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HOW DENTAL AESTHETICS AFFECTS SELF – CONFIDENCE AND ITS IMPACT ON PSYCHOSOCIAL BEHAVIOUR: A CLINICAL STUDY WITHIN THE UNIVERSITY OF LEEDS AGES 18-25.

Master thesis

Supervisor

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	1 Is summary informative and in		Yes	Partially	No			
1	Summary	Is summary informative and in compliance with the thesis content and requirements?	0.3	0.1	0			
2	(0.5 point)	Are keywords in compliance with the thesis essence?	0.2	0.1	0			
3	Introduction, aim	Are the novelty, relevance and significance of the work justified in the introduction of the thesis?	0.4	0.2	0			
4	and tasks (1 point)	Are the problem, hypothesis, aim and tasks formed clearly and properly?	0.4	0.2	0			
5		Are the aim and tasks interrelated?	0.2	0.1	0			
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7	Review of Literature	Have the most relevant researches of the scientists discussed properly and are the most important results and conclusions presented?	0.6	0.3	0			
8	(1.5 points)	Is the reviewed scientific literature related enough to the topic analysed in the thesis?	0.2	0.1	0			
9		Is the author's ability to analyse and systemize the scientific literature sufficient?	0.3	0.1	0			
10	Material and methods	Is the research methodology explained comprehensively? Is it suitable to achieve the set aim?	0.6	0.3	0			

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22		Do the data presented in other sections (introduction, review of literature, results) repeat?	0	0.2	0.3
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25		Are the conclusions clear and laconic?	0.1	0.1		0
26		Is the references list formed according to the requirements?	0.4	0.2		0
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	Additional sec	ctions, which may increase the collected r	number (of points		l
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32		Is the thesis volume sufficient (excluding annexes)?		15-20 pages (-2 points)		pages points)
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39	Is the content (names of sections and subsections and enumeration of pages) in compliance with the thesis structure and aims?	-0.2 point	-0.5 points
40	Are the names of the thesis parts in compliance with the text? Are the titles of sections and sub-sections distinguished logically and correctly?	-0.2 point	-0.5 points
41	Was the permit of the Bioethical Committee received (if necessary)?		-1 point
42	Are there explanations of the key terms and abbreviations (if needed)?	-0.2 point	-0.5 points
43	Is the quality of the thesis typography (quality of printing, visual aids, binding) good?	-0.2 point	-0.5 points
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HOW DENTAL AESTHETICS AFFECTS SELF – CONFIDENCE AND ITS

IMPACT ON PSYCHOSOCIAL BEHAVIOUR: A CLINICAL STUDY WITHIN

THE UNIVERISITY OF LEEDS AGES 18-25.

SUMMARY

The aim: To evaluate the impact of dental aesthetics on psychosocial behavior and self –confidence and to

learn some of the contributing factors of this effect.

Materials and methods: The survey was conducted at the University of Leeds, located in West Yorkshire,

England. A self- administered anonymous questionnaire designed to evaluate the impact of dental aesthetics

on psychosocial behavior and self -confidence. There were 204 respondents between the ages 18-25

studying in the School of Languages, Cultures and Societies. The data was analyzed using SPSS, version

19. The level of significance was set at P<0.05. Cronbach's alpha test was used to determine the level of

internal consistency.

Results: Tooth colour (60.8%) proved to be the smile component causing the most dissatisfaction amongst

the subjects, closely followed by tooth position (48%). The greater number of participants would not hide

their teeth (53.4%) while smiling but the majority claimed they did not feel confident enough (61.8%)

showing their teeth while smiling. Additionally, over a half of the subjects were not content (50.4%) with

their smile and desired some kind of aesthetic treatment (80.5%). A significant number of participants felt

that social media had great amount of impact (72.5%) in relation to self – confidence and psychosocial

behavior due to dental appearances.

Conclusion: There is a definite correlation between dental aesthetics and the impact it implements on an

individual's psychosocial well –being and self – confidence. Females showed a higher dissatisfaction with

their smile however, amongst the men, the greater number were also dissatisfied with their dental

appearance. Reported the majority of participants did not feel content with their smile and external factors

such as social media found to have a large effect on one's self perceived satisfaction of their dental

appearance and its impact on self – confidence as well as psychological well-being.

Keywords: Self – confidence, psychosocial, aesthetics

INTRODUCTION

Theories on beauty have a very long history and the concept of esthetics has emerged from early stages and different species. Since the ancient Greeks, questions have risen of what makes someone or something beautiful and whether beauty rests in the eye of the beholder or rather is a possession of an object or person. Academia has identified the subject of esthetics with the philosophy of art and beauty. However, it is still very ambiguous, complex and contested [1].

In the modern competitive world, social, economic and sexual concerns in relation to esthetics are much more frequent and the demand for esthetic treatment has increased immensely. Two factors which have been associated with facial aesthetics are facial and smile harmony [2]. Tooth arrangement, colour, shape and size are all factors that plays a role in dental esthetics and therefore social confidence which in turn lead to a better quality of life. Facial, oral and dental esthetics may not necessarily compromise oral functions but it can have a massive impact on an individual's quality of life which can lead to social and psychological impairment [6].

