



**EFFECT OF SKIN COLOUR, AND GENDER ON NARCISSISM, SELF-CONCEPT,  
AND AGGRESSION ORIENTATION AMONG YOUNG ADULT STUDENTS**

<sup>1</sup>Anwesha Bhattacharyya

Assistant Professor, Department of Psychology, Sister Nivedita University, Kolkata

[anwesha.bhattacharyya2019@gmail.com](mailto:anwesha.bhattacharyya2019@gmail.com)

<sup>2</sup>Saoni Goswami

M.Sc. student, Department of Psychology, Sister Nivedita University

[saoni912@gmail.com](mailto:saoni912@gmail.com)

**ABSTRACT**

The present study deals with the effect of gender and skin colour on narcissism, self-concept, and aggression orientation among young adult students. For the data collection procedure, 90 male and female (30 belonging to each skin colour level) young adults within the age range of 18-25 years belonging to middle socioeconomic status, with a minimum 10+2 level of school education were approached. The skin colour of the participants has been measured using a skin colour card and classified under three levels: fair, medium and dark. The sample for the study was first screened to rule out any effect of psychopathological causes or conditions using the General Health Questionnaire-28. For the data collection procedure, the respective

questionnaires have been used, namely- Narcissistic Personality Inventory-40, Self Concept Inventory and the Aggression Orientation Scale. The statistical analyses were computed using the SPSS version 21. The outcomes of the ANOVA and MANOVA tests show that gender significantly influences some aspects of narcissism, such as exploitativeness and self-sufficiency. Additionally, it has been discovered that exhibitionism is significantly impacted by skin tone. It is also discovered that exhibitionism is significantly impacted by the relationship between gender and skin tone. The results of the ANOVA demonstrated that gender has a substantial impact on some specific domains of self-concept, including the political and physical self. The results of the MANOVA demonstrated that gender has a significant effect on the self-concept dimensions, such as the political and physical self-concept. It further indicates that skin tone significantly influences three types of aggression orientation: verbal, physical, and predisposition tendencies.

**Keywords:** *Gender, Skin Colour, Narcissism, Self-Concept, Aggression Orientation*

## INTRODUCTION

The present study aims to assess narcissism, self-concept, and aggression orientation, through varying ranges of skin complexion and among both genders; male & female, and find out whether there are any significant differences based on the above-mentioned psychological variables between the genders and between individuals having different skin colour. The independent variables in the present study included gender and skin colour. The dependent variables included; narcissism, self-concept, and aggression orientation respectively.

### ***“Why is Skin Colour so important?”***

In this nation, the most celebrated God of the ancient religion, Hinduism, Lord Krishna is said to possess an exotic dark skin. He has been adored over the centuries as a possessor of

divine beauty, admired by innumerable women. Not only that, Lord Rama known for his charm and endearing aura is also described in the scriptures as dark-skinned. The Nobel-winning poet Rabindranath Tagore has admired dusky beauty in his poems and novels. Coming to the progressive days of the 21st century, we see that the fashion ramp is ruled by women having a dark complexion.

However, the picture seems a bit confusing. The Indian market of cosmetics in the last few decades has been flooded by so-called beauty creams that promise Indian women flawless fair skin. The advertisement themes surprisingly seem to establish the concept that success, happiness, fame, beauty, and love can only come with the attainment of fair skin. This theme might seem unacceptable to many but still, the purchase, marketing and launch of such products is steadily growing. There have been some tactful changes with the establishment of concepts like body shaming, colour shaming, and ageist attitudes and growing awareness about these concepts, for instance, the substitution of the term “fair” for “bright” or “glow” in cosmetic brands. A report by The Times of India (2021) presented the fact that the WHO has issued a warning that fairness creams ruin our skin. Due to the presence of highly unhealthy chemical components like mercury, hydroquinone and ammonia, these products also increase the probability of kidney damage, depression, and peripheral neuropathy.

Most of the actors who step into the film industry with dusky complexion eventually over the years are seen to alter their skin complexion using various cosmetic or surgical procedures. However, in this nation climatic conditions, exposure to the sun etc attribute to the brownish complexion of the skin in context to the worldwide range of skin complexion. A blog site which caters to the parents of India to guide and help them in the process of parenting devotes an entire webpage to the issue of skin complexion. Quite interestingly, the webpage is titled, “*Is your daughter dark?*” Market research indicates that the demand for fairness products in India is growing steadily not only in the world of women but also in the world of men. These

findings disprove the old phrase of masculine beauty, “tall, dark and handsome.” In the garb of political correctness and acceptance across all colours and genders, such propagation continues.

## **Skin Colour**

### ***Some causative factors***

Skin colour is one of the physical attributions that an individual get through the genetic inheritance from our ancestors, especially the parent and grandparent generation. However, the geography of our ancestors is the basis for why skin tones differ in humans. Thousands and thousands of years ago, people living close to the equator were more exposed to more UV light intensity than those living closer to the poles, who had much less exposure to the sun and also received lower intensity of the sun’s rays. Skin responds to this by producing melanin- a skin pigmentation agent, which helps the epidermis (the skin layer) protect itself against UV radiation. The more melanin our skin produces, the more pigment we have, which results in a darker skin tone. However, pigmentation is highly heritable, being regulated by genetic, environmental, and endocrine factors that modulate the amount, type, and distribution of melanin in the skin, hair, and eyes. But this does not explain everything. We often see individuals with skin tones that cannot be correlated with the place they live in. There are additional genes and other biological factors that are linked to skin tone. As, it is clearly known that the aspect inherited is the genotype, whereas the aspects expressed to be observed or visible is the phenotype.

### ***Affecting Factors***

Other factors like sensitivity of the skin, exposure to the sun etc further affects the maintenance of skin colour even after birth. Individuals in occupations like farmers, road workers, or even the ones who fail to find proper shelter would not have fair skin tone during

their lives even though they might have been born with it. Individuals who can afford treatment to alter their skin colour and hence change their actual skin tone to what they prefer. Hence, socioeconomic context can also be a decisive factor in the change of skin colour during the lifetime of an individual.

### ***Implications in the Indian context***

India is a land of variations. The subcontinent has areas differing in climatic conditions due to varied levels of exposure to the sun. The Tropic of Cancer almost passes through the heart of India. The part of the country which lies lower to this latitude is more exposed to the sun and consequently, the people living in these areas have a greater distribution of melanin in their skin to cope with it. On the other hand, the northern portion of the country due to comparatively lesser exposure to the sun leads to lesser distribution of melanin among the people.

But this is a much-generalized picture. It should also be kept in mind that India is a land of many races or ethnicities. In the days of the Aryans and Dravidians, the days of Mughal rule, and the days of colonization, when the Persians, the Portuguese, the French and the British set foot in India, the nation has become a place for varied races. For instance, families of Parsis who are originally from the old land of Persia now namely Iran, living in the southern part of the Indian subcontinent would still because of their specific phenotype tend to be born with fair skin tone.

The current study aims to investigate whether there are any real or fact-based changes between people based on their skin colour. The question arises as how much of this discrimination and bias is based on the impact of Western capitalism, years of rule and oppression by the white-skinned British colonialism leading to the internalized schema of white

supremacy or are there differences based on neurobiological or psychological substrates based on skin colour?

### ***Changing face and Fate of Gender***

Studies that have been conducted earlier report differences in narcissism, aggression etc, among men and women. According to early studies men are more narcissistic and aggressive than women. The reflection of this belief is evident in Indian literature, cinema, and art. Early studies have continued to reinforce this view. Recent findings indicates a change. The early finding's conformity to this view is largely due to a lack of exploration of the different facets of aggression. Recent studies claims that females have higher relational aggression or passive aggression than males, while physical aggression or forms of overt aggression are higher in males.

