Difficulties in Emotional Regulation, Suicidal Behaviors and Social Media Posts: A Mixed Method Study Among Young Adults Using Semiotic Analysis

Sharmistha Mondal (✉ sharmisthamondal2818@gmail.com)

CHRIST (Deemed to be University)

Jayasankara Reddy

CHRIST (Deemed to be University)

Research Article

Keywords: Emotional regulation, Suicidal behaviors, Social media, Semiotic analysis

Posted Date: September 17th, 2021

DOI: <https://doi.org/10.21203/rs.3.rs-879938/v1>

License: © ⓘ This work is licensed under a Creative Commons Attribution 4.0 International License.

[Read Full License](#)

Abstract

The study is an explanatory sequential mixed method design aimed at understanding the relationship between difficulties in regulating emotions and suicidal behaviors. Furthermore, we explored their pattern of social media engagement to identify cues or indications, if any. The quantitative component consists of 100 young adults (18-30 years) sampled using convenience and snowball sampling techniques. The Difficulty in Emotion Regulation Scale (DERS) and Suicide Behaviors Questionnaire (SBQ) were administered. Spearman rank-order correlation analysis establishes a moderate positive correlation ($r_s(100) = .400, p < .0005$) between difficulties in regulating emotions and suicidal behaviors. Furthermore, for the qualitative component, 15 participants were chosen, with five in each category of 1) difficulty regulating emotions and suicidal behaviors, 2) difficulty regulating emotions but no suicidal behaviors and 3) no difficulty regulating emotions but suicidal behaviors. Their active social media account was accessed with consent, and semiotic analysis of their posts from June 2020 to February 2021 was performed, as data collection spanned the timespan. Saussure and Pierce's concept of semiotic analysis is adopted as the framework for the analysis. The results reveal some common and specific categories of signified in the domain of interpersonal relationships, intrapersonal relationships, coping activities, social implications, thought process/cognitions and attitudinal modifications. The connotations and myths associated with the same are also explored within the cultural framework. The results are then triangulated with the quantitative component to provide a broader understanding of the intricate links between the variables.

Background

With the postmillennial generation, social media reflects the unprecedented clutch of effervescent trends, presiding the framework of present-day lifestyles. According to the latest statistics, there are approximately 346.2 million Facebook users in India in 2020, accounting for 23.4% of the entire population, men being 76% and women up to 24%, with the age range of 25 to 34 being the largest user group^[15]. The platform provides youth with the most important interactive medium, unlike the traditional means of media, where users are able to assume an active role in shaping the architecture of their experience^[4]. With the increasing number of users, it promotes communication, technological proficiency and collaboration, along with increased vulnerability to social media threats. It has been observed that people often use them to express their emotions through status updates and make inferences about others' emotional and interpersonal lives due to the ease of their availability at their fingertips. Certain kinds of interpersonal communications, which include vague boasting, humble bragging or subtweeting, are observable on a mass scale and are viewed under negative light due to their attention-seeking or boasting nature^[14]. However, they are highly suggestive of being the cryptographic approach to air their raw emotions, either intentionally done to seek attention or to indirectly indicate subtle cry for help and can be often seen among individuals with suicidal ideations. Suicide is a major public health and ageless concern with devastating effects. World Health Organization (WHO) statistics indicate that India ranks highest in the South-East Asian region and 22nd in the world for suicide rate^[12]. It is a leading cause of

death among young adults under the age of 35. There is an estimated 10 to 20 million nonfatal attempted suicides every year. However, suicide is not an isolated process; rather, it is conceptualized in the continuum beginning with suicidal ideations, plans, attempts and finally completion^[19]. Suicidal ideations are consistent predictors of suicidal attempts and completed suicides^[8]. Hence, it is important to identify the indicators that lead an individual to engage in suicidal ideations and further continue through the suicidal path. As social media is majorly used platforms in recent times to express feelings or communicate either directly or indirectly about the need for help, it can be considered a major indicator to identify individuals with suicidal ideations. Higher instances of emotional distress are reported in suicidality attributed to difficulties in emotional regulation abilities. Hence, it is yet another important indicator that needs to be examined. Although there is a link between emotions expressed on social media and suicidal ideations, there is a vacuum in exploring the nature of the posts or status updates that subtly indicates their cry for help, reflecting vague booking or humble-bragging aspects of communication, which are often viewed negatively^[14]. Hence, it is important to venture this domain to identify the indicators.

Suicide

Suicide is the third leading cause of death among young adults worldwide^[25]. In India, addressing suicide is imperative to consider making a global difference, with young adults being the vulnerable group^[25]. The major correlates of suicide are often family problems, mental illnesses, unemployment, relationship issues, substance abuse, failure in examinations, bankruptcy or economic issues, poverty, dowry dispute, infidelity in relationships, marriage related issues, impotency, death of a dear one, divorce, ideological causes such as hero worship, illegitimate pregnancy, physical abuse, and professional or career related problems^[1]. All this reflects the uniqueness in the social structure of Indian society and the societal pressure that forces an individual to take a drastic step of committing suicide. Suicide attempters with very high suicidal intent or ideations and suicide completers are overlapping populations^[17]. Young adults are usually suicide attempters, whereas older adults are suicide completers worldwide^[30]. Suicide completers include individuals with pessimistic outlooks toward their lives, those lacking appropriate problem-solving approaches and coping skills, and those lacking any other factor^[13]. They often have their attempts planned, with high intentionality and lethality, and mostly attempt to conceal their act of suicide. However, attempters deliberately harm themselves and seek indirect help and usually include adolescents and young adults.