Gingival disposition and lip position are other factors which allows tooth visibility and affects smile harmony. How well a person can function and interact in a society depends on the ability of expressing a series of emotions by the morphology and mechanism of both teeth and lips [2,3]. Personality development and social interaction is influenced by facial attractiveness and one important factor in facial expression is a beautiful smile. According to literature, dental esthetics can have a notable effect on psychological well-being as well, which in turn can affect their self-confidence and self-esteem [3]. Esthetic related dental malformations are potential targets for bullies especially in children and adolescents. According to Scheffel D, et al, a significant improvement in self-confidence, self-esteem, academic performance as well as social integration was noted amongst individuals post dental treatment [2].

Previously, people were influenced by the people they surrounded themselves with such as close friends or people they look up to. However, nowadays, social media has strongly affected the increased demand for esthetic treatment from the public, by influencing the behavior and thinking of our beauty conscious in society. Even amongst some prestigious occupations and professional groups, good dental appearances are now a requirement [4].

Self - confidence itself plays a very important role in every aspect of life, more so in becoming successful. Therefore, it is clear there are several factors which can alter one's self confidence. A strong mind with understanding and perception cannot be put down easily; in oppose to those with low self – confidence who

can be put down easily. When an individual has a decreased self-confidence it is often found that they compare themselves to someone they perceive is better than them and in return leads to upgrading materialistically such as cars, clothes, gadgets etc. while others may focus on their physical appearance like nose, hair, makeup and of course dental aesthetics [3,5]. Believing or feeling in your powers and abilities is self-confidence. These specific factors can have a clear and direct impact on our apparent actions. Not everyone has a perfect occlusion and many wishes to whiten or correct alignment of their teeth or even both. People who are not satisfied with their dental appearance is a strong predictor for low self-confidence. Dissatisfaction is more common amongst females than males [5].

Aesthetics is the fusion of two; art and science. An aesthetic transformation is that aim of mimicking and recreating nature – natural appearances [4]. With the rising dental expenditures due to new technologies, aesthetic treatment options are constantly evaluated, adopted and implemented in dental practice. In recent practices, the aesthetic treatment options which have largely emerged are dental composites, ceramics, veneers, aesthetic posts, bleaching, implants and computer aided design/computer aided manufacturing (CAD/CAM) [7].

Aim

The aim of this research was to evaluate to what extent dental aesthetics impacts psychosocial behavior and self – confidence, as well as understanding the factors contributing to such impact.

Tasks:

- 1. To collect the data regarding one's self perception of their dental appearance including factors that influence such notion.
- 2. To compare the relation between different genders and the way they perceive their dental appearance.
- 3. To evaluate how social media affects the approach to smile appearance

Hypothesis: There is a significant correlation between dental aesthetics and the impact it has on psychosocial behavior and self-confidence.

REVIEW OF LITERATURE

Literature suggests aesthetics is typically identified in academia with the beliefs of art and beauty. However; despite the extensive unanimity of such definition, the concept of aesthetics continuously remains deeply complex, ambiguous and essentially disputed [1]. In accordance to WHO's definition of quality of life, oral health is not just the absence of oral disease but rather includes the influence on an individual's social life and self-confidence. Therefore, placement of a restoration, improving dental appearance is found to result in a positive effect on self-esteem and quality of life [4].

L Strajnic et al. conducted a study to identify what factors influence the respondent's satisfaction with their dental appearance. They concluded that female respondents were more dissatisfied with their dental appearance compared with male respondents, but the difference was found to be non-significant. Additionally, it was found that patient with higher education level were more satisfied with their dental appearance compared to those of lower education [8]. In conjunction with this study, Alacron P et al. equally states that females expressed a greater dissatisfaction with their dental appearance with majority of patients in their study not satisfied with their smile [5]. However, Venete A, et al. reports that men present higher levels of perfectionism than women while women present a greater level of self confidence in their dental aesthetics. In confliction with the above studies, low self – confidence is a strong attribute to dissatisfaction with dental appearance [5,9]. Their study proved this using a survey consisting of three questionnaires assessing PIDAQ (psychosocial impact of dental aesthetics questionnaire), MPS (multidimensional perfectionism scale) and RSS (rosenberg self-esteem scale) [9].

According to Bersezio C, et al. one of the most effective ways to understand how aesthetic treatments impact self- perception is through testing bleached patients and allowing an insight into the effect of a teeth whitening procedure [15]. Employment, opportunities, achievements, success in relationships are all influenced by pleasurable teeth which is a vital role in social interactions [15,18].