Besides, it is assumed that men and women should also differ in the way they perceive themselves. Sociologists are of the view that in most societies including Indian society, women are more emotionally dependent and less confident in comparison to men. In simple words, what a woman thinks about herself is largely what she hears about herself from others, especially family and friends. On the other hand, men are believed to be more self-reliant.

Another changing scenario all over the world is the increasing concern and awareness among the male population regarding their appearance, looks, presentability etc. This has even led to the coining of names for a new breed of men "metrosexuals" who maintain their looks with salon treatments like manicures, pedicures etc which were earlier only a domain for women. The age-old concepts of masculinity and femininity have also gone through considerable change. It is becoming more and more acceptable that men also go to salons and skin care clinics and have a self-care regime. The changing and evolving gender roles in urban Indian society can be easily observed.

## **Gender Roles, and Gender Differences**

### ***The Standards and Stereotypes***

Both within and across different cultures we find great consistency in standards of desirable gender-role behaviour. Males are expected to be independent, assertive, strong, less emotional, more aggressive, and competitive; females are expected to be more passive, sensitive, emotional, caring, nurturing and supportive.

In this post-modern age, however, it seems that these stereotypes are getting a bit weaker. This change is also evident in the changing choices of jobs among men and women. Women all over the world are strongly invading the corporate and business world which earlier used to be a “men’s only” zone, whereas men are steadily moving into the world of fashion, styling and grooming which was earlier thought to be a “women’s cup of tea.” Earlier domestic work like washing clothes, cleaning the home, and even looking after the babies was a work almost wholly done by the woman. The sanction of paternity leave by several companies is action-oriented evidence of this change.

### ***Gender as a spectrum and Gender fluidity***

It was not within the scope of this research to consider gender as a spectrum as per the present conceptualization and explore the effect of skin colour as well as gender on the psychological variables of these individuals. There are various challenges in including individuals from every gender orientation in the spectrum. Firstly, the individuals who do not fall into the strictly heteronormative category have to deal with stigma and discrimination, and usually have been through numerous negative experiences and usually have a greater occurrence of traumatic life events. Hence, the effect of the independent variables on the dependent variables cannot be efficaciously assessed or analysed without ruling out the high possibility of a greater effect of these extremely relevant confounding variables on the

dependent variables. Secondly, statistically speaking the non-heteronormative part of the spectrum is statistically considered a minority. Maintaining the statistical ratio of the population in the sample is also an additional challenge. Additionally, some individuals identify themselves as gender fluid. They may not be comfortable to assign themselves to a specific box or category. To avoid complications, the people who identify themselves as queer or gender fluid were also not included in the study.

### ***Biological Factors in Gender Differences***

Biological factors that are thought to shape gender differences include hormones and lateralization of brain function. Hormones may organize a biological predisposition to be masculine or feminine during the prenatal period, and the increase in hormones during puberty may activate that predisposition. In addition, social experiences may alter the levels of hormones, such as testosterone. Gender differences in the organization of the brain may be reflected in the greater lateralization of brain functioning in males, which may help explain male success in spatial and math skills. It may also explain female tendencies to be more flexible than males and to withstand injury to the brain more effectively.

### ***Cognitive Factors in Gender Differences***

Cognitive factors in children's understanding of gender and gender stereotypes may contribute to their acquisition of gender roles. Two cognitive approaches to gender typing have looked at when children acquire different types of gender information and how such information modifies their gender-role activities and behaviours. To do this, they must develop gender identity, gender stability, and gender constancy. Gender schema theory suggests that children develop naive mental schemas that help them organize their experiences in such a way that they will know what to attend to and how to interpret new information. According to this theory, we should expect individual differences in how gender-schematic children will be.

Besides the factors mentioned other factors like a family environment, availability of parental figures etc also play a role in the formation of gender differences.

The current study has tried to assess whether men and women differ concerning psychological correlates like narcissism, aggression orientation, and self-concept.

### ***Narcissism***

The term "narcissism" is derived from the Greek mythology of Narcissus, but was only coined at the close of the nineteenth century. The story goes that Narcissus was a handsome Greek youth obsessed with his beauty, and as punishment, he was doomed to fall in love with his reflection in a pool of water. The first psychologist to address narcissism was Havelock Ellis (1898). Freud's understanding of narcissism led him to use the term to describe a wide array of psychiatric disorders, very much in contrast to the term's contemporary use to define a specific personality disorder. He postulated a state of primary narcissism at birth in which libido is stored in the ego. He viewed the infant as completely narcissistic, with the entire libidinal investment in physiological needs & their satisfaction. He referred to this self-investment as ego-libido.

According to Post-Freudians like Kernberg, the self is an intrapsychic structure consisting of multiple self-representations. Kernberg (1975) defines normal narcissism "as the libidinal investment of the self." However, it needs to be emphasized that this libidinal investment of the self is not merely derived from an instinctual source of libidinal energy.

There is also a specific disorder called "narcissistic personality disorder" designated in the diagnostic documents. Narcissistic Personality Disorder (NPD) is diagnostically defined in the DSM-5 (APA 2013) as a pervasive pattern of grandiosity, need for admiration, and lack of empathy, with interpersonal entitlement, exploitativeness, arrogance, and envy. Some soft signs include sensitivity to criticism or rejection, shame, taking advantage of others to reach

own goals, exaggerating own importance and talents, imagining unrealistic fantasies of success, beauty, power, intelligence, or romance, requiring constant attention and positive reinforcement from others, lacking empathy, and disregarding the feelings of others, being obsessed with self and pursuing mainly selfish goals.

It was discovered by Raskin et al. (1988) that several contemporary theorists have divided narcissism into multiple main components. These elements include Vanity, Entitlement, Exhibitionism, Self-sufficiency, Authority, and Superiority. The NPI's components and the entire scale have both been reported to have sufficient construct validity.

## **SKIN COLOUR AND NARCISSISM**

### ***Racial differences in narcissistic tendencies***

One of the publication in the journal, “Journal of Research in Personality” by Hill et al. (2011) presented a difference between, levels of narcissism among different races of human beings whose major attribute of differentiation is skin colour. From their study, it was found that Black individuals in the United States reported the highest level of self-esteem among all other races including the White Americans. It has also been found that Black individuals reported higher levels of narcissism even when other affecting variables like gender, and self-esteem were controlled. The analysis in another facet of the study showed that Black individuals also reported higher levels of narcissism than White individuals in the less pathological facets of the construct of narcissism.

“NPA theory of personality types based on Mendelian genetics:” This article published by Benis (2008) on a research website explained that like many external traits, character traits that lead to the formation of personality can also be genetically determined. Some of these genetically determined character traits that were found significant are narcissism,

perfectionism, and aggression. These studies indicate that there might be some effect of skin colour on the level of narcissism of individuals. Studies conducted in this field have either been conducted on the US population where skin colour also has a racial implication. So, it is difficult to say what has led to the differences- the prejudice or the skin colour.

### **Self-Concept**

The self or self-concept is “an organized, consistent, conceptual gestalt composed of the characteristics of ‘I’ or ‘me’ to others and to various aspects of life, together with the values attached to these perceptions” (Rogers, 1959). As a result of interaction with the environment, a portion of the perceptual field gradually becomes differentiated into the self. This perceived self (self-concept) influences perception and behaviour. One's self-concept is a collection of beliefs about oneself, that includes such things as academic performance, gender roles and sexuality, racial identity, and many others.

Baumeister (1999) provides the following self-concept definition; “the individual's belief about himself or herself, including the person's attributes and who and what the self is.” In childhood, the Self-Concept tends to be tied to concrete or physical things like looks, items and skill levels. As the child grows, they learn about intrinsic (inner) characteristics and psychological differences because they now have a larger network of peers and relatives to compare themselves with.