Difficulties in Emotional Regulation and Suicide

Emotions are central to human functioning. All emotions are believed to spring from desires that are caused by a sense of imperfection, incompleteness or nonfulfilment that one feels with oneself, where the strength of such a desire determines the intensity of emotional experience^[27]. Emotional regulation is a complex process involving initiation, inhibition or modulation of one's state or behavior in demanding situations^[31]. People with a higher ability for emotional regulation employ several strategies to minimize

the effects of adverse emotions on their decisions during situations where the effects are deleterious^[18]. It is framed in various ways, with few aligned to the traditional views as a one-dimensional process. However, in contemporary times, it is multidimensional, involving inhibition of disruptive emotions associated with cognitive and behavioral responses benefiting adaptive roles^[6]. Maladaptive emotional regulation is one of the major indicators of suicide. In 2004, Gratz and Roemer conceptualized emotion dysregulation in six dimensions, namely, awareness, clarity, nonacceptance, impulse, goals and strategies. These factors serve the function of perceiving a lack of regulatory strategies, making a person helpless to react to certain situations, with feelings of hopelessness, prompting them to judge the situation as inescapable and eventually leading to suicidal behaviors^[26]. Emotional dysregulation can often be seen in the context of suicide cognitions and is considered a process by which suicide cognitions lead to acute suicide desire^[5].

Social Media and Mental Health

The use of social media in a positive manner, through authenticity in terms of self-presentation, is linked with the well-being of users^[29]. The effects of social media are dependent on the quality of its usage rather than the quantity^[9]. The way people use social media is more crucial than any kind of mere exposure, as it differs in terms of warning-focused public dialog, appearing worthy of consideration^[4]. Social interactions pejoratively have a major influence on real-life social situations, sometimes isolating them from proximity to people in real life and conversing with others, reducing their empathy or even leading to mental health issues such as suicidal ideations. People apprehend the negative impact of social media usage, as it is tied to negative health outcomes, including suicidality, loneliness or decreased empathy^[4]. In many press releases of the American Association of Suicidology in 2017, it was explained that social media in all forms plays a very significant role in affecting the mental health of people.

Emotional Expression using Social Media

With the advancement of technology and the availability of social networking sites, many individuals prefer expressing their emotions online^[33]. Platforms like facebook. Instagram, Twitter and others have tremendously advanced over the last few decades, with each having unique features related to uploading, commenting on pictures, posting events, and sharing their status or activities^[28]. Surveys have revealed that adolescents, teenagers and young adults tend to spend more time integrating social networking sites into their daily lives^[33]. Usually, online expressions of emotions are inclined toward negative emotions, either in a restricted or unrestricted manner that could be avoided in face-to-face interactions, impacting well-being functionally^[33]. Psychological constructs influencing emotional expressions are personality, real-life emotional expressions, social anxiety, or cultural expression. The presence of resources in the real world often acts as a determining factor. People seek social media to express emotions by providing clues about their present situation reflecting their underlying mental state. Facebook users seek emotional support by posting and alleviating any kind of negative emotion^[21]. Nevertheless, social media

platforms play a significant role in developing emotional vocabulary, developing social identities, outlets for negative emotions, sources of emotional dependence and reducing thresholds for frustration and tolerance^[24].

Social Media and Vaguebooking

Facebook and Instagram are primarily used social media platforms that enable users to discuss and share their thoughts, whereabouts, or important information, generally with short and restricted information, even concealed at times^[16]. Viewers' response is usually found to be stronger to negative news than to positive news, independent of sharers' emotional state^[3]. Vaguebooking is defined as the intentional status update that prompts online friends or other viewers to ask what is going on or is possibly a cry for help^[7]. It occurs as some intentional vague remarks, or ambiguous information, worded to solicit attention, elicit sympathy or concern, without explaining the precise cause or nature of their apparent distress^{[7][4]}. It can be seen on any social media platform but seems more prevalent on Facebook, Instagram or Whatsapp. Statuses such as "Big things coming this year!", "Please send positive vibes my way", "Bad day", and other similar statuses are considered ultimately inward-looking motivated by the desire to vent to pique others' curiosity or sympathy^[14]. Due to its attention seeking nature, it is often viewed under negative light and is ignored due to its cryptographic approach of airing raw emotions, practically begging ridicule^[23]. It is viewed as the lack of authentic self-presentation and rumination due to its manipulateness and vagueness. However, there is also a possibility that it serves as a warning sign for individuals who might be exposed to any kind of mental health issue with regard to social media usage^[4]. Hence, such posts or status updates deserve a second look, as they might indicate a call for help that people cannot directly communicate. It can be directed toward a particular person, group of people or particular target audience, as sometimes such social coding, such as in-jokes or false personal data, could be understood only by their intended audience^[23]. There are certain psychological benefits, as it helps navigate the needs of people to actively engage in social media by achieving blandness and provocation while helping them express their concerns and indicate the need for help indirectly^[23]. In particular, in terms of indicating suicidal ideations, it is found to prompt many indications of professional assistance. It also reflects some form of emotional dysregulation among the individuals, indicating prominent suicidal ideations.

Overall, difficulties in emotional regulation and social media updates can provide clues on individuals' suicidal ideations. Considering the deteriorating effect of suicide on the community, there is growing recognition of prevention strategies by identifying indicators, which can sometimes be cryptographic in nature. However, culturally sensitive learning and traditions should also be considered in this context, as they act as determining factors. Exploring this domain will yield better insight into the intricate links between the variables and help design more appropriate preventative strategies at the community level. Hence, it is important to determine the relationship between difficulties in emotional regulation and suicidal ideations and understand the social media phenomena that youth with greater and lesser difficulties engage in and whether their social media posts and updates indicate any suicidal ideations.

Method

Objectives of the Study

- To understand the quantitative relationship between difficulties in emotional regulation and suicidal behaviors.
- Qualitatively, we explored their intricate relationship with social media posts to understand the presence of any indications or cues related to difficulties in emotional regulation and suicidal behaviors.