Two studies were conducted to evaluate the impact the teeth whitening procedure. Bersezio, C et al. used a 10% carbamide peroxide gel for one hour daily for three weeks on 58 patients [15]. Pavicic DK, et al. divided 60 subjects into two groups; one with a photoactivated whitening gel and the other a placebo group [10]. The two studies concluded that teeth whitening demonstrated a positive effect on dental self-confidence as well as oral health-related quality of life, psychology and aesthetic perception. In subjects with higher perfectionism, by increasing the colour change, a decrease in dental self-consciousness was found [10,15,18]. Despite the possibility of the side effects that are present with teeth whitening products such as tooth sensitivity in which participants encountered, the success it had on an individual's self-

confidence over threw the level of concern corresponding to the risk of experiencing such side effects [15]. Facial attractiveness is a controversial topic among humans in regards to what constitutes an attractive face. When the cause of distortion of the balanced facial form arises from irregularities in the dental region, a prominent result in changes in self—esteem is formed [11,19]. I Manevska, et al. performed a cross-sectional study to assess psychosocial issues regarding satisfaction with facial appearance and domains [11]. On the other hand, Baker. S, et al. wanted to evaluate and determine the visual attention which comes to the mouth in males as literature shows this test has only been accomplished on females. Results demonstrated that the mouth had significantly more visual attention than the eyes or nose irrespective of the facial attractiveness levels. However; men showed a rather significant amount of attention to the mouth in comparison to the females who showed more attention to the eyes [14]. Similarly, in Manevska, et al. study, they found women to be more effected by the middle third of the face and when they presented a reduced middle third it was a recognized association with an increased awareness of dentofacial aesthetic (AW). In relation to the men, a reduced upper lip height was found to lead to a lower level of satisfaction and an increase in facial aesthetics concern (FA) [11].

As well as social influences and stereotypes, having a great impact on the perception of one's facial attractiveness; personality traits also have major impact on one's satisfaction when concerning facial aesthetics, particularly dental [11, 16].

A cross sectional study was performed by Gavric A, et al. to understand the relationship among dental esthetics related quality of life, cranio-dentofacial characteristics and self – esteem within respondents who are adolescent and young adults. Results concluded that the social impact of dental esthetics, borderline dental self – confidence and facial type all contribute the most in explaining the variability of self- esteem. Self- perceived psychosocial impacts of dental esthetics showed to have a grander influence on self-esteem in adolescents and young adults in comparison to the normative level of malocclusion, craniofacial typology, sex or age [13].

Afros S, et al. study evaluated attitudes which effects social and psychological behavior in relation to satisfaction of their dental appearance and the association it has with gender. Results showed that there was a significantly higher percentage of subjects which were highly satisfied with their smile and were happy to show their teeth while smiling. Self – confidence has positive impact on a person when one has self-perceived satisfaction of dental aesthetics [12].

Authors recognize the correlation between self – satisfaction, social behavior and psychological well-being; and more importantly the impact they can imply on dental self-confidence. [12,13,17].

MATERIALS AND METHODS

The survey was conducted from November 2018 to January 2019 in a city called Leeds which is located in the heart of West Yorkshire, England. With a population of almost one million, Leeds holds one of the top 10 universities for research power within the UK and is known to be a member of the Russell Group universities. The University of Leeds has a community of around 38,000 students with approximately 27,000 undergraduates and more than 10,000 postgraduates.

The study was carried out in the faculty of Arts, Humanities and cultures in the School of Languages, Cultures and Societies. Humanities was the department of choice including various courses in different streams within this field as the study excluded any dental or medical related courses due to the contrasting outlook the participants may have. A self- administered anonymous questionnaire was distributed electronically with the permission of the Student Support Manager to 300 students between the ages of 18-25 studying in the School of Languages, Cultures and Societies. The respondents received an explanation of the purpose of the questionnaire and, only after a consent form with a questionnaire was sent to all participants.

The questionnaire was prepared in English and the questions were designed to evaluate how dental aesthetics affects self – confidence and its impact on psychosocial behavior. The cross-sectional study consisted of two parts; the first part included various components of the psychosocial impact of dental aesthetics questionnaire (PIDAQ) in which several questions were designed to pool aesthetic concerns, social impacts, psychological impact and dental self – confidence. The second part, however; consisted of questions which were designed to understand what kind of factors would be contributing to the lack of an individual's self – confidence. With the distribution of 300 questionnaires, we received 204 (68%) responses. 72 were male and 132 were female. The response rate was not 100% however; with a 68% response rate we managed to collect a sufficient amount of data. Distribution of 300 questionnaires was found to be sufficient by calculation using the sample size formula.

In reference to the formula, with a confidence level set at 95%, the margin of error was only 4% with 204 respondents and is therefore a highly acceptable response rate. Using the Statistical Package for the Social Sciences (SPSS) program, version 19; the data obtained was computerized, coded and analyzed. With descriptive analysis, quantitative analysis and Pearson chi- squared test ⁽²⁾ was done to establish relationships between categorical variables. A level of significance was set at P<0.05. Furthermore, using the Cronbach's alpha test the internal consistency was calculated and in most social scientific research institutions, a reliability of coefficient 0.70 or higher is considered 'acceptable' in regards to Cronbach's

alpha. The department of bioethics within the Lithuanian University of Health Sciences issued an ethical approval (Reference no. BEC-OF-16) to carry out the study. All participation was voluntarily with anonymity ensured for all respondents.

