Like, Share and Comment: Adolescent's Social Media Motivators and Threat During Covid-19 Lockdown

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Abstract

The COVID-19 epidemic has caused a tremendous disruption in people's lives all around the world. It has affected every facet of life and resulted in a serious health crisis in numerous countries. In response to this once-ina-century outbreak, governments were forced to take extreme measures, including severe lockdowns and an absolute prohibition on physical interactions. These measures forced families to interact with one another and the external world in ways they may not have done before. More than any other age group, adolescents saw a substantial shift in their way of life, and social media made it simpler for them to engage with their friends. Through the development of information and communication technology, social media made this possible, which greatly increased the amount of data being exchanged. This significant innovation based on web 2.0 paves the path for more rapid and effective personal conversations. All spheres of communications were affected by this exponential growth in data consumption and adolescents were among the first to adapt and experience the digital world for educational and leisure purposes. These cutting-edge digital apps have met the needs of diverse strata. Through a survey questionnaire, the study examined the adolescent's motivations for using digital media according to the uses and gratification theory. The social media usage, peer influence and security threats were examined. Due to the satisfaction they derive from using social media, which outweighs the security risks, the study shows that adolescents were highly networked in this platform and they have been gratified from numerous digital applications during the pandemic induced lockdowns.

Keywords: Social media, Adolescent, Gratification, Peers, COVID-19

Introduction

Globally, the COVID-19 outbreak that resulted from the SARS-CoV-2 virus's transmission in late 2019 has had a significant impact. Every country and international organization was challenged by the novel corona virus to discover a mechanism to stop its spread, which resulted in rigorous physical isolation rules and severe lockdowns. The social distancing norms and face masks have emerged as the most effective weapons in the fight against this terrible virus, disrupting all spheres of life. People have been confined to their houses during the lockdowns for a protracted period of time, and adolescents with strong social needs encountered difficulties in maintaining friendship, interactions and emotional well-being. Ages 10 to 19 are classified by the World Health Organization as adolescents, a stage between childhood and adulthood. Due to the children's rapid transformation in terms of their physical, psychological, and cognitive

abilities, it is a crucial time in human development. 1.6 billion people in the globe are adolescents accounting one-sixth of the human population.

Adolescents are susceptible to social incentives and admiration due to hormonal changes and the external ambience. They also have a higher risk of developing mental health problems including anxiety and depression (Keles et al., 2020). They were forced to a new way of living by this COVID-19 pandemic, which ruined their way of existence. They were able to recover from this reality thanks to social media, which is already a well-established platform among adolescents. They benefited greatly from social media during lockdowns that were implemented as a preventative step to stem the spread of COVID-19. Through a virtual platform, it enabled them to socially connect and reunite with their friends and family. Additionally, it provided them with informational resources on the growing epidemic and the essential safety and health precautions to be observed. The social media played a significant influence in this setting and must be assessed for their social patterns from the viewpoint of peers.

Due to the availability of economical mobile phones and the widespread use of the internet among many facets of society, social media usage has gained more traction among young people even before the pandemic (Spilkova et al., 2017; Whiting and Williams, 2013). The digital applications, particularly social media, were able to expand their user bases by billions due to their user-friendly designs, straightforward interfaces, and quick, cost-free signup processes. It's a special platform for collaboration and customization based on user needs due to user-generated content and user-to-user content exchange (Collin et al., 2011). The social media applications are web-based applications that make it easier for users to connect, share, and collaborate on information within their user network (Kaplan and Haenlein, 2016; Aichner et al., 2021). The most well-known social media apps have generally been social networking sites and the use of these digital applications made communication channels more effective and quick (Popoola, 2014).

In contrast to other medium of communication, it makes it simpler to communicate and connect with friends (Tong et al., 2008; Drahová and Balco, 2017). Users' generated material has blurred the lines between producers and consumers and created new ways for them to interact with and share their information (Lin, 2001). In recent years, a number of social networking applications have emerged, each serving a different function for users (Asemah et al., 2013). The consumers choose social media applications based on their requirements and level of satisfaction (Quan-Haase and Young, 2010). In addition to providing a user-friendly experience, choosing to remain anonymous allows people to share their ideas more quickly (Lampe et al., 2010). Due to all of these incentives, social media is an engaging and unavoidable part of adolescents' daily life (Lau, 2017). They were among the most frequent users of social media than any other demographic group due to their quicker adoption of new technology and exposure to its capabilities (Smith, 2014; Lenhart et al., 2015). They utilize social media to communicate with friends, family, and even strangers as well as for amusement and education (Reich et al., 2012).

