Satisfaction with Life in Orofacial Pain Disorders: Associations and Theoretical Implications

Ian A. Boggero, MS
Graduate Student
Department of Psychology
University of Kentucky
Lexington, Kentucky, USA

Marcia V. Rojas-Ramirez, DDS, MS
Resident
Orofacial Pain Clinic
University of Kentucky
Lexington, Kentucky, USA

Reny de Leeuw, DDS, PhD, MPH
Professor
Orofacial Pain Clinic
University of Kentucky
Lexington, Kentucky, USA

Charles R. Carlson, PhD
Professor
Department of Psychology
University of Kentucky
Lexington, Kentucky, USA

Correspondence to:
Ian A. Boggero
Department of Psychology
University of Kentucky
111-B Kastle Hall
Lexington, KY 40506-0044, USA
Email: ian.boggero@uky.edu

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Aims: To test if patients with masticatory myofascial pain, local myalgia, centrally mediated myalgia, disc displacement, capsulitis/synovitis, or continuous neuropathic pain differed in self-reported satisfaction with life. The study also tested if satisfaction with life was similarly predicted by measures of physical, emotional, and social functioning across disorders. **Methods:** Satisfaction with life, fatigue, affective distress, social support, and pain data were extracted from the medical records of 343 patients seeking treatment for chronic orofacial pain. Patients were grouped by primary diagnosis assigned following their initial appointment. Satisfaction with life was compared between disorders, with and without pain intensity entered as a covariate. Disorder-specific linear regression models using physical, emotional, and social predictors of satisfaction with life were computed. **Results:** Patients with centrally mediated myalgia reported significantly lower satisfaction with life than did patients with any of the other five disorders. Inclusion of pain intensity as a covariate weakened but did not eliminate the effect. Satisfaction with life was predicted by measures of physical, emotional, and social functioning, but these associations were not consistent across disorders. **Conclusions:** Results suggest that reduced satisfaction with life in patients with centrally mediated myalgia is not due only to pain intensity. There may be other factors that predispose people to both reduced satisfaction with life and centrally mediated myalgia. Furthermore, the results suggest that satisfaction with life is differentially influenced by physical, emotional, and social functioning in different orofacial pain disorders. *J Oral Facial Pain Headache 2016;30:99–106. doi: 10.11607/ofph.1526*

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Chronic pain refers to pain that lasts beyond the normal tissue healing time and involves both physiologic and psychological components.[1] Orofacial pain is an umbrella term that specifically refers to pain disorders experienced in the head, mouth, and face area.[2] Chronic orofacial pain patients report poor psychological functioning[3] and reduced satisfaction with life.[4] This reduced satisfaction with life in orofacial pain patients is due in part to the fact that orofacial pain negatively influences physical, emotional, and social functioning.[5]

Extant research indicates that orofacial pain disorders are cross-sectionally related to depression,[6] fatigue,[7] and psychological distress,[8] but these relationships are not the same across disorders. Kino and colleagues[9,10] found that myofascial pain patients reported higher depression scores than disc displacement patients. Lindroth et al[11] similarly found that masticatory myofascial pain patients reported more anxiety, depression, and sleep disturbances than intracapsular pain patients. Pallegama et al[12,13] found that orofacial pain patients with muscle pain reported greater depression and psychological distress than healthy controls. Vazquez-Delgado et al[14] found that headache and orofacial muscle pain patients reported higher distress than an intracapsular pain group, even after controlling for pain intensity. However, not all the findings are consistent,[9–14] and another study did not find significant psychological differences between orofacial pain patients experiencing muscle, joint, or both muscle and joint pain.[15]

Inconsistencies may arise from several sources. First, the studies used different outcomes, with some studies examining depression and anxiety[9–13] and others examining sleep disturbances[11] and/or psychological distress.[12–15] Second, the scales used to assess similar constructs were not consistent across the studies. Third, there was variability in the comparison groups, with most studies looking at differences between two groups (eg, intracapsular pain versus masticatory muscle pain[9,10]) or three groups (muscle versus joint versus muscle and joint[11,15]) of disorders. Fourth, there was inconsistency in the covariates, with some studies comparing the groups after controlling for pain intensity and other studies leaving pain intensity uncontrolled.[14]

