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## Psychological gender in clinical depression. Preliminary study

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### Summary

**Aim.** Psychosocial and social theories of mood disorders indicate that factors connected with women's gender roles could create a higher risk of depression. The fact that social role is an important factor associated with depressive disorders suggests that not only biological but also psychological gender influences the vulnerability to depression.

**Method.** Gender schema theory was applied to investigate the role of femininity in depressive disorders. It was predicted that patients who identify themselves with traditional feminine gender role will be more depressed than androgynous and undifferentiated patients or individuals with high level of masculinity. Sixty one patients suffering from affective disorder participated in this research. The Polish adaptation of Bem Sex – Role Inventory and Beck Depression Inventory were used to investigate the association between psychological gender and symptoms of depression.

**Results.** The results indicated that there is a significant connection between the type of psychological gender and the level of depression. The highest level of depression was shown by undifferentiated patients, femininity was also found to be associated with a great number of depressive symptoms. These findings also suggest that androgynous individuals and patients with high level of masculinity tend to be less depressed.

**Conclusions.** Psychological gender is an important factor which interacts to create a higher depression risk in man and woman.

**Keywords:** depression, psychological gender

### Introduction

Women suffer from depression twice as often as men [1, 2]. Some of the hypotheses to explain this disproportion refer to biological factors [3, 4], other to a greater extent emphasize the importance of social and psychological variables [5]. Theories emphasizing the role of social factors point to the fact that the status of woman is still lower than the status of the man, and performed by her culturally defined roles are considered less prestigious [2]. This tendency in many societies is reflected by a less favorable financial situation of women, limited access to education and little opportunity to decide on events important to the community [6]. This imbalance in the family

is often reflected in the limited possibilities to influence the issues important to the family, or in the absence of the perception of women as an equal partner. The impact of social factors on the increase in the number of cases of depression among women is also confirmed by the fact that these differences do not exist in the communities in which the roles of men and women are equally valued. [7] Women may be at risk of depression also because of the excessive demands and overloads that result from the simultaneous performance of a number of social roles [8]. Women living in marriage and working professionally more often suffer from depression than married and working men, while these differences do not occur in singles [9]. In women, depression is often a consequence of the adverse events associated with family life, but does not appear as a result of difficulties relating to other spheres.

This relationship, however, is revealed only in families where with traditional division of roles, but not in pairs, in which women not identify themselves with traditional social role [10]. In addition, women more often than men create the concept of self-referring to the interpersonal relationships [2, 11, 12]. Women's self-esteem is more dependent on the quality of the relationship and on their own perceived social competence [13]. Because of the tendency to define themselves according to the relationships, problems in the interpersonal sphere are for them tantamount to self-image problems, which increases involvement of interpersonal conflicts in causing symptoms of depression. At the same time women are more likely than men to experience difficulties in relationships with others [2, 14, 15], and these conflicts are a source of stress stronger than it is for men [12, 16, 17]. Typical for women locating their self-esteem in the relationship causes that they have a sense of failure when these relationships are at risk [11]. The social role of women also means concern for others at the expense of their own needs [18, 19]. Characteristic for women tendency to mute their feelings and aspirations for the needs of other people also may increase susceptibility to depression. Additional cost of giving support is experiencing negative emotions when other experience failures [18]. In women, depression can occur as a response both to their own and others' failures. Although the notion of psychological gender described for the first time Termam already in 1936 [see: 20] theories questioning the dichotomic sex division into male and female appeared not until the 70s and 80s of XX century [20, 21]. One of the best verified concepts of gender is the gender schema theory by Sandra Lipstiz Bem [19, 20, 22]. Bem assumes that individuals can have high or low intensity of male or female characteristics regardless of their biological sex. In Bem's theory, psychological sex - gender - results from assimilation of cultural definition of masculinity and femininity [22], and then functions as a scheme by which we make selection of information. This scheme directs our expectations as to the characteristics and behaviors appropriate for men and women, as well as the characteristics and behaviors that should characterize ourselves as men or women. According to Bem's theory, the type of gender depends on whether the self-concept includes a scheme of gender created on the basis of social definitions of masculinity and femininity, or whether the gender schema is not included in the scheme of oneself. [23] Bem identifies four main configurations of the psychological characteristics related to gender, corresponding to the four types of psychological gender [22]. Sex-typed persons have