The psychologists Carl Ransom Rogers and Abraham Maslow could be credited for the introduction of the idea of self-concept in the field of psychology. Central to Rogers'(1959) personality theory is the notion of self or self-concept. This is defined as "the organized, consistent set of perceptions and beliefs about oneself". The self is the humanistic term for who we are as a person. Two primary sources that influence our self-concept are childhood experiences and evaluation by others.

The humanistic approach states that the self is composed of concepts unique to ourselves. The self-concept includes three components:

- ***Self-worth (or self-esteem)***: what we think about ourselves,
- ***Self-image***: How we see ourselves, which is important to good psychological health and
- ***Ideal self***: This is the person who we would like to be. Our idea of self-worth depends on the kind of regard we get from our near and dear ones, especially our parents.

He also suggested that different types of interactions have different consequences of one's self-concept.

Many psychologists have put forward varied models of self-concept. Lewis (1990) suggested that the concept of self has two aspects: the existential self and the categorical self. On the other hand, in 1985, the multifaceted hierarchical model of academic self-concept was put forward by Herbert W. Marsh and Richard Shavelson. According to this model, the self consists of two aspects: the academic self-concept and the non-academic self-concept.

## SKIN COLOUR AND SELF CONCEPT

“Perceptions of and Preferences for Skin Colour, Black Racial Identity, and Self-Esteem Among African Americans” research paper titled by Coard et al. (2001) conducted the study to examine the role of skin colour (i.e., lightness-darkness), among 113 African American college students of various skin colours. The findings revealed that there is a preference for medium skin colour among the sample. Rather than preferring their own fair or dark skin colour, the sample chooses the medium skin colour. It is also found from this study result that there is a relation between satisfaction regarding own skin colour and the self-esteem of an individual.

A study published by Thompson (2001) published in the journal, “Gender and Society” used the National Survey of African-Americans to find out how gender socially constructs the importance of skin tone for evaluations of self-worth and self-competence. It has been found that there is a negative effect of skin tone on self-esteem and self-efficacy for both genders. However, the way the effect operates is different for men and women. For women, the negative effect of skin tone is mostly on self-esteem. In Black men, the negative effect of skin colour is mostly on self-efficacy. The effect of skin colour on self-esteem found in women was less in individuals belonging to the higher social strata.

A study published in the “Caribbean Journal of Psychology” by Charles (2010), compared the level of self-esteem and racial self-esteem between Jamaican young adults who bleach their skin and the ones who do not, and also compare their attitude towards treatments like bleach. These results suggest that there is a negative relationship between SE and skin bleaching and that bleachers have a basic Black worldview and identity, so their racial self-esteem is comparable to that of non-bleachers.

Another study published in the “Journal of Black Psychology” by Wade (1996), examined skin colour in relation to self-esteem and self-perceived global, physical and sexual attractiveness among 91 African Americans. Findings show that fair-skinned females have higher levels of self-esteem and self-ratings of attractiveness than dark-skinned females. Dark-skinned males on the other hand had higher or no different ratings than the fair-skinned males. Though some of the mentioned early study findings present contradictory results, it is clear from the findings that there is surely some effect of skin colour on self-esteem, self-efficacy, and various other dimensions of the self.

An article published in the “Journal of Applied Social Psychology” (Mucherah et al., 2013) presented the results of a study conducted to examine skin colour and its relationship to

body dissatisfaction and self-esteem is critical to expanding upon the research that explores the intersection between body image and the sociocultural experience of women of the African diaspora. Results revealed a significant effect of ethnicity and employment status on body dissatisfaction, skin colour satisfaction, and self-esteem. Follow-up analyses revealed that Afro-Caribbean women were the most satisfied with their body shape, biracial women were most satisfied with their skin colour, and women who self-identified as professionals had the highest self-esteem.

A study published in “Cultural Diversity and Ethnic Minority Psychology” by (Kim et al., 2019), reveals the association between skin colour and academic achievement in young Latino students. Data were drawn from a longitudinal study of the early development of Latino children that took place in 24 public elementary schools in New York City. This study considered the intersectionality of ethnicity and gender as well. The findings showed that for Dominican-origin boys, being “collectively black” was indirectly associated with lower academic achievement in first grade, mediated by lower teacher-rated adaptive behaviour in prekindergarten or kindergarten.

## **ON GENDER AND SELF-CONCEPT**

An article published in the “Journal of Experimental Social Psychology” by McGuire et al. (1979) explored the salience associated with gender identity and the predomination of a specific gender in the household and its effect on an individual’s self-concept. As a part of the study, the effect of gender on self-concept was also explored. It was found that gender had more of an effect on the negation self-concept (tell me what you are not) than on the affirmation self-concept (tell me what you are), especially in the girls. It was also found that gender salience decreased with the increase of age.

Another article published in the journal titled, “Adolescence,” by Aşçi (2002) presents the study that was done among Turkish university students to evaluate their age and gender differences in physical self-concept. Multivariate analysis of the data revealed a significant effect of gender but no significant effect of age. Univariate analysis revealed significant gender differences in sports competence, physical condition, body attractiveness and physical strength. All these variables find favour in males except body attractiveness.

It might be concluded that most of these differences can be attributed to social rather than biological causes. The present study will try to explore this domain and try to compare the results with former study findings.

## **AGGRESSION**

In psychology, the term aggression refers to a range of behaviours that can result in both physical and psychological harm to oneself, others or objects in the environment. The expression of aggression can occur in several ways, including verbally, mentally, and physically.

### ***Theories of Aggression***

Sigmund Freud determined that all instincts fall into one of two major classes: the life instincts or the death instincts. Life Instincts (Eros), sometimes referred to as sexual instincts, the life instincts are those that deal with basic survival, pleasure, and reproduction. Death Instincts (Thanatos) was initially described in his book *Beyond the Pleasure Principle*. In Freud's view, self-destructive behaviour is an expression of the energy created by death instincts. When this energy is directed outward onto others, it is expressed as aggression and violence.

One of the leading theories is the Social Learning theory of Bandura (1965). These theories claim that aggressive behaviour is learned through observing and imitating aggressive models. Aggressive behaviour is strengthened and maintained if it has a desirable outcome (reinforcement).

There is an idea that a sense of social, economic, or political injustice can lead to aggressive behaviour (sometimes called relative deprivation). There is also an idea that individuals who are in some way anonymous, i.e., wearing a uniform or in a crowd can behave more aggressively than individuals who are identifiable as individuals. This is called deindividuation theory. Somewhat the kind of aggression which transpires in cases of cyberbullying

Another significant theory is the frustration-aggression hypothesis which is a theory of aggression proposed by Dollard et al. (1939), and further developed by Miller et al. (1941) and Berkowitz (1969). The theory says that aggression is the result of blocking, or frustrating, a person's efforts to attain a goal. This theory attempts to explain why people scapegoat.

Some modern theories are also surfacing around the old concept of aggression as an instinct. Konrad Lorenz has put forward a modern theory of instinctual aggression, which is based on the framework of sociobiology. In the present study a comparatively new scale called, the “Aggression Orientation Scale” has been used to assess the aggression orientation of an individual. Aggression orientation can be defined as the sum total of action orientation or impulse towards aggression acting out in each direction. The scale has domains like predisposition domain, externalized tendency, internalized tendency etc.

### ***Skin Colour and Aggression***

An article by Rushton et al. (2012) in the journal, “Personality and Individual Differences” explored the link between pigmentation and the melanocortin system and

aggression modulation in human beings. Pigmentation of the hair, skin, cuticle, feather, and eye is one of the most salient and variable attributes of vertebrates. This study aimed to find whether this relation exists in the most sophisticated vertebrate species, i.e. human beings. Both within human populations (e.g., siblings), and between populations (e.g., races, nations, states), the study found that darker-pigmented people average higher levels of aggression and sexual activity (and also lower IQ).