Research Design

The study uses an explanatory sequential mixed method design to understand and explore the relationship between the chosen variables. In the quantitative component, data are collected and analyzed, and in the qualitative component, through semiotic analysis, the obtained quantitative results are elaborated and explained.

Quantitative Component

This component aims to understand the relationship between difficulty in regulating emotions and suicidal behaviors. One hundred young adults within the age range of 18 to 30 years were selected through convenience and snowball sampling owing to the difficulty of obtaining participants online due to the COVID-19 pandemic. The age group was specifically chosen because statistics suggest that young adults are more vulnerable to emotional dysregulation and suicidal ideations. Additionally, they go through significant changes during this dynamic period of their life that makes them prone to such tendencies. Here, the Difficulty in Emotional Regulation Scale by Gratz and Roemer is used. It is a 36-item scale measuring six dimensions of nonacceptance, goals, awareness, impulse, strategies and clarity. The Suicidal Behaviors Questionnaire by Marsha Linehan is another tool used, which is a 90-item self-report measure of past and future suicidal ideations. They are administered together using google forms. SPSS-25 software was then used to establish the correlation between both variables.

Qualitative Component

Fifteen participants with maximum scores were selected using the purposive sampling technique. They were divided into three categories of participants: 1) difficulties in regulating emotions and suicidal behaviors, 2) difficulties in regulating emotions but no suicidal ideations and 3) no difficulties regulating emotions but reported suicidal behaviors. The groups are separately analyzed to understand the unique pattern of their status updates. In this phase, after obtaining their consent additionally, their active social media accounts are chosen for semiotic analysis to explore their social media engagement and indications of their concerns. Here, signs and the use of signs as a part of a sign system are manually analyzed. From June, the timeline of the posts was considered, as the questionnaires were administered

to capture their emotional difficulties and suicidal behaviors. Through credibility, the analysis and interpretations are verified for accuracy and absence of any personal biases.

Trustworthiness/Credibility

Member checks and peer reviews were used to establish the credibility of the results. In the former, participants' views of the credibility of the findings and interpretations are derived. The participants had access to their data collected, analyzed and interpreted so that the accuracy could be judged and modified by them in case of misinterpretations. In the latter, the peer reviewer played the role of devil's advocate, who helped in maintaining honesty throughout the study.

Results And Discussion

Quantitative Component

Correlation analysis was run to assess and establish a relationship between the variables of difficulties in emotional regulation and suicidal behavior using SPSS-25 software. Shapiro-Wilk's test of normality established a nonnormal data distribution. As the data were not normally distributed, Spearman's rank-order correlation was run among participants aged 18 to 30 years. The table.1, highlights that there was a moderate positive correlation between difficulties in regulating emotions and suicidal behaviors, $r_s(100) = .400, p < .0005$.

Descriptive statistics were run among the six domains of the DERS scale, namely, lack of emotional clarity (Clarity), lack of emotional awareness (Awareness), Impulse control difficulties (Impulse), Nonacceptance of emotional responses (Nonacceptance), Difficulty engaging in Goal-directed behaviors (Goals) and limited access to emotion regulation strategies (Strategies). The analysis table no. 2, shows that participants obtained the maximum score in the domain of strategies, followed by goals, nonacceptance and impulse, awareness and then clarity.

Some of the observations from the scores reveal that 28 out of 100 participants (17-female; 11-male) had engaged in suicidal behaviors. These participants scored high in difficulties in emotional regulation, especially in the domains of Nonacceptance, Impulse control difficulties and limited access to emotion regulation strategies, followed by goals, awareness and clarity, indicating the decreasing likelihood of these difficulties. Nineteen of them had past suicidal threats without the intent of dying and low lethality, whereas the other 9 participants had the intent to die with high lethality. All 28 of them indicated their likelihood of future attempts and death by suicide. There were also participants whose scores indicated greater difficulties with emotional regulation in the domains of goals and strategies but no suicidal behaviors or ideations and participants whose scores indicated no difficulty with emotional regulation but the presence of suicidal behaviors and ideations and the likelihood of future attempts and death by suicide. However, the sociodemographics of these participants were similar with graduate educational qualification, unmarried status, upper middle class and family type.

Qualitative Component - Semiotic Analysis Approach

Semiotics is the study of signs and signs using behavior. One of the founders, the Swiss linguist Ferdinand de Saussure, defines this as the study of “the life of signs within society”. He treated language as a sign-system. His basic semiotic concept of distinction between the two inseparable components of a sign, namely, the signifier and signified, is used as the framework for this study. Additionally, Charles Sanders Peirce’s perspective of categorization of signs as icon, symbol and index is also considered for the analysis. Here, not only the signs but also the conventions governing the use of signs and sign system is studied, where it explores the connotation, denotation and myth associated with certain signs and symbols in the cultural context used by the participants to communicate or express their emotions to the social media audience indicating their vulnerability to suicidal behaviors and understanding the concept of Vaguebooking, if any, using the semiotics.

Based on the responses and scores obtained by the participants in the quantitative component, 15 participants are selected who are categorized into three categories of – 1) Presence of both difficulties in regulating emotions and suicidal behaviors, 2) Presence of difficulties in regulating emotions but no suicidal behaviors, and 3) No difficulties in regulating emotions but presence of suicidal behaviors. After obtaining consent from those participants, their active social media accounts were accessed. As all the participants provided consent for their instagram accounts, the posts from the instagram were chosen from the timeline of June 2020 to February 2021, as the data collection spanned the timespan. The unfortunate event of the COVID-19 pandemic has spun across the living style of people, leading to roller-coaster emotions due to unforeseeable consequences, making vulnerables more prone to their concerns. As the data collection was done during this time period, the responses and posts of the people are highly contextualized to the situation and the concerns that arose during this particular time period. The following are the tables (table 3, table 4, and table 5) of semiotic analysis of three categories of the participants highlighting the signified component that is common among their posts and the common underlying themes that emerged from the same.

