



## Review Article

# Selfie's and orthodontics - A narrative review

Pragya Behl<sup>1,\*</sup>, Amanish Singh Shinh<sup>1</sup>, Pritesh Singla<sup>1</sup>, Amanpreet Singh Natt<sup>1</sup>,  
Karan Maheshwari<sup>1</sup>, Sharnjeet Kaur<sup>1</sup>

<sup>1</sup>Dept. of Orthodontics, Adesh Institute of Dental Sciences and Research, Punjab, India



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### ABSTRACT

The impact of selfies on adolescents serves a great deal in affecting their self esteem and quality of life. Selfies allow the individual to closely scrutinize and criticize themselves everyday by dint of their imperfections. The need for orthodontic treatment may arise from this scrutiny which is aided by comments and remarks by peers or on social networking websites.

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## 1. Introduction

Selfie is defined by Oxford Dictionaries as "a photograph that one has taken of oneself, typically with a smartphone or webcam and uploaded to a social media website". According to Oxford Dictionaries, "Selfie" is the word of the year for 2013.<sup>1</sup> Clicking and posting selfies to social media platforms pervades in everyday life. It has become common with the onset of Smartphones and various social platforms.<sup>1,2</sup> Increase in digitization and social media is changing people's everyday lives. The way they connect and collaborate at work and in civil society has likely been changed. It is of question if the impact of this heightened social media use is beneficial to either the individuals or the society. It is enabling unprecedented levels of communication, social interaction and community building across boundaries of time, place and social context.

## 2. Statistics

In a survey done by Statista Research Department in the year 2019, over 93 million selfies were posted on a daily basis.<sup>3</sup> No further surveys have been done about selfie posting since then but we can only imagine how much this number would have risen in the past 2 years. According to a research published by Statista Research Department in the year 2021, 82% of U.S. Adults ages between 18-34 years had posted selfies on social media at somepoint in their life. As of 2021, Facebook is the largest social media platform globally with 2.85 billion monthly active users worldwide. According to the latest data, the country with the most Facebook users is India with over 340 million active users, followed by the US (200 million), Indonesia (140 million), Brazil (130 million), and Mexico (98 million).<sup>3</sup>

## 3. Studies and Reviews

The American Psychiatric Association (APA) in the year 2014 has confirmed what many people thought all along: taking 'selfies' is a mental disorder. The disorder is called

\* Corresponding author.

E-mail address: [pragyabeh182@gmail.com](mailto:pragyabeh182@gmail.com) (P. Behl).

selfitis, and is defined as the obsessive compulsive desire to take photos of one's self and post them on social media as a way to make up for the lack of self-esteem and to fill a gap in intimacy.<sup>4</sup> In a study by Khalid N et al. in 2015<sup>5</sup> described certain reasons for selfie to be considered as a disorder. Reasons included that selfie creates privacy risk, it can cause an addiction, it can damage real relationships, it places too much emphasis on physical appearance.<sup>5</sup> Over the past couple of years, clicking and posting selfies has become a popular trend. However, since March 2014, 127 people have died and many have been injured while trying to click a selfie out of which 76 were Indians.<sup>6</sup>

The study by Wang R, Yang F, Haigh MH<sup>7</sup> discovered that self-esteem mediated the relationship between selfie viewing and life satisfaction. Specifically, the more frequent people view selfies on social media, the lower level their self-esteem and life satisfaction.<sup>8</sup> Perception of appearance of the individual usually relates to both self-esteem and self-image and has an impact on the quality of life.<sup>9</sup>

A focal role in a patient's decision to seek orthodontic treatment is played by aesthetics, even in cases of clear medical necessity (Gosney, 1986). The motivation to improve aesthetics is clearly of a psychosocial origin (Peck and Peck, 1970).<sup>10</sup> Dental malocclusion or malaligned teeth affect a person's self-esteem and also has social and psychological consequences.<sup>11</sup> Studies show that adolescents with low self-esteem are more likely to develop depression, as well as other mental health problems.<sup>12,13</sup> People with crooked teeth often become embarrassed about their smile in social situations. They may cover their mouths, smile awkwardly or with their lips closed, or even avoid speaking. All of these actions can have an impact on their self esteem and social confidence.<sup>1-3</sup> Most typical consequences are those of psycho-social dysfunction and social isolation.<sup>4</sup> The orthodontist is in a unique position to see adolescents frequently over a significant amount of time.<sup>14</sup> Apart from improving the dental malocclusion, it is still a challenge to ascertain if orthodontic treatment has an impact on quality of life and self esteem of patients. In the past few years, number of patients seeking orthodontic treatment has risen substantially.<sup>3</sup>

