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Influence of Self-Perception and Importance of Body Image on the Methods Implemented to Enhance the Physical Appearance

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ABSTRACT

Physical appearance refers to the traits and features in our body and to how we look. The importance given to the looks and complexion is a major factor contributing the perception of one's physical appearance. In the current scenario, there are many ways to enhance the overall physical appearance. This study aims to find whether the satisfaction gained on behalf of the physical appearance has any impact on the value given to body image and the steps taken to enhance it. In this regard, the research also proves whether the noteworthiness on the looks affects the methods that are used to improve the body image. Data was collected by the methods of purposive and convenience sampling from 462 people who live in Tamilnadu, which is one of the southern states of India. The Structural Equation Modelling (SEM) technique was used to analyse the data using Smart PLS version 3.0 software. The results showed that the techniques implemented to enhance the physical appearance is influenced by the perception of individuals on their look and the level of importance given by them to it. Also, it was ascertained that the self-satisfaction of persons with regard to appearance has a negative impact on the importance given by them to their body image.

KEYWORDS

physical appearance, self-satisfaction, importance, implementation, perception, body image

Introduction

Right from our birth, until the very last moment, body is the prime asset for any individual. It is essential to take care of our physical appearance in order to lead a healthy life. In this era where people are obsessed with the way they portray themselves whether on social media or in real life, so much of importance is given to the various features and shape of the body. Complexion also plays a crucial part in deciding the attractiveness of a body. People also take immense care to enhance their appearance in all possible ways. Consequently, beauty becomes a valuable parameter in deciding the satisfaction of their physical appearance.

In this 21st century, we live in a society that considers physical appearance as one of the most important parameters to judge others' personality and richness. Surrounded by the extreme influence of media, we are constantly compelled to see people with perfect looks around us – be it in magazines, on the news, in the movies and all over the internet. Flawless body shape and an exemplary appearance is extremely valued since it automatically makes everyone to love and admire you. Since the past few decades, a high focus on the self-perceived satisfaction due to their body image has been noticed in both men and women (Tiggemann, 2004). Body image at present is comprehended as a perplexing and multidimensional construct, which includes psychological, emotional and behavioural aspects of experiencing one's body (Cash & Pruzinsky, 2002). Hence, the look of our body has been given such an important value.

The increase in awareness and consciousness in terms of health and aesthetics of the body led to immense body enhancement techniques and their modifications (Jackson & Scott, 2014). Due to these advancements in sociology, the public discussion is inclined to talk about the shape and form of body and its impact in the mind of common people. We get that a lot of stress is made on the physical appearance these days. But the sole purpose of this research is to truly understand if in anyway it impacts the self-satisfaction of an individual. People do try a lot of costly and cost-effective techniques to enhance the body image. The study also aims to find out if it is because of the significant importance that is given to the looks and features. This research would give us a fair bit of understanding on how the gravity on achieving an ideal body image impacts the self-satisfaction and plays a vital role in the techniques used to enhance it.

Literature Review

The Oxford English Dictionary quotes the body as the “structure of bones, flesh, etc., of a human being or animal, living or dead”, which presents that body was treated as a sole materialistic entity before 1980s (Simpson & Weiner, 1989). But over the years, the perception of the body has changed to be the medium to portray the persons, their identification and mannerisms influenced by social and cultural factors. The body not only denotes an organism that has trunk and limbs, but also the metaphor of an individual (Ozawa-De Silva, 2002). Appearance of the body is equal to the physical presentation of one's highest owned property to this entire world.

Since body is presumed to be an uncertain one, it is more pliable and we are regularly trying to refine, improve and alter it. Shilling (1993) explains that the body could be best actualized as an unfinished social and biological phenomenon, which is in a continual process of becoming “a project which should be worked at and accomplished as part of an individual’s self-identity”. Turner (1984) expresses the idea that the bodies are controlled by the society with pre-occupied regulations of ideal appearance-based rules. These capture attention to the methods in which bodies are assessed, corrected and monitored in modern societies.