Social media, like any other medium, has positive and negative aspects that influence and divert youngsters. Adolescents' use of digital resources is significantly threatened by security flaws and the possibility of online abuse (Siddiqui and Singh, 2016). User experience gratifications are different from one another. Each media offers a set of uses to its consumers and in turn users seek gratification with the usage of multiple social media applications. Like how the message based instant apps were preferred to email among the users to connect and communicate (Huang and Yen, 2003).

The motivations for social media usage can be grouped into entertainment, communication, expression of opinion and relaxation (Al-Menayes, 2015; Whiting and Williams, 2013). As the functionality of social media varies, so does the gratifications the users experience from them. The Facebook is one of the familiar social media application among the adolescents and used predominately for socializing with other users on the same platform (Alhabash et al., 2014). Apart from socialization which is the one of the foremost factor of the social media usage, other factors like knowledge seeking, maintaining friends also plays a critical role in social networks (Raacke and Bonds-Raacke, 2008).

Social networking has even facilitated the reunion of friends who had been separated. It assists their socialization, quest for knowledge, and emotional expression. Typically, different media merge with the new medium to facilitate communication and reach a wider audience (Quan-Haase, 2008). Each application serves a certain goal; thus it frequently tends to satisfy for a particular use. Adolescents' peer pressure has a significant impact on how quickly they embrace the digital tools and connect on social media (Jung et al., 2005). In the context of Covid-19, this process of using social media has accelerated further, as the challenges of physical communication were prohibited.

Social media and peers

Young people are easily influenced by the social norms and environment in which they live (Barker, 2009), and they frequently imitate the behavior of their close friends who share their interests (Crandall et al., 2008). Adolescents' behavior is significantly influenced by how much time they spend with their peers and how important peer approval is to them (Prinstein and Giletta, 2016). The influence of peers on social media usage relies on their level of motivation and the pressure they encounter from their peers (Santor et al., 2000). Adolescents are easily influenced by their peers, therefore the social standards that they perceive from their peers reflect in their actions. Peers reflect social norms and the pattern of socialization to the members of that group (Henneberger et al., 2020). They do this to align their attitudes with those of their peer group in order to get acceptance and remain part of the same flock (Choukas-Bradley et al., 2015). Even while peer influence might not always support all of their values, being excluded from the group prohibits them from expressing it (Paluck et al., 2016). When surrounded by others, adolescents even take more risks (Gardner and Steinberg, 2005; Andrews et al., 2020). Even in their social media applications, they exhibit this feature. Areas of the prefrontal cortex are stimulated by peer support and motivation. The importance of peers among young Instagram users was established via magnetic resonance imaging of the cortex by Sherman, Payton et al., 2016. If they are recommended by their peers, the distinctiveness of digital apps promotes the intensity of social media activity. They enjoy their experience by receiving likes, shares, and comments from their friends. They believe that what their friends do and how they act are the standards that they should follow (Nesi et al., 2018). But the Covid-19 induced lockdowns have changed all the paradigm and induced a new normal to the adolescents. They have been forced to accept this new reality and adapt themselves.

Uses and Gratifications

The gratification plays an important role among the users in choosing the medium which offers them the most (Palmgreen and Rayburn, 1979). The social networks were many and offered a wide range of features.

This gives people the option to choose the ones they believe are best suited for their needs (Ku et al., 2013). Hedonic, utilitarian, and social satisfaction were the three main categories used to group the gratifications. The hedonic satisfaction is facilitated by passing leisure time and enjoyment. The utilitarian category includes information and knowledge seeking, whereas the social presence and interaction category includes social gratification (Gan and Wang, 2015).

