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## COMMENT & RESPONSE

### Use of FACE-Q to Measure Quality of Life Following Aesthetic Facial Treatments

**To the Editor** We commend Jacono and colleagues<sup>1</sup> for using a patient-reported outcome measure (PROM) in their study, adding to the body of evidence-based outcomes data for facial aesthetics treatments. We have concerns, though, about their choice of PROM. The Rosenberg Self-Esteem scale (RSES) is a legacy scale, published in 1965 after testing in more than 5000 US high school students. Jacono and colleagues<sup>1</sup> found no change in self-esteem in 50 patients 6 months after a face-lift. This was not a surprise; self-esteem is a relatively stable construct.<sup>2</sup> What was a surprise was the authors' choice to use a generic rather than cosmetic-surgery specific PROM.

A recent Department of Health (United Kingdom) funded literature review assessed 35 cosmetic surgery-specific PROMs and found nine, of which 3—FACE-Q, BREAST-Q, and Skindex—met international recommendations for how PROMs should be developed and validated.<sup>3</sup> Jacono and colleagues<sup>1</sup> were aware of the FACE-Q, but stated that it measures “patient satisfaction.” Their aim was to measure psychosocial effects of aesthetic surgery.

To clarify, the FACE-Q does not *just* measure patient satisfaction. The FACE-Q is composed of more than 40 independently functioning scales and/or checklists that measure 4 main constructs: facial appearance, adverse effects, patient experience, and quality of life. Some facial appearance scales do

**Table. Head-to-Head Comparison of RSES and FACE-Q Psychological Function Scale**

Rosenberg Self-esteem Scale	FACE-Q Psychological Function Scale
I feel that I am a person of worth, at least on an equal plane with others.	I feel okay about myself.
I feel that I have a number of good qualities.	I am accepting of myself.
All in all, I am inclined to feel that I am a failure.	I am comfortable with myself.
I am able to do things as well as most other people.	I feel good about myself.
I feel I do not have much to be proud of.	I like myself.
I take a positive attitude toward myself.	I feel positive about myself.
On the whole, I am satisfied with myself.	I feel happy.
I wish I could have more respect for myself.	I feel attractive.
I certainly feel useless at times.	I feel confident.
At times, I think I am no good at all.	I feel great about myself.

Abbreviation: RSES, The Rosenberg Self-esteem scale.

measure *satisfaction* with appearance, while others, for negative concepts such as facial rhytides, ask about being *bothered* by appearance. The quality-of-life scales, however, *do not* measure patient satisfaction, but rather broader health constructs, including psychological and social function.<sup>4</sup>

The **Table** shows the RSES and FACE-Q psychological function scale content. Both scales have 10 items and use agree/disagree response options. Instructions for the FACE-Q ask respondents to answer items with their facial appearance in mind. The FACE-Q items are positively worded, whereas the RSE mixes positive and negative items. It is important to note that FACE-Q items were developed from qualitative interviews with 50 facial aesthetic patients ensuring high content validity; items contain exact words used by patients to ensure that they resonate. We previously reported moderate to large effect sizes on FACE-Q scales measuring psychological and social function from a clinical trial of 279 patients following a lip filler treatment,<sup>5</sup> and from a study that included 23 patients following a rhinoplasty.<sup>5</sup>

A recent blog called for PROM data to be collected in all cosmetic surgery studies.<sup>6</sup> The choice of which PROM to use is a crucial decision. If the wrong PROM is used, it may appear that an intervention has little to no benefit—when in fact it does, but the right questions weren't being asked.

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provides services to pharmaceutical, medical device, and biotechnology companies. No other disclosures are reported.

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**In Reply** We are writing regarding our recent study that evaluates the effect of face-lift surgery on self-esteem.<sup>1</sup> We appreciate the constructive criticism of Klassen et al,<sup>2</sup> but disagree with the conclusions.

Klassen et al<sup>2</sup> highlight the importance of patient-reported outcome measures (PROMs) in aesthetic surgery and discuss the strengths of the FACE-Q in that respect. The FACE-Q has wide applicability in assessing the aesthetic patient; however, our study does not evaluate facial appearance, adverse effects, patient experience, or “other quality-of-life measurements” that are not self-esteem. Our study evaluates just self-esteem.

The question then becomes what is the best instrument to evaluate self-esteem. The RSES is the most widely used measure of global self-esteem. The instrument has been cited 3016 times during the past 5 years. A large body of empirical evidence supports the internal consistency of the instrument, its predictive validity,<sup>3</sup> and its equivalence over time.<sup>4</sup> The consistency of the RSES was demonstrated across samples in 3 European countries (Serbia [n = 1010], Poland [n = 699], and Italy [n = 707]) and in the United States (n = 1192).<sup>5</sup> In short, with the body of literature validating its effectiveness, the RSES is the gold standard for evaluating self-esteem. To suggest that the FACE Q should replace the RSES after 1 clinical study of a few hundred patients without more significant evaluation seems imprudent.

Klassen et al<sup>2</sup> further imply that the questions asked in the RSES lead to unreliable outcomes because the “FACE-Q items are positively worded, whereas the RSES mixes positive and negative items.” To the contrary, the use of both positive and negative questions is actually a strength of the RSES. The RSES was developed in accordance with the recommended strategy of building instruments with a balanced number of positively and negatively worded items. This approach helps to limit response bias that can skew outcomes.<sup>6</sup>

Given this body of evidence in the psychological literature, we believe that the RSES is the correct PROM for evaluating self-esteem and that the conclusions of our study are valid. It is not surprising that there was no significant change in self-esteem after face-lift because, as Klassen and colleagues<sup>2</sup> stated, “self-esteem is a relatively stable construct.” Our feeling of self-worth or self-esteem is the lifetime sum of psychological development and is not likely to significantly change after a few hour operation.

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