From the analysis in table 3, it can be seen that these participants have certain themes in common, namely, interpersonal relationships, intrapersonal relationships, social implications, engagement in religious practices and coping. These participants indicated difficulties mainly in the domain of nonacceptance and impulse control aspects. Their social media posts indicate their attempt to escape from these difficulties by engaging in behaviors mentioned through the signified. However, the component of Vaguebooking is definitely seen where with the expectation of responses from social media audiences, the participants are trying to seek out or express their concerns while creating indirect awareness and directing toward the need to address the concerns at a community level.

Connotation of the Signified – Interpersonal Relationships

Peer support, family support or sharing cordial bonds with partners is a major aspect of one’s life. The outbreak of the COVID-19 pandemic caused a shift in the mode of living, leading to a sudden transformation from offline to online media, affecting not only communication between people but also

their work. This time period served as a realization point to many and triggered their vulnerability to emotion regulation difficulties and even to suicidal behaviors. During this period of isolation, which prompted feelings of loneliness, the importance of having peers, family or partner or even proper workgroup cooperation served as an escape route to many where they had someone to share their feelings and emotions with. These significant relationships provided participants with safe or comfortable zones where they could sail through difficult times collectively.

Myth

India has prevailed the concept of collectivistic culture since times immemorial. As part of it, the concept of collectivistic harmony, where the sharing of experiences among each other and feelings of togetherness are given importance during difficult times. This is something ingrained as a group think phenomena among several Indians, which can be reflected even among the participants.

Connotation of the Signified – Intrapersonal relationship

Intrapersonal relationships are yet another domain that experienced radical shifts during this pandemic. People generally try to escape focusing on their relationships with themselves either due to some associated anxieties or due to their busy schedule. However, this pandemic provided everyone an opportunity to reflect on themselves and develop an inner healthy relationship. For the same, participants utilized spirituality, religiosity, self-encouragement, self-appraisal and self-reflection that helped them gain awareness of personal space and boundaries and the needs and wants of their inner self. People were caught in a situation where they had to encourage and appraise themselves. The concept of personal space or boundary is always violated, as other people sharing a significant relationship with the individuals perceive it as a threat to their ego, esteem and relationship and hence discourages the same since age-old times. However, in this lockdown where people were strictly home-bound and experienced interference, they understood the importance of having personal space and started working on factors that define their individuality. However, having the realization that this is against the beliefs held by society, they tried seeking validation through others. People are currently gradually realizing the needs for individuality due to the vast exposure and education of Westernized concepts but are reluctant to voice out due to the fear of oppression and other communal violence. However, the pandemic was an opportunity to disprove all such hypotheses. In addition, it also highlights the notion of collective experiences or the similarity of experiences due to ingrained cultural values and learning.

Myth

India, as a collectivistic culture, has always overlooked the concept of individuality. As a result, people learn to prioritize the external strokes they receive rather than the internal strokes. The concept of collective experiences is considered ideal, whereas individuality is considered to degrade the values held by Indian society. Hence, any such effort by an individual is considered a threat and is responded negatively either with suppression or violence by the strong believers or superior members of the

community, which is even though a sad reality, especially in rural society, it prevents other people from different part of the society to also not voice out or make an effort for the same.

Connotation of the signified- Social implications

Society, as a whole, has its own expectations from individuals in terms of their adherence to certain beliefs, values, norms and appearances. Every individual has a desire to fit into their in-groups and favors group conformity. Impression management techniques and religiosity have been means for participants for the same. However, some also used humor on stereotypes and prejudices, along with self-criticisms to highlight this aspect. However, dissonance could be noticed through such posts where the phenomena of Vaguebooking are clearly reflected. The participants are expecting to see if anyone else does relate or share any similarity to their thought process, tracing back to the notion of need for collective efforts as preached by cultural learning, which is unconsciously deeply ingrained among the mindset of people.

Myth

The postmillennial generation youth are aware of several social concepts that restrict their autonomy due to membership in a certain culture or group. However, the fear of voicing out opinion still persists among many, as it is viewed under negative light by society. It is considered a violation of traditionally or culturally prevailing values, which is strongly opposed by powerful members of society. In addition, the notions of collective concepts can be seen dominating the outlook of people in viewing any situation.

Connotation of the Signified – Coping activities

Every individual has their own threshold to withstand distressing situations. As a result, everyone resorts to certain activities that can help them cope by providing distraction to their in-built negative energy. Participants engage in activities such as expressive arts, substance consumption, approval gained through social media, altruistic acts, being hopeful and developing optimistic resolution. Expressive arts have a scientific understanding of being coping activities, as it helps individuals channelize their energy productively. Gaining approval is a means of validation that helps them feel that their feelings and emotions are valid. Altruism has always helped people feel good, even proven by various studies. Apart from that, being hopeful and making resolutions provides people with directions for their future that indirectly serve as a means of intrinsic motivation. Indian culture always withholds the value of helping others in the context of karma philosophy. It believes that by doing good, you gain good. This highlights the thought process of the people behind noble deeds as a means of coping. Gaining approval or validation indicates a similar mindset or similarity in experiences, which boosts confidence among people and helps them cope with situations.

Myth

Substance consumption is something most commonly reported by people to cope with difficult times, as it temporarily numbs them in providing relief. Even though people are aware of the consequences, they still happen to follow the same pattern. Apart from this, most coping activities remain universal among

people either as a result of group think or individual preferences or peer influences. The traditionally prevailing concepts are always given importance as learning starts at home. The karma concept is one such. However, it is true that no harm should be inflicted on others, but the cognitions behind the thought process highlight the culturally prevailing learnings.