The question that arises is that if this is because of an increase in prevalence of malocclusion or because of an increase in felt need or self awareness? Previous studies have observed that orthodontic treatments have increased due to the frequency in the incidence and prevalence of malocclusions. The impact of which in the daily life of the patients may have an influence on the self-esteem of the patient.<sup>8</sup> The preventive outlook of modern dentistry, increased access to information, technological advances of orthodontics, and psychosocial variations justify the increase in demand for orthodontic treatment in adults.<sup>15</sup> The latest statistics show that 81% population of the world owns a smartphone. In the year 2020, 1.38 billion

smartphones were sold worldwide, most of which are sold because of being selfie friendly.<sup>16</sup> In modern days after the advent of smartphones and social media, there has been seen a significant decrease in perception of body image leading to increase in sociocultural pressure and body dissatisfaction and decrease in self esteem and quality of life.<sup>17</sup> Refinement of oral health and psychosocial well-being are recognized benefits of orthodontic treatment (Bennett et al. , 1995).<sup>18</sup> A patient's expectations from orthodontics are improved aesthetics, self-image and social functioning ( Pietilä and Pietilä, 1996 ).<sup>19</sup> This assertion is supported by research on general body image. It shows that individuals who are satisfied with their physical appearance are seen to be more outgoing and successful in establishing social contact ( Cash and Fleming, 2002 ).<sup>20</sup> Traditionally, principal goal of orthodontic treatment is considered to be oral health and function ( O'Brien et al. , 1998 ; Hunt et al., 2001).<sup>21</sup> Nevertheless, there has been growing acceptance of aesthetics and its psychosocial impact is considered to be an important treatment benefit ( Giddon, 1995 ; Cunningham and Hunt, 2001 ; Hunt et al ., 2001).<sup>22</sup> Noticeably improved body image and self-confidence after orthodontic treatment was reported by some patients ( Albino et al. , 1994 ; Cunningham et al. , 1996 , 2002 ; Birkeland et al. , 1997 ; Kiyak, 2002 ).<sup>2</sup> Orthodontic treatments for aesthetic reasons occupy a place of great importance in current dentistry, where adolescents and adults wish to have a smile aesthetically accepted by them or by their social circle.<sup>23</sup> Children with visible malocclusion were likely to be socially and psychologically disadvantaged.( Shaw et al., 2007)<sup>4</sup> Evidence of the assumption that orthodontic treatment leads to higher self-esteem or lack of treatment can lead to low self-esteem in adulthood appears coherent.<sup>4,5</sup>

#### 4. Summary

For many years, parents of early adolescent children would bring them to an orthodontist when they'd realize that their child's teeth were crooked or the face looked different than that of other kids. On the other hand were the early adolescents seeking orthodontic treatment that were pushed by negative remarks from their peers or other social groups regarding their dentition or facial profile which would further lead to inferiority complex, low self esteem and psychosocial issues. Although most of the adolescents were self motivated and inspired either by commercials or by other patients being benefited by undergoing orthodontic treatment. Remarks from peers or subsequent comments on social media platforms serves as an impetus for seeking orthodontic treatment.<sup>17</sup> Such patients inadvertently observed themselves in the mirror or pondered over their pictures to make up their minds to go for corrective orthodontic treatment and improve their psychosocial behavior.

The past decade has seen a lot of development in the technological front in the form of smartphones that come with built in high resolution cameras. A few studies have observed that these smartphone cameras have contributed a great deal to self assessment and self observation and has led to many people being preoccupied with their appearance and driving them towards corrective cosmetic enhancement of their face and teeth. “Now that cameras are ubiquitous, photographs of ordinary people are everywhere, too.” (by Rose Eveleth) This is true indeed as before the invention of cameras, paintings were made to encapsulate the image of only the important members of the society. Before the invention of smartphones photographs were taken in a posed manner from at a distance of almost 4-5 feet. Such pictures did not highlight the intricacies or facial abnormalities unless one chose to get a close up picture taken by a professional. But with phone camera in every other hand, people are at liberty to take self pictures or selfies at any time.

These selfies aid the adolescents to closely scrutinize and criticize the imperfections in their facial and dental profile hence may prompt them to seek orthodontic treatment. It is observed that people with crooked teeth avoid posting their selfies on social media or post their pictures with a smile with closed mouth to avoid social backlash in real life, the aftermath of which leads to irksome manifestation of social sensitivity. Social sensitivity is the personal ability to perceive, understand and respect the feelings and viewpoints of others. Pragmatically it is defined as individual’s heightened concern for other people’s judgments of and reactions to themselves (KrejciManwaring, Kerchner, Feldman, Rapp, & Rapp, 2006).<sup>24</sup> Studies have demonstrated that high social sensitivity leads to a sensitive response to social signals such as eye gaze, vocal tone, and body language (DiTommaso, Brannen-McNulty, Ross, & Burgess, 2003; Harb, Heimberg, Fresco, Schneier, & Liebowitz, 2002; Pickett, Gardner, & Knowles, 2004).<sup>25</sup>

In social media, posts and comments have been seen to heighten social sensitivity (Chua & Chang, 2016; Weiser, 2015).<sup>24</sup>

## 5. Conclusion

In this virtual reality world selfie seems to be turning out as a modern age self assessment tool and affecting psychosocial behaviour. Evidence and studies are needed to substantiate this assumption. Is it arising from low self esteem or some psychosocial behaviour further needs to be investigated.

It also needs to be validated whether selfie is becoming a tool of self perception of teens and prompt them for the need of orthodontic treatment.

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## 7. Conflict of Interest

None.

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## Author biography

**Pragya Behl**, Post Graduate Student  <https://orcid.org/0000-0002-8434-8746>

**Amanish Singh Shinh**, Professor and HOD

**Pritesh Singla**, Professor

**Amanpreet Singh Natt**, Professor

**Karan Maheshwari**, Reader

**Sharnjeet Kaur**, Senior Lecturer

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