Early theories of communication presupposed people to be easily receptive to the media, and they expected that the audience would be docile and accept the powerful media (Windahl and McQuail, 1993). In contrast to the earlier postulates, later theories like uses and gratification took a different stance. This approach viewed viewers as engaged parties who were working toward a common objective. It stresses the need of individuals being motivated to use the medium with active engagement (Katz, 1959; Rubin, 2009). People had the option to select a media that had some effect from the psychological and sociological characteristics of the audience (Flaherty et al., 1998). The ability to choose the information they need from the medium and even to produce their own material is made possible by the social media's active users and adjustable features. As a result, users actively choose the application that can fulfil their demands based on their own, and they stick with it as long as it fulfills them. Thus, the active participant chooses the medium based on perceived benefits and pleasures (Baxter et al., 2008; Katz and Blumler, 1974). The uses and gratification theory centered around the users' psycho-social needs (Leung and Wei, 2000) and it can be applied to both traditional & new digital media including social media applications and used by social scientists (Stafford et al., 2004; Han et al., 2015).

Adolescents' intrinsic requirements for gratification further shape their use of social media as their social and cognitive demands, when combined, push them to use it (Wang et al., 2012; Perloff, 2014). The peer validation among them were also linked to the social media likes (Jong and Drummond, 2016) and the social networking sites helps the users to gratify their needs which may not be easily possible in traditional media (Asemah et al., 2013). In pursuance to this, the following research questions were asked.

- 1. What is the effect of gratifications on social media usage during COVID-19?
- 2. What is the influence of gratifications on perceived threat during lockdown?
- 3. What is the effect of perceived threat on social media usage during the pandemic?
- 4. What is the moderating effect of peers on relationship between gratifications and social media usage?

Theoretical framework

From the above literature analysis, the present research study created a theoretical model on the constructs influencing the social media usage through hedonic, utilitarian and social gratifications and with the help of peers, perceived threat during the lockdown.

Peers (PR) Hedonic Perceived threat H4 Gratifications (HG) (TH) 45 Utilitarian 16 H7 Gratifications (UG) H Social Social Media Gratifications (SG) H3 Usage (SMU)

Figure 1. Model framework

Method

The survey methodology based on the questionnaire were used for the study. The questionnaire was filled by the students of the age group between 16 and 18 studying in the Chennai city. The Chennai considered as the cultural capital of India for its heritage and culture. The city with the population of more than 4.5 million has one of the high internet penetration and smart phone usage in India. The samples were selected through random sampling on the basis of constituency used for the parliamentary election. The data were then collected among the students. All the respondents were allowed to participate in the study only after the consent from the parents. 655 samples were collected and further analyzed. The data were then collected from the users and 5 samples were removed due to insufficient data. Finally, 650 samples were further examined for the research. Among them 52% (N = 338) were females and rest were males (N = 312). Among age group, 38% belongs to 16 (N = 247), 32% belongs to 17 years old (N = 208) and the rest belongs to 18 (N = 195).

Results

Model Analysis

The validity of the sample was evaluated through convergent validity and discriminant validity to assess the model fitness.

Convergent Validity

The convergent validity of the model is assessed by the average variance extracted (AVE), factor loadings and composite reliability (Gefen et al., 2000). The average variance extracted for the constructs was above 0.600 and composite reliability was higher than 0.9. Also the measured factor loadings were reported more than 0.7 as shown in table 1. The factor loading is usually expected to be above 0.7 for every construct used (Vinzi et. al., 2010). During the analysis 7 constructs exhibited low factor loadings that is below 0.7 and were removed to improve the reliability and AVE scores (Grefen and Straub 2005). The reliability of the items was studied through the Cronbach's alpha and composite reliability. The alpha values were higher than the 0.700 mark and composite values were above 0.700 too (Wasko and Faraj 2005). Similarly, the convergent validity was significantly acceptable as the all the values of Average Variance Extracted was above 0.500 as shown in table 1.

