Original Article

An investigation on self-mutilation in a group of the social network *Facebook**

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To identify the composition and structure of a self-mutilation group in a virtual social network, qualitative, descriptive and exploratory research was carried out. We analyzed 103 textual and imagery posts, based on the content analysis of Bardin, from a group about self-mutilation on Facebook in the period 2014-2015. The categories, composition, and structure of the Facebook self-mutilation group that emerged address identity characteristics that permeate group participants and the context of self-mutilation practice and engagement attitudes to the group. It is emphasized that the identity and structural characteristics found that operationalize the functionality of a self-mutilation group on the internet contribute to the understanding of the behavior and contribute to the professional practice of children and youth.

Descriptors: Self Mutilation; Adolescent; Internet.

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Uma investigação sobre automutilação em um grupo da rede social virtual *Facebook*

Com o objetivo de identificar a composição e estrutura de um grupo de automutilação em rede social virtual foi realizada pesquisa qualitativa, descritiva e exploratória. Foram analisadas 103 postagens textuais e imagéticas, a partir da análise de conteúdo de Bardin, de um grupo sobre automutilação no *Facebook* no período de 2014-2015. As categorias, composição e estrutura do grupo de automutilação no *Facebook*, que emergiram abordam características identitárias que permeiam os participantes do grupo e contexto da prática de automutilação e atitudes de engajamento ao grupo. Ressalta-se que as características identitárias e estruturais encontradas que operacionalizam a funcionalidade de um grupo de automutilação na *internet* colaboram para a compreensão do comportamento e contribuem para prática profissional infanto-juvenil.

Descritores: Automutilação; Adolescente; Internet.

Una investigación de la automutilación en un grupo virtual de red social *Facebook*

Con el objetivo de identificar la composición y estructura de un grupo de automutilación en red social virtual se realizó una investigación cualitativa, descriptiva y exploratoria. Se analizaron 103 posturas textuales e imágenes, a partir del análisis de contenido de Bardin, de un grupo sobre automutilación en Facebook en el período de 2014-2015. Las categorías, composición y estructura del grupo de automutilación en Facebook, que emergieron abordan características identitarias que permean a los participantes del grupo y contexto de la práctica de automutilación y actitudes de compromiso al grupo. Se resalta que las características identitarias y estructurales encontradas que operan la funcionalidad de un grupo de automutilación en Internet colaboran para la comprensión del comportamiento y contribuyen a la práctica profesional infanto-juvenil.

Descriptores: Automutilación; Adolescente; Internet.

Introduction

Self-mutilation is defined as intentional behavior of destruction to the body itself and without suicidal intent[1]. Adolescence is the predominant period for behavior[2], being more frequent in girls than boys, 17% and 7.9%, respectively[3]. The prevalence of self-mutilation in the UK is estimated to be between 4.6% and 6.6%[3]. In Brazil, there are still no studies that quantify the prevalence of this type of behavior. However, self-injury behavior is evidenced as a hidden phenomenon, that is, the number of cases of self-mutilation that appears in health services is very small, close to cases without treatment in the community[4].

The Internet has a potential impact on the development of non-suicidal self-harm behavior and suicide. In this context, it can present itself as a risk environment collaborating with behavioral behavior, but it can also operate as a contemporary prevention strategy. Today the Internet is part of the daily lives of thousands of people around the world, with characteristics such as timelessness and extraterritoriality have been gaining more and more followers. In Brazil, about 76% of people access the Internet every day with an average daily exposure of 4:59 p.m. from Monday to Friday[5].

In the United Kingdom, more than 80% of households have access to the Internet[6]. In the world, more than 700 million people have profiles online in Virtual Social Networks, becoming a modern and primary means of social interaction[7].

It is notable that the Internet acts as an important connectivity resource among individuals, especially individuals who feel isolated. Studies point out that the Internet intervenes on vulnerable individuals in two main ways: as a space of mutual support, with exchange of experiences and emotional support, reducing feelings of loneliness and isolation, or as a noxious space with anonymous information exchange or with triggers for behavior of risk[8].

The spread and reach of the Internet has drawn the attention of the general public, especially parents of children and adolescents, as well as health professionals and governments to the problem of suicide and self-mutilation[9]. A study carried out in Italy shows great interest in the search for self-mutilation on the internet, especially with the terms "self-harm and cut" followed by "self-harm and child", "self-harm and forums" and "self-harm and causes and reasons"[10]. An Irish study of 3,500 schoolchildren found that 18% who had self-reported indicated the influence of the internet in their decision to engage in self-mutilation[11]. The internet has led to the creation of new virtual and social spaces in people's lives, offering them new perspectives in living good and bad knowledge[12]. It is known that the innovation of a new typology of social communication through the publication of images and textual elements in the online environment. But despite its great publicity, little has been studied about its influence on the life of the human being[13]. In order to study the behavior of self - mutilation in the Brazilian context, an investigation was carried out aiming to identify the composition and structure of a group of self - mutilation of the Virtual Social Network.

