

The Influence of Psychological Factors for Development and Maintenance Body Dysmorphic Disorder among Female Students in Kurdistan Iraq Region “across-cultural study”

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Abstract

The objective of this study is to identify the psychological factors that influence for development body dysmorphic disorder among female students in Kurdistan community. The study adapts a cognitive behavior model for measuring the relationship between the psychological factors and development body dysmorphic disorder. Across-cultural study with 460 females' student attended to the study from six universities in Kurdistan Iraq region. The self-report questionnaires which were divided into several scales and sub- scales used for measuring psychological factors and body dysmorphic it content Rosenberg self-esteem scale (RSER), perfectionistic self-Presentation scale (PSPS), body image behavior inventory (BIB)-3, body –shame sub-scale, and body shape questionners-16 items the English version. All the scales and sub scales translate directly by four experts in English to Arabic and English to Kurdish languages. The pilot survey was conducted with (120) respondent to evaluate the internal consistency by using Cronbach's alpha for reliability. The Cronbach's alpha for BSQs was (0.89), Rosenberg self-esteem was (0.71), perfectionism PIP (0.73), body-shame sub scale (0.79), and body image behaviors BIB-3(0.88). The validity was examined through the psychometric evaluation of the instrument using the principle component analysis (PCA). Also structural equation modeling (SEM) was used to evaluate the overall fit of model as well as assess the structural model all together. The results showed significant relationship between psychological factors in terms of (self-esteem, perfectionism, body-shame, and body image behavior) and development of body dysmorphic disorder, also there were moderator effect from racial on the relationships, but no moderator effect from Islamic al-hijab on the relationship between psychological factors and BDD. According to the results the intervention programmers for this specific population are recommended

Key words: Body dysmorphic disorder, body shape dissatisfaction, psychological factor, body image behavior, body-sham

1. Introduction

Body dysmorphic disorder “refers to a person's perceptions, attitudes and experiences concerning his/her body, especially its appearance” (Cash & Pruzinsky, 2002; Thompson, Heinberg, Ahab & Tantleff-Dunn, 1999). Therefore, these experiences and attitudes with which the person goes through life may then cause satisfaction or dissatisfaction with his/her body image. Furthermore, individuals who are dissatisfied have a negative and distorted body image, with excessive beliefs and a lack of the self-esteem that appears in a person of normal appearance (Rosen, Reiter and Orosan, 1995).

Psychological factors or individual risk factor may contribute to developing dysmorphic concern. Especially personality characteristics, which are expressed in cognitive emotion and behavior factors, for example, established core beliefs, self-esteem, values organization and life experiences may have an influence on an individual's vulnerability to developing this disorder. Evidence of psychological factors in the BDD literature may lend credence to the position that the development and maintenance of BDD may have a psychological basis. Landsman (1980) indicated that the unattractive person generally has a more difficult time winning friends and being popular with the opposite sex than the person with a pleasing appearance; and Phillips (2000) found that individuals with this disorder are often “unemployed or disadvantaged at work, housebound or socially isolated” because of their defect. A risk assessment must be done, as there is a high rate of suicide and self-harm (Veale, Gournay, Dryden, Boocock, Shah, Willson, & Walburn, 1996; Phillips, 1991; Phillips, 1996; Phillips, 1993).

Psychological models of body image satisfaction have shown significant development in the last ten years. Cash (2002) presented a cognitive- behavior model of body image development and experiences that underlined the importance of physical characteristics, interpersonal characteristics, cultural socialization and personality traits to body image evaluation and investment. Psychological, neurobiological and sociocultural factors are assumed to play a big role in the development of BDD (Phillips & Castle, 2002). This research has selected psychological factors influence in the development of BDD.

And by reference to studies across-cultures, especially those conducted in the Middle East see the few minority ones by the knowledge of the researcher pointed to the disorder. Phillips et al., (2005) stressed the need for cross-cultural researches, particularly Eastern ones, because information we have are based on insufficient case studies and reports unrepresentative of the Eastern community. In addition, Philips suggested that must be

applied in the widely population samples to intend comprehensive results. Regarding the current study, the researcher takes Iraq as a population research in the Kurdistan region as a sample of Iraqi society, and it will apply with non-clinical sample.