Body image is characterized as the mental portrayal of one’s own body and sentiments one has in regards to this portrayal (Slade, 1994). It is a wide idea, yet, at its most essential is the way we see, understand, and assess our bodies. Grogan (2006) specifies it as “a person’s perceptions, feelings or thoughts about his or her body”. Unlike other senses as touch and taste, people gain early impressions of others depending on their visual appearance, voice or smell, without engaging the person’s will or awareness (Groyecka et al., 2017). This in turn shows how significant the appearance of a person could turn out to be.

Contemporary society provides incredible obsession towards physical attractiveness and youthful looks, as shown by media, stressing whatever is beautiful is also good (Dion et al., 1972). Earlier studies believe that the socio-historical contexts have from multiple points of view influenced and moulded our impression of beauty and that our comprehension about what is beautiful is contextually negotiated and shifts relying on gender, socio-economic background, ethnicity, sexual orientation and other socially constructed factors (Barriga et al., 2009).

Self-Satisfaction

Wilson et al. (2013) discovered a solid connection between body image satisfaction and health-related quality of life, which is physical and mental. The satisfaction caused because of the looks always brings in a happy feel. The main reason for it would be the compliments that are received from the outside world for your appearance. On account of physical health, the point that body satisfaction held a more grounded prescient incentive than body mass index, which is a calculated ratio of a person’s height to weight is to be noted. This rightly indicates that the satisfaction levels have a lot to with the mental health. The fact that women’s self-perception issues and socio-cultural pressures on them have intensified of late (Pope et al., 2000) indicates that women record higher rates of body dissatisfaction and face greater pressure from print and electronic media to have an ideal body than men. It is believed that body dissatisfaction, which is a negative attitude towards one’s body image, arises from a sensed disparity linking the real physical appearance and the ideal perfect body state (Heider, Spruyt, & De Houwer, 2018).

The colour of one’s skin is predominantly segregated, since whiteness is believed to be the representative of beauty and grace in most Western cultures; as, in comparison, blackness reflects hatefulness and ugliness (Hunter, 2002). The words fair and pretty are interchangeable across India, where white skin is considered a symbol of caste and status, with turmeric powder being applied almost diligently

in attempt to achieve a lighter skin tone (Li et al., 2008). Due to such constructive differences over the skin tone, it is regarded as one of the main parameters to gauge the satisfaction of an individual on behalf of her/his appearance.

Importance

Studies have demonstrated a constructive connection linking body dissatisfaction and acknowledgment of plastic or cosmetic surgery among ladies, proposing that individuals may consider it as a way of acquiring greater confidence and social rewards from showing up increasingly appealing to other people (Lunde, 2013). Nonetheless, some experiments in the past have indicated that body image quality and self-confidence may not improve, although their body dissatisfaction decreases because of undergoing particular cosmetic surgery procedures.

The ongoing rivalry in the mass media of ultra-thin models is believed to be a crucial factor in creation of a distorted body image (Thompson & Heinberg, 1999). Recent results suggest that the physical appearance primarily evaluates the worth and position of women, and that the grading of their body appearance is an integral part of their confidence (Davison & McCabe, 2006; Vartanian et al., 2012). One trait that has been extensively observed in comparison to confidence and that has strong consequences for romantic desirability quotient is physical beauty viewed by itself (Bale & Archer, 2013).

Even limited exposure to photographs of the idealized male figure has been found to increase body dissatisfaction in men (Baird & Grieve, 2006). For both genders, this relation of exposure-dissatisfaction is predicted, as the theory of social comparison would assert (Festinger, 1954). Growing body dissatisfaction is likely to cause a more pessimistic appearance lens in association with self-assessments, leading ultimately to increased vulnerability to beauty-based rejection (Webb et al., 2013).

Implementation

Body esteem refers to the contentment of a person with an appearance of his or her body (Amos & McCabe, 2016). Emotions regarding personal appearance are crucial for the self-perception of sexual desire, because the physical appearance is a strong predictor of reproductive success (Ellis, 1992; Frederick & Haselton, 2007; Gallup & Frederick, 2010; van Hoof et al., 2000). The authors (Hausenblas & Fallon, 2006) were led by the results about the effect of physical activity on body image and they concluded that physical exercise was correlated with enhanced and increasingly positive self-perception in individuals who are indulged in exercise when compared with the physically inactive ones.

