

# Exploring the Application of the Body Image Concern Inventory Scale in Diverse Research Studies

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## Exploring the Application of the Body Image Concern Inventory Scale in Diverse Research Studies

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### ABSTRACT

**Purpose:-** *Body Image Concern Inventory Scale (BICI), was established by Danny Axsom, Heather L. Littleton and Cynthia L. S. Pury in 2005 to recognize the increased prevalence of body dissatisfaction and related psychological distress. The study employs assessment of the Body Image Inventory Scale used in various researches and literature articles to gather rich, in-depth insights of its reliability and validity.*

**Methodology:** *The objective of this study is to delve into the intricacies of the topic at hand in 30 research articles and literatures done over 15 years. Researchers will investigate the body image perceptions and related psychological factors in various articles available online, shedding light on their potential areas of distress related to body image in female & male genders across all ages.*

**Findings:** *The study provides a holistic understanding of the various researches done about body image with the help of BICI scale. The findings of this study establishes that the BICI scale proves to be a robust and dependable instrument for estimating dysmorphic apprehension in people. The scale exhibits high levels of reliability and validity, and is user friendly indicating its suitability for use in various research articles and clinical background.*

**Originality/Value:** *The study reviews 30 cases using BICI scale to evaluate Body dysmorphic behaviour done in last 15 years.*

**Paper Type:** *Review of prevailing literature*

**Keywords:** BICI, BDD, Body Dissatisfaction, Research Studies

### 1. INTRODUCTION :

1. In today's society, body image has emerged as a significant aspect influencing individuals' perceptions of themselves and their holistic wellness. The pursuit for an idealized body shape, often portrayed by media and societal standards, has led to amplified incidence of body dissatisfaction and related emotional turmoil. Considering the complexity of body image and its impact on mental health requires reliable and valid measurement tools. The Body Image Concern Inventory Scale (BICI) is a tool meant to evaluate the same, which has gained prominence as a comprehensive and multidimensional instrument for evaluating body image discernments (Furnham, A., & Greaves, N. (1994). [1]).

The BICI scale is designed to capture the multifaceted nature of body image and its mechanisms, such as presence of outward aspect, visage orientation, body areas satisfaction, and obese obsession. It allows researchers and clinicians to quantitatively assess an individual's subjective experience and cognitive-affective evaluation of their own body. By examining these dimensions, the scale helps in identifying specific areas of concern and contributes to a more complete grasp of body image.

The findings will contribute to our knowledge of body image and the actions targeted at promoting positive body image & reducing body dissatisfaction.

## 2. OBJECTIVE :

- To illustrate the importance of incorporating valid & reliable measurement tool such as the BICI scale in research and medical practice.
- By utilizing such scales, professionals can gain a better understanding of body image concerns.
- By utilizing such scales developing targeted interventions would be easy by the health care professionals, It will facilitate positive body image development and improved overall well-being in the society.

## 3. METHODOLOGY :

The study will employ a mixed-methods approach, studying the quantitative assessments and qualitative interviews or focus groups of the researches done using BICI scale so as to gather rich, in-depth insights into participants' experiences and perceptions. By utilizing this extensive methodology, the study aims to provide a holistic understanding of body image within the selected population. This study aims to understand the use of the BICI Scale in 30 research articles and literatures done over 15 years. Researcher will investigate the body image perceptions and associated psychological factors in various articles available online, shedding light on their subjective experiences, attitudes, and possible ranges of distress related to body image in male and female genders across all ages.

## 4. DEFINITION :

The Body Image Concern Inventory (BICI) was developed by L. Littleton, Danny Axsom and Cynthia L. S. Pury in the year 2005 as a 19-question assessment (scoring between 19 to 95) for measuring of Body Dysmorphic Disorder. BICI scale has been found to be a strongly reliable and utmost valid instrument in several studies (Littleton, H., & Breitkopf, C. (2008). [2]).

## 5. RESEARCH STUDIES ANALYSED :

### 5.1 BICI Used For Clinical and Subclinical Diagnosis of BDD

40 undergraduate students who were a known case of body dysmorphic and eating disorder disorders, the BICI exhibited notable discriminatory power. The scale demonstrated a sensitivity of 96%, indicating its ability to accurately identify individuals with clinical disorders. Additionally, it showed a specificity of 67%, signifying its capacity to correctly classify individuals with and without the symptoms. These results highlight that the scale had strong potential to diagnose of the BICI in differentiating between the clinical and subclinical manifestations of body dysmorphic disorder and disorders related to eating among this specific group of the students (Champlain, A., & Laumann, A. (2015). [3]).

### 5.2 BICI Among those Seeking Cosmetic Surgery

In a sample of 117 individuals seeking cosmetic rhinoplasty, BICI was employed alongside psychiatric interviews to assess the presence of body dysmorphic disorder (BDD). The scale demonstrated a sensitivity of 93.5%, indicating its ability to accurately identify individuals with BDD. Furthermore, it exhibited a specificity of 80.8%, suggesting its capacity to correctly classify individuals without BDD. At a cutoff score of 42, the BICI yielded a positive predictive value of 63.4%, indicating the likelihood of true positive BDD cases, and a negative predictive value of 96.5%, indicating the probability of true negative cases. These findings emphasize the effectiveness of the BICI in detecting BDD among individuals seeking cosmetic nose job, thereby facilitating the identification of patients who may benefit from further psychiatric evaluation and intervention [4]

### 5.3 BICI In English And Mandarin To Assess Young Adults For Body Image Concerns

Wang and his team conducted two studies to evaluate the psychometric features of the BICI among Chinese young adults. The BICI, was administered in both Mandarin & English to a total of 1,231 participants in the first study. The first aspect examined was the test-retest reliability of the scale over a period of six month, which yielded a consistency measure of 0.73 for the overall scale. This indicates a satisfactory level of consistency in participants' replies in the time frame. Also a positive factor investigation was employed to assess the underlying factor edifice of the BICI. The results supported the three-factor model, which includes the following dimensions: avoidant behaviours (AB), safety behaviours against perceived flaws (SB), and negative appearance evaluation (NE). These factors

signify diverse facets of physical appearance experiences and contribute to a comprehensive understanding of body image concerns among Chinese young adults. These findings underscore the robustness and validity of the BICI in assessing body image perceptions within this specific population. The observed test-retest reliability indicates the steadiness of answers in time, even though the established three-factor structure further wires the multidimensional nature of body image skills captured by the BICI. The Chinese version of the BICI proves to be a valuable tool for researchers and clinicians who work with Chinese young adults, enabling a more accurate assessment of body image concerns and facilitating targeted interventions to promote positive body image development [5].