Another article published in the “Journal of Student Research” revealed that White Americans have several predicted beliefs regarding black Americans, especially after the application of the Civil Rights Act. This study was conducted by Anderson et al. (2011) to find out whether the stereotype of Blacks as being more aggressive than Whites still holds. The results of this study revealed that ambiguously aggressive acts would be perceived as more threatening when those acts were performed by a black male than by a white male. Though earlier, Harrison et al. (2001) found that participants viewed aggressive and violent acts performed by white males as being a greater cause for concern than the same acts performed by black males.

The mentioned studies indicate that there might be some relationship between skin colour and the psychological variable aggression. This effect is mostly due to biological causes like gene composition and the incidence of pleiotropy. It is also found that there are also some prejudices which lead people to believe that dark-skinned individuals tend to be more violent or aggressive.

### ***Gender differences in Aggression***

“Relational Aggression, Gender, and Social-Psychological Adjustment”: This article published in the journal, “Child Development” by Crick et al. (1995) aimed to find the differences in aggression especially in its form and expression between boys and girls. The

results claim that this general result is due to a lack of exploration of the different expressions of aggression. Results indicated that as predicted, girls were significantly more relationally aggressive than boys. Results also indicated that relationally aggressive children may be at risk for serious adjustment difficulties (e.g., they were significantly more rejected and reported significantly higher levels of loneliness, depression, and isolation relative to their non-relationally aggressive peers).

A review article published in the *Psychological Bulletin* by Eagly et al. (1995) found that in general although men are more aggressive than women, the differences were found to be inconsistent across studies. The tendency of men to aggress was greater than women. This fact has been overstressed in studies. Men aggress themselves in ways that cause physical pain or injury rather than psychological or social harm more than women. Besides, gender differences in aggression were found more because women perceived that enacting a behaviour would produce harm to the target, guilt, and anxiety to oneself as well as pose danger to oneself.

Another article by Rys et al. (1997), aimed to find out the relationship between three behaviours (physical aggression, relational aggression, and prosocial behaviours) and three social outcomes (peer rejection, acceptance, and reciprocal friendships) in 131 third and 135 sixth-grade girls and boys. The results indicate that there were significant gender differences in physical aggression and prosocial behaviour at both grade levels. Results also confirmed early study findings which claim that there are gender differences in relational aggression, because of which relational aggression affects peer relations in girls.

The above studies indicate that there is indeed some gender difference in aggression. But this difference was more specific than generic. The difference is mainly based on the way of expression of aggression as well as the social and gender roles incorporated within an individual.

Another article was published in “Current Opinion in Psychology” (Björkqvist,2018), which examined gender differences in aggressive behaviour. In proportions of their aggression scores, boys and girls are verbally about equally aggressive, while boys are more physically and girls more indirectly aggressive. There are genetic determinants of both physical and indirect aggression, suggesting that both types of aggression give evolutionary advantages.

## METHOD

### Aim

The aim of the present study is to investigate whether there is any effect of the variations of skin complexion, gender differences and psychological variables- narcissism, self-concept, and aggression orientation.

### Design of the Study

| Independent Variable     | Levels of the Independent Variable                                      |
|--------------------------|-------------------------------------------------------------------------|
| ❖ Skin Complexion        | Fair (30 subjects)<br>Medium (30 subjects)<br>Dark (30 subjects)        |
| ❖ Gender Difference      | Male (30 subjects in each subgroup)<br>Female (30 subjects in subgroup) |
| Dependent Variable       | Measuring Tools                                                         |
| ▪ Narcissism             | Narcissistic Personality Inventory-40 (NPI-40)                          |
| ▪ Self-Concept           | Self Concept Inventory                                                  |
| ▪ Aggression Orientation | Aggression Orientation Scale (AOS)                                      |

## SAMPLE

A sample of 30 young adults for each combination in this 3x2 factorial study, belonging to the age range 18-25 and middle socio-economic status were selected. The minimum educational qualification of the participants was fixed at the 10+2 pass level. It was made sure that the participants selected, do not have any chronic illness, diagnosed mental health condition, skin disease etc and do not fall into any extreme category of body height or weight. This is because these factors might hamper the scope of observation of the effect of the independent variable skin complexion as well as gender on the psychological variables.

## SAMPLING TECHNIQUE

The sampling technique used is disproportionate stratified random sampling.

**Inclusion criteria:** Individuals within the age range of 18-25 years and having the minimal educational qualification of passing the higher secondary school leaving examination were selected. The socioeconomic status is kept fixed to the middle range.

**Exclusion criteria:** Individuals who are married are excluded from the study. The people who do not fall into the middle socioeconomic status are excluded. The persons who fall into the extremities concerning the height-weight ratio are excluded from the study. The persons who suffer from any kind of chronic illness or mental health condition were excluded from the sample.

## DATA COLLECTION PROCEDURE

Data for this study has been collected using the tools according to the variable to be measured. In the case of the variables- narcissism, self-concept and aggression orientation; quantitative scales were used for their respective measurement.

## DESCRIPTION OF THE TOOLS USED

Before administering the questionnaires to measure the respective variables, a consent form was presented to the participants at the start of the data collection procedure to explain the purpose of the study, their role in it and the confidentiality of the details they provided was ensured, and finally, their consent was obtained for participation in the study. The tools used are as follows:

- **Sociodemographic Datasheet**

The Sociodemographic Datasheet aims to find out the necessary details of the participant, as well as the details which are necessary to exclude the variables that interfere in the process of the observation of the effect of the independent variables on the dependent variables.

- **General Health Questionnaire-28 (Goldberg & Miller, 1979)**

The general mental health questionnaire has been used in the present study as a screening device. This questionnaire was developed by Goldberg and Miller in 1979. The General Health Questionnaire is a method to quantify the risk of developing psychiatric disorders. This instrument targets two areas- the inability to carry out normal functions and the appearance of distress- to assess the well-being of a person. The test exists in several forms, namely: GHQ-30 (30 items), GHQ-28 (28 items) and GHQ-12 (12 items). In the present study, GHQ-28 has been used. The reported Cronbach's alpha coefficient for GHQ ranges from 0.82 to 0.86. The instrument is considered reliable and has been translated into 38 languages.

- **Tool Used to Classify Skin Colour (Fitzpatrick, 1975):**

The skin colour of the subjects was measured and classified based on the Skin Colour Scale of Fitzpatrick. This scale was developed by Fitzpatrick (1975), a Harvard dermatologist, classifies the response of different types of skin to UV light. This scale was developed with inputs from the Skin Colour Chart developed earlier by Felix von Luschan an Austrian anthropologist, ethnologist, doctor, and archaeologist. This scale was much in use till the 1950s. Fitzpatrick scale though remains a recognized tool for dermatologic research into the colour of skin. It measures several components: Genetic Disposition, Reaction to Sun Exposure and Tanning Habits. The Fitzpatrick scale consists of six categories:

**Type I** (scores 0-7) Light, pale white, **Type II** (scores 8-16) White; fair, **Type III** (scores 17-24) Medium, white to olive, **Type IV** (scores 25-30) Olive, moderate brown, **Type V** (scores over 30) Brown, dark brown, **Type VI** Black, very dark brown to black.

In the Indian population, the skin colour is limited to several ranges of the colour brown. It has been found that the skin colour of the Indian population can be mainly classified under the three types of the Fitzpatrick scale: Type III, Type IV and Type V. Hence these three types are named fair, medium and dark respectively for this study. The subjects are put in any of the three categories based on the assessment of the researchers and an objective judge to rule out chances of researcher bias.

