

# Anger held inward, aggressive dream content in craniomandibular disorders and bruxers

*Raiva para dentro, conteúdo agressivo em sonhos em bruxômanos com distúrbios craniomandibulares*

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## RESUMO

**Objetivo.** Avaliar raiva para dentro e conteúdo agressivo em pesadelos naqueles com transtornos temporomandibulares/bruxismo. **Método.** Dois instrumentos para raiva para dentro e outro para conteúdo agressivo em pesadelos, critérios clínicos para transtornos temporomandibulares e bruxismo foram usados em 70 indivíduos com transtornos temporomandibulares e bruxismo (66 do sexo feminino, idade média 31,3 anos); 28 indivíduos com bruxismo e sem transtornos temporomandibulares (19 do sexo feminino, idade média 32,3 anos); e 39 controles sem esses transtornos (26 do sexo feminino, idade média 30,6 anos). **Resultados.** Os valores em raiva para dentro não foram diferentes para os grupos transtornos temporomandibulares/bruxismo (130,7) e sem transtornos temporomandibulares/bruxismo (105,6), mas foram diferentes em relação ao grupo controle (70,1): transtornos temporomandibulares/bruxismo versus grupo controle ( $p<0001$ ); sem transtornos temporomandibulares/bruxismo versus grupo controle ( $p<0,01$ ). As frequências de conteúdo agressivo em pesadelos foram: transtornos temporomandibulares/bruxismo=71,4%, sem transtornos/bruxismo 67,9%; grupo controle=46,2% ( $p=0,02$ ). As médias em conteúdo agressivo não foram diferentes entre os grupos. **Conclusão.** Os valores em raiva para dentro foram maiores naqueles com transtornos temporomandibulares/bruxismo. Os eventos agressivos diminuíram do grupo com mais distúrbios psicológicos para aquele com menos distúrbios..

**Unitermos.** Bruxismo, Transtornos Craniomandibulares, Ira, Sonhos, Agressão

**Citação.** Molina OF, Santos ZC, Sobreiro MA, Cano ML. Anger held inward, aggressive dream content in craniomandibular disorders and bruxers.

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## ABSTRACT

**Objective.** To evaluate means in anger-in and aggressive dream content in craniomandibular disorder/bruxers. **Method.** Two questionnaires to evaluate anger-in and aggressive content in nightmares, clinical examination, and criteria for craniomandibular disorders/bruxism were used in 70 subjects with craniomandibular disorders/bruxism (66 females, mean age 31.3); in 28 bruxers without craniomandibular disorders (19 females, mean age 32.3); and in 39 controls without such disorders (26 females, mean age 30.6). **Results.** Anger-inward was not different between craniomandibular disorder/bruxism (130.7) and non craniomandibular disorder/bruxism (105.6); but it was different when compared with control group (70.1): craniomandibular disorder/bruxism versus control group ( $p<0.001$ ); non craniomandibular disorder/bruxism and control group ( $p<0.01$ ). Frequencies of aggressive dream content in nightmares were about: craniomandibular disorder/bruxism: 71.4%; non craniomandibular disorder/bruxism: 67.9% and control group: 46.2% ( $p=0.02$ ). Means in aggressive dream events were not different among the groups. **Conclusions.** Anger-in was higher in those with craniomandibular disorders/bruxism. Aggressive events in bad dreams and nightmares decreased from the more psychologically disturbed subgroup to the less psychological disturbed one.

**Keywords.** Bruxism, Craniomandibular Disorders, Anger, Dreams, Aggression

**Citation.** Molina OF, Santos ZC, Sobreiro MA, Cano ML. Raiva para dentro, conteúdo agressivo em sonhos em bruxômanos com distúrbios craniomandibulares.

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Original

Received in: 23/06/15

Accepted in: 03/11/15

Conflict of Interest: no

## INTRODUCTION

Craniomandibular disorders (CMDs) is a collective term used to describe a number of related disorders affecting the temporomandibular joints (TMJs), masticatory muscles, and adjacent musculoskeletal structures presenting with common symptoms including pain and limited mouth opening<sup>1</sup>. CMDs may be part of an interdisciplinary group of somatoform syndromes defined as functional somatic syndromes, characterized by similar mechanisms, etiologies and psychosocial impairment<sup>2</sup>. The term “La Bruxomanie” was first introduced in the dental and psychological literature by Marie and Pietkiewicz in 1907 and was later adapted to describe the act of gnashing and grinding the teeth at daytime/nighttime without a functional purpose. Jaw movements during teeth grinding are produced by rhythmic and/or sustained tonic contractions of jaw closing muscles and usually occur without patient’s awareness<sup>3</sup>. Sleep bruxism (SB) is defined as a parafunctional and orofacial motor activity encompassing clenching, bracing, gnashing, and grinding of the teeth during sleep<sup>4</sup>. Many CMDs and bruxing behavior (BB) individuals, present somatoform and dissociative disorders (DID) that in some way are related to sleep disorders including nightmares and bad dreams<sup>5</sup>.