#### **5.4 BICI Used To Compare Body Image Disturbance In Individuals With Eating Disorders And Matched Control Groups**

In a study done by Wang and his team, BICI was utilized to investigate the differentiation of body image trouble between individuals with disorders in eating and matched control groups. The study encompassed 47 female patients diagnosed with eating disorders and 56 participants from the control group.

The results showed that the avoidant behaviours measurement of the BICI scale revealed the most significant differentiation between individuals with eating disorders and the matched control group. This finding suggests that individuals with eating disorders tend to engage in avoidance strategies more frequently when have to deal with body image-related situations compared to the control group.

Moreover, the safety behaviour against perceived flaws dimension of the BICI demonstrated the strongest differentiation between non-clinical and clinical groups. This implies that safety behaviour, which involve protective actions to conceal perceived flaws, existed among individuals with eating disorders compared to non-clinical individuals. The effect size (Cohen's d) of 0.75 specifies a modest distinction between these groups.

Furthermore, the negative appearance assessment measurement of the BICI is connected with adverse effect and personal well-being, demonstrating an inverse association in both clinical and non-clinical groups. This recommends that people with higher levels of negative appearance evaluation tend to experience more adverse sentiments and have lower personal well-being.

Additionally, the study revealed that patients with eating disorders scored higher on the BICI scale's total score and on the three subscale scores (safety behaviour against perceived flaws, avoidant behaviour and negative appearance evaluation) compared to the control group. This difference highlights the heightened body image concerns and dysfunctions experienced by individuals with eating disorders.

These results highlight the potential of the BICI scale to capture eloquent discrepancies amongst people with eating ailments and control groups, providing insights into specific body image dimensions associated with eating disorders. The BICI scale can serve as a valuable tool in assessing body image disturbances in clinical settings and contribute to the development of personalized interferences for people with eating disorders [5].

#### **5.5 BICI Scale To Study Relationship Of BDD on Selfitis Disorder And Narcissism**

A study was conducted to observe the mediating role of body dysmorphic disorder (BDD) in the connection between narcissism and selfitis disorder among 400 young adults between 25-35 yrs. of age. BICI scale was used to assess BDD. The findings revealed that narcissism positively correlated with both BDD symptoms and selfitis disorder. Additionally, BDD was found to partially mediate the association amongst narcissism and selfitis disorder. Outcomes revealed that both selfitis disorder and narcissism are greater in males, while features of body dysmorphic disorder is more in females as compared to males These results provide insights into the psychological mechanisms linking narcissism, BDD, and the development of selfitis disorder in young adults [6].

#### **5.6 BICI To Assess BDD In PCOD Patients And Its Association With Respect to Place of Birth And Ethnicity.**

In this cross-sectional study, the co-relation of ethnic background and place of one's birth on emotional and psycho-sexual health of women with disease of polycystic ovarian syndrome (PCOS) was investigated. The study included 1008 females with polycystic ovarian disorder who completed the study consisting of 5 components, including validated questionnaires.

The findings revealed that females of non-white background had more rates of low body dysmorphic disorder (BDD) but higher rates of depression compared to white females. Specifically, the females born in India had complex levels of anxiety and depression but lower rates of BDD compared to those born in the United Kingdom. Additionally, non-white females and females who were born in India reported lower scores in all sexual domains, except desire, indicating advanced levels of sexual dysfunction.

Interestingly, the study also found that white females and those born in the United Kingdom reported elevated levels of body image anxieties & humiliation around weight. These conclusions highlight how important it is to consider ethnicity and place of birth while providing cross-disciplinary care for women with PCOS, as different groups may experience distinct emotional and psychosexual challenges. Overall, this study underscores the need for tailored interventions and support for females with PCOS, taking into account their upbringings and origins to address the diverse emotional, psychosexual, and concerns with body image they may face [7].

### **5.7 BICI In Hindi – Its Validity & Reliability.**

This study aimed to adapt the Body Image Concern Inventory scale (BICI) into Hindi language and evaluate its psychometric characteristics in a Hindi-speaking population. Following the World Health Organization guidelines, the scale was deciphered into Hindi language. The Hindi version of the BICI, along with other tools, was administered to 157 participants aged 15-25 years. Exploratory factor analysis revealed 2 factors: "symptom interference" (12 items) and "dysmorphic symptoms" (7 items). The subscales and overall scale demonstrated satisfactory reliability (ranging from .789 to .871). Concurrent validity ranged from 0.38 to 0.42. These results specify that the Hindi Version of the BICI is a valid & a good reliable tool for evaluating appearance concerns in Hindi-speaking populations [8].

### **5.8 BICI To Compare Body Image Concerns In Adolescents And Adults**

This research included 4,919 Chinese adolescents and adults (3,165 women, 1,754 men) aged 15-24 who completed the Body Image Concern Inventory scale (BICI) to measure dysmorphic appearance concern. The analysis revealed a strong relationship between age and dysmorphic appearance concern, with the highest levels stated at around 20 years old for both sexes. Females had elevated levels of dysmorphic appearance concern compared to males, primarily due to more frequent engagement in protective actions. The women residing in urban areas scored more on the BICI than those living in rural areas. Psychological anguish itself reported for a major portion of the variance in dysmorphic appearance concern, explaining 14.7% & 17.0% of the variance among both genders, above & beyond the impact of age and BMI. These findings suggest that dysmorphic appearance concern is prevalent among Chinese male & female adolescents and young adults, highlighting its negative impact on psychological well-being [9].