Methods

The study had a qualitative, descriptive and exploratory approach, based on the theoretical reference of the content analysis of Bardin[14]. According to this reference the analysis of the communications allows the "inference of knowledge regarding the conditions of production and reception of messages"[14]. It was searched through this research, to present the meanings manifested in the messages of the postings and comments of a group of self-mutilation of the Virtual Social Network Facebook.

The research was conducted in a group on self-mutilation found from the search bar of the Facebook

Social Network with the term "self-mutilation". The group has been operating since 2013 and has been classified as a support group. The group was chosen because it aims to help self-mutilation practitioners in information exchange, to act as a support group for people vulnerable to self-injurious behavior and to have a large number of participants (7.471 participants).

Facebook categorizes groups as an open, closed or secret group. The main difference of the three is the permission to view the posts, the open group being the only one that allows the view without participating in the group. Closed and secret groups need permission to participate and consequently view participants' publications. The group of this study falls within the category closed group, being necessary the approval of the researchers by administrators of the page. The approval of the authors was not conditioned to questioning or motivation to participate. The research was not disclosed to the participants and / or administrators and the Ethics and Research Committee with Human Beings of the Federal University of São João del-Rei (CEPS / UFSJ) was requested to waive the Free and Informed Consent Form. These decisions were adopted jointly with CEPES / UFSJ due to the large number of participants and that the dissemination of the research could weaken the bonds between researcher and researcher. The study is in line with the objectives and assumptions of Resolution 466 of December 2012.

The data were collected from March to April 2016, after approval of the research project by CEPES / UFSJ, with an opinion number 975,511, on March 19, 2015. Data collection was performed in the self-mutilation group of the Social Social Network Facebook not through the posts with more than 10 comments and comments of the same published in the group from December 2014 to December 2015. For the collection was used a form prepared by the authors and built in the program Microsoft Word 2010. The form contemplated issues such as : date and time of the post, if main post (text) or secondary (photo or link in attachment) and finally comments and numbers of tanned. They were identified by assigning the letter P to the posts and the letter C to the comments.

The data were analyzed according to the Bardin operational proposal[14], which recommends a pre-analysis from the floating reading of the collected material, definition of the units of registration and significance with the construction of the categories of analysis and later inference and interpretation of the results in light of the theoretical framework. As the objective of the study is to identify the composition and structure of the self-mutilation group of the Virtual Social Network Facebook was used to analyze the posts and

comments a guiding script containing two questions: 1 - Who are the participants of the Social Network self-Virtual Facebook ?; 2- How is the group of self-mutilation of the Facebook Social Network structured?

After reading the material, we identified the main units of records that were present in most discourses and categorized by similarities. The coding was performed primarily by one of the authors of the study being discussed later with a Professor of Psychiatric Nursing at the University of São Paulo and with extensive experience in researches with the adopted methodological framework.

Results

From the analysis of the statements and comments published in the virtual group of self-mutilation, two categories emerged: composition and structure of the self-mutilation group of the Social Facebook Virtual Network.

Composition of the group of self-mutilation of the Social Social Network Facebook

The content of this category refers to the composition of identity characteristics that permeate the participants of the group and that present themselves as: identification related to the age group, contemporary symptoms, juvenile idol and with the specific type of self-mutilation behavior. The testimonies and comments of the participants of the group reveal young participants and the beginning of the practice of self-mutilation in adolescence: *I started with 15 years (I have 17) ...* (C2028)*; I'm 15 years old and I started at age 11 ...* (C2033)*; I think I'm the youngest in the group [frown emoticon]* (sad face) *I'm 11 years old* (C2034)*; I'm 17, I started at 13* (C2036)*; I'm 19, I cut myself since I was 10* (C2037)*; I'm 14 years old and started at age 11: "/* (C2043)*; I'm 13 and I started this year about 7 months ago* (C2056)*.*

We observe the association of self-mutilating behavior with contemporary symptoms of eating disorders by pro-anorexia and bulimia testimony and comments. It is important to emphasize that the participants of the group identify the eating disorders through the terms ana and mia, that is, anorexia and bulimia, respectively. *Anyone here is pro-Ana?* (P11)*; Serious People Even I Am A & M* (C1012)*; Does anyone here practice Ana and Mia?* (P65)*; I have a group on whats for Ana and Mia. If someone wants to come in, send me the inbox number* (C2166)*; My queens ana and mia* (C2165)*; I am Mia and pro-ana* (C151)*;*