The current study was initiated to address each of these sources of variability. Instead of having separate measures for depression, anxiety, psychological distress, and sleep disturbance, an alternative is to select a measure that assesses broad psychological functioning. Satisfaction with life is a self-reported measure in which patients report how satisfied they are with their life on a general level.[16,17] It is significantly negatively correlated with measures of depression and anxiety ($r = -0.54$ and -0.55, respectively[18,19]) and positively correlated with quality of life.[17] Previous research has shown that pain lowers self-reported satisfaction with life,[20] making it a useful outcome measure for assessing psychological status in chronic pain patients. However, no study to date has tested how satisfaction with life differs across different orofacial pain disorders. Thus, the primary aim of the current study was to test if patients with masticatory myofascial pain (MMFP), local myalgia (LM), centrally mediated myalgia (CMM), disc displacement (DD), capsulitis/synovitis (C/S), or continuous neuropathic pain (CNP) differed in self-reported satisfaction with life. These groups contained a mix of muscle-related and nonmuscle-related diagnoses, so that comparisons could be made within muscle-related disorders (MMFP, LM, CMM) and between muscle and nonmuscle disorders (DD, C/S, CNP). Associations were tested with and without the inclusion of pain intensity as a covariate. Based on previous literature, it was hypothesized that satisfaction with life would be lower in muscle than nonmuscle disorders.

A secondary aim of the current study was to determine if physical, emotional, and social functioning variables predicted quality of life consistently across disorders, or if there were disorder-specific associations between these measures and satisfaction with life. To do this, two physical functioning variables were used: pain intensity and fatigue. These variables were chosen because they have previously been associated with psychological ill-being in orofacial pain patients.[5] Two emotional functioning variables were used: pain unpleasantness, which assesses the affective components of pain processing,[21] and affective distress, which measures feelings of depression, irritability, and tension. Finally, two social functioning variables were used: social support and pain interference, which assesses functioning in social, recreational, and leisure activities.

Materials and Methods

Patient Selection

Data were extracted from the medical records of 343 consecutive patients seeking treatment for orofacial pain at a tertiary orofacial pain clinic between 2008 and 2012. All patients were interviewed, examined, and diagnosed by a licensed dental resident training in the field of orofacial pain, and patients were clustered into diagnostic categories based on their primary diagnosis (see below). The diagnoses were MMFP (n = 35, 10.2%), LM (n = 88, 25.7%), CMM (n = 40, 11.7%), DD (n = 80; 23.3%), C/S (n = 49, 14.3%), and CNP (n = 51, 14.9%). The mean age of the sample was 45.3 years (standard deviation [SD] = 15.3), and mean duration of the pain was 60.5 months (SD = 98.6). The overall sample contained 81.6% females. At their initial visit to the Orofacial Pain Clinic, the patients signed a consent form allowing the use of their data for teaching and research purposes. This study was approved by the Institutional Review Board of the Office of Research Integrity at the university where the study was conducted.

Procedures

Patients completed clinical and psychometric questionnaires during their initial appointments as part of the routine intake procedures of the Orofacial Pain Clinic. The following information was extracted from each patient's medical records for the current study:

- *Demographic information:* Patients reported their age and gender.
- *Satisfaction with life:* The Satisfaction With Life Scale[16,17] was used to assess satisfaction with life. It consisted of five items, each rated on a 7-point scale from 1 ("Strongly Disagree") to 7 ("Strongly Agree"). A sum was calculated by adding the score from all items, producing a possible satisfaction-with-life score within the range of 5 to 35. Higher scores indicated greater satisfaction with life. In the current sample, reliability for the scale was $\alpha = .91$.[22]
- *Pain duration:* Patients reported how long (in months) they had been experiencing the pain complaint for which they were seeking treatment.