RESULTS

Overall, 204 participants filled in the questionnaire, with 132 (64.7%) of them female and 72 (35.3%) male. From the 204 participants 175 (85.8%) were undergraduates at the University of Leeds and only 29 (14.2%) were postgraduates of the same institute. With a focus of the age range between 18-25 years the average age of respondents was 21.5 however; there was a sufficient variety of participants from all ages within the study category. The alpha coefficient for all questions was 0.86 and accordingly suggests the questions have a relatively high internal consistency.

Table 1. Concern of smile components amongst participants with the significant difference between genders.

Smilecompone	lecompone Females Males (n=72) Tota		Total		Significanceofdiffere			
nt	(n=13	2)					nce	
	No.	%	No.	%	No.	%	X^2	p
Lip shape	15	11.4 %	2	2.8 %	17	8.3 %	4.496	0.034
Shapeofteeth	19	14.4 %	6	8.3 %	25	12.3 %	1.591	0.207
Colour ofteeth	93	70.5 %	31	43.1 %	124	60.8%	14.672	< 0.001
Sizeofteeth	26	19.7 %	8	11.1 %	34	16.7 %	2.473	0.116
Position ofteeth	71	53. %	27	37.5 %	98	48.0 %	4.951	0.026
Colour ofgums	9	6.8 %	2	2.8 %	11	5.4 %	1.491	0.222
Position of gums	10	7.6 %	5	6.9 %	15	7.4 %	0.027	0.869
Sizeof lips	36	27.3 %	2	2.8 %	38	18.6 %	18.442	< 0.001
Happy with all	21	15.9 %	28	38.9 %	49	24.0 %	13.480	< 0.001

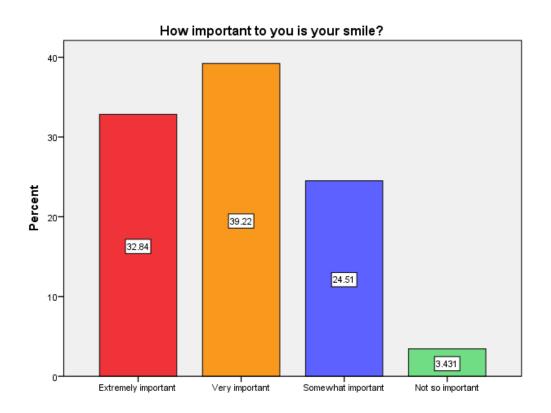
According to Table 1, females showed more concern in all of the smile component factors and therefore there was a higher number of males who selected the component "happy with all" (38.9%). A total of 24% of the participants were happy with their smile leaving the majority fairly dissatisfied. In both genders, 'colour of teeth' showed to cause the majority of dissatisfaction with the subject's teeth, with a (70.5%) of females and (43.1%) of males. Following on, position of teeth (48%), size of lips (18.6%), size of teeth (16.7%) and lip shape (8.3%) showed a significant amount of dissatisfaction among the participants. The components proving the least concern for dental aesthetics were position of gingiva (7.4%) and colour of gingiva (5.4%). There was only one component, size of lips in which a significant gender wise difference was observed with a significantly higher number of females dissatisfied than males.

Table 2. Smile satisfaction with association to gender.

Gender	Highlysatisfied (n=43)		Satisf	ied (n=91)	Not s	atisfied (n=70)	Signific ifferenc	
	No.	%	No.	%	No.	%	X^2	p
Female	18	13.6 %	59	44.7 %	55	41.7 %	15.721	<0.001
Male	25	34.7 %	32	44.4 %	15	20.8 %	-	
Total	43	21.1 %	91	44.6 %	70	34.3 %		

An almost equal amount of male (44.4%) and females (44.7%) were satisfied with their smile. However, a chief number of males (34.7%) were highly satisfied in comparison to females (41.7%) where the majority were not satisfied. Furthermore, statistically the p value indicated a significant result.

Figure 1. Importance of smile amongst participants.



Majority of participants felt their smile as very important (39.22%) or extremely important (32.84%). Only (3.4%) viewed their smile as not so important.

Table 3. Percentage of participants hiding their teeth when smiling.

Do you hide your teeth when smiling?										
	Females (n=132)		Mal	Males (n=72) Total		Significanceofdiffer				
							ence			
	No.	%	No.	%	No.	%	X^2	p		
Yes	79	59.8 %	16	22.2 %	95	46.6 %	26.507	< 0.001		
No	53	40.2 %	56	77.8 %	109	53.4 %				

Almost half of the 204 participants hide their teeth when smiling (46.6%), however, the higher percentage of participants would not (53.4%). Gender wise difference, majority of males would not hide their teeth (77.8%) in relation to the majority of females who would hide their teeth when smiling (59.8%).

Table 4. Percentage of participants confident in showing their teeth.

Are you confident enough showing your teeth?										
	Femal	Females (n=132)		Males (n=72) Total			Significanceofdiffer			
								ence		
	No.	%	No.	%	No.	%	X^2	p		
Yes	36	27.3 %	42	58.3 %	78	38.2 %	19.032	< 0.001		
No	96	72.7 %	30	41.7 %	126	61.8 %				

38.2% of the participants were confident showing their teeth, however, almost double (61.8 %) were not confident enough with the majority of females feeling this way.

