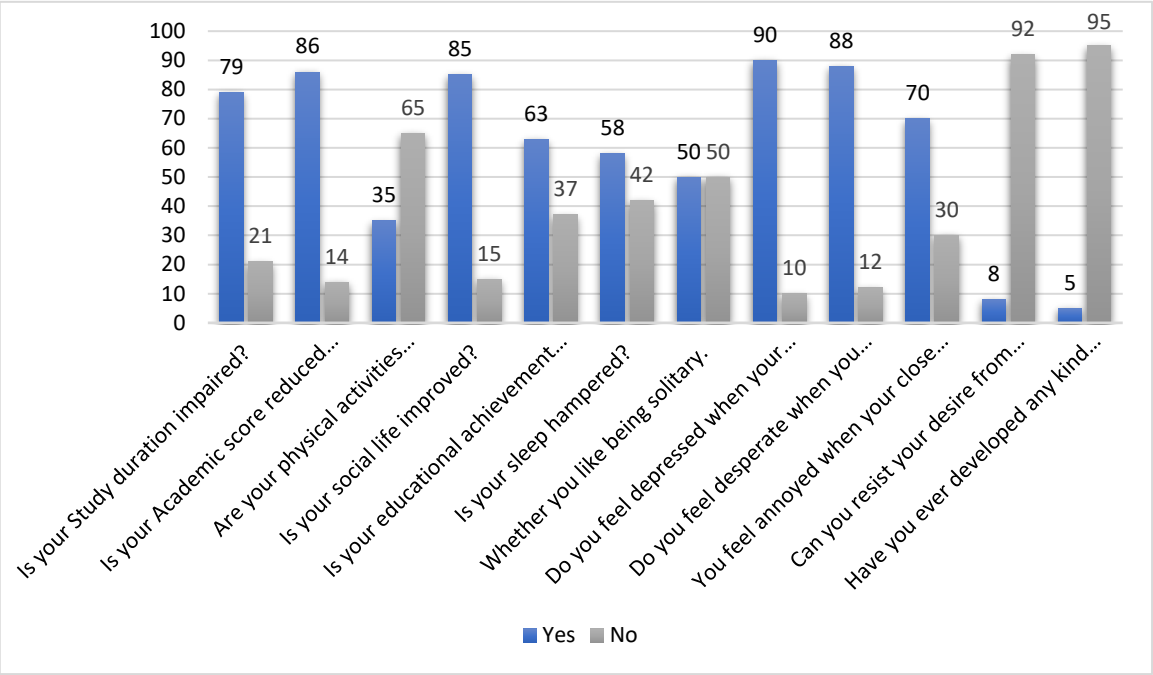

Fig. 4. Impact of WhatsApp usage among Students.

The Non-Parametric Bivariate correlation analysis highlighted the significant correlation among the parameters. The highest level of significant correlation is as follows:

Table 5. Correlation & Interpretation

Correlated Parameters	Correlation Coefficient	Interpretation
s1a → s4a	0.815**	High positive correlation
s3a → s5a	-0.958**	Very high negative correlation
s5a → s3a	-0.958**	
s2a → s4a	0.960**	Very high positive correlation
s4a → s2a	0.960**	
s6a → s5a	0.901**	
s7a → s6a	0951**	
s8a → s9a	0.903**	
s9a → s8a	0.903**	
s10a → s3a	-0.892**	High negative correlation
s11a → s9a	0.799**	High positive correlation
s12a → s11a	0.778**	

4 DISCUSSION & CONCLUSIONS

Dhiman and Varma [13] reported that compulsive WhatsApp usage significantly influences users' behavioral patterns and daily routines, highlighting the growing need to understand its psychological and social implications in contemporary society. With the increasing adaptation of global digitalization and virtual social connections, Bala, K. mentioned that WhatsApp addiction is common, with far more than half of the study group exhibiting some type of WhatsApp addiction pattern [14]. In addition, the problem of WhatsApp Addiction in nursing students needs to pay attention, and it's time to develop a thorough intervention strategy to encourage healthy and safe WhatsApp usage across all sectors.

Dhiman, A., & Chaudhary, G. concluded that members of Generation Z are often online longer than expected [15]. Most people feel depressed, moody, or anxious while offline, which forces them to reconnect. According to research, people with a high need for Internet use have increased emptiness, affective problems, and unconscious behaviors. Internet addiction can be reduced by, first; recognizing the problem followed by healthy life choices. This includes more in-person contact with family, friends, co-workers, neighbors, and well-wishers, with the aim of minimum or nearly no sage of smartphones. This increases the opportunity to fulfill the need for outdoor activities.

Based on the results of this research study revealed that WhatsApp is affecting the personal lives of educators, the concentration of the educators is reduced with the overuse of WhatsApp, and educators' physical activities are reduced whereas students' physical activities are not affected by WhatsApp, and communicating with each other has become very easy and faster with the advent of WhatsApp that is the reason of improvement in the social life of educators as well as students. Most of the educators said that they become multi-tasker. Educators and students said that their sleep is affected by WhatsApp, with educators being solitary while students are neutral about this. Both of them agreed that they feel depressed when their close friends stop texting them on WhatsApp. Educators and students feel desperation when they misplaced their cell phones. They feel annoyed when a close friend doesn't respond to their message. As per tables 2 and 3 the fact that 85% of educators and 92% of students cannot resist the desire of viewing the message. Educators and students never try to develop any kind of repugnance toward WhatsApp.

Faye et al., WhatsApp applications are utilized by almost everyone using a smartphone [16]. The impact may cause users to make rational choices and lose the touch with reality. The feelings can be contained only for the use of networking online. The loss of interest in the real world, problems in school or work, and inability to withdraw from WhatsApp are shown as symptoms of dependence. A psychiatric disorder called Borderline personality disorder (BPD) is the most common disorder that overlaps with feelings of loneliness, boredom, and inconsistent self-image which increases the proneness of WhatsApp addiction as these people may use mobile more often to stay in touch with more people. Many studies have found that dependent internet users rank high in terms of feelings of loneliness, impulsive behavior, emotional problems, and low self-esteem.

WhatsApp reduced the study time, and loss of interest in learning, and the study was a less effective overall influence on the participants' learning outcomes. WhatsApp overuse creates a social bubble that adversely affects study duration, academic performance, and sleep. Yet primary educators and students use WhatsApp groups for academic purposes as well as personal purposes. Social life has been improved among WhatsApp users. The study points out that WhatsApp has beneficial effects as well as harmful effects (overuse). The findings of this research study are limited to the specific region and not generalized to other sectors and regions of the world. Hence, further research could focus on the cultural impact of WhatsApp usage in varied social constructs.

FUNDING INFORMATION

This research received no specific grant from any funding agency in the public, commercial, or not-for-profit sectors.

ETHICS STATEMENT

This study did not involve human or animal subjects and, therefore, did not require ethical approval.

STATEMENT OF CONFLICT OF INTERESTS

The authors declare no conflicts of interest related to this study.

LICENSING

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