Exercisers have a more positive perception on their body looks than non-exercisers and those who exercise regularly showed a more optimistic post-intervention body image in relation to the non-exercising people. Hence, the study concluded that exercise is related to improved perception of the body looks. (Hausenblas & Fallon, 2006). The dissatisfaction due to the looks is more easily influenced by external factors such as the intake foods with high calorific value and not indulging in any form of physical exercise (Vocks et al., 2009).

Research Gap

Besides quite a few questionnaire-based researches on physical appearance, multiple experimental studies have investigated that various parameters affect the perception of physical appearance and gives us measures to find the level of satisfaction and importance given to it. Certain papers referred talk about the several ways to enhance the appearance that are tried by common human. The factors already studied under the importance given to looks are all mutually exclusive and hence they are all taken in consideration together as one construct in this study. In this economical world, usage of homemade remedies and frequency of visiting a stylist is taken as worthy variables to find the intensity of attention and care given to the physical appearance.

There is also a brief amount of pressure on every individual to portray their body in the best way possible to the outer world. That sense of stress is taken into consideration and it signifies the importance each person gives to physical appearance. Comparison among individuals on behalf of their appearances has become more common when we live amidst a judgemental society. Such parameters are considered in this study along with a few indicators that are already mentioned in the past researches.

Model and Hypothesis Development

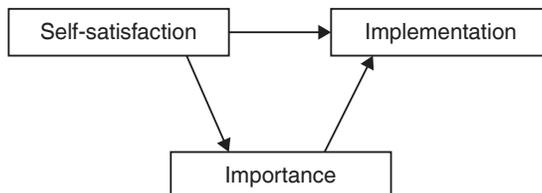
Based on the previous theories and literatures, three research questions are proposed.

- Research question 1: Does the level of satisfaction attained through physical appearance impact the importance given to it?
- Research question 2: Does the contentment on the personal body image significantly affect the usage of various methods to enhance the physical appearance?
- Research question 3: Does the importance given to physical appearance of an individual have an effect on the various techniques implemented to improve the body image?

We have developed a theoretical model that contains one independent variable, which is the Self-satisfaction, and two dependent variables which are Importance and Implementation. Figure 1 depicts the research model.

Figure 1

Research Model



As a part of data analysis, this paper aims to test the following hypothesis.

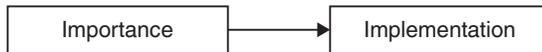
H1: The level of self-satisfaction due to physical appearance has significant impact on the importance given to it.



H2: The level of self-satisfaction has significant impact on the ways of implementation of several methods to enhance the physical appearance.



H3: The importance put forth on an ideal physical appearance has significant influence on the implementation of different methods to enhance the physical appearance of an individual.



Research Methodology

This section outlines the details of the method of research that comprises of the information on participants, data collection, model development as well as the testing of hypotheses.

Participants

The population of the study is considered to be the people of Tamilnadu, which is one of the popular southern Indian states. So, the participants included were people who live in Tamilnadu, among which most of them were from Coimbatore. A Google¹ form consisting the questionnaire was shared across and 462 responses were obtained. There were 264 females and 198 males distributed among diversified age groups. The education qualifications and employment/affiliation status of the participants were also collected. The sample was deemed fit for the analysis as (Hair et al., 2010) suggests that number of samples should be at least 10 times the number of items in the research instrument.

Data Collection

The data was collected through the convenience sampling method. The questionnaire-based survey was shared in known WhatsApp² groups across the friends and family members who were living in Tamilnadu. It was shared to approximately 650 people and 462 responses were obtained. As there were no restrictions imposed on the background of the respondent, except the fact that they currently live in Tamilnadu,

¹ Google™ and the Google Logo are trademarks of Google Inc. in the U.S. and other countries.

² WhatsApp™ is a trademark of WhatsApp Inc., registered in the U.S. and other countries.

the data was collected in a span of 4 days. Table 1 shows the background of the participants in detail.