- **Narcissistic Personality Inventory- 40 (Raskin & Terry, 1988)**

The Narcissistic Personality Inventory (NPI) is a self-report measure that assesses subclinical levels of narcissism. It evolved through a 54-item, four-factor version (Raskin and Terry, 1988). The current NPI includes 40 items that reflect seven components: Authority, Self-sufficiency, Superiority, Exhibitionism, Vanity and Entitlement. The NPI demonstrated a significant test-retest correlation to all scales. The NPI exhibits adequate

reliability (Raskin and Terry, 1988). Internal consistency is reported as high (0.83), for alternate forms reliability was found to be .72, and for split-half reliability, the result was 0.80. The NPI also exhibits adequate construct validity.

- **Self-Concept Inventory (Dr. Beena Shah, 1986)**

The self-concept inventory was designed by Dr. Beena Shah of Garhwal University and was published in 1986. It is for adults, up to the age of 50 for both sexes belonging to urban as well as rural areas. The test is available in two languages, namely Hindi and English respectively. Following are the dimensions of self-concept chosen Self-concept (SSC), Emotional Self-Concept (ESC), Physical Self Concept (PSC), Cognitive Self Concept (CSC), Aesthetic Self Concept (ASC), Political Self Concept (PISC), Job-related Self Concept (JRSC), Self Confidence (SC), Self-Concept Related to Beliefs and Traditions (SCRBT), and Self-Concept Related to Personality Traits (SCRPT). The split-half reliability of the inventory was computed for each criterion group of the sample (N=325) drawn at random, by applying the Spearman-Brown formula. The value of the reliability coefficient varying between .50 and .82, which are highly significant proves that this test is reliable. It also has good content and construct validity.

- **Aggression Orientation Scale (Dr. Jayanti Basu, 2001)**

Aggression Orientation is defined as the sum total of action orientation or impulse towards aggressive acting out in a given direction. This scale: Aggression Orientation Scale was prepared in Bengali by Dr. Jayanti Basu, Department of Applied Psychology, University of Calcutta. The paper was presented at the NACIACP conference held in Delhi in February 2001. The scale consists of 84 items among which 26 items are in the Predisposition (PR) domain, & items are in the domain of Externalized Tendency (ET), 7 items are in Internalized Tendency (IT) domain, 9 items are in Verbal Behavior (VE) domain, 11 items

are in Physical Behavior (PE) domain and 16 items are in Indirect Behavior (IE) domain. The split-half reliability of the Bengali scale with Spearman-Brown correction for the domains all fall between .59-.80.

### DATA ANALYSES

After recording the data of the total 180 subjects in a data sheet the statistical analyses were done in the software- Statistical Program for Social Sciences (SPSS) version 21. Mean and SD were computed for the DV response of each subgroup. Analysis of variances (ANOVA) and Multiple Analysis of Variances (MANOVA) were computed to find out the difference concerning each variable between and within each subgroup.

### RESULTS

The results have been arranged in the order in which the hypotheses have been stated earlier. The results will act as a guideline with the help of which we can decide to accept or reject the hypotheses in each of the cases.

**Table I**

*Results of MANOVA and ANOVA of young adult Males & Females having varying skin tone with respect to their different components of Narcissism and Self-Concept*

| Source | Dependent Variables | Wilk's Lambda value | F for Wilk's Lambda value(df 2,178) | Significance | F for ANOVA (df1,2) | Significance |
|--------|---------------------|---------------------|-------------------------------------|--------------|---------------------|--------------|
|        | Authority           |                     |                                     |              | 1.723               | .191         |
|        | Self-sufficiency    |                     |                                     |              | 8.243               | *.005        |

| Gender                   | Superiority      | .906 | 2.495 | .018 | .759  | .385  |
|--------------------------|------------------|------|-------|------|-------|-------|
|                          | Exhibitionism    |      |       |      | .078  | .781  |
| Exploitativeness         |                  |      |       |      | 7.347 | *.007 |
| Vanity                   |                  |      |       |      | .434  | .511  |
| Entitlement              |                  |      |       |      | .761  | .384  |
| Skin tone                | Authority        | .913 | 1.120 | .339 | .565  | .569  |
|                          | Self-sufficiency |      |       |      | .385  | .681  |
|                          | Superiority      |      |       |      | .539  | .585  |
|                          | Exhibitionism    |      |       |      | 5.508 | *.005 |
|                          | Exploitativeness |      |       |      | .049  | .952  |
|                          | Vanity           |      |       |      | 2.244 | .109  |
|                          | Entitlement      |      |       |      | .353  | .703  |
| Gender<br>X<br>Skin tone | Authority        | .909 | 1.169 | .298 | 2.752 | .067  |
|                          | Self-sufficiency |      |       |      | .385  | .681  |
|                          | Superiority      |      |       |      | .864  | .423  |
|                          | Exhibitionism    |      |       |      | 4.800 | *.009 |
|                          | Exploitativeness |      |       |      | .801  | .451  |
|                          | Vanity           |      |       |      | .414  | .662  |
|                          | Entitlement      |      |       |      | .633  | .532  |

From the **results of MANOVA and ANOVA, there is a significant effect of gender** (.018) but no significant effect of skin tone (.339) on the narcissistic components of an individual. The interaction between gender and skin tone is also not significant (.298).

The **significance values of each narcissism component for ANOVA** give us a clear idea about the significance or insignificance of the independent variables on the dependent variables. The significance value for ANOVA shows that the effect of gender on the narcissism components; self-sufficiency and exploitativeness is significant (the values being .005 and .007 respectively). It is also found that skin tone has a significant effect on exhibitionism (the significance value being .005). The interaction between gender and skin tone is also found to have a significant effect on exhibitionism (.009).

It might be further stated that **gender has a significant effect on some specific components of narcissism, namely self-sufficiency and exploitativeness**. It is also found that the level of exhibitionism is higher in adults possessing dark complexion in comparison to their fair counterparts, irrespective of their gender. Thus, **skin tone has a significant effect on the narcissism component, exhibitionism**.

**TABLE 2**

*Results of MANOVA & ANOVA of Young Adult Males & Females having varying Skin Tones for their Self-concept Components*

| Source | Dependent Variable | Wilk's Lambda Value | F for Wilk's Lambda (df2,178) | Significance | F for ANOVA (df1,2) | Significance |
|--------|--------------------|---------------------|-------------------------------|--------------|---------------------|--------------|
|        | SSC                |                     |                               |              | 1.000               | .319         |
|        | ESC                |                     |                               |              | 2.218               | .138         |
|        | Phy.SC             |                     |                               |              | 9.302               | *.003        |

|                           |            |      |       |      |       |       |
|---------------------------|------------|------|-------|------|-------|-------|
| <b>Gender</b>             | Cog.SC     | .841 | 3.124 | .001 | 2.754 | .099  |
|                           | Aes.SC     |      |       |      | 3.562 | .061  |
|                           | Pol.SC     |      |       |      | 6.643 | *.011 |
|                           | JobRltd.SC |      |       |      | .793  | .374  |
|                           | SC         |      |       |      | .110  | .741  |
|                           | SCRPT      |      |       |      | 1.965 | .163  |
|                           | SCRBT      |      |       |      | .110  | .740  |
| <b>Skin tone</b>          | SSC        | .996 | .839  | .666 | .208  | .813  |
|                           | ESC        |      |       |      | .467  | .628  |
|                           | Phy.SC     |      |       |      | .303  | .739  |
|                           | Cog.SC     |      |       |      | 1.345 | .263  |
|                           | Aes.SC     |      |       |      | .015  | .985  |
|                           | Pol.SC     |      |       |      | .656  | .520  |
|                           | JobRltd.SC |      |       |      | 1.191 | .306  |
|                           | SC         |      |       |      | 2.621 | .076  |
|                           | SCRPT      |      |       |      | .024  | .976  |
|                           | SCRBT      |      |       |      | 1.077 | .343  |
| <b>Gender X Skin tone</b> | SSC        | .881 | 1.077 | .372 | .601  | .549  |
|                           | ESC        |      |       |      | .386  | .680  |
|                           | Phy.SC     |      |       |      | .717  | .490  |
|                           | Cog.SC     |      |       |      | .845  | .431  |
|                           | Aes.SC     |      |       |      | .637  | .530  |
|                           | Pol.SC     |      |       |      | .553  | .576  |
|                           | JobRltd.SC |      |       |      | 3.416 | *.035 |
|                           | SC         |      |       |      | .414  | .662  |
|                           | SCRPT      |      |       |      | .194  | .824  |
|                           | SCRBT      |      |       |      | .028  | .972  |

**From the results of MANOVA**, it can be inferred that there is a significant effect of gender (.001) on the self-concept of an individual. However, there is no significant effect of skin tone on the variable. The interaction between gender and skin tone is also not significant.