The oral cavity possesses intense emotional significance and in certain conditions, stress and emotional tension may be channeled to the teeth and strong masticatory muscles. In a review of the literature examining psychological factors<sup>6</sup>, it was reported that BB, may be a mechanism to release overt aggression, frustration and rage when an individual’s basic drives are blocked and her or she is frustrated. BB is more likely to appear when the individual is facing periods of stress, life dilemmas, anxiety, tension, rage and strangulated aggression which need to be channeled outward in some way<sup>6</sup>. Previous studies have indicated that many CMDs subgroups present with symptoms of psychopathology, including anxiety, depression, somatization and dissociation<sup>5,7</sup>. Some subgroups also present sleep disorders including sleep fragmentation, increased body movements, nightmares and bad dreams associated with their psychopathology. Dreaming serves three primary functions: the mainte-

nance of self-cohesiveness, the restoration of a fragmenting self, and the development of new psychic structures<sup>8</sup>.

Dream characters are projected parts of the dreamer’s self which have been denied expression in the waking personality. Some DID individuals present with an alternative personality who is bad in terms of the need to manifest aggression in dreams<sup>9</sup>. When individuals are subjected to severe psychological trauma, they develop alter personalities, including one related with aggressive behavior; a powerful affect that may have previously been directed toward others<sup>10</sup>. Such a behavior may in certain circumstances appear in bad dreams and nightmares. The literature about psychological factors in CMDs and BB individuals is scarce and there is a paucity of studies about anger inward and aggression, violence and hostility in dreams, thus the goal of this study is twofold: 1. Evaluate scores in anger held inward in BB subjects with CMDs, using a novel instrument; 2. Test the hypothesis that aggressive events in bad dreams and nightmares occur more frequently in those presenting CMDs and BB as compared to two sets of control individuals.

## METHOD

### Sample

CMDs+BB patients (n=70), non CMDs+BB patients (N=28) and Non CMDs Non BB controls (n=39) in this investigation were those referred consecutively for diagnosis and treatment to the Department of Orofacial Pain UNIRG University, School of Dentistry in the period 2013-2015. Patients referred consecutively were included in the CMDs and BB group if they demonstrated three or more signs and symptoms characteristics of CMDs: A complaint of facial/TMJ pain, actively seeking treatment for CMDs, presence of joint noises, difficulties to perform normal jaw movements, tenderness to palpation and headache of musculoskeletal origin. It is widely accepted in the current literature<sup>11</sup> on CMDs, that a combination of signs and symptoms better defines CMDs patients. The presence of BB was evaluated using a combination of patients’ self-report and clinical evaluation. BB was accepted as present following the observation of wear facets on the anterior teeth,

cheek/tongue biting (scalloping laterally on the tongue), hypertrophy of the alveolar bone and masseter muscle, patient's report of catching himself or herself clenching or grinding during the day and/or at night, patient's report of awakening with pain, information from a bed partner that the patient clenches or grinds the teeth at night, awakening with tension and/or fatigue in the masseter muscles, awakening with pain in the face, TMJs and head and other signs and symptoms.

Only those patients presenting at least three or more signs and symptoms associated with BB were considered as bruxers. Patients in the first control group (Non CMDs+BB) were those individuals referred in the same period of time but without presenting with CMDs signs and symptoms. The second control group (Non CMDs/Non BB), was constituted by those subjects referred over the same period of time presenting with a complaint in the stomatognathic system but without demonstrating neither characteristic of CMDs or characteristics of BB. CMDs+BB patients, Non CMDs+BB subjects and control group subjects were evaluated in the same facilities and in the same period of time. Exclusion criteria for the CMDs+BB group and for the control group were the presence of severe psychological and psychiatric disorders, intellectual difficulty to respond properly to questionnaires, presence of disabling disease, for instance, Parkinson's disease and other forms of epilepsy and lack of complete data in their charts. Exclusion criteria in the control group were presence of CMDs and/or BB characteristics, psychiatric and neurological disorders, intellectual deficiency to respond properly to questionnaires and lack of sufficient data in their respective clinical charts. Controls had been referred in the same period of time for diagnosis and treatment of a complaint in the masticatory system including the earache, headache, and toothache. However, such subjects did not fulfill criteria for a diagnosis of CMDs.