Table 5. Percentage of participant's content with the way their smile looks.

Are you co	Are you content with the way your smile look in the mirror, videos and photos?											
	Femal	es (n=132)	Males (n=72) Total			Significanceofdiffer						
							ence					
	No.	%	No.	%	No.	%	X^2	p				
Yes	41	31.1 %	43	59.7 %	84	41.2	15.801	< 0.001				
No	91	68.9 %	29	40.3 %	120	58.8						

The greater number of subjects were not content with the way their smile looks in the mirror, videos and photos (58.8 %) with the higher number of females (68.9 %) feeling this way.

Table 6. Percentage of participants conscious when smiling in front of opposite sex.

Does your smile make you feel conscious in front of opposite sex?											
	Femal	Females (n=132)		Males (n=72)		Total		anceofdiffer			
							ence				
	No.	%	No.	%	No.	%	X^2	p			
Yes	112	84.8 %	45	62.5 %	157	77.0 %	13.123	< 0.001			
No	20	15.2 %	27	37.5 %	47	23.0 %					

Both male and female feel that their smile makes them feel conscious in front of the opposite sex with a total of (77 %).

Table 7. Percentage of participant's content with their smile.

All in all, do	All in all, do you feel content with your smile?											
	Femal	es (n=132)	Males (n=72)		Total		Significanceofdiffer					
								ence				
	No.	%	No.	%	No.	%	X^2	p				
Yes	54	40.9 %	47	65.3 %	101	49.5 %	11.067	0.001				
No	78	59.1 %	25	34.7 %	103	50.5 %						

An almost 50/50 percent regarding participant's feeling content with their smile. (49.5%) answered that they do feel content with their smile, however, (50.5 %) do not feel content.

Table 8. Percentage of participants wishing their teeth looked better.

Do you wish your teeth looked better?											
	Femal	Females (n=132)		Males (n=72)		Total		Significanceofdiffer			
							ence				
	No.	%	No.	%	No.	%	X^2	p			
Yes	106	80.3 %	44	61.1 %	150	73.5 %	9.611	0.008			
No	10	7.6 %	14	19.4 %	24	11.8 %					
Not bothered	16	12.1 %	14	19.4 %	30	14.7 %					

A large quantity of the participants desires a better-looking smile (73.5%) followed by (14.7%) of the subjects who were not bothered.

Table 9. Percentage of participants dissatisfied with their looks.

	Females (n=132)		Males (n=72)		Total		Significanceofdifferenc			
								e		
	No.	%	No.	%	No.	%	X^2	p		
Yes	74	56.1 %	24	33.3 %	98	48.0 %	9.651	0.008		
No	38	28.8 %	31	43.1 %	69	33.8 %				
I am happy	20	15.2 %	17	23.6 %	37	18.1 %		l		

A total of (48%) participants were unhappy with their look due to the appearance of their smile. In relation to gender comparisons, males were happier with their looks (23.6%) as oppose to females who felt their teeth were the purpose of them feeling dissatisfied with their appearance.

Table 10. Percentage of participants who have had aesthetic treatment to their teeth.

Have you ever had any aesthetic treatment to your teeth? (whitening. Crowns, veneers, composite bonding)

	Females (n=132)		Males (n=72)		Total		Significanceofdiffer	
							ence	
	No.	%	No.	%	No.	%	X^2	p
Yes	38	28.8 %	11	15.3 %	49	24.0 %	4.659	0.031
No	94	71.2 %	61	84.7 %	155	76.0 %		

Table 11. Percentage of participants who would like to have aesthetic treatment to their teeth.

If possible, would you have aesthetic treatment done to your smile? (whitening. Crowns, veneers, composite bonding)

	Females (n=132)		Males (n=72)		Total		Significanceofdiffer		
							ence		
	No.	%	No.	%	No.	%	X^2	p	
Yes	115	87.1 %	49	68.1 %	164	80.4 %	10.743	0.001	
No	17	12.9 %	23	31.9 %	40	19.6 %			

In regards to the subjects who have already had some sort of aesthetic treatment (76%) of them answered no (as seen on table 10), however, at an almost exact same number of participants desired to have some aesthetic treatment done to their smile (80.4%) at some point in their life (as seen on table 11).

Table 12. Percentage of participants concerned with social media affecting their smile.

Are there any other factors which affect the way you feel about your smile? e.g. social
media

	Females (n=132)		Mal	Males (n=72) Tota		Total		Significanceofdiffer		
							ence			
	No.	%	No.	%	No.	%	X^2	p		
Yes	115	87.1 %	26	36.1 %	141	69.1 %	56.792	< 0.001		
No	17	12.9 %	46	63.9 %	63	30.9 %				

More females feel that factors such as social media have an effect on how they feel about their smile in comparison to males. However, the majority in both genders agree that social media does have an effect on how they feel about their smile. The same number of females answered yes and no for both questions in table 11 and table 12.