Table 1
Demographic Details

Measure	Item	Frequency	Percentage (%)	Cumulative Percentage
Gender	Male	198	42.9	42.9
	Female	264	57.1	100
Age	15 & Below	6	1.3	1.3
	16 – 25	242	52.4	53.7
	26 – 35	54	11.7	65.4
	36 – 45	50	10.8	76.2
	46 – 55	70	15.1	91.3
	56 – 65	28	6.1	97.4
	66 & Above	12	2.6	100
Education	Junior/Elementary School	5	1.1	1.1
	High School	33	7.1	8.2
	Bachelor's Degree/Diploma	272	58.9	67.1
	Master's Degree/Doctorate	145	31.4	98.5
	Others	7	1.5	100
Employment	Salaried	85	18.4	18.4
	Self-employed	84	18.2	36.6
	Retired	17	3.7	40.3
	Student	201	43.5	83.8
	Housewife	62	13.4	97.2
	Others	13	2.8	100

Research Measurement and Questionnaire Design

The purpose of the research is to study the relationship between the satisfaction of individuals towards their physical appearance, importance given to one's physical appearance and the methods that are implemented to enhance the physical appearance. Modifications to indicators and constructs were done to make sure the constructs suffice the need of the research context. Each construct is measured using a Likert scale with several indicators. It is a scale developed with five levels of ratings, starting from 1 which denotes 'strongly disagree' to 5 that denotes 'strongly agree' on each of the pointers. Table 2 shows the indicators involved in the study.

Data Analysis

Smart PLS 3.0 software, which assess the structural model (Henseler et al., 2009) is used to develop the data analysis part. Structural Equation Modelling technique was inculcated because it could test a causal relationship between the constructs that contain a number of indicators (Hair et al., 2011). There are two major steps undertaken in analysing the data. The assessment of the measurement model is first conducted to ensure that each construct and indicators on the research instrument have met

the criteria (Boudreau et al., 2001). The next activity is to conduct an evaluation of structural models in which the hypothesis will also be tested along with the model fit assessment.

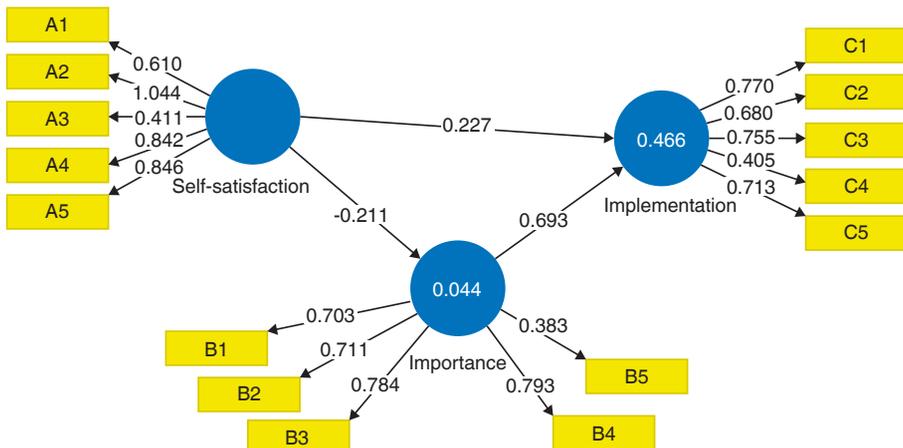
Table 2
Indicators

Construct	Indicators
Self-satisfaction	Height
	Weight
	Skin Complexion
	Features
	Body Shape
Importance	Comparison with others
	Pressurized to look good
	Partner's appearance
	Cosmetic/Plastic surgery
	Confidence & Self Esteem
Implementation	Visiting beauty parlour/saloon
	Diet
	Exercise
	Use of homemade remedies
	Money spent on beauty products

Evaluation of Measurement Model

The levels of significance were tested and path analysis was carried over in assessing the hypotheses associated with study. The parameters and the latent variables are shown along with the structural model in Figure 2.