- *Pain intensity and unpleasantness:* Patients were asked to record their *(1)* average pain intensity by using a visual analog scale from 0 ("No pain at all") to 100 ("The worst pain you can imagine") and *(2)* their average pain unpleasantness by using a visual analog scale from 0 ("Not at all disagreeable") to 100 ("The most disagreeable you can imagine"). This scale of pain unpleasantness has previously been validated in orofacial pain populations.[5] For each of the two scales, patients were asked to place the mark of their pain intensity and unpleasantness on a separate 100-mm line, which was then quantified using a millimeter ruler by a trained clinical psychology resident at the clinic where the study was conducted.

- *Pain interference, affective distress, and social support:* The West Haven-Yale Multidimensional Pain Inventory (WHYMPI) is a widely used self-report measure that examines how pain impacts daily life.[23] It was specifically designed for use in chronic pain populations and has been validated for use in patients with orofacial pain disorders.[24–26] The WHYMPI has 52 items and assesses functioning across 12 domains, with higher scores representing a higher level of the corresponding construct. In the current study, only the interference, affective distress, and social support subscales of the WHYMPI were used. The interference subscale contains 9 items measuring the extent to which pain disrupted vocational, social/recreational, and family/marital functioning. The social support subscale contained 3 items and assessed the patient's perceived support or concern from their spouse or significant other. The affective distress subscale also contained 3 items and assessed feelings of depression, tension, and irritability. Previous studies have shown the 3 subscales have high internal consistency (Cronbach α < .70).[23]

- *Fatigue:* The Multidimensional Fatigue Inventory–Short Form is a 30-item questionnaire assessing fatigue symptoms over the past week.[27] Patients rated each of the items on a 5-point scale ranging from 0 ("Not at all") to 4 ("Extremely") with higher scores representing more of the corresponding construct. Sample items include "I feel upset," "I am worn out," and "I feel run down." The scale consisted of five subscales (general fatigue, physical fatigue, emotional fatigue, mental fatigue, and vigor) and an aggregated total score in which the vigor score was subtracted from the sum of the other four scales. Positive numbers indicated higher levels of fatigue; negative numbers indicated higher levels of vigor. Previous

research has validated the scale in orofacial pain populations.[7,28] Only the total fatigue score was used in the current study (Cronbach α = .90).

Clinical Interview and Examination

During the interview, patients were questioned by a dental resident about the onset, location, quality, intensity, duration, frequency, and aggravating and relieving factors associated with their pain. Following the interview, a clinical evaluation was performed with the aim to reproduce the patient's chief pain complaint. Diagnoses were made according to the American Academy of Orofacial Pain's guidelines for assessment, diagnosis, and management of orofacial pain.[2] The guidelines were chosen because they provide diagnostic criteria for neuropathic orofacial pain disorders as well as joint and muscle disorders. The examination included assessment of cranial nerve functioning and cervical range of motion, the palpation of masticatory and cervical muscles, mandibular function and provocation tests, and assessment of joint sounds, general dentition, intraoral soft tissue, and dental occlusion. In cases for which diagnostic clarity was needed, diagnostic injections or radiographic images were implemented. After collecting all data, the dental resident consulted with an expert orofacial pain specialist to determine diagnoses.

To obtain a diagnosis of LM, patients had to report pain that reproduced the chief pain complaint upon palpation of a masticatory muscle (eg, pain upon palpation of the left masseter muscle), and the pain had to be aggravated with jaw function or parafunctional activity. To obtain a diagnosis of MMFP, patients had to report pain that reproduced the chief pain complaint upon palpation of a masticatory muscle, and the pain had to create a referral pattern (ie, a trigger point). MMFP was not diagnosed in the absence of a trigger point. To obtain a diagnosis of CMM, patients had to report pain that reproduced the chief pain complaint upon palpation of distinct masticatory muscles. Additionally, for a CMM diagnosis there had to be aching pain at rest, and the pain could not be aggravated by jaw function/parafunction. To obtain a diagnosis of DD, patients had to report pain and either jaw locking, significant limitations in jaw opening, or joint sounds that were confirmed during the evaluation, such as clicking, popping, crepitation, or snapping noises in the joint during opening or closing of the mouth. To obtain a diagnosis of C/S, patients had to report reproducibility of their chief pain complaint by loading the joint. To obtain a diagnosis of CNP, patients had to report constant dentoalveolar pain that was not reliably altered by local provocation and was not attributable to local pathology. For full diagnostic criteria for these disorders, see de Leeuw and Klasser.[2]