### **5.9 BICI to predict Athlete's Success perception, Body Image and Role Efficacy**

This study aimed to examine the interpreters of athletic achievement perception among physical education students, concentrating on the functions of body image and self-efficacy, with the mediating effect of achievement motivation. The research utilized a descriptive and correlational approach, employing path analysis. A sample of 311 male and female physical education students from universities in South Khorasan province, Iran, partook in the research study.

The participants completed questionnaires including the Perception of Success Questionnaire (POSQ), Body Image Concern Inventory scale (BICI), General Self-Efficacy Scale, and Sport Orientation Questionnaire (SOQ). The data were evaluated using structure equation modelling and path analysis in SPSS24 and Amos24 software.

The findings revealed that body image and self-assurance directly influenced athletic success perception, indicating a positive relationship. Additionally, these variables indirectly impacted athletic success perception through their influence on achievement motivation. The results underscored the reputation of these constructs in predicting athletes' success.

Overall, the study highlighted the significance of an optimistic body image and self-efficacy in athletes' perception of success. It suggested that having a desirable body image contributes to increased interest in sports participation and exercise, leading to higher motivation and ultimately enhancing training and



competition success. These verdicts are in line with prior research emphasizing the association between self-efficacy and motivation for progress [10].

#### **5.10 BICI To Examine Effects of Media On Cosmetic Surgery:**

This analysis intended to scrutinize the properties of mass media practice on the propensity of young Iranian women towards cosmetic surgery, with a focus on the role of media pattern incorporation of beliefs about one's appearance, and body image. The study utilized a descriptive-correlational design and employed structural equation modelling as the analysis method.

325 young women from the University of Isfahan in the year 2019-2020 participated in the study. They completed various questionnaires, including the amount of media preoccupation and the beliefs about appearance scales, body image concerns inventory, scale for sociocultural attitudes to appearance, and scale related to compensatory tendencies for beauty and fitness questionnaires.

The findings of the study, explored using SEM, verified that the model had good fit indices. The simple effects analysis indicated that all direct effects were significant, except for the preoccupation of beliefs about appearance on the inclination towards cosmetic surgery. Moreover, the indirect effects analysis displayed that all indirect effects were significant.

Overall, the results emphasize the significance of media pattern internalization and body image concerns in shaping the inclination of Iranian females towards cosmetic surgery. The findings highlight the influence of media exposure and societal attitudes on women's perceptions of appearance and their decision to undergo cosmetic procedures [11].

#### **5.11 BICI Used To Evaluate Association Between Certain Symptoms Of PCOS And Depression**

This single-centered cross-sectional research was done to understand the impression of body image perception on the intensity of depression and quality of life in polycystic ovarian syndrome (PCOS) patients diagnosed with depression. The study included 80 women with PCOS who met the eligibility criteria.

The findings of the study revealed a suggestion between few indicators of PCODS and depression, representing that these indicators may fluctuate over the course of the illness. The results highlight the importance of implementing regular and continuous screening for psychiatric morbidity rather than relying on one-time assessments.

Furthermore, the study demonstrated a higher likelihood of negative body image perception and depressive signs in PCODS women with depression. This suggests that body image concerns can contribute to psychiatric illness in PCOS patients, emphasizing the need for prioritized treatment to enhance their quality of life.

In a nutshell, the research underscores the significance of addressing body image perception, depression, and psychiatric well-being in PCOS patients. Continuous screening for psychiatric morbidity is crucial, and interventions targeting body concerns image and depressive indicators can have an important role in improving the quality of life for individuals with PCOS [12].

#### **5.12 BICI To Understand Impact Of PCOS And Related Factors Like Income, Physical Appearance and Physical Health On Body Image Concerns In Adolescents**

This cross-sectional study compared body image concerns in youngsters with and without polycystic ovarian syndrome disease (PCOS). The research was done on 1076 participants, with 344 having PCOS and 732 without PCOS. The results showed that youngsters with PCOS had higher body image concerns as compared to those who didn't have PCOS. Factors such as hyperandrogenism, abnormal uterine bleeding, obesity, and household income were allied with body image concerns. The study highlights the impact of PCOS and correlated factors on body image concerns in adolescents [13].

#### **5.13 BICI To Understand Influence Of Celebs On Males & Females**

This study examined body image concerns, media influence, and satisfaction with appearance among participants. Findings indicated that both males & females had body image problems, with females being more influenced by celebrities. Only a small percentage of participants were gratified with their appearance, and many spent times checking their appearance and seeking reassurance from others. The study supported a three-factor model of negative appearance evaluation, safety behaviours & avoidant behaviours. Female participants had a higher prevalence of body dysmorphic concerns. Overall, the

study highpoints the prevalence of body image concerns and the impact of media and socio-personal factors on individuals' perceptions of their appearance. Confirmatory factor analysis was in sync with the former studies and showed 40.08 % samples showed negative appearance evaluation (NE item 1-5) out of which 35.24% were men and 44.24% were women, 38.8% illustrated to have used safety behaviours against perceived flaws (SB item 6-13) out of which 32.3% were men and 44.4% were women, 33 % showed avoidant behaviours (AB items 14-19) out of which 29.5% were men and 36.0% were women. This suggested that women had more prevalence of body dysmorphic concerns [14].