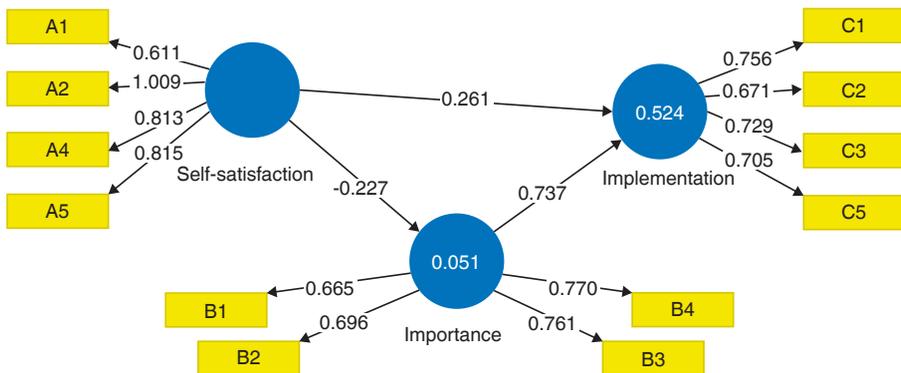
Figure 2
Initial Structural Model



Since A3 (Skin Complexion), B5 (Confidence & Self Esteem) and C4 (Homemade Remedies) have very low factor loadings (less than 0.6), it shows that these parameters do not contribute enough to their respective constructs. The perceived reason for skin complexion not contributing to self-satisfaction as much as the other constructs might be because people are satisfied with their skin tone and since average Indian skin complexion is not too dark, people are ready to accept the complexion. When it comes to confidence, people not only rely on their looks, but also there are other paramount factors that would increase or decrease their esteem even if they are not satisfied so much with their external image. Homemade remedies might have been a valuable indicator about 10 to 20 years ago, but now due to advancements in technology and the increased awareness as well as buying power in people, they choose to move towards a scientifically proven source to enhance their body image. Hence, we remove the three variables from the model. The structural model that is considered in the further analysis is depicted in Figure 3. In this model, the factor loadings of all the parameters are above the mark of 0.6, so we can go ahead with the analysis part.

Figure 3

Final Structural Model



Multicollinearity

The score of variance inflating factor (VIF) helps us to assess the multicollinearity in between the independent variables. Construct should be considered to have an acceptable level of multi-collinearity if the VIF score is lesser than 10 (Hair et al., 1995). The VIF score of the study variables ranges from 1.432 (diet) to 6.002 (features), hence meet the acceptable criteria. This is shown in Table 3.

Table 3

Multicollinearity

	VIF		VIF		VIF
A1	1.794	B1	1.725	C1	1.830
A2	2.032	B2	1.759	C2	1.432
A4	6.002	B3	1.469	C3	1.603
A5	5.991	B4	2.330	C5	2.183

Reliability Assessment

The reliability of the study was measured using two important variates i.e., Cronbach alpha and composite reliability (CR). The Cronbach's alpha (α) and the Composite Reliability (CR) values has to be greater than 0.80 for all constructs, only then it would indicate adequate internal consistency of the constructs (Hair et al. 2010). The values for Cronbach alpha ranged from 0.807 to 0.892 while that of the CR values ranged from 0.808 to 0.894 in the current study, indicating a high internal consistency as shown in Table 4.

Convergent Validity

To what extent the various parameters measuring the same construct are in agreement with each other is checked by Convergent Validity (CV). Babin & Zikmund (2016) suggested that CV depends on internal consistency, essentially, how much the two measures are related to each other in a construct. Hair et al. (2010) observed that the loadings for all items should be higher than 0.50 for convergent validity to be evident in a study. The CR and the Average Value Extracted (AVE) values in the current study both surpassed the prescribed value. Thus, the study's overall measurement model indicated satisfactory convergent validity as shown in Table 4.