Table 1 Descriptive Statistics and Bivariate Correlations Among Study Variables

	1	2	3	4	5	6	7
1. Satisfaction with Life	1						
2. Pain intensity	−0.24**	1					
3. Fatigue	−0.52**	0.35**	1				
4. Pain unpleasantness	−0.20**	0.73**	0.30**	1			
5. Affective distress	−0.44**	0.32**	0.66**	0.30**	1		
6. Pain interference	−0.37**	0.60**	0.53**	0.58**	0.49**	1	
7. Social support	0.19**	−0.27**	−0.00	0.24**	−0.03	0.30**	1
n	324	332	342	332	341	341	337
Mean	23.94	48.54	17.38	59.26	48.08	45.00	59.84
Range	5–35	0–100	−24–95	0–100	0–100	0–100	0–100
Standard deviation	7.50	23.64	22.68	27.26	15.22	17.03	23.35

*$P < .05$; **$P < .001$.

Data Analyses

Prior to beginning data analyses, variables were checked for normality, missing data, and outliers using a cutoff of ± 3 SD from the mean. Missing data were handled by using list-wise deletion. A grouping variable was created based on the patient's primary diagnosis. Means, SDs, ranges, and bivariate correlations among study variables were then computed. Bivariate correlations (r) between −1 and 0 signified that as scores on one variable increased, scores on the other variable decreased. Correlations between 0 and 1 signified that as scores on one variable increased, scores on the other variable also increased. To test the primary aim of the study, one-way analysis of variance (ANOVA) was used to compare satisfaction with life across the six orofacial pain groups. ANOVA is a statistical test used to determine whether the mean of a variable is similar across two or more groups. Analyses were repeated with the inclusion of pain intensity as a covariate. To probe which of the groups differed from the others, post hoc analyses were computed. To reduce type 1 error, significant values for the post hoc analyses were those where $P ≤ .01$. To probe if patients with muscle disorders reported lower satisfaction with life than those without muscle disorders, a planned contrast was conducted comparing the average of the three muscle disorders (MMFP, LM, CMM) with the average of the nonmuscle disorders (DD, C/S, CNP).

To test the secondary aim of the study, linear regression was used. A separate model was run for each predictor, and models were computed separately for each of the six diagnostic groups. Satisfaction with life was the outcome variable in all models. The statistic of interest in a regression model is the unstandardized beta weight (B). B is interpreted as the unit change in the outcome for each unit change in the predictor. All analyses were conducted using SPSS version 22 software.

Results

Missing Data, Normality, and Outliers

Of 343 possible patients, complete satisfaction with life data were available for 324 patients (94.5%), complete pain intensity and unpleasantness data were available for 332 patients (96.8%), complete WHYMPI data were available for 341 patients (99.4%), and complete fatigue data were available for 342 patients (99.9%). Patients who were missing data on one or more variables were excluded from analyses containing those variables. Checks for normality revealed that all variables were normally distributed. Outlier analyses revealed that there were no outliers on any of the variables.

Descriptive Statistics and Correlations

Descriptive statistics were conducted to investigate how study variables related to one another. Table 1 shows means, SDs, ranges, and bivariate correlations among satisfaction with life, pain intensity, and physical, emotional, and social functioning variables in the total sample.