From the analysis of the table 4, the themes of interpersonal and intrapersonal relationships were found to be common among the groups holding the same significance. However, the significant components include self-sufficiency and self-exploration activities, whose significance again traces back to the realization of the importance of individuality. One theme that is found to be different among this group is the thought process or cognitions. This group has scored high in the domains of having limited access to emotion regulation strategies and difficulty engaging in goal-directed behaviors. The theme of the thought process highlights this aspect, where these people are found to focus majorly on the past rather than their present or future and tend to explain unfortunate events through external attributions. These are some of the aspects that contribute to hindering individuals' ability to strategize and keep them from thinking about the future, which makes it difficult to engage in goal-directed behaviors. However, the phenomena of Vaguebooking are found to be significant.

Connotation of the Signified – Thought process/Cognitions

Appreciation of available resources, reflecting on good memories, are positive aspects of an individual's cognitions. It not helps them gain confidence but also helps them feel optimistic and hopeful about the future. It is said that people realize their fortunes only when it is taken away from them. This pandemic provided hands-on experience of the same. It at least helped people realize and appreciate the resources they have in life and reflect on good and positive aspects that can help them keep going through tough times. External attribution is something people commonly engage in when they happen to experience an unfortunate event, as it helps them feel satisfied regarding their nonparticipation in the event. However, owing up to mistakes is not something that everyone does, either due to the threat to their ego or esteem, and helps them escape guilt feelings. Even though the outbreak of the pandemic is external, its spread is something that could be curbed but is unsuccessful due to people's ignorant attitude. In addition, even though the situation has definitely contributed to many unfortunate crisisful events, attributing everything to it is one of the defenses that helps people avoid anxious feelings that comes by facing their reality.

Myth

External attribution easily explains where people have the tendency to externalize the blame of unfortunate events on something else that helps them escape guilt feelings and perceive themselves under positive light. This is something that is even among people irrespective of their cultural origins. However, modeling such tendencies starts right from the family peers or media that individuals are exposed to on a daily basis.

From the analysis of table 5, this group of participants also shared certain similar aspects of social media engagement. The themes of interpersonal relationships, intrapersonal relationships and coping

remain the same as those of other categories. However, only differences could be seen in terms of their attitudinal modifications, and the coping activities used by this group of people are slightly unconventional filled of adventurous and extensively sportive activities, along with perspective on self-grooming and behavioral appearances,

Connotation of the Signified – Attitudinal modifications

These groups of participants indicated certain modifications in their outlook since the pandemic. They highlighted the reality check of death and suffering, which is inevitable. Due to the perception of the whole event negatively, they engage in pessimistic evaluation of every situation they are in and deny looking at the other part of the story, highlighting their rigid cognitions. However, some participants also indicated hope for optimism based on the way the world is trying to balance and get through the situation. Sometimes, people tend to live in denial due to the anxiety they face due to suffering. However, this pandemic has exposed everyone to their vulnerable sides, which provided reality checks, as suffering is inevitable. However, people with rigid mindsets tend to overlook the positives of the situation and engage in pessimistic evaluations of the situation, which is clearly reflected in this context.

Myth

Cultural learning always highlights positive aspects and relates everything negative to punishment or death. The concept of death is viewed negatively rather than viewing it from different perspectives. Due to the negative connotations associated with death, its reality is often avoided or denied. However, there are scriptures that believe in the concept of after-life, but the skepticisms regarding the concept leave people with disdain and make them deny it to avoid any negative emotions.

There are certain aspects that are universal among individuals in regard to social media engagement. The theme of interpersonal and intrapersonal relationships is common among different groups, highlighting its significance in their lives. As all the participants have the same cultural origin, it can be attributed to group think phenomena. The COVID-19 pandemic has been eye-opening to individuals in many aspects. It not only made the individuals aware of their individuality but also provided them with a sense of supportive community. It made people aware of their relationships with others and themselves. It cannot be denied that cultural background and learning play a huge role in determining an individual's behaviors. Even though Indian culture views suicide negatively, it still prompts people to take such drastic measures to eliminate their distress for which they do not find any escape, even despite making efforts to seek help either directly or indirectly. In addition, it is taught to individuals to never display the weakest version of self to others, as that is disregarding not only to such individuals but also to their families. Everything a person does is related to the family values. Hence, individuals are always conscious of what they generally choose to share and express. However, there is always a dissonance that makes an individual at least try seeking help or express their concerns indirectly cueing toward the need for modification or correction in that domain. As this task is not easy, especially in the collective context of India, people try to use the cultural values of gaining majority rather than individually voicing out concerns. Hence, validation and approval from others is given at most importance, as seen even through

the posts of the participants in the study. All the posts highlight the definite Vaguebooking phenomena, where participants posted things expecting responses from social media audiences. The posts highlight the participants' domains of the difficulties in regulating emotions and reflect their thought processes and struggles. It is true that it is the choice of participants of what they post or choose to share on social media. Because of the nature of posts, the captions justifying them show their desire to speak up and convey many of their emotional expressions. However, underlying them is the difficulties in their emotion regulation strategies that are also reflected. Although none of the posts directly include any explicit content on suicidal behaviors or attempts, the underlying meaning behind their choice of posts reflects their tendency to share their views and seek help even through superficial relatedness. This not only helps them communicate their feelings and emotions but also helps them express their emotions, feelings and thought process, providing a means for ventilation. However, participants with greater difficulty in emotional regulation and no suicidal behaviors had a relatively lower number of posts than individuals with no difficulty in emotional regulation but suicidal behaviors. However, the participants with difficulty in emotional regulation and suicidal behaviors had a relatively larger number of posts, indicating their tendency to indirectly seek help through social media engagement. Their posts are unique, sometimes reflecting their struggles, their opinions, and the activities they use for coping. As seen and even justified by the literature, individuals with suicidal behaviors or attempts have comparatively frequent social media engagement and sharing of posts when compared to individuals with only emotional difficulties. Even though the themes of their posts remained the same, the captions used reflected their own unique struggles with regulating their emotions. This indicates their encrypted cry for help and the need to address some issues as a community. Hence, it is important to understand the encrypted meaning of the posts and not perceive it as an attention-seeking nature of the person at first glance but rather consider it as something through which individuals are trying to communicate certain concerns that require assistance.