**From the results of ANOVA**, it can be inferred that there is a significant effect of gender on the self-concept dimensions of physical self-concept and political self-concept (the values being .003 and .011 respectively). Skin tone is not found to have any significant effect on any self-concept dimension. **The interaction between skin tone and gender has a significant effect on Job-Related self-concept (.035).** It might be stated that **gender has a significant effect on some specific domains of self-concept, namely physical self, and political self.** The table of mean shows a difference in physical self-concept, political self-concept and self-confidence. However, the ANOVA significance values confirm that none of these effects of skin tone are significant. **Hence, it might be stated that skin tone has no significant effect on self-concept.**

**TABLE 3**

*Results of MANOVA & ANOVA of young adult Males & Females having varying skin tone with respect to their Aggression Orientation*

| Source        | Dependent Variable      | Wilk's Lambda value | F for Wilk's Lambda, (df2,178) | Significance | F for ANOVA (df1,2) | Significance |
|---------------|-------------------------|---------------------|--------------------------------|--------------|---------------------|--------------|
| <b>Gender</b> | Predisposition Tendency | <b>.960</b>         | <b>1.180</b>                   | <b>.319</b>  | .001                | .982         |
|               | Physical Expression     |                     |                                |              | 2.253               | .135         |
|               | Internalized Expression |                     |                                |              | 1.614               | .206         |
|               | Verbal Expression       |                     |                                |              | 1.223               | .270         |
|               | Internalizing Tendency  |                     |                                |              | .683                | .410         |
|               | Externalizing Tendency  |                     |                                |              | .793                | .374         |

|                           |                         |             |              |             |       |       |
|---------------------------|-------------------------|-------------|--------------|-------------|-------|-------|
| <b>Skin tone</b>          | Predisposition Tendency | <b>.849</b> | <b>2.401</b> | <b>.005</b> | 3.771 | *.025 |
|                           | Physical Expression     |             |              |             | 8.515 | *.000 |
|                           | Internalized Expression |             |              |             | .586  | .558  |
|                           | Verbal Expression       |             |              |             | 3.638 | *.028 |
|                           | Internalizing Tendency  |             |              |             | 1.332 | .267  |
|                           | Externalizing Tendency  |             |              |             | .941  | .392  |
| <b>Gender x Skin tone</b> | Predisposition Tendency | <b>.919</b> | <b>1.217</b> | <b>.269</b> | 3.095 | *.048 |
|                           | Physical Expression     |             |              |             | 3.105 | *.047 |
|                           | Internalized Expression |             |              |             | .488  | .615  |
|                           | Verbal Expression       |             |              |             | .274  | .761  |
|                           | Internalizing Tendency  |             |              |             | .179  | .836  |
|                           | Externalizing Tendency  |             |              |             | .826  | .439  |

From the results of MANOVA it can be seen that there is no significant effect of gender (.319) on the aggression orientation: predisposition tendency, physical expression, internalized expression, externalized expression, internalizing tendency and externalizing tendency. However, the results indicate that there is **significant effect of skin tone (.005) on aggression orientation of an individual**. The interaction between gender and skin tone with respect to aggression orientation is not significant.

From the results of ANOVA, it can be seen that there is no significant effect of gender on aggression orientation. **Skin tone has a significant effect on predisposition tendency, physical expression and verbal expression** (the values being .025,.000 and .028 respectively). The **interaction between gender and skin tone** is also found to have a **significant effect on the predisposition tendency and physical expression** (the values being .048 and .047 respectively).

It is further observed that irrespective of gender, dark-complexioned young adults have a higher range of predisposition tendencies and physical expression, in comparison to fair-complexioned young adults. The level of these two kinds of aggression orientation seems to progress in ascending order from fair complexion to dark complexion. In females, the level of physical expression is very close in dark and medium-complexioned adults, although both levels are higher than the fair-complexioned counterparts. But the level of verbal expression is prominently higher in dark-complexioned adults, than the medium or fair-complexioned counterparts. Hence, it might be stated that **skin tone has a significant on specific kinds of aggression orientation, namely predisposition tendency, physical expression and verbal expression.**

## DISCUSSION

As mentioned earlier, several studies indicate the importance of skin complexion in the decisiveness of attractiveness to the opposite gender. The study by Hill (2002) investigated the relationship between “Skin Colour and the Perception of Attractiveness Among African Americans,” it has been found that skin colour consciously or unconsciously is perceived as a decisive factor of attractiveness, especially for females. This is because fair skin is perceived more as a feminine trait of beauty. Another study published in the “Egyptian Dermatology

Online Journal” which involved the women of Pakistan, has established the fact that females with whitish complexion enjoy several benefits in terms of marriage prospects, social acceptability and even employment status.

It must however be remembered that the present study involves the perception of young adults in India, having varying skin tones. The literature survey has brought some interesting aspects regarding the importance of skin tone under scrutiny. Several studies by the media and press have brought into light the increasing trend among Indian adults to lighten their skin tone, thereby attaching more and more importance to it.

The mentioned previous findings led us to believe that skin colour is an important factor for the concerned individual and the way society perceives him/her. However, this factor was assumed to be more important for females as indicated by literature survey findings. Recent market research findings show that concern regarding skin colour is increasing among men. This is indicated by the steadily increasing consumption of fairness products by men.

The findings of the present study indicate that skin tone is a matter of concern not only for dark-complexioned females but also for males. Dark-complexioned Indian adults irrespective of their gender wish to lighten or alter their skin complexion. The findings are thus more or less in concurrence with previous study findings.

The results found for the rest of the quantitative analyses will be discussed hereafter.

From the previous chapter of results, the following significant findings can be summarized:

- There is a significant effect of gender on some narcissism components, namely self-sufficiency and exploitativeness, some specific dimensions of self-concept, physical self, and political self of an individual.

- There is a significant effect of skin tone on the narcissistic component exhibitionism, and on aggression orientation, specifically predisposition tendency, physical expression, and verbal expression of an individual.
- The interaction between gender and skin tone has a significant effect on a specific component of narcissism- exhibitionism, a specific domain of self-concept, job-related self-concept of an individual.

A study conducted by Foster et al. (2003), published in the “Journal of Research in Personality” claimed that men are more narcissistic than women. It is also mentioned in this study that this finding conforms to numerous earlier studies as well. Another study finding claims that men and women differ in their forms and expressions of narcissism.

The present study findings indicate that there is a significant effect of gender on the narcissism components. It is found that men have a higher level of self-sufficiency and exploitativeness, than women. Since men are more self-sufficient, they need fewer reinforcers from the external environment to love themselves. Besides, due to their higher level of exploitativeness men are more capable of keeping themselves safe and saving their pride. These points further explain the fact that men are more narcissistic than women. The present study thus highly correlates with previous study findings.