Differences in Satisfaction with Life Among Orofacial Pain Disorders

Results from the ANOVA test revealed that the six diagnostic groups significantly differed from each other in satisfaction with life scores ($F_{5,318} = 3.35$, $P = .006$). Table 2 shows that CMM patients reported significantly lower satisfaction with life than those with other disorders. None of the other disorders significantly differed from one another with regard to satisfaction with life. When the models were rerun with pain intensity entered as a covariate, the differences were reduced but remained statistically significant. A planned contrast comparing muscle versus nonmuscle disorders revealed that patients with muscle disorders reported similar levels of satisfaction with life to those with nonmuscle disorders ($t_{318} = 1.871$, $P = .068$).

Table 2 Comparison of Satisfaction with Life Among Orofacial Pain Disorders (Independent Sample *t* Tests)

Group	n	Mean unadjusted [adjusted][a]	SD unadjusted [adjusted][a]	Comparison group	P [P adjusted][a,b]
MMFP	33	23.58 [23.25]	6.92 [6.79]	LM	.57 [.48]
				CMM	.05 [.11]
				DD	.13 [.18]
				C/S	.83 [.43]
				CNP	.81 [.97]
LM	80	24.45 [24.45]	6.97 [6.97]	CMM	.003 [.008]
				DD	.22 [.39]
				C/S	.71 [.84]
				CNP	.34 [.45]
CMM	38	20.11 [20.11]	8.10 [8.10]	DD	< .001 [.001]
				C/S	.02 [.01]
				CNP	.05 [.07]
DD	79	25.87 [26.03]	7.00 [7.02]	C/S	.16 [.61]
				CNP	.05 [.14]
C/S	45	23.93 [24.50]	7.50 [7.08]	CNP	.62 [.40]
CNP	49	23.18 [23.18]	8.09 [8.09]		

[a]Mean column shows what the value of satisfaction with life is for each group. The adjusted values in brackets show the satisfaction with life score after controlling for pain intensity. SD and *P* columns describe the standard deviations and *P* values, respectively, both unadjusted and controlling for pain intensity [in brackets].

[b]Due to the large number of comparisons, significant *P* values were those ≤ .01. Reported *P* values are from *t* tests comparing the difference between the disorders identified in the Group column vs those listed in the Comparison group column.

MMFP = masticatory myofascial pain; LM = local myalgia; CMM = centrally mediated myalgia; DD = disc displacement; C/S = capsulitis/synovitis; CNP = continuous neuropathic pain.

Table 3 Physical, Emotional, and Social Predictors of Satisfaction with Life in Different Orofacial Pain Disorders, B (SE)

	Physical functioning predictors		Emotional functioning predictors		Social functioning predictors	
	Pain intensity	Fatigue	Pain unpleasantness	Affective distress	Social support	Pain interference
MMFP	0.02 (0.06)	−0.07 (0.05)	0.01 (0.05)	−0.20 (0.09)*	0.06 (0.05)	−0.01 (0.10)
LM	−0.02 (0.03)	−0.19 (0.03)**	−0.01 (0.03)	−0.29 (0.05)**	0.09 (0.03)*	−0.18 (0.05)**
CMM	−0.15 (0.06)*	−0.14 (0.05)*	−0.08 (0.05)	−0.28 (0.07)**	0.11 (0.06)	−0.14 (0.10)
DD	−0.10 (0.03)*	−0.21 (0.03)**	−0.05 (0.03)	−0.20 (0.05)**	0.07 (0.03)*	−0.16 (0.04)**
C/S	−0.10 (0.05)*	−0.13 (0.05)*	−0.08 (0.05)	−0.12 (0.06)*	−0.02 (0.06)	−0.13 (0.06)*
CNP	−0.03 (0.05)	−0.21 (0.06)*	−0.06 (0.04)	−0.19 (0.08)*	0.05 (0.05)	−0.17 (0.06)*

*$P < .05$; **$P < .001$.

Linear regression was used to predict satisfaction with life from the listed physical, emotional, and social predictors. A separate model was run for each predictor, and models were computed separately for each of the six diagnostic groups.