Table 13. Percentage of participants editing their picture before uploading it on social media.

If you're an active social media user, would you edit the way your smile looks before uploading a picture?											
Females (n=132) Males (n=72) Total Significanceofdiffer											
	No.	%	No.	%	No.	%	X^2	p			
Yes	63	47.7 %	13	18.1 %	76	37.3 %	17.547	< 0.001			
No	69	52.3 %	59	81.9 %	128	62.7 %					

Only 37.3 % of the participants edits the way their smile looks before uploading it on social media and it is more common amongst females in comparison to males.

Table 14. Percentage of participants feeling insecure about their smile.

Do you ever feel insecure about publicly speaking or showing yourself smiling online?											
	Femal	Females (n=132)		Males (n=72)		Total		anceofdiffer			
								ence			
	No.	%	No.	%	No.	%	X^2	p			
Yes	84	63.6 %	18	25.0 %	102	50 %	27.818	< 0.001			
No	48	36.4 %	54	75.0 %	102	50 %					

In terms of participants feeling insecure about their smile when publicly speaking or showing themselves online, half answered yes and half no. However, more females felt insecure in comparison to males.

Table 15. Percentage of participants feeling more confident prior to the social media craze.

Before the social media craze, would you say you felt more confident with the way your smile looked? (i.e. do you feel your teeth became an issue after comparting them with others and advertisements of the "perfect" smile)

	Females (n=132)		Mal	Males (n=72)			Significanceofdiffer	
							ence	
	No.	%	No.	%	No.	%	X^2	p
Yes	115	87.1 %	33	45.8 %	148	72.5 %	39.878	<0.001
No	17	12.9 %	39	54.2 %	56	27.5 %		

A majority feel that before the social media craze they were more confident with their smile a total of 72.5 % answered yes. Almost double the number of females answered yes in comparison to males.

DISCUSSION

This clinical study was designed to obtain results to accept the hypothesis of the research as well as being able to draw comparisons to similar studies within the same field. The aim of the research was to evaluate how much of an impact dental aesthetics has on psychosocial behavior and self—confidence in which the information was extracted from the PIDAQ questions (6-16) in the questionnaire that the participants completed. A further analysis of the components that cause such dissatisfaction in dental aesthetics and understand how individuals perceive satisfaction of their dental appearance. To compare it with various practices and attitudes moreover, additional factors such as social media which contribute to the desire of aesthetic treatment to gain the 'perfect' looking smile. The study population selected for the study were students attending the University of Leeds from various courses pursuing different pathways with the exception of dental students. This is due to the reason being literature has proven the different perception dental students/dentists perceive regarding aesthetics [20, 21]. The participants chosen were a group of individuals more concerned with seeking a future, staging job opportunities, perfecting their looks, searching for a suitable partner and therefore rather stable within their desires and thoughts.

The greater number of participants were satisfied with their smile and out of the smile components, tooth colour was the one that raised that most amount of dissatisfaction. Due to the decrease in caries prevalence, dental aesthetics is the new focus – in specific, teeth whitening [18]. Women showed themselves to be more dissatisfied with their smiles than men. This reveals women to have the tendency to demonstrate sensitivity, awareness and are exigent regarding their appearance [21]. It was proven that the least common cause of concern for the individuals was gingival position and colour. This is in accordance with numerous studies who have shown supporting results of this study [4,18,19].

Majority of the subjects recognize their smile as either very important or extremely important in which we can conclude the correlation between the level of education and the way participants value their smile. Various studies observe a parallel relationship between age, level of education and its effect on hygiene, self-satisfaction and the desire to improve dental aesthetics [22,4]. One study suggests that individuals whom oral health has importance use dental appearance as a foundation for making judgment of psychological adjustment as well as intellectual competence [4].

A higher percentage of the subjects would not hide their teeth when smiling however, additionally, the higher percentage of subjects do not feel confident showing their teeth. Also, majority of subjects were not content with the way their smile looked in the mirror, videos and photos. This is pertinent to the fact that social behavior, psychological well-being and self – satisfaction are all inter-related. Remarks regarding the

lack of confidence to show teeth while smiling or the feeling to be discontent with the way a smile is viewed in the mirror or photos reflects dissatisfaction leading to a negative effect on the psychological well-being of an individual [19].

One of the findings of the study which can be seen as very interesting is related to the subjects feeling conscious of the opposite sex when smiling. The higher figure of the 204 participants answered **yes** however, regarding the males, the greater number was men feeling conscious of the opposite sex when smiling. This figure is a possible reflection of the society changing where beauty was previously dominated by females. Furthermore, a reflection into the marketing industry where a vast number of male beauty commodities or 'beauty guru's' are being introduced. This further ties in hand with the high number of subjects who feel that some type of external factor such as social media/ peer pressure/ occupation has an impact on the way one feels towards his/her smile. With the rise of social media and beauty bloggers promoting smiles which are perceived as the 'ideal/perfect' look, more and more of the world's population aspire to have similar appearances, in this case – dental appearances. However, not all can fulfill one's desire for aesthetic treatment leaving a feeling of insecurity, lack of self-confidence and effecting psychosocial behavior in a negative light [23]. Studies suggest that with the power of social media and the gain of immense popularity in the last decade, a long- lasting effect of low self -esteem on individuals is almost certain [24]. This study supports these findings as close to three quarters of the subjects answered that before the social media craze a feeling of more confidence with one's self was present.