According to the testimonies and comments of the participants, the group's identification with the American singer-songwriter Demi Lovato shows a history of self-mutilation and eating disorders. Participants in the self-mutilation group identify themselves as Lovatics and refer to the expression Stay Strong, a term tattooed by the singer on their wrists to represent the support of fans during the treatment of self-mutilation. It is important to emphasize that after the treatment the singer dedicated herself to offer messages of support to the fans who suffer with the self-injurious behavior. *Are you also lovatic? And focus on it, you're like Demi can win !!! You're already strong enough to hold on for 3 months. Keep it up! Do not give up! We're rooting for you !!!* (C214)*; I stayed 1 month without cuts and yesterday I cut myself thinking that I would improve. But it will not make me give up, we deserve to be happy! Stay Strong.* (C104).

The group identifies the presence of serious self-mutilation as several cuts or burns on the skin and the interest in information about sharp objects, extension of cuts and scars: *What do you cut yourself with? I cut myself with the blades of the gillete but they are not so deep, I wanted them to be* (P52)*; I cut myself with the scissors, and blades of pointers ... were left behind* (C1010)*; I cut myself with fillet scissors and burned myself but I got out, just like you one day will* (C1011)*; I know this is not the kind of advice I should give, BUT I used the same razor blade, who determines the depth or the mark that will stay is yourself. Mine have been here for years* (C1023)*; There are people who do not control themselves, not to wear sweatpants, cut their thighs and belly ... the wrists I covered with bracelets, those who self-mutilate, have this need* (C965)*; I did not want any deep cuts, I know that's it and you can be sure it's not cool ... Everyone looks, they realize they ask and it's a damn embarrassment. If you have deep cuts, you'll find that you're crazy because no one really understands your motives ... And worse the greater judgment is from your own family* (C1026).

Structure of the self-mutilation group of the Facebook Social Network Facebook

This category presents the structuring carried out by the participants of the self-mutilation group in virtual social network to operationalize the group's functionality. Thus, it understands as structures of the online group the meanings and motivations for the practice of self-mutilation, evidencing the context of the practice of self-mutilation among the participants of the group and welcoming and understanding attitudes, contributing in the engagement of participants to the group.

Among the meanings of the practice of self-mutilation is the expression of suffering and pathological

manifestation with characteristic of dependent behavior. *Self-mutilation is a disease! Needs care. Self-mutilation is not cool, it's not normal, and it's not funny at all! I was never proud of my cuts! I never liked cutting myself!* (C740)*; And every day the addiction worsens* (C2029)*; If only cut once ?? Most addictions begin with the experiencing person* (C652)*; We are not talking about a short story we are talking about people who mutilate themselves and this is serious* (C739)*; I thought going back to the blades things would change, the feelings would fade, but everything stayed the same, the cuts on my wrists hurt* (P07)*; Cut to me, it's suffering! Affff* (C1618)*; Only the blade really understands me! And I thought ... For a few days, it was healed! But with time everything comes back, then the time is cloudy and the only thing that is seen is the blade: /: /: /* (P96)*; I cut myself for 3 years ... I wanted to stop, but it ended up being "automatic" .. sometimes I cut myself because someone spoke a little higher with me. It did not cut me because I wanted to, but because I was sensitive. I wanted to stop, but there was no one to help me. Yes! The [group] played a very important role in my recovery* (C572)*; So long without being cut ... more I had a relapse a few days, unfortunately! Emoticon unsure* (P89)*.*

The motivations category for the practice of self-mutilation presents the causes presented by the participants of the Facebook group. In this sense it is observed that the causes are related to the flight of problems; psychopathology, attention seeking; helplessness; missing absence or omission of parents and sensation provoked by the act itself: *My first cut was with 9, but I did not do more. There began to appear many problems in my life that I have been doing more, more, more and more* (C2053)*; I was a year so happy with all this change and everything came back again, the anguish, sadness, sometimes I feel abandoned ...* (P89)*; I do not know how to deal with it ... I have many nightmares with sexual violence ... I feel disgusted with my body ... sometimes I can not stand touching me ... looking at me ... and difficult ...* (C472)*; I just got betrayed while I was in a serious relationship* (P61)*; It's complicated. The vzs I do with anger, daily frustrations and depression ...* (C2050)*; I cut myself because I really had reasons I cut myself because I'm bipolar I had depression and some other stuff.* (C659)*; Often the children only want to be better for the parents just want the parents to be proud of them .... If we had more parents present many people would not start to cut themselves I'm sure* (C1909)*; I started to cut myself after my father died 3 and a half years ago, and I really wanted to die, I never wanted it so much because when my old man died I was fighting him because he used drugs never to be home and do not care about me. When I heard he was murdered in jail I wanted to be him. Why did he have to die?* (P88)*.*