#### **5.14 BICI To Understand Association Between Body Image Concern & Mental Distress**

In this transverse study of 250 participants from universities in Islamabad, the relation between body image concern and mental distress was examined using the Body Image Concern Inventory Scale (BICI) & Kessler's Psychological Distress Scale (K-10). The results showed a significant correlation between body image concern and mental distress. Additionally, male students exhibited elevated levels of concern compared to female students. Regression analysis revealed that 40% of the variability in psychological distress could be described by body image concern. Therefore, the study highlights the importance of addressing body image concerns in relation to psychological well-being, particularly among male students [15].

#### **5.15 BICI To Assess Relationship Of BDD With Gender, Marital Status, Education And Income**

The study examined 314 Iranian students between the age of 18-55 yrs. using BICI scale. BDD was more in Unmarried students, females, those with better living standards and education or with higher family income background [16].

#### **5.16 BICI To Relate BDD And Exercise Addiction**

This study aimed to consider the hazard and defending aspects for addiction of exercise, focusing on alexithymia, self-esteem & body image concerns. 288 regular exercisers participated in the study, and data analysis revealed a strong association between alexithymia and exercise addiction, due to body image concerns. Self-esteem moderated this relationship, with higher self-esteem attenuating the effect of alexithymia on body image concerns. The results have inferences for tailored interventions in preventing and treating exercise addiction [17].

#### **5.17 BICI To Body Image Concerns During Pregnancy**

The study involved 172 pregnant smokers, assessing weight before pregnancy and body image concerns during the I trimester using the Weight Concern Scale and Body Image Concern Inventory. Smoking status was studied in the III trimester through self-report. Analysis showed that weight concerns significantly influenced continuation of smoking in late pregnancy. The suppositions advocate that theories about weight control properties of cigarettes may subsidize to pregnant women's smoking behaviour, emphasizing the importance of addressing weight concerns to facilitate successful cessation [18].

#### **5.18 BICI To Establish Relationship Between BDD And Stress**

This study compared body image and alleged stress levels between females with and without PCOS. The study included 30 females with PCOS and 30 females without PCOS from OB Gyne clinics. Females with PCOS had reduced body image and higher perceived stress linked to those who didn't have PCOS. Both groups showed a optimistic relationship between body concerns and alleged strain. These results emphasize the position of addressing psychosocial factors in treating PCOS and adopting multidisciplinary approaches that focus on improving psychological well-being alongside managing physical symptoms [19].

#### **5.19 BICI Scale Body Image Concerns And Social Media And Addiction of Internet**

This study surveyed the association between Body Image Concerns Scale (BIC) and technical addictions (Social Media Addiction & Internet addiction) in 204 samples. The results showed strong associations between BIC and technical addictions, regardless of gender & age. The research study also found significant correlations between internalizing and externalizing problems and these attributes in the total sample. These discoveries underscore the significance of considering gender and developmental stage

when studying the association between BIC and technology addictions. This study contributes to understanding the power of technology use on body image, particularly among adolescents [20].

#### **5.20 BICI In Relation To Self-Compassion, External Shame, Body Image Dissatisfaction, And Management of Appearance**

This study examined the connection between external shame, self-compassion, body image dissatisfaction, and appearance management in female university students. The sample included 377 participants who completed questionnaires. The results showed significant relationships between all variables, with shame and negative body image mediating the association between self-compassion and appearance management. Self-compassion was found to predict appearance management through these mediating variables. These findings suggest that self-compassion, along with addressing external shame and body image dissatisfaction, can affect the way individuals manage their appearance [21].

#### **5.21 BICI (modified) And Relation to Depression, Anxiety, Self-Esteem, Functional Impairment, & Body Image Distress**

The Body Image Concern Inventory Scale (BICI) was used in a sample of female undergraduates (n=761). The BICI demonstrated good homogeneity and showed expected relationships with measures of anxiety, self-esteem, depression, functional impairment, and body image disturbance. The inventory consists of three factors: appearance preoccupation, appearance concern, and coping behaviour. A shorter kind of BICI scale with nine items removed maintained its validity and reliability while improving factor construction and reliability. The BICI scale and the shorter version can be used as valid & reliable measures, but they are not effective diagnostic screens for Body Dysmorphic Disorder (BDD) [22].

#### **5.22 BICI In Relation To Family, Peer, Faith And Religious Practices**

This study inspected the connotation between the Muslim religion and body image anxieties in 475 Israeli Muslim women. The findings revealed that a stronger spiritual faith and wearing the hijab were linked to good body image, while only a stronger spiritual faith was associated with reduced body dissatisfaction. Media pressures were found to mediate the relationship between religious faith and body image outcomes. Peer pressures were more influential in promoting positive body image, while family pressures had more impact on negative body image. These results highlight the need for diverse cultural understanding of body image concepts [23].

#### **5.23 BICI To Measure Corelation Between Self-Esteem, Loneliness, Disordered Eating, And Depression**

This study surveyed the association between body image issue concern and various psychological factors among young adults. 80 individuals aged 20 to 25, with an equal number of males and females were studied. Various measures of body image concern, self-esteem, loneliness, disordered eating, and depression were used. The outcomes indicated a positive relationship between body image issues, loneliness, disordered eating, and depression, while a negative correlation was found between body image problems and self-esteem. Both genders expressed similar levels of issues with body image [24].

#### **5.24 BICI To Measure Body Image Disturbances, And Self-Esteem In those With Cushing's Disease**

This study investigated the incidence of mental health ailments, body image disturbances, & self-esteem in patients suffering with Cushing's disease (CD). Thirty-five CD patients were assessed using various measures. Results showed that 65% of patients had psychopathology, with major depressive disorder being the most common. Body image disturbances were present in 50% of patients, and 60% had reduced self-esteem. Depression was correlated negatively with self-esteem and correlated positively with body image issues. These findings highlight the importance of addressing psychopathology and body image issues in CD patients for better treatment outcomes [25].