2. Literature review

Body dysmorphic disorder was transmitted to as “dysmorphobia” by Italian psychopathologist Enrique Morselli in 1891. The name is imitative from the Greek word *dysmorphia*; “dys-” meaning abnormal or apart, and “morphē,” meaning shape. “Dysmorphophobia” was first termed in the American psychiatric classification of DSM-III (American Psychiatric Association, 1980). There was another term used in the older European literature is “monosymptomatic hypochondriacal psychosis” (Riding, & Munro, 1975). This was described as “delusional belief of a somatic nature”, usually in the absence of other prominent psychotic symptoms (Thomas, 1984). The term “body dysmorphic disorder” was used in the third edition of Diagnostic and Statistical Manual of Mental Disorders and in (1987) continued in DSM-IV. While in 1997 it was renamed as body dysmorphic disorder in the DSM-IV4 (Veal & Neziroglu, 2010).

The last two decades have seen a significant change and good turn of increasing the participant population in body image studies in psychology and development psychology, including every stage in human life, with consideration for the gender factor and body image into a complex construct that includes more than concerns over weight and shape. Besides these significant developments in the psychological field, there have also been substantial developments in social psychology and feminist approaches to body image in the last ten years. Researchers have become interested in factors that influence people’s experience with appearance and the effect of body image on behavior, and the most important deviations have been an enlarged academic awareness in factors affecting the desire for muscularity in both men and women (Grogan, 1999; Grogan, 2008).

There are many psychological factors impacting the development of body image, body satisfaction, actual experiences, self-esteem, gender socialization and eating pathology, such as direct and indirect feedback from others (Harper-Guiffre & MacKenzie, 1992). Factors such as the thin-ideal or a sociocultural pressure for thinness, the emphasis on the physical appearance and attractiveness, social pressure to diet, and depression may also influence the development of body image concern (Stice & Shaw, 1994; Beren, Hayden, Wilfley & Grilo, 1996; Striegel-Moore, Tucker & Hsu, 1990). Suggestion of psychological factors in the BDD literature may lend credence to the position that the development and maintenance of BDD may have a psychological basis.

2.1 Self-esteem

Jourard and Lansman (1980) concluded that a high sense of self-esteem means that the person accepts himself/herself as worthy. A number of studies have shown that self-esteem highly correlated with a positive attitude toward one’s body. In other words, persons who accept their bodies are more likely to manifest high self-esteem than those who dislike their bodies. Phillips (2004) indicated that poor body image is correlated with poor self-esteem. The study presented 93 BDD patients who completed the “Rosenberg Self-Esteem” with other instruments. The results showed that slighter self-esteem was connected with simpler body dysmorphic disorder and depression, along with greatly delusion. Lastly the relationship between self-esteem and the body dysmorphic was mostly mediated by depressing symptoms. The researcher Buhlmann, et al., (2009) assessed “implicit and explicit self-esteem” and attractiveness beliefs in BDD among three groups: one group detected with the BDD, the second group individuals with subclinical BDD symptoms, and healthy control participants. BDD participants had significantly lower implicit self-esteem, relative to the control group, and subclinical BDD participants were intermediate between these groups. In this study we also selected the self-esteem as psychological factor that influence BDD development.

2.2 Perfectionism

The literature specified several prevalent underlying beliefs in BDD. These beliefs include a need for perfection, an overemphasis on appearance and excessive self-consciousness (Geremia & Neziroglu, 2001; Wilhelm & Neziroglu, 2001). Buhlmann, Etoff and Wilhelm (2008) examined the face physical attractiveness percentages and perfectionism idea among subjects with body dysmorphic disorder, obsessive compulsive disorder and control subjects to identify perfectionism and overvalued ideas. Persons with body dysmorphic were considered by severer assessments for body attractiveness for themselves. Furthermore, they rated the attractiveness of their own faces significantly lower than did the healthy group or obsessive compulsive group subjects. Also the researchers observe that BDD subjects showed higher general levels of perfectionism than the control group.

Kollei et al. (2013) “examined perfectionism, aesthetic sensitivity and the behavioral inhibition system (BIS)” in body dysmorphic disorder. Subjects with BDD fifty eight respondent and the population-based control sample (N=2071), selected from a representative German population survey, completed self-report questionnaires assessing DSM-IV standard of BDD, dysmorphic concerns, perfectionism, aesthetic sensitivity and BIS-reactivity. Individuals with BDD reported significantly higher degrees of perfectionism as well as of BIS-reactivity, and for the total sample; each of the traits, perfectionism, BIS-reactivity and aesthetic sensitivity was associated dimensionally to dysmorphic concern.