MMFP = masticatory myofascial pain; LM = local myalgia; CMM = centrally mediated myalgia; DD = disc displacement; C/S = capsulitis/synovitis; CNP = continuous neuropathic pain.

Physical, Emotional, and Social Predictors of Satisfaction with Life Across Different Orofacial Pain Disorders

Table 3 reveals that emotional functioning variables similarly predicted satisfaction with life across different orofacial pain disorders, whereas physical and social functioning had disease-specific associations. For example, in DD patients, each unit increase in fatigue was associated with a significant 0.21-unit decrease in satisfaction with life, whereas in MMFP patients, each unit increase in fatigue was associated with an insignificant 0.07-unit decrease in satisfaction with life.

Discussion

The current study examined satisfaction with life in a sample of six of the most prevalent orofacial pain disorders and tested how satisfaction with life was associated with physical, emotional, and social functioning. CMM patients reported significantly lower satisfaction with life than MMFP, LM, DD, C/S, and CNP patients. The findings contribute to a large, albeit ambiguous, body of literature examining psychological functioning in subgroups of orofacial pain patients in several theoretically and clinically important ways. For one, previous studies have found that patients

with muscle pain report greater psychological distress compared with patients with intracapsular pain or nonmuscle pain.[9–14] Results from the current study did not replicate these effects, as patients with muscle pain reported similar levels of satisfaction with life to those of patients with nonmuscle pain. The study instead suggests that there is substantial variability in psychological functioning within muscle disorders. That is, even though CMM, MMFP, and LM are all associated with muscle pain, satisfaction with life among these disorders is not equal. Perhaps a major difference is that in CMM, hyperexcitability of the central neurons through synaptic mechanisms is implicated.[29] Thus, future research should test whether other disorders that may be associated with central sensitization are similar to CMM with regard to satisfaction with life and other psychological outcomes.

The findings from the current study highlight the importance of using a broad outcome measure to assess psychological functioning. Satisfaction with life is known to be influenced by functioning across a number of domains, making it a particularly useful measure for assessing global pain-related psychological ill-being. The majority of the literature comparing psychological functioning in orofacial pain categories uses specific measures of depression and anxiety.[9–14] Although these scales validly capture functioning in their respective areas, they do not adequately capture how pain is influencing functioning on a broader level. In other chronic pain disorders such as cancer pain,[30] lower back pain,[31] and fibromyalgia,[32] the literature has focused on satisfaction with life or other global quality of life measures, suggesting that this information is important in assessing overall psychological functioning in chronic pain patients. Future research should place a greater focus on satisfaction with life in orofacial pain.

The fact that satisfaction with life findings remained significant even after controlling for pain intensity opens the possibilities that there may be variables that predispose people to both CMM and low satisfaction with life above and beyond pain intensity. These variables may be genetic, psychological (ie, neuroticism, history of depression), social (ie, high family strain), or behavioral (ie, poor diet, smoker). Because the data from the present study were collected at a single time point, causal effects could not be tested. Examination of the factors that predispose people to orofacial pain and dissatisfaction with life could be a fruitful area for future research.

A secondary aim of the study was to test how physical, emotional, and social functioning variables predicted satisfaction with life within different orofacial pain disorders. Satisfaction with life and emotional functioning, as indexed by pain unpleasantness and affective distress, were consistently associated across all disorders. Specifically, higher affective distress was consistently associated with lower satisfaction with life, whereas pain unpleasantness was not associated with satisfaction with life. Importantly, the beta weights for these associations were largely consistent (B values ranged from −0.08 to 0.01 for pain unpleasantness, and from −0.12 to −0.29 for affective distress). These findings suggest that affective distress may contribute to how satisfied orofacial pain patients are with their lives, and they emphasize the need for treatment protocols focused not only on reducing pain but also on promoting affective well-being. These findings are corroborated by several papers, which compellingly show that positive affect is associated with lower pain and better functioning in chronic pain patients.[33–35] Multidisciplinary treatment teams that incorporate psychosocial interventions and use the biopsychosocial model to guide treatment may be particularly beneficial for improving satisfaction with life and emotional functioning in orofacial pain patients.[36]