#### **5.25 BICI Used As Pre And Post Test To Study The Effectiveness Of Meta Cognitive Therapy**

This study was done to measure the usefulness of Meta Cognitive Therapy in reducing negative Meta Cognitive beliefs, increasing positive Meta Cognitive beliefs, and decreasing body image issues in



depressed high school female students. A total of 40 students were haphazardly allocated to an experimental group (receiving Meta Cognitive Therapy) and a control group. Nine sessions of therapy was given to experimental group, while the control group had no intervention. Pre-test and post-test measures was used to collect data on body image concern and metacognitive beliefs. The results depicted that Meta Cognitive Therapy was effective in lowering the body image concern and negative beliefs and increasing positive beliefs [26].

### **5.26 BICI To Examine Relationship Between Body Image, Public Anxiety, And Psychological Distress Among Young Adults**

This study was done to observe the connection between social anxiety, mental distress & body image among young adults. 156 participants completed measures of the above said. The results showed positive correlations between body image and public anxiety, and body image and psychological distress. These findings highlight the importance of interventions and counselling for individuals with increased levels of public anxiety and psychological distress related to body image concerns [27].

### **5.27 BICI - Acceptable Measurement Invariance Between Genders**

This study examined the factor structure of the Body Image Concern Inventory Scale (BICI) in a Japanese population. The sample included 2,060 individuals (1,030 women, 1,030 men) aged 20 to 69 years. Results showed that the BICI's second-order factor model, with three first-order factors and one second-order aspect, fits the data perfectly. Cronbach's alpha values for the overall scale and its subscales were satisfactory. Invariance tests indicated that the BICI had acceptable measurement invariance between genders. These findings support the consistency of the BICI scale and its ability to compare scores between both genders in Japan [28].

### **5.28 BICI And Its Discriminative Power To Assess Healthy Population And Those With BDD.**

This study aimed to establish reference values for the Body Image Concern Inventory Scale (BICI), Whitely Index (WI), and Checklist Individual Strength (CIS-20R) questionnaires in both a healthy population and a patient with BDD, hypochondriasis, and chronic fatigue syndrome. 648 healthy individuals and 823 patients were included in the study. Cut-off values were determined for each questionnaire, indicating the upper limit of symptom severity. The discriminative power of the questionnaires was too high. This can help in making clinical decisions and determining the effectiveness of therapy [29].

### **5.29 BICI - Psychometric Properties, Validity, Reliability**

This study aimed to estimate the psychometric properties of the Body Image Concern Inventory Scale (BICI). 591 students in Tehran participated in the study. Concordant validity was estimated by linking the BICI scores with the Multidimensional Student's Life Satisfaction Scale and Frost Multidimensional Perfectionism Scale. Confirmatory factor examination confirmed the factor model of the BICI. Correlation analysis demonstrated significant negative correlations between the BICI and the other scales, representing convergent validity. The study concluded that BICI scale is reliable and valid for research study & medical purposes [30].

### **5.30 BICI To Prove Positive Correlation Between Body Image, Exercise And Eating Attitudes**

This study explored body image, eating attitudes, and exercise motivations among non-athlete women in sport centres. A total of 315 participants participated in the Eating Attitudes Test-26 (EAT-26), Body Image Concern Inventory Scale (BICI), and questions about their workout motivations. The outcome indicated a positive relationship between body image and eating attitudes. Significant differences were found in exercise motivations based on eating attitudes and body image. Women with higher scores in eating attitudes and body image exercised for shape-related reasons rather than health reasons. These findings suggest that factors beyond exercise may be the reason for the development of eating disorders among women involved in athletic activities [31].

### **5.31 BICI To Study BDD And Relationship With Personality Factor**

This study aimed to examine the connection between the Big 5 personality aspects and perfectionism (positive and negative) with body image. 373 female pupils from Alzahra University. Measures used

included the NEO-5 Factor Inventory, Positive and Negative Perfectionism scale the Farsi version, and Body Image Concern Inventory Scale. The results depicted positive correlations between agreeableness, neuroticism, and openness with body image, and a negative correlation between conscientiousness and extraversion. Results showed that perfectionism was an important forecaster of body image, and both positive & negative perfectionism playing a role. In conclusion, personality factors and perfectionism dimensions can foresee body image and its factors. The findings suggest that perfectionism is associated with body image, as perfectionists strive to present their appearance perfectly [32].

### 5.32 BICI To Understand Relationship Between BDD And Attentional Bias Towards Faces, Attractive Appearance-Related Images, And Disgusting Images

This study inspected the connection between body dysmorphic concern and selective attention in individuals with Body Dysmorphic Disorder (BDD). The participants, consisting of female heterosexual students, were assessed using a dot probe procedure with various stimuli. The findings revealed that dysmorphic concern was related with attentional bias towards faces, attractive appearance-related images, and disgusting images, depending on the duration of stimulus presentation. These results have important implications for understanding BDD and its underlying mechanisms [33].

**Table 1: Summary of the Review**

Various Setting in which BICI is used	Short Review
Used For Clinical and Subclinical Diagnosis of BDD	The scale had strong potential to diagnose of the BICI in differentiating between the clinical and subclinical manifestations of body dysmorphic disorder and disorders related to eating among this specific group of the students
BICI Among those Seeking Cosmetic Surgery	The scale has the effectiveness of the BICI in detecting BDD among individuals seeking cosmetic nose job, thereby facilitating the identification of patients who may benefit from further psychiatric evaluation and intervention.
5.4 BICI In English And Mandarin To Access Young Adults For Body Image Concerns	The Chinese version of the BICI proves to be a valuable tool for researchers and clinicians who work with Chinese young adults, enabling a more accurate assessment of body image concerns and facilitating targeted interventions to promote positive body image development.
BICI Used To Compare Body Image Disturbance In Individuals With Eating Disorders And Matched Control Groups	BICI scale captures eloquent discrepancies amongst people with eating ailments and control groups, providing insights into specific body image dimensions associated with eating disorders.
BICI Scale To Study Relationship Of BDD on Selfitis Disorder And Narcissism	BICI provide insights into the psychological mechanisms linking narcissism, BDD, and the development of selfitis disorder in young adults.
BICI To Assess BDD In PCOD Patients And Its Association With Respect to Place of Birth And Ethnicity.	BICI underscores the need for tailored interventions and support for females with PCOS, taking into account their upbringings and origins to address the diverse emotional, psychosexual, and concerns with body image they may face.
BICI In Hindi – Its Validity & Reliability	Hindi Version of the BICI is a valid & a good reliable tool for evaluating appearance concerns in Hindi-speaking populations.
BICI To Compare Body Image Concerns In Adolescents And Adults	These findings suggest that dysmorphic appearance concern is prevalent among Chinese male & female adolescents and young adults, highlighting its negative impact on psychological well-being.
BICI to predict Athlete’s Success perception, Body Image and Role Efficacy	Significance of an optimistic body image and self-efficacy in athletes' perception of success.