2.3 Body-shame

The case for feeling shame it appears especially in the pathology of body, body image disorder erythrophobia, or social phobia. It is usually manifested in the growth sexual stages among adolescence, when they are growing in their facial features and the outer dimensions of the body. The body dysmorphic disorder BDD is closely linked to feel ashamed. It characterized by fears exaggerated, assuming the ugliness of physical and non-form consistency, and these fears appears on the face as an expression of shame patients usually complained from the big nose and massive size of the mouth or any other parts, the extreme hair in the face, swelling and redness of the skin. This causes a sense of overwhelming shame, or fear to appear from others feeling surveillance from others, and when other laughing translated as paranoid ideas in the mind of the patient's. Often Patients sees their defective part as a larger size and prominent than ever seen before. The symptoms of shyness increase in front of others and disappear when the patient is alone, making patients avoid to the maximum extent possible connections. Often sees patients defective part in the forms larger size and prominent than ever before. The symptoms of shyness increase the presence of others and disappear when the patient is alone, making patients avoid to the maximum extent possible connections (Fuchs, 2003).

Gilbert and Bailey (2000), demonstrated the effect of shame caused in social situations is related with thoughts about existence substandard, ugly, bad or defective; this is a belief that people are looking on the self with a critical or disdainful opinion for failing to achieve an appealing look. The center of shame fluctuated between how the individual thinks people view him and how he considers he must be. This is mentioned to as external shame. (ii) An inner "self-evaluative" mechanism. This is the inner criticism and worldwide self-evaluation as existence substandard, ugly, bad or defective, and the disappointment to achieve an internal standard; an inconsistency among the real self and an ideal self. This is attributed to inner shame. (iii) An emotion mechanism. Several emotions are employed, while the essential emotion is viewed as self-disgust, related with anger and social anxiety. (iv) A psychological mechanism. The emotion of shame is visibly related to a stressor reaction. In some cases it may include heightened parasympathetic activity. (v) A behavior mechanism: avoidance and numerous safety-seeking behaviors within social conditions, and fluctuating one's appearance conferring to a self-imposed average.

2.4 Compulsive and Avoidance behaviors

Most patients engage in various obsessive compulsive behaviors. The common activity includes comparing their appearance with that of other people. Another behavior is looking for reinforcement about how they look, usually without trusting the reassurance provided, and compulsively requesting dermatologic treatment or cosmetic surgery. Clinical impressions propose that this typically happens quite routinely, and it causes higher level of nervous and the incapability to think or concentrate (Phillips et al., 1993; Phillips & Diaz, 1997). Other common repetitive behaviors are excessive grooming, for example combing the hair or washing the skin frequently, tanning to change their skin color or skin imperfections, seeking assurance asking whether one's appearance has remained acceptable, unnecessary shopping for beauty products, changing their clothes repeatedly to find a more satisfying outfit, and excessive exercise; for example, weightlifting in the case of muscle dysmorphia (Veale & Riley, 2001).

Avoidance of various actions or conditions often occurs. The most communal avoidance is of public and social conditions, for example going out with sibling or meeting new individuals, and appears to be an effort to avoid undesirable evaluations. Many individuals with body dysmorphic avoid sexual closeness or will only have an close relationship in the dark or whereas wearing make-up. Some individuals will mainly avoid wearing certain sorts of dress or colors; some of them avoid coiffeurs and public changing places, avoid watching at their pictures and mirrors, or avoid a confident posture. Some of them avoid consuming a medical check since they are too ashamed to expose their defect; this might be a cause for not procurement cosmetic surgery. "One patient told us that the only reason they had not committed suicide was that their body would then be on view to the mortuary attendant" (Veale et al., 2010).