Table 1. Loadings, Reliability and Validity

| Constructs | Items | Factor Loadings | Cronbach's Alpha | rhoA | Composite Reliability | AVE |
|----------------|-------|--------------------|---------------------|-------|--------------------------|-------|
| Hedonic | HG1 | 0.804 | 0.891 | 0.914 | 0.920 | 0.698 |
| Gratifications | | | | | | |
| | HG2 | 0.899 | | | | |
| | HG3 | 0.744 | | | | |
| | HG4 | 0.913 | | | | |
| | HG5 | 0.805 | | | | |
| Utilitarian | UG1 | 0.783 | 0.937 | 0.942 | 0.947 | 0.66 |
| Gratifications | | | | | | |
| | UG2 | 0.926 | | | | |
| | UG3 | 0.824 | | | | |
| | UG4 | 0.753 | | | | |
| | UG5 | 0.753 | | | | |
| | UG6 | 0.89 | | | | |
| | UG7 | 0.836 | | | | |
| | UG8 | 0.799 | | | | |
| | UG9 | 0.764 | | | | |
| Social | SG1 | 0.893 | 0.973 | 1.018 | 0.975 | 0.797 |
| Gratifications | | | | | | |
| | SG2 | 0.945 | | | | |
| | SG3 | 0.849 | | | | |
| | SG4 | 0.857 | | | | |
| | SG5 | 0.868 | | | | |
| | SG6 | 0.883 | | | | |
| | SG7 | 0.897 | | | | |
| | SG8 | 0.868 | | | | |
| | SG9 | 0.927 | | | | |
| | SG10 | 0.938 | | | | |
| Peers | PR1 | 0.774 | 0.921 | 1.12 | 0.932 | 0.733 |
| | PR2 | 0.858 | | | | |

| PR3 | 0.941 | | | | |
|-----|---|---|---|---|---|
| PR4 | 0.770 | | | | |
| PR5 | 0.924 | | | | |
| TH1 | 0.949 | 0.914 | 1.026 | 0.936 | 0.785 |
| TH2 | 0.945 | | | | |
| TH3 | 0.845 | | | | |
| TH4 | 0.796 | | | | |
| SM1 | 0.702 | 0.922 | 0.925 | 0.937 | 0.65 |
| SM2 | 0.744 | | | | |
| SM3 | 0.762 | | | | |
| SM4 | 0.877 | | | | |
| SM5 | 0.832 | | | | |
| SM6 | 0.839 | | | | |
| SM7 | 0.815 | | | | |
| SM8 | 0.863 | | | | |
| | PR4 PR5 TH1 TH2 TH3 TH4 SM1 SM2 SM3 SM4 SM5 SM6 SM7 | PR4 0.770 PR5 0.924 TH1 0.949 TH2 0.945 TH3 0.845 TH4 0.796 SM1 0.702 SM2 0.744 SM3 0.762 SM4 0.877 SM5 0.832 SM6 0.839 SM7 0.815 | PR4 0.770 PR5 0.924 TH1 0.949 0.914 TH2 0.945 TH3 0.845 TH4 0.796 SM1 0.702 0.922 SM2 0.744 SM3 0.762 SM4 0.877 SM5 0.832 SM6 0.839 SM7 0.815 | PR4 0.770 PR5 0.924 TH1 0.949 0.914 1.026 TH2 0.945 TH3 0.845 TH4 0.796 SM1 0.702 0.922 0.925 SM2 0.744 SM3 0.762 SM4 0.877 SM5 0.832 SM6 0.839 SM7 0.815 | PR4 0.770 PR5 0.924 TH1 0.949 0.914 1.026 0.936 TH2 0.945 TH3 0.845 TH4 0.796 SM1 0.702 0.922 0.925 0.937 SM2 0.744 SM3 0.762 SM4 0.877 SM5 0.832 SM6 0.839 SM7 0.815 |

Discriminant Validity

The Discriminant validity was evaluated by Fornell-Larcker criterion. The table 2 displays that the square root of Average Variance Extracted for the items was higher than the inter construct correlation. The discriminant validity was also tested by heterotrait-monotrait ratio of correlations (Henseler et al., 2015) with the upper limit of 0.90. Hence, in this model discriminant validity is established (Table 3).

Table 2. Fornell-Larcker criterion

| | HG | PR | SG | SMU | TH | UG |
|-----|--------|--------|--------|--------|--------|-------|
| HG | 0.836 | | | | | |
| PR | 0.506 | 0.856 | | | | |
| SG | 0.311 | 0.383 | 0.893 | | | |
| SMU | 0.579 | 0.328 | -0.082 | 0.806 | | |
| TH | -0.208 | -0.167 | 0.520 | -0.417 | 0.886 | |
| UG | 0.548 | 0.395 | -0.022 | 0.569 | -0.426 | 0.816 |