The present study findings also indicate that skin tone has a significant effect on the narcissistic component, exhibitionism. Previous study findings in this context are limited. Besides, most of them have been conducted in the United States, South Africa etc. where skin tone is not only an issue as there is also racism in these countries based on skin colour. A study conducted in the “Journal of Research in Personality” published by Hill et al. (2011) stated that dark-skinned people have a higher level of narcissism in comparison to light-skinned individuals. The present study finding indicates that skin tone has a significant effect on a

specific component of narcissism, i.e. exhibitionism. It is found that dark complexioned adults irrespective of their gender have a higher level of exhibitionism than the fair complexioned individuals.

Hence, the present study findings are in concurrence with previous study findings.

In the present study, it has been found that there is a significant effect of gender on some specific domains of self-concept like physical self and political self. Previous studies in this context are very limited. However, a study published in the “Journal of Applied Social Psychology” by Coard et al. (2001), stated that men and women do not differ significantly in their conception about themselves. In another study conducted among Turkish school-going adolescents, to investigate the age and gender differences based on physical self-concept, published in a journal and on the official website of “Europe PubMed Central” it has been stated that there are significant gender differences in sport competence, physical condition, physical strength and bodily attractiveness (all favoring males except bodily attractiveness). The higher level of physical self-concept in men might be due to this reason as indicated by the previous study. Men are more conscious and aware of their physical self- their ability and inability. The higher level of political self-concept in men might be explained by their higher exploitative tendency in comparison to women. The present study findings despite limited previous studies to refer to show a concurrence with previous study findings.

The present study findings indicate no significant effect of skin tone on self-concept. Previous study findings present contradictory results. According to the study by Wade (1996) published in the “Journal of Black Psychology”, fair-skinned females have higher level of self-esteem and self-ratings of attractiveness than dark-skinned females, while dark skinned males and fair skinned males have no such difference. Another study published in the journal “Gender and Society” claims that skin tone has a negative effect which operates differently in men and

women. A third study depicts a different picture. This study shows that people satisfied with their skin colour have lower self-esteem than the ones who are dissatisfied. Hence, nothing conclusive can be said based on the present or former study findings.

The interaction between gender and skin tone is found to have a significant effect on Job-Related Self-concept. This is a new area of research. So, there are further scopes of investigation. Most of the early studies provide with the common finding that men are more aggressive than women. However, in recent years it has been thought that this finding is due to a lack of investigation of the different forms of aggression. A study conducted by Crick et.al (1995) published in the journal, "Child Development" presents the finding that girls have higher level of relational aggression than boys. In another study by Rys et.al (1997), there are significant gender differences in physical aggression and prosocial behavior. Present study findings however do not show any significant effect of gender-on-gender orientation. This finding is somewhat different from earlier study findings. The present finding might be an indication of a change in the pattern of aggression orientation of young adults. In the modern progressive, competitive urban society of India, men and women are thriving for equal footing, and facing similar kinds of crises and difficulties on the professional front. Thus, the differences in the level of aggression between men and women in this context might be diminished.

Present study findings indicate that there is a significant effect of skin tone on the aggression orientation of an individual, specifically on predisposition tendency, physical expression, and verbal expression. In a previous study published in the journal, "Personality and Individual Differences" and in the "Inductivist" blog page published by Rushton (2012), an interesting finding has been put forward. In this study, early studies on animals were reviewed which stated that darker pigmented animals of a species were more generally active and aggressive. The study was conducted on humans having skin tone also on people of

different races. It has been found that, dark-skinned humans are more generally active, have higher levels of aggression and are more likely resistant to stress. In the present study, a similar relation is found between skin tone and aggression orientation. The dark-complexioned young adults are found to have a markedly higher predisposition tendency than fair-complexioned adults. The dark and medium-complexioned adults are found to have higher tendencies of physically expressing their aggression in comparison to the fair-skinned individuals. The level of verbal expression is higher in dark-skinned individuals in comparison to the medium or fair-skinned ones. Hence, it might be concluded that the present study finding is in concurrence with previous study findings.

A study published in the “Social Issues Research Centre” official website, establishes several important facts. It states that women are more critical of their appearance than the men. Research findings show that majority of the women are dissatisfied with what they see in the mirror. On the other hand, men are more likely to be either pleased with what they see or indifferent. This publication also states that our standards of beauty are getting more and more rigid and harder to attain, especially for women. In another publication by the BBC News magazine official website published by Vaidyanathan (2012) the idea among Indians that “fairness is beauty” and the growing demand of the Indians to attain fair skin is challenged.

Therefore, to conclude, the present study findings reveal that significant differences exist in narcissism, self-concept, and aggression orientation for both genders as well as skin tone. The effects are however more specific in nature. Most of the present study findings have been confirmed and correlated with previous study findings. Some of the present study findings however are entirely new and bring in the scope of further investigation.

## CONCLUSION

From the present study, several conclusions could be drawn:

- There is a significant effect of gender on some narcissism components, namely self-sufficiency and exploitativeness, as well as some specific dimensions of self-concept, physical self, and political self of an individual.
- There is a significant effect of skin tone on the narcissistic component exhibitionism, and on aggression orientation, specifically predisposition tendency, physical expression, and verbal expression of an individual.
- The interaction between gender and skin tone has a significant effect on a specific component of narcissism- exhibitionism, a specific domain of self-concept, job-related self-concept of an individual.
- Though this is a comparatively unexplored area, the limited research findings in this area establish a concurrence with the present study findings.

However, the present study is also bound by several limitations. These limitations will be mentioned hereafter.

## LIMITATIONS

- Due to time constraints some more dimensions which could be explored to find out the effect of skin colour on the perception of individuals about the concept of beauty or attractiveness were left unexplored.
- Through the present study it is found whether there is a significant effect of skin tone and gender on the dependent variables. However, it is not clear from the present findings

whether this difference due to gender or skin colour is due to biological factors like gene composition, structural differences etc, or due to the collective effect of social phenomena like learnt gender differences, stereotypes, genderism and gender-based prejudice and social perception of external attributes like skin colour.

- The sample has been classified into the three levels of the IV, skin colour based on a measuring skin colour scale. It must be noted that there are various modern technologies available, like laser techniques, spectrophotometry etc. But we have been bound to use a simple and less sophisticated measure for the purpose due to monetary and practical limitations.
- Since the study sample is mostly limited to the people of eastern India, the range of variability based on skin color is comparatively restricted.

## **FUTURE IMPLICATIONS**

- The present study is a new and fresh area of exploration in our nation. The findings of the present study give us ample scope for further exploration to find out the causes behind the effects that have been found significant.
- These study findings can also be applied to find out the strengths and weaknesses of the personality of an individual based on their skin colour and gender. This might act as a steppingstone to understanding how an individual can be used as a resource in the working mechanism of a society or an organization.
- It remains an interesting area to explore how much of the differences based on skin colour and the cause-and-effect relationship are based on skin-deep differences or

differences culminated because of sociocultural feedback, discrimination, prejudice, and judgments based on skin colour received throughout the lifetime of an individual.

- These study findings can also be applied to determine personality differences based on gender. It also ascertains the changing pattern of gender differences in modern society.