Table 4
Convergent Reliability and Validity

Research Constructs	Factor Loadings	Cronbach alpha	Rho	CR	AVE	
Self-satisfaction	A1	0.611	0.892	0.918	0.892	0.679
	A2	1.009				
	A4	0.813				
	A5	0.815				
Importance	B1	0.665	0.814	0.818	0.815	0.525
	B2	0.696				
	B3	0.761				
	B4	0.770				
Implementation	C1	0.756	0.807	0.809	0.808	0.513
	C2	0.671				
	C3	0.729				
	C5	0.705				

Discriminant validity

The uniqueness and distinctiveness of a measure is signified by Discriminant Validity. It is a scale showing whether a measure of a construct is too strongly correlated with a measure of another construct (Babin & Zikmund, 2016). Discriminant validity is assessed by analysing the Average Variance Extracted (AVE) and the squared differences between the constructs (Fornell & Larcker, 1981). As shown in Table 5, both constructs met the discriminant validity, because the AVE for each construct was higher than its squared correlation with the other constructs.

Table 5
Discriminant Validity

	Self-satisfaction	Importance	Implementation
Implementation	0.716		
Importance	0.678	0.724	
Self-satisfaction	0.094	-0.227	0.824

Evaluation of Structural Model

Model fit is a measurement that describes how well a model represents the observations. It assesses the discrepancy between the observed values and the expected results produced by the model (Bollen & Long, 1992). The Standardized Root Mean Squared Residual (SRMR) is an absolute measure of fit, naturally, a value of 0 means a perfect fit and it ranges up to 1. A value of 0.08 or less is generally considered to indicate good fit (Hu & Bentler, 1999; Maydeu-Olivares, Shi & Rosseel, 2017). The SRMR value for our study is 0.061, which is well, less than the limit. Hence, this proves that the model is fit enough.

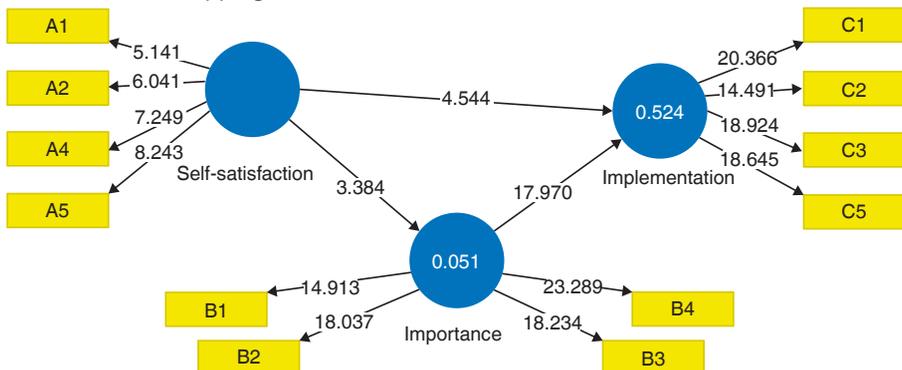
Bootstrapping

To test the structural model, Hair et al. (2017) proposed using a bootstrapping technique with 5,000 bootstrap samples to look at the R², beta (β) and corresponding *t*-values. They also proposed that researchers would disclose the predictive significance (Q²) as well as the effect sizes (*f*²), in addition to these basic steps. So, a bootstrapping of the sample data was done and the results are shown in the Figure 4.

Hypothesis Testing

The *p*-value would notify that there is an effect, but the extent of the effect cannot be perceived through the *p*-value (Sullivan & Feinn, 2012). The substantive value (effect size) and the statistical significance (*p*-value) are important findings in reporting and interpreting the studies. Hahn and Ang (2017) outlined the rigor in presenting findings

Figure 4
Results of Bootstrapping



in quantitative research that include the use of observational studies, measures of effect size and confidence intervals. It is shown in Table 6.

Table 6
Hypothesis Testing

Study Hypothesis	Hypothesis	t-value	Decision	R2	f ²	p-value
Self-satisfaction -> Importance	H1	3.384	Supported	0.051	0.054	0.001
Self-satisfaction -> Implementation	H2	4.544	Supported	0.524	0.136	0.000
Importance -> Implementation	H3	17.970	Supported		1.082	0.000

Self-satisfaction ($\beta = -0.227, t = 3.384, p < 0.01, f^2 = 0.054$) is a significant predictor of Importance, but it influences negatively with explaining just 5.1% of the variance in Importance. Self-satisfaction ($\beta = 0.261, t = 4.544, p < 0.01, f^2 = 0.136$) and Importance ($\beta = 0.737, t = 17.870, p < 0.01, f^2 = 1.082$) are both significant predictors of Implementation explaining 52.4% variance of it. The f^2 values of range 0.02 is assessed as small effect, 0.15 is assessed as medium effect and 0.35 is assessed as large effects of exogenous latent variables. Self-satisfaction has a positive influence on Implementation, while the effect size is small, i.e., 0.136. Importance has a very large positive effect on Implementation with effect size of 1.082.