Note: Values in Italic represent square root of AVE

Table 3. HTMT ratio

| | HG | PR | SG | SMU | TH | UG |
|----------------------------|-------|-------|-------|-------|-------|----|
| Hedonic Gratifications | | | | | | |
| Peers | 0.472 | | | | | |
| Social Gratifications | 0.45 | 0.506 | | | | |
| Social Media Usage | 0.841 | 0.302 | 0.308 | | | |
| Perceived threat | 0.235 | 0.176 | 0.459 | 0.429 | | |
| Utilitarian Gratifications | 0.819 | 0.391 | 0.36 | 0.837 | 0.406 | |

Structural Model Analysis

The structural model echoes the paths hypothesized in our research framework and the model is evaluated based on R² and path significance. The goodness of the model is established by the strength of each structural path developed by R² for the dependent variable (Briones Penalver et al., 2018) and the value of R² must be equal to or over 0.100. Hence, the predictive capability of the model is recognized. Similarly, Q² establishes the predictive relevance of the endogenous items. The Q² value above 0 reveals that the established model has predictive relevance. The results show that there is a strong significance in the prediction of the items as seen in table 4. Also, the model fit was examined using SRMR. The SRMR value was reported as 0.083 and the value is below the required value of 0.10 demonstrating acceptable model fitness (Hair et al., 2016). The R²for SMU and TH points to 0.981 and 0.444 respectively.

| | | Standard | | | 2.50% | 97.50% |
|-----------|--------|-----------|--------------|----------|--------|--------|
| | β | deviation | T statistics | P values | | |
| HG -> SMU | 0.438 | 0.023 | 19.106 | 0.000 | 0.394 | 0.484 |
| UG -> SMU | 0.638 | 0.024 | 27.061 | 0.000 | 0.590 | 0.682 |
| SG -> SMU | -0.214 | 0.010 | 21.233 | 0.000 | -0.233 | -0.194 |
| HG -> TH | -0.076 | 0.061 | 1.252 | 0.211 | -0.204 | 0.034 |
| UG -> TH | -0.344 | 0.055 | 6.216 | 0.000 | -0.448 | -0.231 |
| SG -> TH | 0.534 | 0.030 | 17.826 | 0.000 | 0.470 | 0.589 |
| TH -> SMU | 0.042 | 0.009 | 4.409 | 0.000 | 0.024 | 0.061 |
| PR -> SMU | -0.068 | 0.012 | 5.788 | 0.000 | -0.089 | -0.043 |

Table 4. Model fitness

Further evaluation of the goodness of fit, hypotheses were analyzed to check the significance of their relationship. H1 checks whether HG has a significant impact on SMU. The result shows that that HG indeed has a significant impact on SMU ($\beta = 0.438$, t = 19.106, p < .001). Hence, H1 was reinforced. H2 checks whether UG has a significant impact on SMU. The result shows that that UG indeed has a significant impact on SMU ($\beta = 0.638$, t = 27.061, p < .001). Hence, H2 was reinforced. H3 checks whether SG has a significant impact on SMU. The result shows that that SG indeed has a significant impact on SMU ($\beta = -0.214$, t = 21.233, p < .001). Hence, H3 was reinforced. H4 checks whether HG has a significant impact on TH. The result shows that that HG has an insignificant impact on TH ($\beta = -0.076$, t = 1.252, p = 0.211). Hence, H4 was not reinforced. H5 checks whether UG has a significant impact on TH. The result shows that that UG indeed has a significant impact on TH ($\beta = -0.344$, t = 6.216, p < .001). Hence, H5 was reinforced. H6 checks whether SG has a significant impact on TH. The result shows that that SG indeed has a significant impact on TH ($\beta = 0.534$, t = 17.826, p < .001). Hence, H6 was reinforced. H7 checks whether TH has a significant impact on SMU. The result shows that that TH indeed has a significant impact on SMU ($\beta = 0.042$, t = 4.409, p < .001). Hence, H7 was reinforced. H8 checks whether PR has a significant impact on SMU. The result shows that that HG indeed has a significant impact on SMU (β = -0.068, t = 5.788, p < .001). Hence, H8 was reinforced.