2.5 The Cognitive-Behavior Model for BDD

This research adapts a developed cognitive behavior model from Cash's (2008), and the model was adapted for two reasons; the first is that the model is non-disorder specific, which means that the researcher can adapt it to non-clinical samples. The second reason is that Cash's model indicates that the factors influencing negative body image development are divided into two basic categories. The earlier factors are historical influences from the individual's past; the forces that shaped how the person came to see his/her appearance in the way that he/she does. The later factors are the; current influences the events and an experience in normal life that define how the individual thinks, feels and responds to his/her looks. This research adapts both categories by selecting some of the main factors' influence; for example, from the historical category, from the physical characteristics and changes, body shape dissatisfaction; from personality traits, self-esteem and perfectionism, and from interpersonal experience, body shame. Meanwhile, for the influence of current factors, the researcher adapted body image behaviors including (compulsive actions and avoidance behavior) in daily life, also the researcher added some sociodemographic factors as a moderator for model ethnic including (Kurd, Arab), and wearing veil

/al hijab and non-wearing veil to identify the effect of these factors on the relationship between psychological factors and negative body image, our model used three main categories (cognitive, emotional, and behavioral factors) cognitive factors including historical influence from Cash's model which is refers personality traits (self-esteem and perfectionism), emotional factors including interpersonal experience from Cash's model for our study we selected the body shame as interpersonal experience, from current influence the study selected body image behavior which including compulsive actions and avoidance behavior. These three main categories from model interact with each other to development and maintenance negative body image. The figure 1.1 below showed the model adapted.

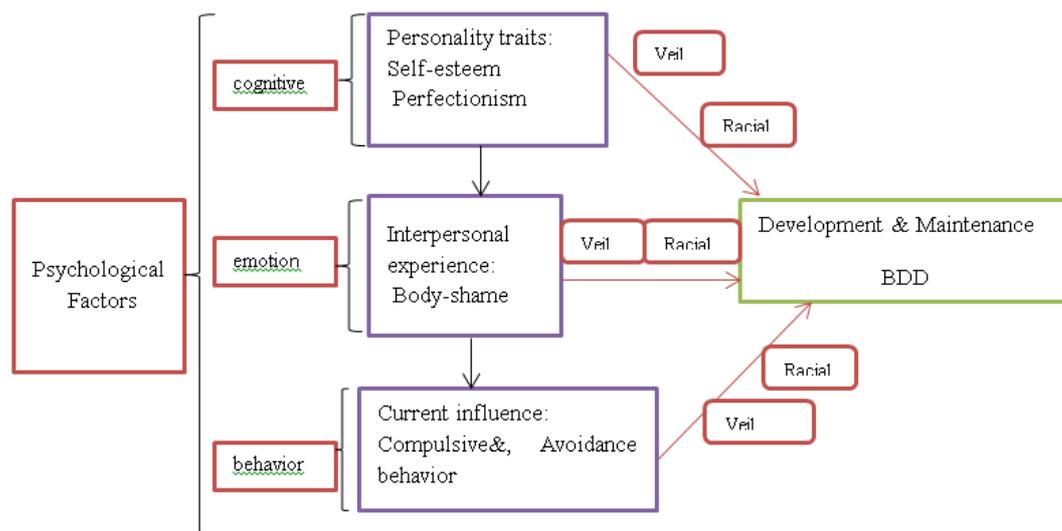


Figure 1.1: Model of Development and Maintenance BDD

2.6 The objective

The main objective of this study is to identify the influence of psychological factors for body dysmorphic disorder. The second target is to identify the levels of body shape dissatisfaction among female students in Kurdistan region.

3. Method of study

3.1. Sampling

The sample splinted by stratified technique sampling where are dividing the sample for the two layers, including the public and private universities. The public includes the University of Salahaddin and the University of Sulaymaniyah., the private includes four universities (Chihan1 University, Al-Hyat University, Komar University, and Chinan2 University) then the sample should be in a random choice. Researcher adopted for the selection of sample size on Krejcie, and Morgan, (1970) table based on the formula without calculations are required, and to get the sample size in the current research, based on the table if we want to know the research sample size from population estimate from (30,000) students, the samples size should be (379) (Hill, 1998). However, the sample size for this study were selecting from six universities they were (460) female students and we selected more than required sample size for avoiding the missing data. Out of 460 female students 410 were fulfilling the questionnaire completely, and 50 female students excluded from the study.