Results and Discussion

From the analysis made so far, it can be concluded that the self-satisfaction on behalf of the physical appearance does not have positive impact on the importance given to it. Hence the hypothesis H1 cannot be accepted. It means that people who have a satisfactory body image don't really stress too much and give a great importance to it. The implementation of various techniques to enhance physical appearance is highly impacted by the satisfaction levels of the body image of an individual. So, the hypothesis H2 is accepted. This proves that trying out various methods to improve the appearance essentially is influenced by satisfaction levels. The stress on the physical appearance has a very significant and a large impact on the various methods inculcated to improve it, which therefore proves the hypothesis H3 right, and it is accepted. This explains that importance given to the aesthetics of the body impacts directly the various ways that are inculcated to enhance it. Finally, this research provides a new insight covering the self-satisfaction due to the physical appearance and how it impacts the importance given to it and paves way to use modern methods to enhance the body image.

Among the various methods taken over to preserve and improve the aesthetics of the body, the study showed that people mostly rely on visiting external sources like as parlours/saloons and exercising regularly, which is in correlation with the pointers of the previous researchers (Hausenblas & Fallon, 2006). Diet has become an everyday phenomenon and it a common aspiration for all to follow a healthy diet and a good body appearance. The use of homemade remedies were popular in ancient times, but now with the fast paced world, people aim for instant, proven, risk-free, sophisticated and ready to use products which eliminates the need of self-made items.

The research proves that the importance given to body image doesn't seem greatly dependent on the confidence and self-esteem that one has. Self-esteem and confidence is one latent factor that is least affected by poor body appearance. The self-perception about the beauty of oneself seems to rely highly on the weight of individuals as it also showcases the health and well-being. Skin complexion is of least priority when it comes to impacting one's perception on their appearance. This is in contrast with a lot of studies and researches undergone previously that stresses the racial differences due to darker skin tone (Hunter, 2002). Various features and shape of the body is denoted as significant factors when it comes to self-perception.

Conclusion

The purpose of this research is to have an understanding on whether the perception of one's own physical appearance has an impact on the importance given to physical appearance along with the different methods implemented to enhance it. The results derived through the analysis was only partially consistent with the hypothesis made. It showed that self-satisfaction does not have a great influence on Importance. Self-satisfaction negatively impacts the importance given to physical appearance. To sum this up, it can be said that the effect of self-satisfaction on importance is small and negative. When persons feel very good about their physical appearance and is comfortable in their skin, they does not stress much on the body image. Rather when they do not feel satisfied about their looks is when they start giving importance to the physical appearance. The perception of one's body image affects the methods that are followed to enhance it. Persons who are high in perception regarding their appearance would implement several techniques to keep up their looks. Importance given to the looks plays a huge role in deciding whether persons are inclined towards the methods used to enhance the physical appearance. The ones who give more importance to the looks seems to put it more efforts to follow various techniques that would improve their body image. When persons give least consideration to their appearance, there is very low chances that they would try out various methods that enhances their body image.

The research could be done as a differential analysis of self-perception among various age groups or between the genders, so a more detailed information of the classes can be obtained. Other factors that impact the three elements taken into consideration can be studied in-depth to come up with the list of crucial reasons affecting the self-perception, importance and implementation. Overall, this research can be considered as a start to delve deeper into the causes of motivating and demotivating factors with regard the body appearance.

Limitations

The research used only three latent variables, which are self-satisfaction, importance and implementation. Each of the latent variables had been accessed by only four indicators each, however there could be other indicators too that would

better define the latent variables. Involving cross-sectional analysis by gender and age would have been more helpful to understand the current scenario with respect to the study.

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