Many previous researches have suggested that dental aesthetics has a remarkable effect on self-confidence which is reflected from the impact of an individual's social and psychosocial well-being. This study has shown likewise. However, we can consider certain limitations such as the subjects were all young adults and therefore the relevance of the findings cannot be applied on adolescents or elderly. Needs and desires change at various stages of life and so factors such as age, stage of education, occupation and sex have an influence on a person's satisfaction with their dental appearance [1, 8, 9]. Long term studies are required to conclude to what extent external factors such as social media and different conditions (mental and physical) influence the effect of dental aesthetics on psychosocial behavior and self-confidence.

CONCLUSION

- 1. To conclude, more than half of the participants were not feeling content with their smile. 'Colour of teeth' showed to cause the majority of dissatisfaction with the subject's teeth. This was followed by, position of teeth, size of lips, size of teeth and lip shape in which all showed a significant amount of dissatisfaction among the participants.
- 2. When comparing gender wise difference, females proved to feel more dissatisfied with their dental appearance and lacked confidence to show their teeth when smiling. Moreover, men feel considerably self-conscious regarding their dental appearance and both genders desire a change in the way their smile appears.
- 3. The lack in self confidence affecting an individual's psychosocial behavior is immensely influenced by additional factors such as social media. Both genders agreed that they felt more confident with the way their smile appeared before the social media craze indicating the large impact it has on how one perceives their dental appearance and the desire for dental aesthetic treatment.

ACKNOWLEDGEMENT

Researcher/author is extremely grateful and would like to thank the dedicated support of her supervisor (Rimantas Ožiūnas). The appreciation should also be extended to the department of prosthetic dentistry, Lithuanian University of Health Sciences, for providing the researcher with professional advice and suggestions.

ETHICAL STATEMENT

This study was approved by the head of the Bioethical Centre, Lithuanian University of Health Sciences following the guidelines of the Declaration of Helsinki and Tokyo for Humans. Reference number; BEC-OF-16. Informed consent was obtained from all eligible participants prior to the start of the study.

PRACTICAL RECOMMENDATIONS

Factors such as social media has an enormous impact on how one sees his/her smile which in turn affects self-confidence, these factors could possibly be used to enhance someone's self-confidence as well. This means that instead of bloggers and vloggers with a high following uploading pictures and videos of the ideal smile, they could try to spread useful information to the wider public about oral health, how to feel

confident, and promote the understanding that an individual is unique and special in their own sense. Furthermore, the large companies, governments or anyone the public looks up to could also be beneficial in promoting self-confidence on social media and help improve oral health which may lead to a natural improvement in dental aesthetics. Additionally, we could introduce some form of dental counselling where by patients can communicate and feel comforted by opening up to their dentist regarding their smile as oppose to having to do any treatment based on psychological reasons rather than medical. It is vital the dentist explains clearly and thoroughly all disadvantages alongside the advantages of aesthetic dental treatment before carrying out any procedure.

CONFLICT OF INTERESTS

The author (Hannan Hafidh) has not encountered any conflict of interests.

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ANNEXES

Annex No.1

Questionnaire

How dental aesthetics affects self - confidence and its impact on psychosocial behavior

I am HANNAN HAFIDH, a dental student of Lithuanian University of Health Sciences and I am conducting

a scientific research, which is aimed to evaluate the impact of dental aesthetics on psychosocial behavior

and self – confidence and to learn some of the contributing factors of this effect. The research participants

are students of the University of Leeds ages 18-25. The research data collected from the anonymous

questionnaires will only be used for scientific purposes and confidentiality is guaranteed.

If you require any further information, feel free to contact Hannan Hafidh:

LSMU, MA. Clinic of Prosthodontics Department, Kaunas clinics

Adress: Sukileliuprospektas. 51, LT – 50106 Kaunas, Lithuania

Tel no: +370 (636) 14 953

E-mail: Hannansadek@yahoo.com

Thank you for your participation.

CONSENT FORM FROM EACH PARTICIPANT

I understand all information provided to me on the information sheet and agree to participate in the research of Hannan Hafidh "How dental aesthetics affects self – confidence and its impact on psychosocial behavior: a clinical study within the University of Leeds ages 18-25" aimed to evaluate to what extent dental aesthetics impacts psychosocial behavior and self – confidence.

	•			
Signat	ture of par	ticinant		
SIZHAI	iuic oi bai	ticipant.	 	