BICI To Examine Effects Of Media On Cosmetic Surgery	BICI helps influence of media exposure and societal attitudes on women's perceptions of appearance and their decision to undergo cosmetic procedures [10].
BICI Used To Evaluate Association Between Certain Symptoms Of PCOS And Depression	Continuous screening for psychiatric morbidity is crucial, and interventions targeting body concerns image and depressive indicators can have an important role in improving the quality of life for individuals with PCOS
BICI To Understand Impact Of PCOS And Related Factors Like Income, Physical Appearance and Physical Health On Body Image Concerns In Adolescents	Factors such as hyperandrogenism, abnormal uterine bleeding, obesity, and household income were allied with body image concerns
5.14 BICI To Understand Influence Of Celebs On Males & Females	Shows the prevalence of body image concerns and the impact of media and socio-personal factors on individuals' perceptions of their appearance.
BICI To Understand Association Between Body Image Concern & Mental Distress	Regression analysis revealed that 40% of the variability in psychological distress could be described by body image concern
BICI To Assess Relationship Of BDD With Gender, Marital Status, Education And Income	BDD was more in Unmarried students, females, those with better living standards and education or with higher family income background.
BICI To Relate BDD And Exercise Addiction	Self-esteem moderated this relationship, with higher self-esteem attenuating the effect of alexithymia on body image concerns.
BICI To Body Image Concerns During Pregnancy	The suppositions advocate that theories about weight control properties of cigarettes may subsidize to pregnant women's smoking behaviour, emphasizing the importance of addressing weight concerns to facilitate successful cessation.
BICI To Establish Relationship Between BDD And Stress	These results emphasize the position of addressing psychosocial factors in treating PCOS and adopting multidisciplinary approaches that focus on improving psychological well-being alongside managing physical symptoms.
BICI Scale Body Image Concerns And Social Media And Addiction of Internet	This study contributes to understanding the power of technology use on body image, particularly among adolescents.
BICI In Relation To Self-Compassion, External Shame, Body Image Dissatisfaction, And Management of Appearance	These findings suggest that self-compassion, along with addressing external shame and body image dissatisfaction, can affect the way individuals manage their appearance
BICI (modified) And Relation to Depression, Anxiety, Self-Esteem, Functional Impairment, & Body Image Distress	The BICI scale and the shorter version can be used as valid & reliable measures, but they are not effective diagnostic screens for Body Dysmorphic Disorder (BDD).
BICI In Relation To Family, Peer, Faith And Religious Practices	Peer pressures were more influential in promoting positive body image, while family pressures had more impact on negative body image. These results highlight the need for diverse cultural understanding of body image concepts.

BICI To Measure Corelation Between Self-Esteem, Loneliness, Disordered Eating, And Depression	The outcomes indicated an positive relationship between body image issues, loneliness, disordered eating, and depression, while a negative correlation was found between body image problems and self-esteem. Both genders expressed similar levels of issues with body image.
BICI To Measure Body Image Disturbances, And Self-Esteem In those With Cushing's Disease	Depression was correlated negatively with self-esteem and correlated positively with body image issues. These findings highpoint the importance of addressing psychopathology and body image issues in CD patients for better treatment outcomes.
BICI Used As Pre And Post Test To Study The Effectiveness Of Meta Cognitive Therapy	The results depicted that Meta Cognitive Therapy was effective in lowering the body image concern and negative beliefs and increasing positive beliefs.
BICI To Examine Relationship Between Body Image, Public Anxiety, And Psychological Distress Among Young Adults	These findings highlight the importance of interventions and counselling for individuals with increased levels of public anxiety and psychological distress related to body image concerns.
BICI - Acceptable Measurement Invariance Between Genders	Invariance tests indicated that the BICI had acceptable measurement invariance between genders.
BICI And Its Discriminative Power To Assess Healthy Population And Those With BDD.	The discriminative power of the questionnaires was too high. This can help in making clinical decisions and determining the effectiveness of therapy
BICI - Psychometric Properties, Validity, Reliability	Correlation analysis demonstrated significant negative correlations between the BICI and the other scales, representing convergent validity. The study concluded that BICI scale is reliable and valid for research study & medical purposes.
BICI To Prove Positive Correlation Between Body Image, Exercise And Eating Attitudes	These findings suggest that factors beyond exercise may be the reason for the development of eating disorders among women involved in athletic activities.
BICI To Study BDD And Relationship With Personality Factor	Perfectionism is associated with body image, as perfectionists strive to present their appearance perfectly
BICI To Understand Relationship Between BDD And Attentional Bias Towards Faces, Attractive Appearance-Related Images, And Disgusting Images	The findings revealed that dysmorphic concern was related with attentional bias towards faces, attractive appearance-related images, and disgusting images, depending on the duration of stimulus presentation.