The subcategory of welcoming attitudes and understanding is highlighted in many comments and demonstrates aspects of inclusion and engagement in the group of self-mutilation in virtual social networks: *In this group, there are wonderful people ... who really want to help. I'm not saying this to pull anybody's bag no ... I'm talking because I know they are, because when I needed them, they really helped me. It does not cost anything to call one of us to talk* (C585)*; How many times have I talked to someone who prevented me from being cut off ...* (C587)*; Here you can help or be helped if you need help ... Emoticon grin (smiley face), we are here for what you need* (C1578)*; I cut myself I spent two years cutting me two weeks ago I do not cut myself and I'm here to help that needs* (C1581)*; But the group is not eh for those who like to cut themselves, but to stop them from getting hurt* (C1621)*.*

However, the statements and comments of the participants present differences regarding the rules and understanding of what is a protective and risk factor for self-mutilation. The participants' concern about posting photos of cuts as a risk factor for self-mutilating behavior is identified: *This is a group that was created with the purpose of helping each other to overcome the problem that is the self-mutilation. It is explicit that the majority here does not feel well, so I find it unnecessary to post photos that often hinder the process of recovery and overcoming another person. Are you feeling bad? Tell us your story and we will try our best to help you, that alone is enough.* (C581)*; It's not selfish, because they do not post a photo thinking "I'm going to post it to someone else to see and cut themselves", but because they want help, only sometimes it affects someone, I believe that most people posting here are asking for help .. He does not always have the courage to call someone like that out of nothing and talk about what is happening "*(C586)*; Wow, the group is for help and the biggest focus is Self-mutilation. If people post pictures of the cuts here it is because they know that here they have found the best help, not judgment. They go to see if anyone really cares and offers help, they do not want someone who feels the obligation to help, but someone who offers this help of their own free will, so they feel that someone really cares* (C777)*.*

Discussion

Adolescence is a maturation period that suffers social, cultural and environmental influences with exposure to different situations of vulnerability to health[15]. At this stage of the life cycle, affiliation to social groups is associated with lower levels of vulnerability and self-destructive behaviors[16]. Self-injurious behavior can occur at any stage of the life cycle, however, studies point to adolescence as the predominant period for behavior[2]. Self-injurious behavior usually begins at 13, 14 years of age, and may last for 10 to 15 years, or even for decades and is commonly associated with

the maladaptive coping mechanism characteristic of adolescence[1].

Eating disorders constitute contemporary symptoms associated with representations and meanings that provide the food intake added to the values and standards imposed by the current society[17]. Eating disorders (anorexia and bulimia) are associated with serious health disorders, including self-mutilation, reflecting broader difficulties in effective coping mechanisms[18].

Latent self-injurious behavior significantly predicts aversion to body size indicating that people with a history of self-mutilation are less sensitive to treatment. Self-injurious behavior is an important prognostic factor for eating disorders due to its association with negative effects and anxiety and depression symptoms, which in turn favor body dissatisfaction after eating disorders[18].

In the study[17] on eating disorders and virtual communities, the authors found data that corroborate with the findings of the present study: proper communication, for example, ana (anorexia), mia (bulimia), identification with peers, sense of belonging, identification and influence of idols (actresses, singers, models) a characteristic presence in virtual communities pro ana and mia and that serve as a stimulus for this behavior.

Contemporary adolescence is marked by "affective loneliness", with the absence of parents and the introduction of paid caregivers, associated with computers, televisions and video games of the last generation[19]. Thus, the references of these adolescents are no longer the parents or other family caregivers, but impersonal personalities of soap operas, movies, music icons, fashion and sportsmen that will be the identifying models and that will serve as "axis value for the construction of the style of life "of adolescents[19].

The follow-up of people who exert influence among adolescents expanded enormously after the advent of mass media[20]. The study[21] with young adults shows that 75% of these reported a strong attraction for a celebrity at some point in their lives, especially musicians or movie stars. Still, that 59% of those interviewed felt themselves influenced by their idols in some aspect of their beliefs or attitudes. In this regard, it is understood that adolescents are influenced by celebrity behavior that can become references to the beginning and perpetuation of acts that coincide with the reality experienced by them[22].