## REFERENCES

- 28-Item General Health questionnaire. (n.d.). Physiopedia. [https://www.physio-pedia.com/28-Item\\_General\\_Health\\_Questionnaire](https://www.physio-pedia.com/28-Item_General_Health_Questionnaire)
- Agarwal, S. (2012, June 26). *Indians obsessed with fairness creams*. The Times of India. <https://timesofindia.indiatimes.com/life-style/beauty/indians-obsessed-with-fairness-creams/articleshow/13892601.cms>
- Anderson, J. C., Feia, E., & Ceulemans, P. (2011). Skin color and perceptions of ambiguous aggression. *UW-Stout Journal of Student Research*.
- Aşçi FH. An investigation of age and gender differences in physical self-concept among Turkish late adolescents. *Adolescence*. 2002 Summer;37(146):365-71. PMID: 12144165.
- Bandura, A. (1978). Social Learning Theory of Aggression. *Journal of Communication*, 28(3), 12–29. <https://doi.org/10.1111/j.1460-2466.1978.tb01621.x>
- Benis, A. M. (2008). *NPA Theory of Personality*. Lulu. com.
- Björkqvist, K. (2018). Gender differences in aggression. *Current Opinion in Psychology*, 19(1), 39–42. <https://doi.org/10.1016/j.copsyc.2017.03.030>
- Charles, C. (2010). *Skin bleaching in Jamaica: Self-Esteem, racial Self-Esteem, and Black identity transactions*. [https://papers.ssrn.com/sol3/papers.cfm?abstract\\_id=2372183](https://papers.ssrn.com/sol3/papers.cfm?abstract_id=2372183)
- Coard, S. I., Breland, A. M., & Raskin, P. M. (2001). Perceptions of and preferences for skin color, Black racial identity, and Self-Esteem among African Americans<sup>1</sup>. *Journal of Applied Social Psychology*, 31(11), 2256–2274. <https://doi.org/10.1111/j.1559-1816.2001.tb00174.x>
- Crick, N. R., & Grotpeter, J. K. (1995). Relational Aggression, Gender, and Social-Psychological Adjustment. *Child Development*, 66(3), 710–722. <https://doi.org/10.1111/j.1467-8624.1995.tb00900.x>

- Dutra, E. (2016). Rogers and Heidegger: Is a gathering for a new view of the self possible? *Estudos De Psicologia (Campinas)*, 33(3), 413–423. <https://doi.org/10.1590/1982-02752016000300005>
- Eagly, A. H., Karau, S. J., & Makhijani, M. G. (1995). Gender and the effectiveness of leaders: A meta-analysis. *Psychological Bulletin*, 117(1), 125–145. <https://doi.org/10.1037/0033-2909.117.1.125>
- Foster, J. D., Campbell, W. K., & Twenge, J. M. (2003). Individual differences in narcissism: Inflated self-views across the lifespan and around the world. *Journal of Research in Personality (Print)*, 37(6), 469–486. [https://doi.org/10.1016/s0092-6566\(03\)00026-6](https://doi.org/10.1016/s0092-6566(03)00026-6)
- Hill, M. E. (2002). Skin color and the perception of attractiveness among African Americans: Does gender make a difference? *Social psychology quarterly*, 77-91.
- Kaplan & Sadock's Comprehensive Textbook of Psychiatry. (2007). <https://www.wolterskluwer.com/en/solutions/ovid/kaplan--sadocks-comprehensive-textbook-of-psychiatry-761>
- Kim, Y., & Calzada, E. J. (2019). Skin color and academic achievement in young, Latino children: Impacts across gender and ethnic group. *Cultural Diversity and Ethnic Minority Psychology*, 25(2), 220–231. <https://doi.org/10.1037/cdp0000230>
- Kohlberg's (1958) Three-stage Cognitive Developmental Theory of Gender Typing Suggests That Children Begin by Categorizing Themselves as Male or Female, and Then Feel Rewarded by Behaving in Gender-consistent Ways - Google Search.
- McGuire, W. J., McGuire, C. V., & Winton, W. M. (1979). Effects of household gender composition on the salience of one's gender in the spontaneous self-concept. *Journal of Experimental Social Psychology*, 15(1), 77–90. [https://doi.org/10.1016/0022-1031\(79\)90020-9](https://doi.org/10.1016/0022-1031(79)90020-9)

MSEd, K. C. (2022, November 7). What is Self-Concept? Very well Mind.

<https://www.verywellmind.com/what-is-self-concept-2795865>

Mucherah, W., & Frazier, A. D. (2013). How deep is skin-deep? The relationship between skin color satisfaction, estimation of body image, and self-esteem among women of African descent. *Journal of Applied Social Psychology*, 43(6), 1177–1184.

<https://doi.org/10.1111/jasp.12081>

Netscribes (India) Pvt. Ltd. research reports. (2011).

<https://www.marketresearch.com/Netscribes-India-Pvt-Ltd-v3676/>

Patel, Dr. B. M. & RET Academy for International Journals of Multidisciplinary Research (RAIJMR). (2014). A study regarding the Self-Concept of degree colleges' principals. In *International Journal for Research in Education: Vol. 3* (Issue: 1) [Journal-article].

[https://www.raijmr.com/ijre/wp-content/uploads/2017/11/IJRE\\_2014\\_vol03\\_issue\\_01\\_02.pdf](https://www.raijmr.com/ijre/wp-content/uploads/2017/11/IJRE_2014_vol03_issue_01_02.pdf)

Raskin, R., The Institute of Personality Assessment and Research, Terry, H., & The Institute of Human Development. (1988). A Principal-Components analysis of the narcissistic personality inventory and further evidence of its construct validity. In *Journal of Personality and Social Psychology* (Vol. 54, Issue 5, pp. 890–902) [Journal-article].

American Psychological Association, Inc.  
<http://www.columbia.edu/~da358/npi16/raskin.pdf>

Rushton, J. P., & Templer, D. I. (2012). RETRACTED: Do pigmentation and the melanocortin system modulate aggression and genderuality in humans as they do in other animals? *Personality and Individual Differences*, 53(1), 4–8.

<https://doi.org/10.1016/j.paid.2012.02.015>

- Rys, G. S., & Bear, G. G. (1997). Relational aggression and peer relations: Gender and developmental issues. *Merrill-Palmer Quarterly* (1982-), 87-106.
- Simply Psychology. (2023, December 20). *Self-Concept in Psychology: Definition & Examples*. <https://www.simplypsychology.org/self-concept.html>
- Social psychological theories of aggression*. (2010, September 17). Ashbourne College's Psychology Blog. <https://ashbournecollegepsychology.wordpress.com/psya3/aggression/social-psychological-theories-of-aggression/>
- Studymode.com. (2021, August 10). *Carl Rogers: Self Actualization and Self Concept*. 721 Words | Studymode. <https://www.studymode.com/essays/Carl-Rogers-Self-Actualization-And-Self-47095878.html>
- Thompson, M. S., & Keith, V. M. (2001). THE BLACKER THE BERRY. *Gender & Society*, 15(3), 336–357. <https://doi.org/10.1177/089124301015003002>
- Vaidyanathan, B. R. (2012, June 5). Has skin whitening in India gone too far? *BBC News*. <http://www.bbc.co.uk/news/magazine-18268914>
- Wade, T. J. (1996). The relationships between skin color and Self-Perceived global, physical, and genderual attractiveness, and Self-Esteem for African Americans. *Journal of Black Psychology*, 22(3), 358–373. <https://doi.org/10.1177/00957984960223006>
- Wikipedia contributors. (2024, March 13). *Otto F. Kernberg*. Wikipedia. [https://en.wikipedia.org/wiki/Otto\\_F.\\_Kernberg#:~:text=According%20to%20Kernberg%2C%20the%20self,libidinally%20and%20aggressively%20invested%20components.](https://en.wikipedia.org/wiki/Otto_F._Kernberg#:~:text=According%20to%20Kernberg%2C%20the%20self,libidinally%20and%20aggressively%20invested%20components.)
- Wikipedia contributors. (2024, March 17). *Fitzpatrick scale*. Wikipedia. [http://en.wikipedia.org/wiki/Fitzpatrick\\_scale](http://en.wikipedia.org/wiki/Fitzpatrick_scale)

Wikipedia contributors. (2024, March 24). *Self-image*. Wikipedia.

<http://en.wikipedia.org/wiki/Self-image>

Zeigler-Hill, V., & Wallace, M. (2011). Racial differences in narcissistic tendencies. *Journal of Research in Personality*, 45(5), 456–467. <https://doi.org/10.1016/j.jrp.2011.06.001>