The relationships between satisfaction with life and physical functioning are more complex than they are for emotional functioning. The data suggest that pain intensity is a stronger predictor of satisfaction with life in CMM, C/S, and DD disorders than in MMFP, LM, or CNP disorders. One possibility is that in MMFP, higher levels of psychological distress "steal" some of the variance from pain intensity, making pain intensity a less potent predictor of satisfaction with life. However, this possibility remains speculative and should be tested in future work. Interestingly, self-reported fatigue levels were negatively correlated to satisfaction with life in all disorders except MMFP. This fits well with previous literature showing that fatigue is a mediator by which psychological distress influences pain interference.[7] Fatigue may be an important therapeutic target for improving quality of life, and more clinical research examining psychosocial interventions for fatigue are needed.

Finally, the results from the social functioning variables revealed that social support was positively correlated to satisfaction with life in some disorders, suggesting that maintaining social functioning may be important for maintaining satisfaction with life. Research on resilience in pain has emphasized social functioning as a fundamental resource for pain patients to cope with and thrive in the face of pain.[37–39] However, relatively little work has been done examining for whom and how orofacial pains impair social functioning. The mechanisms underlying these relationships should be a focus of future research, as they may potentially reveal important targets for interventions. The pain-interference relationships revealed another interesting aspect of the data: specifically, that pain interference was not predictive of

satisfaction with life in all disorders. These findings suggest that some pain patients are maintaining satisfaction with life in the face of pain interference better than others. The coping strategies and biopsychosocial resources that allow people to do this remains an open question.

The findings from the current study have important clinical implications. The data highlight the need to assess for satisfaction with life in patients with orofacial pain. It may be particularly important to assess for satisfaction with life in CMM patients, who appear to be most negatively affected. Orofacial pain patients should be given resources and referrals for psychotherapy to help them cope more effectively if they report dissatisfaction with life. The satisfaction with life scale that was used in the current study is publically available and only five items long. Most individuals are able to complete it in a matter of minutes.[2] Thus, screening for dissatisfaction with life can be efficient and inexpensive.

The current study was not without limitations. Because data were collected at a single time point, temporal precedence could not be established. Thus, it is unclear whether people with low satisfaction with life were predisposed to have particular orofacial pain disorders, or whether particular orofacial pain disorders reduced people's satisfaction with life. Longitudinal data are needed to shed light on this question in orofacial pain populations. Additionally, diagnoses were made following the patient's first visit. The accuracy of these diagnoses is difficult to determine. Because all the data were collected at the initial appointment, the satisfaction with life variable may not represent people's actual satisfaction with life because they may have been overreporting dissatisfaction to ensure that the providers understood the severity of their pain and the importance of treating it immediately. Because the current study only used an orofacial pain sample, the findings also may not generalize to other chronic pain disorders.

Despite these limitations, the current study had several strengths. First, the study contained patients with a diverse set of orofacial pain diagnoses, thereby increasing the generalizability of the results within orofacial pain conditions. The sample contained diversity with regard to age, gender, average pain duration, and pain intensity that enabled comparisons across a broad range of patients. The findings from the current study have the potential to advance future research examining the role of psychological functioning in orofacial pain in the following ways: *(1)* they suggest that looking between and within broad categorizations of disorders (ie, muscle pain) could yield theoretically and clinically relevant findings; *(2)* they highlight the importance of using global measures (ie, satisfaction with life) to assess psychological functioning; *(3)* they emphasize the importance of future work investigating the variables and mechanisms by which satisfaction with life and orofacial pain disorders are related; and *(4)* they underscore the need for future research to examine how satisfaction with life is differentially influenced by physical, emotional, and social wellbeing.

Acknowledgments

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