## 6. ANALYSIS :

The findings of the study demonstrate that the Body Image Concern Inventory Scale (BICI) verifies to be a robust and dependable instrument for evaluating dysmorphic concern. The scale exhibits high levels of validity & reliability, indicating its suitability for use in various research studies and clinical settings. Furthermore, the user-friendly nature of the scale enhances its practicality and ease of implementation for researchers and healthcare professionals alike. These outcomes underscore the potential of the BIIS as a valuable tool in assessing dysmorphic concern, providing valuable insights for both academic investigations and therapeutic interventions.

**S.W.O.T ANALYSIS:** S.W.O.T. is an abbreviation for Strengths, Weaknesses, Opportunities and Threats [33].

### Strengths:-

- The scale on an average demonstrated a sensitivity of 95%, indicating its ability to accurately identify individuals with BDD. Additionally, it showed a specificity of 75%, signifying its capacity to correctly classify individuals without clinical disorders or with subclinical symptoms towards BDD.

- The negative appearance evaluation dimension of the BICI scale was closely connected to adverse effect and individual well-being, demonstrating a contrary relationship in both clinical and non-clinical groups.
- Media pattern internalization and body image stress can be judged easily

**Weakness:-**

- Women dwelling in urban set up scored more on the BICI than those living in countryside areas because the questions resonated more with them.
- Educated samples scored more on BICI as questions resonated more with them.
- The questionnaire does not directly pin point the media.

**Opportunities:-**

- The Tool has been translated in Spanish, Mandarin, Farsi, Japanese also recently to Hindi
- Those following fitness trends, social media and with celebrity influence BICI tools can be very useful.

**Threat**

- It might not be able to score the specific areas of male and female bodily insecurities
- The questionnaire can have chances of error as it doesn't cater to the everyday turmoil of countryside people like body shaming, peer and family pressure etc.

**7. CONCLUSION :**

In conclusion, the application of the Body Image Inventory Scale emerges as a significant asset in the assessment of individuals' perceptions regarding their body image and the interconnected psychological elements. This scale, utilized in our research and integrated into various studies, serves as a robust instrument to delve deeper into the intricacies of body image within a specific population. Through the systematic utilization of the Body Image Inventory Scale, our study seeks to unravel the nuanced dynamics that influence individuals' perceptions of their bodies. The comprehensive analysis facilitated by this scale not only allows for a nuanced understanding of body image but also sheds light on the intricate psychological factors that are inherently linked to these perceptions.

By employing this scale across diverse studies, our overarching goal is to contribute substantially to the expanding body of knowledge in the field of body image research. This contribution extends beyond the confines of a singular study, as the cumulative impact of incorporating the Body Image Inventory Scale in various contexts is poised to deepen and refine our collective understanding of the multifaceted nature of body image. In essence, our research endeavours aim to be a valuable and lasting addition to the broader academic discourse on body image and its psychological underpinnings.

**REFERENCES :**

- [1] Furnham, A., & Greaves, N. (1994). Gender and locus of control correlates of body image dissatisfaction. *European Journal of Personality*, 8(3), 183-200. [Google Scholar↗](#)
- [2] Littleton, H., & Breitkopf, C. (2008). The Body Image Concern Inventory: Validation in a multiethnic sample and initial development of a Spanish language version. *Body Image*, 5(4), 381-388. [Crossref↗](#)
- [3] Champlain, A., & Laumann, A. (2015). Body Dysmorphic Disorder: Screening Patients and Associated Algorithms. *Beauty And Body Dysmorphic Disorder*, 147-163. [Crossref↗](#)
- [4] Ghadakzadeh, S., Ghazipour, A., Khajeddin, N., Karimian, N., & Borhani, M. (2011). Body Image Concern Inventory(BICI) for Identifying Patients with BDD Seeking Rhinoplasty: Using a Persian (Farsi) Version. *Aesthetic Plastic Surgery*, 35(6), 989-994. [Crossref↗](#)
- [5] Wang, K., Yu, X., Yu, C., Liu, Y., Chu, M., & Zhang, R. et al. (2020). Validation of the Chinese Version of the Body Image Concern Inventory. *Evaluation & The Health Professions*, 45(2), 204-214. [Crossref↗](#)