3.2 Instruments

The instruments were used for the study; it was divided into three parts, consisting of: first a questionnaire for demographic factors, second a questionnaire for body shape dissatisfaction, third included the psychological factors, the first part of the questionnaire consisted of a compilation of demographic properties. Those questions included variables such as (age, racial, wearing veil/al-hijab). The second parts included the body shape questionnaire (BSQs) shortened version 16A-items which is measuring dissatisfaction with body shape (Evan, 2003)., and the third parts Rosenberg self-esteem scale (RSES) 10- items (Demo, 1985; Wells & Markwell, 1976), Perfectionistic self-presentation (PSPS)-27 items, Body-shame sub scale (BSS) 8- items, Body image behavior inventory-3(BIBI-3) 50- items for two subscales compulsive actions and avoidance behaviors. We have got permission by most of authors for using and translate the scales and sub-scales by emailed and

acknowledgement the authors who could not connect with them or they did not respond our email.

3.3 Procedures

After translate the scales and sub-scales for two language Arabic and Kurdish languages through a direct translation, the risen that the researchers in cross-cultural studies have supported this way replace the back translation, because some of scholars discussed the fact that back translation is interruption, due to its overview of translation errors every time the survey is translated from one language to another, and it could be wooden words for different cultural (Health et al.2005; McKay et al.1997), the second risen because the objective of this research very sensitive for respondent need experts in languages and social psychology or psychology for avoiding the sensitive words across cultural without losing the main object for each items. Four experts thankfully participants for translating phase, for each languages one expert in language and the other specialized in social psychology and then they discussed their translated form for made unique questionnaires. After filtering both forms of questionnaire in two languages Arabic and Kurdish pilot study for per- Questionnaires made for 120 female students in Salahaddin University in Kurdistan Iraq region. Reliability and validity conducted for each scales and sub- scales used Alpha-Chrobach's for reliability and principles components analysis PCA for validity, the results of reliability showed that BSQs-16 items have .89, RSER self-esteem .71, perfectionistic PSPS have .74, body-shame BSS have .79, and body image behavior BIB-3 have .89 alpha Chrobach's . The principal component analysis (PCA) was conducted to investigate the validity of scales and subscales, the PCA was run for Body Shape Questionnaire BSQ-16A shortened version and the closer evaluation of items loaded of one factors and the variance accounted 38.175%, for Rosenberg self-esteem(RSER) all items loaded of one factors and the variance was 36.0%, for perfectionistic self-presentation scale (PSPS) PCA conducted for three sub-scale, for self- promotion, the accounted for 37.70% of the variance after deleting 3 items, for non-display of Imperfection had accounted for 38.39% of the variance, after deleting 2 items of the scale, nondisclosure of imperfection, after deleting two items, with 48.47% of the variance, all remaining items loaded on one factor. While, for Body –shame sub scale accounted 44.161% of the variance all items loaded on one factors after deleting one items. For body image behavior inventory -3 (BIBI-3) which is contented two sub-scale compulsive-actions and avoidance behavior, for compulsive actions the PCA was run and the items loaded on one factor with variance 34.653% after deleting four items, while the variance accounted for avoidance subscale with 36.412% after deleting five items. Before the final application for the questionnaires the importance of body dysmorphic disorder and the environment of study explained to all participants, and they were required to fill out the questionnaires as accurately and honestly as possible, with reassurance of confidentiality.

4. Data Analysis

The research model for this study is evaluated using PLS-SEM. Smart partial least square 2.0 M3 (Ringle et al., 2004) is used to examine the measurement and structural model for this research. This method program evaluates the psychometric properties of the scales and sub scales in the model and approximate the parameters of the structural model. As shown in Table 4.1 the t-statistics indicated that all path coefficients are significant (T Statistic > 1.96), for hypotheses proposed in this study. Based on the analyses, it shows that body shape dissatisfaction BSQ-16 is influenced by Rosenberg self-esteem RSES ($\beta = -0.1742$, $t = 3.5573$), and Perfectionistic Self-Presentation Scale PSPS impact on body shape dissatisfaction. Also, the results showed that body-shame scale BSS has impacted directly on BSQ ($\beta = 0.2844$, $t = 5.0188$), while, body image behaviors inventory BIBI ($\beta = 0.1282$, $t = 2.0143$) has a significant and positive relationship (or influence) with body shape questionnaire BSQ. The contacting path coefficients between the psychological indicators with each other's also are significant. Based on evaluate the path between the self-esteem (RSER) and perfectionistic (PSPS) ($\beta = -0.6628$, $t = 25.9118$). also the relationship between perfectionistic (PSPS) and body shame (BSS) ($\beta = 0.7139$, $t = 24.5039$), and body shame (BSS) with the body image behaviors (BIB) perceived useful ($\beta = 0.708$, $t = 27.954$) the path coefficient was supported.