There were 66 females (94.3%) in the CMDs+BB behavior subgroup, 19 females (67.9%) in the non CMDs+BB subgroup and 26 (66.7%) in the control group and mean ages in these groups were about 31.3, 32.3, and 30.6 years, respectively. Because in the current study, patients' charts were reviewed retrospectively to gather data and all patients signed a formal con-

sent giving permission to use their material for research purposes long before initiating the study, this investigation was approved by the Ethics Committee of the Dental School 0010-2015.

### Procedure

All patients at UNIRG Orofacial pain unit are evaluated comprehensively, establishing and obtaining a full description of the chief complaint (usually pain), including location, duration, intensity and quality, evaluating if the set of complaints and or signs/symptoms are characteristics of CMDs, assessing muscle tenderness, presence of trigger points by manual palpation, evaluation of jaw movements, use of diagnostic tests for TMJ internal derangements (TMJ-IDs), evaluating presence and severity of BB and oral jaw habits using appropriate questionnaires, self-report and clinical examination to obtain confirmatory clinical and epidemiological data. In the last few years, we are struggling to obtain accurate data on BB by defining (using number of signs and symptoms), if individuals present with mild (3-5), moderate (6-10), severe (11-15) and extreme (16-25) BB signs and symptoms, respectively.

### *Anger held inward*

The Anger-Held Inward Instrument-29 (AHII-29) was developed recently to investigate how anger is processed in CMDs and BB patients and control subjects. A number of current papers about rage and anger-inward and outward were used as a base to elaborate such an instrument. The instrument is a self reported 29-items questionnaire that allows the researcher to assess anger-held inward. The items of this self-rating questionnaire have scores ranging from 0 to 10, thus, providing a minimum score of 0 and a maximum of 290. Items in such an instrument evaluate difficulties to vent out rage/anger, a tendency to take anger-inward, difficulties to discuss, confront and or argue with others, a passive response when facing aggression from others, and finally, a tendency to control and/or ruminate about anger, frustration or rage. This is the first time this instrument is used and it has not been validated in other studies. Following a brief instruction on how to score each item, the patient was invited to respond to the questionnaire in a peaceful environment.

In the current study, all CMDs+BB patients and those in the two control groups responded to the questionnaire.

#### Aggression related content

The Instrument for nightmares and bad dreams-100 (INAA-100) was also developed to investigate aggressive dream content in bad dreams and nightmares in CMDs+BB and control group in the current study. A number of current papers about dream content in nightmares and bad dreams were used to elaborate 100 questions in the instrument. The instrument is a self-reported/self-rated scale (0=never, 1=rarely, 2=occasionally, 3=frequently, 4=always) that gathers information about a number of negative situations including physical, emotional, sexual abuse; critics, humiliations, shame, bullying, intimidation, low self esteem; somatic pain including headache; sadism, cruelty, and severe punishment; self-harming behaviors; being pursued by persons, animals, or both; persecutory rage, aggression, homicide, murder; forbidden, perverse, and promiscuous sexuality; suicide thoughts/attempts, incitement to suicide; and exploitative behavior in bad dreams, nightmares and even in the waking time usually in the form of voices, ideas and thoughts.

#### Statistical Analysis

Statistical methods used in the current investigation included Kruskal-Wallis ANOVA with post-test (Dunn), Chi-square for independence and trends and Fisher's exact test. Significance was accepted if  $p < 0.05$ .

## RESULTS

There were 66 (94.3%), 19 (67.9%), and 26 (66.7%) females in the CMDs+BB, Non CMDs+BB and control group, respectively (Table 1). Females predominated in the experimental group as compared to the two control groups: CMDs+BB versus Non CMDs+BB,  $p < 0.001$ ; CMDs+BB versus control group,  $p < 0.0003$ ; Non CMDs+BB versus control group,  $p = 1.00$ . This is so, as females are overrepresented in subgroups of CMDs and BB. There were a lower frequencies of females in both control groups as compared to the experimental one. This means that controls were in fact different from the

Table 1. Demographic data in Craniomandibular Disorders (CMDs) and Bruxing Behavior (BB), non Craniomandibular Disorders and bruxers; and control group.