- [6] Aroosa, Bibi, H., Naz, S., & Afsar, F. K. (2023). Narcissism and Selfitis Disorder Features among Young Adults: Body Dysmorphic Disorder as Mediator *Pakistan Journal of Health Sciences*, 4(03), 185–189. [Google Scholar](#)
- [7] Kempegowda, P. (2022). Emotional and psychosexual wellbeing in polycystic ovary syndrome: A multicounty survey. *Indian Journal of Endocrinology & Metabolism*, 26, 67-68. [Crossref](#)
- [8] Verma, K., & Verma, S.(2023). Hindi Adaptation and validation of Body Image Concern Inventory. *Mind and Society*, 12(01), 33–40. [Crossref](#)
- [9] Liu, S., Ma, J., Fan, Z., Yu, C., Wang, K., & Littleton, H. L. (2023). Dysmorphic appearance concern among Chinese adolescents and emerging adults. *Journal of Obsessive-Compulsive and Related Disorders*, 36, [Crossref](#)
- [10] Sahebkar, M. A., & Khazaei, S. (2023). Predicting Athletic Success Perception based on Body Image and Self-Efficacy in Physical Education Students: The Mediating Role of Achievement Motivation. *Iranian Evolutionary and Educational Psychology Journal*, 5(2), 1-13. [Crossref](#)
- [11] Khanzadeh, M., & Aghamohamadi, S. (2023) Media use and the tendency for cosmetic surgery among young Iranian women: A structural model. *Journal of Fundamentals of Mental Health*,25(1), 59-67. [Google Scholar](#)
- [12] Agrawal, P., Tandon, S. K., Kanhere, A., Gupta, P., & Borasi, M. (2023). Depression In Polycystic Ovarian Syndrome Patients And Effect Of Body Image Perception And Quality Of Life. *Int J Acad Med Pharm*, 5(3), 392-398. [Google Scholar](#)
- [13] Naz, M. S. G., Ozgoli, G., Mousavi, M., & Tehrani, F. R. (2023). Polycystic ovary syndrome and body image concerns during adolescence. *Journal of Pediatric Nursing*,71 [Crossref](#)
- [14] Thomas, S. B., & Kotian, S. (2021). A Systematic Review Of Research On The Influence Of The Glamour World On Body Image, *Journal of emerging technologies and innovative research(JETIR)*,8(12), 523-527. [Google Scholar](#)
- [15] Rashid, Z., Arzeen, N., & Shah, M. (2021). Body Image And Psychological Distress Among University Students. *Journal of Postgraduate Medical Institute*, 35(3), 181-184. [Crossref](#)
- [16] Kasmaei, P., Farhadi Hassankiade, R., Karimy, M., Kazemi, S., Morsali, F., & Nasollahzadeh, S. (2020). Role of Attitude, Body Image, Satisfaction and Socio-Demographic Variables in Cosmetic Surgeries of Iranian Students. *World journal of plastic surgery*, 9(2), 186–193. [Crossref](#)
- [17] Gori, A., Topino, E., Pucci, C., & Griffiths, M. D. (2021). The relationship between alexithymia, dysmorphic concern, and exercise addiction: The moderating effect of self-esteem. *Journal of Personalized Medicine*, 11(11), 1111. [Crossref](#)
- [18] Correll, J. A., Dalton, W. T., & Bailey, B. (2013). Weight concerns, body image, and smoking continuation in pregnant women in rural Appalachia. *American Journal of Health Behavior*, 37(6), 734-744. [Crossref](#)
- [19] Pimpale, O., & Kapure, R. (2022). Exploring the difference and relationship between Women with PCOS and without PCOS for Body Image and Perceived Stress, *Indian Journal of social sciences and Literature Studies*, 8(1), 446-449 [Google Scholar](#)
- [20] Mesce, M., Cerniglia, L., & Cimino, S. (2022). Body Image Concerns: The Impact of Digital Technologies and Psychopathological Risks in a Normative Sample of Adolescents. *Behavioural Sciences*, 12(8), 255. [Crossref](#)
- [21] Zoghi Paidar, M., Darvehei, F., & Hajimoradi, R. (2020). Structural Model of Appearance Management based on Body Image Dissatisfaction, External Shame, and Self-compassion. *Clinical Psychology Studies*, 11(41), 159.[Crossref](#)
- [22] Collison, J., & Mahlberg, J. (2019). Psychometric evaluation of the Body Image Concern Inventory in an undergraduate sample. *Clinical Psychologist*, 23(2), 112-123. [Crossref](#)

- [23] Sidi, Y., Geller, S., Abu Sinni, A., Levy, S., & Handalzalts, J. E. (2020). Body image among Muslim women in Israel: exploring religion and sociocultural pressures. *Women & Health*, 60(10), 1095-1108. [Crossref](#)
- [24] Kakkar, S. (2020). To assess the relationship of body image concern with self-esteem, loneliness, disordered eating, and depression among young adults. *International Journal of Indian Psychology*, 8(4). [Google Scholar](#)
- [25] Sharma, A., Sawant, N., & Shah, N. (2018). A study on psychiatric disorders, body image disturbances, and self-esteem in patients of Cushing's disease. *Indian Journal of Endocrinology and Metabolism*, 22(4), 445. [Google Scholar](#)
- [26] Simin Gholamrezaei, S., Yousefvand, M., Ghazanfari, F., & Farokhzadian, A. A. (2018). The Effectiveness of Meta Cognitive Therapy in Meta Cognitive Beliefs Change and Body Image Concern (BICI) of Depressed Female High School Students. *Journal of Instruction and Evaluation*, 10(40), 105-127. [Google Scholar](#)
- [27] Luqman, N., & Dixit, S. (2017). Body image, social anxiety and psychological distress among young adults. *International Journal of Multidisciplinary and Current Research*, 9(1), 149-152. [Google Scholar](#)
- [28] Tanaka, M., Tayama, J., & Arimura, T. (2015). Factor structure of the Body Image Concern Inventory in a Japanese sample. *Body Image*, 13, 18-21. [Google Scholar](#)
- [29] Schulte-van Maaren, Y. W., Giltay, E. J., van Hemert, A. M., Zitman, F. G., de Waal, M. W., Van Rood, Y. R., & Carlier, I. V. (2014). Reference values for the body image concern inventory (BICI), the whitely index (WI), and the checklist individual strength (CIS-20R): the Leiden routine outcome monitoring study. *Journal of affective disorders*, 164, 82-89. [Crossref](#)
- [30] Pooravari, M., Habibi, M., Parija, H. A., & Tabar, S. H. S. A. (2014). Psychometric properties of body image concern inventory in adolescent. *Pajoohandeh Journal*, 19(4), 189-199. [Google Scholar](#)
- [31] Ahmadi, V., Khajehdin, N., Firoozi, A. A., Mirshekar, S., Menati, W., Eydi, M., & Baygi, A. S. (2014). Eating attitudes, body image concept and exercise reasons in female athletes. *Journal Of Basic Research And Medical Sciences*, 1(2), 1-7 [Google Scholar](#)
- [32] Rasooli, S. S., & Lavasani, M. G. (2011). Relationship between personality and perfectionism with body image. *Procedia-Social and Behavioural Sciences*, 15, 1015-1019. [Google Scholar](#)
- [33] Onden-Lim, M., Wu, R., & Grisham, J. R. (2012). Body image concern and selective attention to disgusting and non-self-appearance-related stimuli. *Body Image*, 9(4), 535-538. [Google Scholar](#)
- [34] Foong, L. M. (2007). Understanding of SWOT Analysis [E-book]. [Google Scholar](#)

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