Table 4.1

The Structural estimates for psychological factors

Relationship	Path Coefficients(β)	T Statistics	Assessment
RSES -> BSQ	-0.1742	3.5573	Supported
PSPS -> BSQ	0.1936	3.6558	Supported
BSS -> BSQ	0.2844	5.0188	Supported
BIBI -> BSQ	0.1282	2.0143	Supported
RSES -> PSPS	-0.6628	25.9118	Supported
PSPS -> BSS	0.7139	24.5039	Supported
BSS -> BIBI	0.708	27.954	Supported

**p< 0.01, *p< 0.05

4.1.1 Moderator effect of Racial (Kurd-Arab)

Multi-group analyses were conducted to each causal path that has been provided in the model to assess wither Significant differences were found between Kurd and Arab with regard the relationships between variables. Significant differences were found between Kurd and Arab with regard to the relationship between all psychological factors and body dysmorphic, except the relationship between perfectionism (PIPI) and body dysmorphic disorder BDD there was no significant effect from Racial on the relationship the Table 4.2 showed the moderator effect.

Table 4.2

Moderation effect of Racial

Relation	Arab n = 155			Kurd n=255			T Statistic Of difference
	P1	SE	T Statistics	P2	SE	T Statistics	
RSES -> BSQ	-0.3344	0.0843	3.9683	-0.0669	0.0481	1.391	2.764**
PSPS -> BSQ	0.1071	0.1008	1.0621	0.2679	0.0579	4.6264	1.387
BSS -> BSQ	0.1378	0.0934	1.476	0.3911	0.0591	6.617	2.298**
BIBI -> BSQ	0.2353	0.1019	2.3103	-0.0084	0.0772	0.1083	1.924*

4.1.2 Moderator effect of wearing veil/non-veil (Al-Hijab)

Multi-group analyses were conducted to each causal path that has been provided in the model to assess wither no significant differences were found between female wearing veil and non- wearing veil with regard the relationships between variables., except effected on the relationship between body image behavior (BIBI) and body shape dissatisfaction , the Table 4.2 showed the moderator effect.

Table 4.16

Moderation of wearing Veil al hijab-non veil

Relations	Veil n =184			non veil n =226			T Statistics Of differences
	P1	SE	T Statistics	P2	SE	T Statistics	
RSES -> BSQ	-0.1825	0.0812	2.2469	-0.1623	0.06	2.7065	0.201
PSPS -> BSQ	0.248	0.0714	3.4706	0.1436	0.0761	1.887	1.003
BSS -> BSQ	0.2726	0.0946	2.8814	0.301	0.0666	4.5202	0.246
BIBI -> BSQ	-0.0169	0.0935	0.1811	0.2443	0.0879	2.7784	2.032*

5. Discussion and Conclusion

There is relationship between self-esteem and the development of body dysmorphic disorder BDD. The previous studies implied that the appearance has become over identified with self-esteem (Veal, 2002). Also Phillips 2004 and Bohne et al., 2002 indicated that poor body image is correlated with poor self-esteem. Furthermore, the results of Buhlmann et al., (2009) confirmed that lower implicit self-esteem significantly related with attractiveness belief in body dysmorphic disorder. Also the results of this study showed that slighter self-esteem was self-esteem was correlated with simpler body dysmorphic.

While the relationship between perfectionism and the development of BDD confirmed that there is relationship between perfectionism and the onset of body dysmorphic. This result supported with Buhlmann et al., (2008) observed that BDD subjects showed higher general levels of perfectionism. Also Kollei et al., (2013) reported that individuals with body dysmorphic disorder had higher degrees of perfectionism and it is associated dimensionally to BDD.