Groups	CMDs+BB (n=70)	Non CMDs+BB (n=28)	Control Group (n=39)
<b>Females</b>	66(94.3)	19(67.9)	26(66.7)*
<b>Males</b>	4(5.7)	9(32.1)	13(33.3)
<b>Age (years)</b>	31.3±11.7	32.3±9.9	30.6±12.3
<b>Range</b>	17-61	17-55	17-69

Data in n(%) or mean±standard deviation; \*CMDs+BB versus Non CMDs+BB  $p = 0.001$ ; CMDs+BB versus control group  $p = 0.0003$ .

CMD+BB group in which females predominate, a fact that is statistically acceptable. Age was not different when comparing the three groups.

Mean scores in anger taken-inward in the CMDs+BB, Non CMDs+BB and control group were about 130.7; 105.6; and 70.1, respectively. CMDs+BB versus Non CMDs+BB  $p > 0.05$ ; CMDs+BB versus control group  $p < 0.001$ ; Non CMDs+BB versus control group  $p < 0.01$  (Table 2).

CMDs+BB versus Non CMDs+BB  $p > 0.05$ ; CMDs+BB versus control group  $< 0.001$ ; Non CMDs+BB versus control group  $p < 0.01$ .

Aggression related events were reported more frequently in the CMDs+BB group (50=71.4%) than in the Non CMD+BB group (19=67.9%), than the control group (18=46.2%). There was no difference between the CMDs+BB and the Non CMDs+BB group ( $p = 0.8$ ), but there was a difference between the CMDs+BB group versus control group ( $p = 0.01$ ). There was no difference in aggression related events reports between the Non CMDs+BB and the control group ( $p = 0.08$ ; Table 3). There was no difference in reported aggression related events of the CMDs+BB group (2.31), to the Non CMDs+BB (2.14) and to the control group (1.66; Table 3).

## DISCUSSION

One objective of the current study was to evaluate scores in anger held inward in CMDs and BB individuals.

Table 2. Means in anger taken inward in the experimental and control groups.

Groups	CMDs+BB (n=70)	Non CMDs+BB (n=28)	Control Group (n=39)
<b>Anger inward</b>	130.7±54.8	105.6±45.8	70.1±38.8*
<b>Range</b>	4-241	17-210	10-180

Data in mean±standard deviation; \*CMDs+BB versus control group  $p<0.001$ ; Non CMDs+BB versus control group  $p<0.01$ .

The sample in this study consisted of patients referred consecutively to a tertiary facility specialized in the diagnosis and treatment of CMDs and Orofacial Pain. Females were overrepresented in the three subgroups we evaluated. This is of no surprise as there is general agreement that females predominate in subgroups demonstrating CMDs and orofacial pain signs and symptoms<sup>12,13</sup>. This investigation found that higher scores in anger held inward were present in the CMDs+BB subgroup as compared to the two control subgroups. This line of investigation assumes that most CMDs and BB individuals as a group are those presenting with psychosomatic tendencies, headaches and other psychosocial disorders. They are also prone to take anger inward instead of venting anger out. Headaches in CMDs and BB patients are present in more than 80% of the cases and most common types of headaches include tension-type headache, combination headache, occipital neuralgia, myofascial headache and migraine. Following this line of evidence, one investigation asserts that many patients with recurrent headaches have somatization of emotions as a major disorder in their psychological profile<sup>14</sup>. One investigation carried out in CMDs and BB patients indicated that psychosocial factors including somatization, anxiety and depression, associated with higher prevalence of headaches, muscle aches and joint pain are observed frequently in those CMDs and BB subjects<sup>15</sup>.

It may be that patients with more severe CMDs+BB and headaches have somatization tendencies, difficulties regulating anger, and tend to turn anger towards themselves. Headaches predominate in CMDs and BB individuals, they usually indicate somatization<sup>14</sup> and it is known that somatization individuals usually present frequent and intense headaches when subjected to

anxiety and stressful situations. Internalization of anger is observed in some psychosomatic disorders including irritable bowel syndrome, hypertension and depression. The rage or anger in somatization individuals is turned inward and develops into somatic symptoms to protect the target of the rage (usually an object) and also of guilt (the subject or patient)<sup>15</sup>.