Trustworthiness/Credibility

After the data analysis, the results and interpretations were made accessible to the participants in the qualitative phase. An informal interview was conducted to assess the accuracy of the interpretations and ensure the absence of any personal biases. The participants verified and judged the accuracy of the data analysis and ensured no misinterpretations of their posts. Some participants even provided their feedback as they gained insight and were able to relate to the moment in which they were undergoing difficulties with their emotions and feelings and the intention they had behind posting certain status and updates on their timeline. In addition, peer debriefing is also used, where peer debriefer is an expert in qualitative research who critically analyzed the interpretations and posed questions at every step that helped maintain honesty throughout the study.

Implications

The results help in understanding social media engagement, the nature of posts, the purpose of posts and the content of the posts frequently used by individuals with suicidal behaviors and difficulties in

regulating emotions. It is known that suicidal act is not a sudden or impulsive act. Individuals with suicidal ideations have a definite lack of healthy emotional regulation strategies. Their ideations often begin the moment they fail to gain control over their overwhelming emotions and feelings. Difficulties in regulating emotions are often an indicator that directs toward the necessity of assistance in developing healthy emotional regulation patterns. However, individuals who indicated suicidal behaviors had major difficulty in the domain of nonacceptance and impulse control, which is also reflected through their posts and captions used. The aspect of nonacceptance and impulse control difficulties is making them post certain images, videos or quotes that sometimes can be viewed under offensive light by society as a whole, which the individuals are also aware of and still make their viewpoint explicit. Even though it helps them express their concerns, it makes them look peculiar and odd and often is considered their act for seeking attention. However, it is always important to keep aside personal opinions and judge a situation, where such posts can mean something else as well directing toward cause of distress and concerns that is bothering the individual. In addition, individuals with suicidal behaviors use social media platforms relatively frequently, indicating their tendency to seek help indirectly through their encrypted messages due to prevailing traditional or cultural learning. Having understood this, people should enlighten themselves on this aspect and provide helping hand to such individuals by either assisting them express their concerns or connecting them to professionals at the earliest possible. Social media can also develop a screening method to identify encrypted messages that reflect emotional difficulties and provide them with the earliest available assistance. In addition, teaching families, peers, caregivers and individuals themselves to look out for vulnerabilities is a measure that can be taken at a preventive level. Teaching individuals' healthier emotional regulation strategies at the school level or university level will be helpful, as it empowers individuals and helps them deal with situations better and makes them equip with skills that can help them tackle distressing situations with better strategies.

Limitations

The literature suggests a strong positive correlation between difficulties in regulating emotions and suicidal behaviors. However, the moderate positive correlation found in the study can be attributed to the relatively lower sample size of 100 participants. The nonnormal data distribution is also due to the same challenges posed by the COVID-19 pandemic in the data collection process. The sample size is considerably smaller to make any conclusive statement on the correlation between the variables. In addition, a large number of questions caused dropout of the participants. Semiotic analysis in itself is a vast topic and relatively tiresome process. Hence, the lower sample size of 15 participants, with five from each category, was selected. The member-check process was performed over telephone media because the participant's behaviors, facial expressions, and gestures could not be captured.

Recommendations

Furthermore, studies can be conducted with greater sample sizes and normal data distributions. The study can be extended to other cultural backgrounds and understand the myth that is associated with certain signs and symbols that are used by individuals to communicate with others. Studies can delve in

further to identify certain terminologies that are frequently used by individuals with difficulty in regulating emotions and suicidal behaviors. With this understanding, social media accounts can have improvised technology to filter out such words, locate such individuals and put them in immediate professional assistance available. In addition, studies can aim to extend the knowledge to the general population, where research can then explore the impact of this awareness among the general public and its utility.

Conclusion

The explanatory sequential mixed method design of the study provided it with an advantage of understanding not only the relationship between the variables but also exploring their interconnected link with social media posts qualitatively by analyzing the posts using semiotic analysis. Accepting painful reality is never an easy task; hence, it is completely normal for individuals to take their own pace and time to come in terms of it, accept it and express it. Social media, especially since the lockdown, has become a popular means of communication among the public. It is the most easily available and convenient mode that enables people to express their emotions, feelings and concerns. The COVID-19 pandemic has been a rough situation for most individuals, making them vulnerable to suicidal behaviors and emotional dysregulation. As shown by the present study and other studies, such individuals have the tendency to communicate their concerns either explicitly or in an encrypted manner with the people they have access to either offline or online. Having understood this, it is nevertheless important to put aside personal biases and avoid interpreting messages from a personal subjective lens; rather, it is important to take a moment, understand and analyze or interpret the message objectively. It is important to understand why the person uploaded such a post before commenting. Rather than providing a label of 'attention-seeking nature', it is worth a moment to ask the individual regarding the purpose behind such posts, which would enable change in perspective. Hence, it is very important to consider and understand the encrypted nature of posts or captions and provide the concerned individuals with earliest assistance available, especially during these tough times, which requires the value of empathizing and extending assistance to people to help them overcome and win their battle of struggles.

Declarations

Declaration of Interest Statement: There are no conflicts of interest. All measures are taken to avoid any personal biases or misinterpretation of the data from a personal lens. A reflexive report is attached in the appendix to ensure reflexivity. The measures taken to establish credibility rule out the possibility of personal biases. In addition, both supervisor and peer debriefers have ensured the same.

Funding: There is no funding to disclose.

Data Availability statement: All the data are available and were collected throughout the study.