Moreover, the study confirmed the relationship between body-shame and the BDD and it is supported by the Gilbert and Bailey, (2000) reported that body shame and BDD related in different ways. It is a complicated experience with several mechanisms, one of these is psychological mechanisms and the feeling of shame evidently associated to stressor reaction in some patients may include sensitive parasympathetic action. Also body-sham may reflect in behavior and several safety-seeking behaviors inside social circumstances. Some people mainly avoid wearing certain colors, escape from public changing places, and avoid watching at their photos or avoid taking medical examination for they are too ashamed to expose their bodies (Veale et al., 2010)

In addition the results of this study reported the relationship between “body image behaviors” and the development of BDD, and it is supported by many of the previous researches. Phillips and Diaz., (1997) reported that approximately most of patients with body dysmorphic occupies in specific behaviors (i.e., mirror checking, skin piking, cut hair style, hide balding, obsessive wash skin...), also many of individuals with BDD prepare overly before going outside and these compulsive behavior called safety seeking behavior for their function is to avoid or reduce stress and painful emotions of protecting from something bad (Phillips, 1996). Additionally Phillips et al., (2005) found that 90% of patents with BDD checking excessively in front of mirrors or they avoid mirror altogether.

These results are confirmed by cognitive behavior theory of body dysmorphic it with interactions of cognitive, emotional and behaviors factors. The individuals may develop maladaptive attitudes about appearance and the importance of their look or form. For example, they may think they are constantly being evaluated based on their appearance and that in order to be loved, accepted and successful, they must look perfect. Situations that trigger these negative thoughts leave individuals feeling depressed, shamed, worried and disgusted; thus they come to avoid anxiety-provoking situations whenever possible (Greenberg, 2008).

Also the results confirmed by cognitive behavior models, which is supported by Cash’s model (2008) that explained two main categories for the factors that impact body image development; Historical and the current effects. This research adopted both categories. For example from the historical effect personality traits (self-esteem and perfectionism), from interpersonal experience (body shame), Form the current experience (body image behaviors which is including compulsive actions and avoidance behaviors). While Wilhelm’s model (2006) explained the root of basic body disturbance started from personality styles for example perfectionistic and fear from rejection; the second factors it is cultural influence, the negative message about appearance from family and sibling. Also the results supported these two models that adopted for study and the hypotheses explained the interactions between cognitive, emotions and behaviors due to negative body image.

These results supported by literature review that differences also revealed across ethnicities in body satisfaction in the United States associated to racially disorder in the understanding of the variable. The study presented the difference between ethnic groups in some of the exact features disorder. As the American women and European American showed more satisfaction for length, eyes, and face compared Asian Americans women, and there differences were found between “Asian American and European American” men (Koff, Benavage, & Wong, 2001; Mintz & Kashubeck, 1999). Also current study confirmed that there is moderator effect of ethnic (Kurd-Arab) groups on the relationship between psychological factors and body dissatisfaction.

However, the moderator effect of the wearing veil or non-wearing veil not supported in this study, This results also indirectly supported by recent information published in the “Middle-East” newspaper, (2006) which on the body dysmorphic and the prevalence of cosmetic surgical operations that were conducted during the last few years in the Middle East in general, and the Arabs Gulf in particular including (Saudi, Egypt, Lebanon). The report determined to the huge amounts spent estimated to 11.5 billion riyals in the clinical of cosmetic surgery for (cover up aging, facelifts, eyelid, nose, breast surgery, tummy tucks) and the vast majority of women under the 25 who turn to these surgeries notable that all of Saudis women wearing Islamic hijab. Another report confirmed that the huge amounts of money spent estimated 12 billion dollars for industry of fashion in the Gulf (Al-Ghamdi, & Yahya, 2012). The Lebanese surgeon physician Toledo (2013), confirmed results of these reports, adding that the percent of cosmetic surgeries and requested applications for surgery significantly increases in the

Middle East and the main reason for this issue it is appearance and beauty or the need of (beautiful-body) and most of these surgeries processes are not necessary, stressing the prevalence of disorder deformation body image. It is not supported with Al-Adawi (2001) suggested that Islamic states might protect some women against the development of mild body dysmorphic disorder, because of the wearing veil that make women do not reveal themselves other than their husband or families. But, the current results confirmed that al-hijab not more immune Muslims women from development and maintenance body dysmorphic disorder. Therefore, intervention programmers for this specific population are recommended.

the current research overcome some limitations, the first one existence the sample of the research as the study used one gender consisting female university students. The researcher has limited the ability to generalize the results of the study into male student populations in Iraq. Second, this study's research does not consider the other ethnics in Iraq community. Because of the complexity and variety of Iraq community which is includes different multi-ethnic (Arab, Kurd, Turku-man, and Ezeedy) the researcher limited the current study to the two bigger population ethnic in Iraq community and one religion which Islam. Thus, future studies should try to include the other ethnic and religion.

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