Because we found higher scores in anger turned-inward in CMDs and BB patients in the current investigation, this outcome is in accordance with one investigation<sup>16</sup>, evaluating 35 recalcitrant cases of CMDs and BB and reporting that at the time of the psychiatric interview, 31 patients presented with conspicuous psychiatric disorders, some were markedly depressed, and most patients were involved in insoluble life problems associated with rage, conflicts and frustration. As the rage and frustration increased, patients had additional need to control their anger, resulting in more intense bruxism and psychosomatic disorders. The outcome in the current study is additionally supported by one investigation<sup>5</sup> demonstrating that scores in somatization, indicating anger-taken inward are higher in those demonstrating CMDs and BB signs and symptoms.

In a literature review of psychogenic aspects of BB, one research reported that many investigations found that bruxism could be characterized as a form of somatization in which overt aggression is transformed into

Table 3. Frequency and means in aggressive events in bad dreams and nightmares in Craniomandibular Disorders and Bruxing Behavior individuals and control group.

Groups	CMDs+BB (n=70)	Non CMDs+BB (n=28)	Control Group (n=39)
<b>Aggressive events</b>			
<b>with bad dreams</b>	50(71.4)	19(67.9)	18(46.2)*
<b>without bad dreams</b>	20(28.6)	9(32.1)	21(53.8)
<b>means±SD</b>	2.31±2.71	2.14±2.33	1.66±2.51
<b>range</b>	0-12	0-8	0-9
<b>reported episodes</b>	172	69	67

Data in n(%) or mean±standard deviation; \*CMDs+BB versus control group  $p=0.01$ .

teeth grinding<sup>6</sup>. Strangled aggression, oral gratification, depressive symptoms and anger taken inward seem to be a reasonable profile of BB individuals. CMD+BB patients score higher in somatization of emotions and in hostility as compared to control individuals<sup>17</sup>. Furthermore, emotional tension, deep anxiety and repressed anger are some psychological characteristics that reinforce, maintain and or initiate periods of intense BB<sup>18</sup>.

A second goal of this investigation was to compare frequency of aggressive events in bad dreams and nightmares in those presenting with CMDs and also in the comparison groups. Data in the current investigation indicate that aggressive events were reported more frequently in the CMDs and BB group and decreased progressively in the direction of the control non-dysfunctional non BB subgroup. In previous studies CMDs and BB individuals were considered as psychologically/psychiatrically disturbed<sup>2,5,7</sup>. It may be that CMDs and BB individuals as a group are those characterized by high levels of anxiety, depression, and somatization. However, because of repression, dissociation, and proneness to somatization, they have difficulties in channeling anger, aggression, and frustration outward. Such powerful affects remain hidden deep in the unconscious, but they always conserve their potential for being channeled out. Germaine to this issue is one study asserting that dream characters (specifically those related with some form of aggression), are projected parts of the dreamer's self that have been denied expression in the waking personality<sup>9</sup>. Thus, dreaming and specifically, bad dreams and nightmares constitute alternative scenarios for aggressive, violent and/or homicidal characters to manifest overtly and vent out their aggression. One investigation asserts that there is an association between dissociation and nightmares independent of nightmare content<sup>19</sup>. Moreover, dissociation scores are higher in those reporting higher frequency of nightmares.

In the current study, all patients presented with CMDs and BB signs and symptoms. In his review of the literature on BB, the profile of bruxers is one characterized by frustration, rage and strangled aggression, that is, aggression turned inward. Such a behavior explains some psychosomatic tendencies, anxiety and depression<sup>6</sup>. Individuals presenting with psychiatric disorders are pre-

disposed to personal distress and anxiety, affecting their quality of sleep and daily life, and thus, nightmares become the sign of their psychological/psychiatric conditions<sup>20</sup>. Nocturnal BB is a form of violence during sleep<sup>21</sup>. If so, some aggression, rage, homicidal tendencies and violence are more likely to be reported more frequently in nightmares and bad dreams in nocturnal bruxers. One investigation indicates that sleep disturbances are linked to suicidality, a disorder usually linked to depression and anger taken-inward, two characteristics usually found frequently in bruxers<sup>22</sup>.

One study, viewed bruxers as psychosomatic, anxious, and depressed individuals, characterized by their difficulties to externalize aggression, process their anguish, and feel and express their emotional world<sup>18</sup>. Thus, it is likely that when aggression and rage reach a certain level but are not expressed in the waking life, they may appear as rageful or aggressive characters in nightmares and bad dreams. Supporting this assumption, one research<sup>9</sup>, defends the notion that most DID patients have an alter who is bad at least in the sense of forbidden aggression which is not channeled out freely in the waking time. In some cases, extreme aggression appears in bad dreams and nightmares in characters determined to commit suicide, homicide or even murder<sup>9</sup>.