Ethical Approval Statement: The study was conducted under the approved protocol of the ethical guidelines. It strictly adheres to the ethical guidelines of APA and is strictly conducted under supervision

after obtaining approval from the CHRIST (Deemed to be University) ethical review board. The major two ethical issues in the study included confidentiality and the role of researcher as a data collection instrument, where the researcher's effect on the data collected is considered by maintaining reflexivity. Participants were provided with confidentiality at all stages of the research. Informed consent is provided that includes details regarding the purpose of the research, expected duration and procedures, the right to decline to participate and to withdraw from the research once participation has begun by providing details about the foreseeable consequences of declining or withdrawing, reasonably foreseeable factors that may influence their willingness to participate, any retrospective research benefits, limits of confidentiality and whom to contact questions about the research and research participant's rights. This study does not place the participants at any risk of criminal or any civic liability or damage their financial standing, employability or reputation. Reasonable efforts are also made to avoid offering excessive or inappropriate financial or other incentives for research participants when such inducements are likely to coerce participation. Participants are offered a prompt opportunity to obtain appropriate information about the nature, the results and conclusions of the research and reasonable steps to be taken to correct any misconceptions that participants may have of which the researcher is aware of.

References

1. Accidental Deaths and Suicides in India, (2007). New Delhi: Ministry of Home Affairs, Government of India; 2009. National Crime Records Bureau
2. American Association for Suicidology (2017). Validity of the blue whale challenge is disputed, but social media's impact on young people's mental health is real. Retrieved from: <https://www.einpresswire.com/article/393609296/validity-of-the-blue-whale-challenge-is-disputed-but-social-media-s-impact-on-young-people-s-mental-health-is-real>
3. Baumeister, R. F., Bratslavsky, E., Finkenauer, C., & Vohs, K. D. (2001). Bad is Stronger than Good. *Review of General Psychology*, 5(4), 323–370. <https://doi.org/10.1037/1089-2680.5.4.323>
4. Berryman, C., Ferguson, C. J., & Negy, C. (2018). Social Media Use and Mental Health among Young Adults. *Psychiatr Q*, 89(2), 307-314. Doi:10.1007/s11126-017-9535-6
5. Bryan, Craig, & Rozek (2018). Suicide prevention in the military: a mechanistic perspective. *Current Opinion in Psychology*.
6. Cole, P. M., Martin, S. E., & Dennis, T. A. (2004). Emotion regulation as a scientific construct: Methodological challenges and directions for child development research. *Child Development*, 75, 317–333.
7. Coyote, E. (2017). Belinda goes 'Vaguebooking'. Hoaxtead Research. Retrieved from <https://www.google.com/amp/s/hoaxteadresearch.wordpress.com/2017/11/04/belinda-goes-vaguebooking/amp/>
8. Cukrowicz KC, Ekblad AG, Cheavens JS, Rosenthal MZ, Lynch TR. Coping and thought suppression as predictors of suicidal ideation in depressed older adults with personality disorders. *Aging Ment Health*. 2008;12(1):149–57

9. Davila J, Hershenberg R, Feinstein B, Gorman K, Bhatia V, & Starr L. (2012). Frequency and quality of social networking among young adults: associations with depressive symptoms, rumination, and corumination. *Psychology Pop Media Culture.*, 1(2):72–86.
10. Diwanji, S. (2019). India: number of social network users 2015-2023. Statista. Retrieved from <https://www.statista.com/statistics/278407/numer-of-social-network-users-in-india/>
11. Gratz, K. L. & Roemer, L. (2004). Multidimensional assessment of emotion regulation and dysregulation: Development, factor structure, and initial validation of the Difficulties in Emotion Regulation Scale. *Journal of Psychopathology and Behavioral Assessment*, 26, 41-54.
12. Gupta, R. (2019). Suicide Data. The World Health Organization. Retrieved from https://who.int/mental_health/prevention/suicide/suicideprevent/en/
13. Gururaj, G, Isaac, M.K., Subbakrishna, D.K., & Ranjani, R. (2004). Risk factors for completed suicides: A case-control study from Bangalore, India. *Injury control and safety promotion*. 11. 183-91. 10.1080/156609704/233/289706.
14. Hunt, E. (2017). Vaguebooking? Subtweeting? Supertweeting? Why can't we just say what we mean online? *The Guardian*. Retrieved from <https://www.google.com/amp/s/amp.theguardian.comm/culture/2017/may/26/vaguebooking-subtweeting-supertweeting-why-cant-we-just-say-what-we-mean-online>
15. Keelerey, S. (2020). Number of facebook users India 2015-2023. Statista. Retrieved from <https://www.statista.com/statistics/304827/number-of-facebook-users-in-india/>
16. Kramer, A. D. I., Guillory, J. E., & Hancock, J. T. (2014). Experimental evidence of massive-scale emotional contagion through social networks. *Proceedings of the National Academy of Sciences*, 111(24), 8788–8790. doi:10.1073/pnas.1320040111
17. Kumar, S. P. N. (2004). An analysis of suicide attempters versus completers in Kerala. *Indian J Psychiatry*, 46:144–9
18. Lerner, J. S., Li, Y., Valdesolo, P., & Kassam, K. S. (2014). Emotion and Decision Making. *Annual Review of Psychology*, 66, 33.1–33.25, doi: 10.1146/annurev-psych-010213-115043
19. Lewinsohn, P. M., Rohde, P., Seeley, J. R. (1996) Adolescent suicidal ideation and attempts: Prevalence, risk factors, and clinical implications. *Clinical Psychology: Science and Practice* 3: 25–46.
20. Masters,K.,& Mcshane,S.L.(2003). Intergrading emotions in the decision-making process: Developing of an emotions-specific model. *Proceedings of 1st International Emotions Intelligence in organizations conference* (pp.69-80).Adelaide, South Australia.
21. Menon, I. S., Sharma, M. K., Chandra, P. S., & Thennarasu, K. (2014). Social networking sites: an adjunctive treatment modality for psychological problems. *Indian Journal of Psychological medicine*, 36 (3), 260.
22. NapoleonCat. (2019). Facebook users in India. Retrieved from <https://napoleoncat.com/stats/facebook-users-in-india/2019/02>