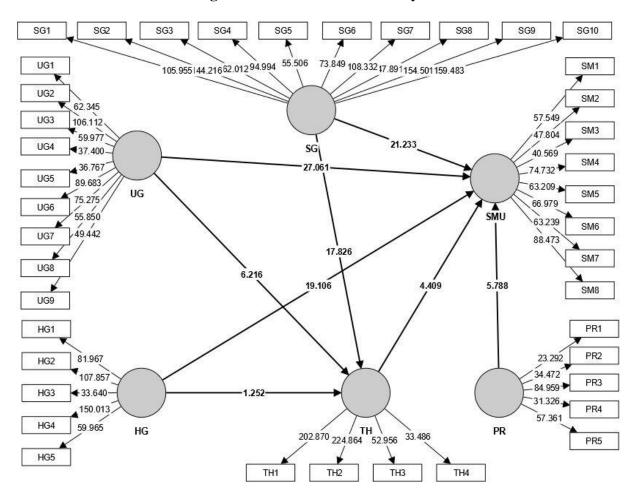


Figure 2. Structural model analysis

Discussion and conclusion

The basis for the impact of social media consumption is a combination of hedonic, utilitarian, and social gratifications. Among them, utilitarianism has a large and profound impact (t = 27.061) on social media usage than other forms of enjoyment, especially during a time like pandemic and lockdowns. The adolescents were indeed attracted by the social media even before and this COVID-19 accelerated and provided gateway for their information source. On the impact of how people use social media, utilitarian reward somehow outweighs social and hedonistic gratification in terms of influence. The information seekers especially adolescents utilized the online media like the social media applications to follow the Covid-19 stories and precautionary measures. Also all their academic work was changed to online mode and this facilitated more usage for the adolescents. The perceived threat was influenced more by the social gratification than utilitarian uses. The online sharing of sensitive information was corresponded mainly to the social benefits of networking. The threat perception looms more for the users experiencing higher social gratification. Hedonic uses were the least important and had little impact on the perceived threat of the three. Surprisingly, compared to the satisfaction the respondents experience, peer effect on media usage was moderate during the lockdown. Although peers only have a minor impact on usage, social media use and utility mainly depend

on the gratification rather than their peers. The physical separation from their friends had a bearing on the peer influence, as the fear of isolation were undermined by the social distancing norms due to pandemic restrictions. The adolescents were connected only through virtual platform and this offered them a chance to explore social media more induced by the individual gratification each user experienced on a personal level. Similar to how it had little bearing on other categories, perceived threat had little impact on the use of social media. The perceived threat was overpowered by the rewards the adolescents gained from the social media. The enjoyment of benefits surpassed the threats of online and it became a minor player to them, as the social media offered them endless possibilities of knowledge, pleasure and enjoyment.

The R² which measures the extent of variance of a dependent variable by independent variables in stipulated model here reveals that a high score of SMU (98.1%). It refers to the magnitude of changes brought on by the influence of an exogenous variable on an endogenous variable. In this case, 98.1 percent of the social media usage is attributed to every component in the model. Information and knowledge seeking were among the major factors for new media usage among the respondents. The desire for knowledge is frequently given priority by adolescents as the main motivation for using social media. This can also be attributed to the respondents' ages, as many of the 16 to 18-year-olds who participated in the poll were preparing for competitive exams to advance in their higher education and pursue engineering or medicine. The social interaction and virtual presence in the social networking sites which forms the social gratification where the next major component slightly lower than the utilitarian purposes which forms a pull factor in the new media usage. The passing of leisure time and enjoyment though a significant factor comes last when compared to others gratifications. Similarly, the perceived threat was heavily catered by the social interaction and communication in the online media. The more they interact, the threat perception is influenced. But the hedonic gratification where the entertainment is focused couldn't have much effect on the threat perception and also falls insignificant. It discloses that when entertainment becomes the goal, the threat consideration among the users were neglected. The threat perception and the peers as mentioned earlier were significant factors on the media usage. But these factors might channelize the adolescents to social media exposure but the continuous usage as well as the media consumption depends more on the level of gratifications than their peers or threat.

Limitations

This study was limited to looking at how adolescents utilized social media during lockdowns brought on by COVID-19. When analyzed across different age groups and the culture, the same research may, in turn, reflect a novel perspective. Therefore, it would be wise to avoid generalizing this work to other segments of society. In order to comprehend the variations in response to and exposure to the same research problems and to thoroughly assess the moderating function of age, researchers are working on the same variables with other age groups.

Disclosure statement

No potential conflict of interest was reported by authors. The authors have no relevant financial or non-financial interests to disclose.

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