One investigation did not establish a correlation between persecutory alters and nightmares<sup>10</sup>. However, it was implicit in such a study that one of the mechanism of alter dynamics is masochistic turning inward of expressions of hostile affect or an identification with the aggressor. In other words, if aggression is apparent in well developed alters appearing in dreams, it is likely that they represent identification with the aggressor in a severely traumatized individual independent of the presence of CMDs and BB.

BB is a form of unconscious aggression against the self that usually occurs in stage 2 NREM and REM sleep. Germaine to this issue is one investigation evaluating REM and non REM interactions during sleep and dreaming, reporting that aggressive social interactions were more characteristics of REM than NREM or wake reports. Intense and repeated activation of hypothalamic/amygdala sites and significant reduction in serotonergic tone in REM sleep, may promote emergence of aggres-

sive impulses in REM dreams, thus, REM sleep appears to facilitate emergence of aggressive impulses<sup>23</sup>. It is likely that such aggressive impulses develop into episodes of nocturnal BB and or into well-developed aggressive characters in nightmares, that emerge following periods of sympathetic arousal<sup>24</sup>. Some types of emotional experience may prevail during specific sleep stages, with more negative emotions and aggressiveness possibly predominating in REM dreams<sup>25</sup>.

Other symptoms that signal the presence of anger include anxiety, panic attacks, insomnia, nightmares, paranoia, resentments, revengeful and suicidal thoughts. Some of these disorders or symptoms are more likely to emerge when anger is turned inward. One investigation used a meta-analysis approach to gather data and reported that anger and hostility are substantially associated with PTSD among trauma-exposed adults and that there is a close association between PTSD, bad dreams and nightmares<sup>26</sup>.

Traumatic events occurring early in childhood may cause repressed anger, hate and resentment and could be split off from consciousness, but may later take control of the person and appear in bad dreams and nightmares as a second personality and/or as a more or less well developed characters<sup>27</sup>.

In the current study, 71.4% of those presenting CMDs and BB reported aggressive events in nightmares. One investigation reported a frequency of 48.6% physical aggression in nightmares, but researchers used samples from undergraduate students and from the general populations, that is, non clinical populations<sup>28</sup>. Another research reported frequencies of 44.8% of aggressive content in dreams, but researchers examined a non-clinical population of 444 psychology students, a fact that may explain the lower prevalence of aggressive content<sup>29</sup>. Nightmare prevalence independent of nightmare content is elevated in clinical populations<sup>29</sup>. Because in the current study we found a high prevalence of aggressive content in dreams in those presenting CMDs and BB, this outcome concurs with one investigation reporting that dreams of attack and pursuit are the most common nightmares themes<sup>30</sup>.

Limitations of this investigation: Although we evaluated a large sample of CMDs and BB subjects and

two controls groups, the results of this study should be interpreted with extreme caution due to the cross sectional nature of the study and also to the fact that both the INAA-100 and the AHII-29 tests have not been validated. We elaborated such instruments based on the review of large amounts of papers about dream themes and anger in. Unfortunately there are no instruments free and available to be used to prepare a study like the one herein presented. Notwithstanding this and with the above cautions in mind, the results of this study are notable with regard to: both bruxers subgroups (with or without CMDs), demonstrated higher and scores in anger taken-inward when compared to the non CMDs Non BB control subgroup; the proportion of aggressive events decreased in frequency from the most dysfunctional subgroup (CMDs+BB) to the less dysfunctional one (Non CMDs Non BB).

The outcome of the current study if replicated in future investigations and following validation of the aforementioned tests may indicate the need for psychological interview and polysomnographic studies to better delineate the psychological, behavioral and neurophysiological nature of CMDs and sleep bruxism. Finally, given the originality and relevance of the aforementioned tests, a project is being conducted to validate such instruments.

## CONCLUSION

Nightmares usually suggest the presence of psychopathology. The outcome of this investigation indicates that CMDs and BB individuals as a group demonstrated higher scores in both anger inward and aggression related events in nightmares. The presence of nightmares in such set of individuals indicates dissociative disorder tendencies and trauma in childhood. However, further studies are needed to substantiate the outcome in the current investigation. Some CMD and BB may be psychologically normal. Regarding multidisciplinary treatment, it is apparent that CMDs and BB patients should be referred for additional evaluation in a sleep medicine facility.

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