23. Nester, D. (2015). In Defense of “Vaguebooking”. BuzzFeed.News. Retrieved from <https://www.google.com/amp/s/www.buzzfeednews.com/amphtml/danielnester/in-defense-of-vaguebooking>
24. Parikh, S. (2017). Social media and the impact on emotional expression. Mental Health. Retrieved from <https://www.fortishealthcare.com/blog/social-media-impact-emotional-expression/>
25. Radhakrishnan, R., & Andrade, C. (2012). Suicide: An Indian perspective. Indian Journal of Psychiatry, 54(4), 304. doi:10.4103/0019-5545.104793
26. Rajappa, K., Gallagher, M., & Miranda, R. (2012). Emotion Dysregulation and Vulnerability to Suicidal Ideation and Attempts. Cogn Ther Res, 36, 833–839. Doi: 10.1007/s10608-011-9419-2
27. Ramaprasad, D. (2013). Emotions: An Indian perspective. Indian Journal of Psychiatry, 55, 153-156, doi: 10.4103/0019-5545.105514
28. Reich, S. M., Waechter, N., & Espinoza, G. (2008). Online and offline social networks: use of social networking sites by emerging adults. Journal of Applied Developmental Psychology, 29(6), 420-433.
29. Reinecke, L. & Trepte, S. (2014). Authenticity and well-being on social network sites: a two-wave longitudinal study on the effects of online authenticity and the positivity bias in SNS communication. Computer Human Behavior, 30:95–102.
30. Roy A. (1995). Suicide. In: Kaplan HI, editor. Comprehensive Textbook of Psychiatry. Maryland, Baltimore, USA: Williams & Wilkins; pp. 1739–91.
31. Thompson, R. A. (1994). “Emotion regulation: a theme in search of definition”. Monographs of the Society for Research in Child Development. 59 (2-3): 25-52. Doi:10.1111/j.1540-5834.1994
32. Wikipedia, (2019). Emotional Self-Regulation. Retrieved on 7 January 2020 from <https://wikipedia/emotional-self-regulation/>
33. Yu, H. & John-Baptiste, S. (2018). Emotion Expression on Social Networking Sites: A Study of Young Persons’ Use of Facebook and Twitter in the UK. Retrieved from <https://cognitive-behavior.org/emotion-expression-on-social-networking-sites/>

Tables

Table 1

Spearman’s rank-order correlation between difficulties in emotional regulation and suicidal behaviors.

			DERS	SBQ
Spearman’s rho	DERS	Correlation Coefficient	1.000	.400**
	SBQ	Correlation Coefficient	.400**	1.000

Table 2

Descriptive statistics of the six domains of DERS.

Domains	N	Minimum	Maximum	Mean	Std. Deviation
Clarity	100	5	24	11.19	4.132
Awareness	100	6	29	14.95	4.229
Impulse	100	6	30	14.34	5.586
Nonacceptance	100	6	30	13.68	5.707
Goals	100	5	34	14.10	5.069
Strategies	100	8	40	18.50	7.155

Table 3

Themes and signified components of the posts of the participants with the presence of both difficulties in emotional regulation and suicidal behaviors.

Themes emerged out of the signified	Signifier	Signified
Interpersonal relationships	Icon	Peer support
	Icon	Family support
	Icon	Cordial bond with partner
	Icon	Workgroup co-operation
Intrapersonal relationship	Index	Religiosity
	Symbol	Spirituality
	Index	Self-encouragement
	Icon	Self-appraisal through external attributions
Social implications	Index	Awareness of boundaries for self
	Index	Impression management techniques for the need to fit in
	Index	Religiosity for group conformity
	Icon	Self-criticisms to gain social validation
Coping activities	Icon	Humor on stereotypes and prejudices
	Icon	Expressive art forms (Dance, music, poem)
	Icon	Substance consumption
	Symbol	Approval from social media audience
	Index	Altruism acts
	Icon	Being hopeful
	Icon	Making optimistic resolution

Table 4

Themes and signified component of the posts of the participants with the presence of difficulties in regulating emotions but no suicidal behaviors

Themes emerged out of signified	Signifier	Signified
Interpersonal Relationships	Icon	Engagement in activities due to peer influence
	Icon	Family Support
	Icon	Partner Support
Intrapersonal Relationships	Index	Self-motivation/encouragement
	Icon	Self-sufficiency
	Index	Self-exploration activities
	Symbol	Spirituality
Thought process/Cognitions	Index	Appreciation of resources
	Index	Reflection on good memories and hoping for the same again
	Icon	External attributions for unfortunate events

Table 5

Themes and signified components of the posts of the participants with no difficulties in regulating emotions but the presence of suicidal behaviors.

Themes emerged out of signified	Signifier	Signified
Interpersonal Relationships	Icon	Peer support
	Icon	Familial influence
	Index	Work-life satisfaction
	Icon	Workgroup support
Intrapersonal Relationships	Icon	Realization of personal space and boundaries
	Icon	Self-sufficiency
	Index	Self-reflection
	Index	Need for loneliness
Attitudinal modifications	Icon	Reality check due to Covid breakout
	Icon	Pessimistic evaluation of situations
	Index	Hope for optimism
	Index	Realization of being fortunate and expression of gratitude
Coping	Icon	Outdoor adventures (Trekking, biking, trips)
	Icon	Self-grooming and behavioral appearances
	Icon	Spending time with pets
	Icon	Workouts (Zumba, Gym, aerobics)