1. How old are you?					
2. Are you an undergradu	late or post gra	duate?			
 Undergraduate 	Undergraduate		 Postgraduate 		
3. Gender	Gender				
• Male	Male		• Female		
4. How satisfied are you v	How satisfied are you with your smile?				
Highly satisfied	• Satisfied	d	Not Satisfied		
5. When concerning your	smile – which 1	feature are you	not satisfied with? (more		
than one can be chose	n)				
• Lip shape	• Tooth shape		• Tooth size		
• Tooth colour	Position of teeth		 Colour of gums 		
Position of gums	• Lip size		 Happy with all 		
6. Do you hide your teeth	when smiling				
• Yes		• No			

7. Are you confident show	wing your teeth?	
• Yes	• No	
8. Do you like how your s	mile looks in the mirror, photos	and videos?
• Yes	• No	
9. Does your smile make	you feel conscious in presence	of the opposite sex?
• Yes	• No	
10. Do you wish your teeth	n looked better?	
• Yes	• No	
11. Are your teeth the reas	son for your dissatisfaction with	your looks?
• Yes	• No	
12. Have you ever had any veneers, composite bo	aesthetic treatment to your technology	eth? (whitening, crowns,
• Yes	• No	
13. If possible, would you l	have some aesthetic treatment rowns, etc)	done to change your smile?
• Yes	• No	
14. How important to you	is your smile?	
Extremely important	Very Important	Somewhat important
Not so important	Not at all important	
15. Are there any other fa	ctors which affect the way you	feel about your smile? E.g.

• Yes	• No
16. All in all, do you feel content with you	rsmile?
• Yes	• No
17. If you're an active social media user – before uploading a picture?	would you edit the way your smile looks in
• Yes	• No
18. Do you ever feel insecure about public online?	cly speaking or showing yourself smiling
• Yes	• no
19. Before the social media craze, were yo Did your teeth become an issue after of advertised)	ou more confident showing your teeth? (i.e.
• Yes	• No

LETTER OF APPROVAL FROM THE UNIVERSITY OF LEEDS

Annex. No 2

Faculty of Arts, Humanities and Cultures School of Languages, Cultures and Societies

University of Leeds Leeds LS2 9JT, UK

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26 November, 2018

Faculty of Odontology, Odontology Program Head of LUHS Bioethics Center - Dr. E. Peicius

Request Granted

I, Bernadine Hafidh, Student Support Manager, in the School of Languages, Cultures and Societies, University of Leeds, give to Hannan Hafidh permission to conduct her Master Thesis (a Clinical Study) titled as "How dental aesthetics affects self-confidence and its impact on psychosocial behaviour: a clinical study within the University of Leeds ages 18 to 25" aimed to understand to what extent dental aesthetics impacts psychosocial behaviour and self-confidence.

The Study will include a consent form and a questionnaire to all participants.

Regards

Bernadine Hafidh Student Support Manager

Professor Matthew Treherne Head of School

ETHICAL APPROVAL

Annex.

No 3



LIETUVOS SVEIKATOS MOKSLŲ UNIVERSITETAS

BIOETIKOS CENTRAS

Kodas 302536989, Tilžės g. 18, LT- 47181, Kaunas, tel.: (8 37) 327233, www.lsmuni.lt., el.p.: bioetika@lsmuni.lt

2018-11-02

Medicinos akademijos (MA) Vientisųjų studijų programa – Odontologija V k. studentei Hannan Hafidh Darbo vadovas asist. Rimantas Ožiūnas LSMUL KK Dantų ir žandikaulių ortopedijos klinika

DĖL PRITARIMO TYRIMUI

LSMU Bioetikos centras, įvertinęs Hannam Hafidh pateiktus dokumentus, studentės tiriamajam darbui tema "How dental aesthetics affects self – confidence and its impact on psychosocial behavior: a clinical study within the University of Leeds ages 18-15" pritaria*.

dr. Elmantas Pelčius

Nr. BEC- OF - 16

^{*} Pastaba: šis pritarimas neatleidžia tiriamąjį mokslinį darbą vykdančių asmenų nuo prievolės laikytis Bendrojo duomenų apsaugos reglamento nuostatų ir nuo atsakomybės gauti nacionalinio arba regioninio bioetikos komiteto leidimą, jei toks leidimas būtinas pagal LR Biomedicininių tyrimų etikos įstatyme numatytus reikalavimus.

EVALUATION FORM OF THE MASTER THESIS FOR THE MEMBER OF THE DEFENCE COMMITTEE

No.	MT evaluation aspects	Evaluation			
	-		Partially	No	
1	Has the student's presentation lasted for more than 10 minutes?				
2	Has the student presented the main problem of the Master's thesis, its aim and tasks?				
3	Has the student provided information on research methodology and main research instruments?				
4	Has the student presented the received results comprehensively?				
5	Have the visual aids been informative and easy to understand?				
6	Has the logical sequence of report been observed?				
7	Have the conclusions been presented? Are they resulting from the results?				
8	Have the practical recommendations been presented?				
9	Have the questions of the reviewer and commission's members been answered correctly and thoroughly?				
10	Is the Master's thesis in compliance with the essence of the selected study programme?				
emarks o	of the member of evaluation committee of Master's Thesis				
aluation	of the Master's Thesis				