The specific type of self-mutilating behavior related to self-cutting peculiarities is identified as a characteristic of group participants. According to the Functional Assessment of Self-Mutilation (FASM), translated and adapted to Portuguese, it is possible to characterize the severity of the lesion[1].

Membership in social groups is a fundamental characteristic of human existence[23], which usually involves activities related to feelings of interaction, belonging, affiliation and connection between participants. Such feelings are understood as positive for social identification and important characteristic of adolescence[16].

Three important characteristics of engagement in social groups related to social identity are highlighted: group participants tend to cooperate and help others with whom they identify; are likely to receive such benefits from other members; and identification with social groups (family, school, friends) is related to support ties and, therefore, with high levels of psychological well-being and low self-reported psychiatric symptoms[16].

Nowadays, social groups expand daily through the Internet, in which people with opportunities, sufferings or other similar peculiarities can exchange information and advise themselves without ascription of locality or temporality. In this way the benefits of insertion into social groups also extend to online (or virtual) social groups characterized by the statements in the self-mutilation group's postings in Virtual Social Network.

From the assumption of dependent behavior[24], we understand the concepts of relapse and lapse. Relapse is understood as a return to the same intensity of dependent behavior, for example a series of self-mutilations, whereas a lapse can be described as the initial cut after a period without the act or a discrete event, other than relapse, which involves in this example the series of self-mutilations continued after this initial slip.

It is important to emphasize that exposure to self-mutilation contents may involve social contagion, being a trigger for this type of behavior. Social contagion can be offline or online, in the latter case you still have the creation of anonymous profiles and exposure to a large number of profiles and information exchange. The visual nature of this type of behavior is easily accessible and highly available and can be potentially imitated[22].

Among the reasons for self-injurious behavior would be to require help or support in addition to exercising interpersonal influence[22]. One of the crucial points in participating in virtual social groups is the search for help by identifying with people who are in the same situation, so if the participants involved in such groups have good intentions or therapeutic response to suffering it can be credited that support positive effect on behavior[2].

Among the meanings of the practice of self-mutilation is the expression of suffering and pathological manifestation with characteristic of dependent behavior. Dependent behaviors are complex disorders that multiply from genetic predisposition, sociocultural processes, psychological vulnerabilities, positive cognitive expectations about the

effects and consequences of alcohol and other drug use (as well as other behaviors), personality traits and temperament, absence of a repertoire of adequate coping skills and low self-efficacy[24].

In a bibliographical review[25] the main causes of self-injurious behavior were the management of distress or regulation of affect to obtain relief from feelings such as emotional pain, erasing cognitive states or calming; exercising interpersonal influence to change situations, requiring help and love, or showing extent of physical pain; the punishment related to good feelings; inducing dissociative state to feel nothing or feel "dormant"; seek sensations like excitement or euphoria related to the adrenaline discharge produced by the cut; dealing with the risk of suicide; maintain or exploit boundaries from the creation of symbolic boundaries between the individual and others; and express or deal with one's own sexuality. It is important to note that management of distress or regulation of affection was the predominant reason in most of the studies found in the literature review[25].

Conclusion

The study allowed to identify the composition and structure of the group of self-mutilation of the Social Facebook Virtual Network from the identification of its characteristics for operation of the group. Among the participants in the Facebook self-mutilation group were the identitary characteristics of adolescent users, the predominant age group for self-injurious behavior and the greater use of the Internet. The self-mutilation group offers support and understanding from the cooperation, identification and mutual support among the participants contributing to the prevention of self-mutilation behavior, but also found aspects that evidence the vulnerability of these adolescents, such as eating disorders, the practice of self-mutilation and social isolation; as well as aspects that provide vulnerability, such as influence by idols or peers, contagious effect and trigger, caused by photos and / or postings.

Nowadays, the self-defeating phenomenon has reached great conjectures and the internet has been used as a tool for debate, information search, support groups and / or reinforcement of stigmas and risk behaviors. Studies that reveal the behavior in the online environment allow a more current look at the phenomenon, the advancement of strategies of identification, prevention and health promotion and provides management by professionals, and it is essential to reconcile clinical care with virtual social networks.

Regarding the limitations of the study, the analysis of random posts is analyzed, that is, the analysis of the postings was not associated with the participant who posted, and it is interesting to follow the statements from the individual and to analyze the various posts that the same participant can post. It is understood the need of studies that deepen and clarify the dynamicity and functionality of the contents of self-mutilation groups in Virtual Social Network, in order to better understand the phenomenon and conception of practices of prevention and management of self-injurious behavior.

We suggest studies in different contexts of adolescents' life as community, school and health service in order to elaborate a better understanding of the phenomenon and from different perspectives.

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