a psychological characteristics consistent with their own biological sex and usually perform behaviors consistent with what in a given culture is considered to be male or female. Forced to undertake behaviors inconsistent with the culturally defined role of women or men, they experience considerable discomfort [24] and try to modify their behavior so as to reduce the existing gap [25]. This group includes the so-called „feminine” women and „masculine” men. Cross-sex-typed people also use expected in a given the cultural gender scheme as a tool to filter and process information, but are characterized by psychological qualities corresponding to the characteristics of the opposite biological sex. This group includes the so-called. „masculine” women and „feminine” men. Androgynous individuals are persons who have in the same high level developed male and female characteristics. Their behavior and self concept do not contain explicit references to cultural criteria of masculinity and femininity, this dimension does not fulfill essential role in the process of filtering and processing of information. According to Bern, such a system of male and female traits expands the behavior repertoire and allows those androgynous persons for efficient adaptation to changing conditions without limitations imposed by gender role stereotypes [25].

The last group are persons sexually undifferentiated, who, like those androgynous individuals, do not include schema into the concept of self, but in contrast to androgynous persons, have slightly shaped both the feminine and masculine features. Those persons are characterized by low self-esteem [26], lower social openness, and smaller sensitivity and protectiveness in comparison with those representing other types [27]. Bern suggests that the characteristic for androgynous persons balance of male and female traits is an optimal pattern for mental health [20], but not all studies support this assumption. Taylor and Hall [28] showed that the type of psychological gender favorable for mental health is male type, similar results were obtained by Lubinski et al [29, 30] and Zeldow et al [31]. There is also research showing that mental health is equally promoted by male and female type [32], as well as the type undifferentiated [33].

### Aim

The aim of this study was to describe the relationship between gender and severity of depression in individuals with a diagnosis of affective disorders. It was expected that the psychological gender factor will play an important role in regulating the severity of symptoms in men and women treated for depression. Numerous studies on the relationship between gender and depression indicate that an important role in the induction of mood disorders in women, in addition to biological factors, may have social factors. Because these factors seem to a greater extent regulate the behavior of women identifying themselves with their biological sex and accepting the socially defined requirements, it is anticipated that among respondents with a diagnosis of clinical depression will be the largest group of women of the feminine type, in this group it will be also possible to observe the most severe symptoms of depression. Whereas, in the examined group there will be few women representing the masculine type of psychological gender.

## Methods

In the study the Inventory for Psychological Gender Assessment (IPP) by Kuczyńska [22] was used. It consists of 35 items, of which 15 refers to the features characterizing women in accordance with the cultural stereotype and 15 to features considered as a typically masculine. The other five items are buffer items, neutral as regards to gender stereotypes. The tested person marks on a 5-point scale the extent to which the given feature characterizes him/her. Configuration of the results that the examined person obtains in the scales of male and female traits, allows to assign him/her one of the four types of psychological gender. Androgynous type are persons who obtain high scores on scales of both masculinity and femininity, sex-typed are men who receive high scores on the scale of masculinity and low scores on the scale of femininity and women, who are characterized by a high score on the scale of femininity and low on the scale of masculinity, cross-sex-typed are men who have high scores on the scale of femininity and low on masculinity scale, and women with low score in the scale of femininity and high in the masculinity scale, sexually undifferentiated type are those who get low scores on both scales.

To measure depression, Beck Depression Inventory [34] was used. This method allows to determine the presence and severity of 21 symptoms of depression.

### The studied group

A total of 61 patients with a diagnosis of a depressive episode or recurrent depressive disorder, including 47 women and 14 men, aged 20-65 years ( $M=48.19$ ,  $SD=10.57$ ) participated in the study. Among the subjects 13 had an additional diagnosis of another mental disorder (personality disorder: 3 persons, delusional disorders: 3 persons, schizoaffective disorder: 3 persons, dysthymia: 1 person, generalized anxiety disorder: 1 person, alcoholic hallucinosis: 1 person, anorexia: 1 person). Fourteen subjects had a university degree, 25 secondary, 15 occupational, 6 primary. Average number of previous episodes was 5.30 ( $SD=4.97$ ), 12 subjects underwent one documented episode of depression, 20 people from 2 to 4 episodes, 10 people from 5 to 7 episodes, 7 patients between 3 and 11 episodes, 7 from 13 to 20 episodes. Mean disease duration was 12 years ( $SD=9.64$ ).

## Results

Among the studied patients, most people were sex-typed (29 persons, including 27 women and 2 men) and type unspecified (21 persons, including 13 women and 8 men). The study group included four cross-sex-typed persons (one woman and three men) and 7 androgynous individuals (six women and one man). In the BDI test persons undifferentiated obtained mean score of 37.28 points, the sex-cross-typed achieved 26 points, the sex-typed received 29.48 points, and 16.14 points androgynous persons (see Table 1).

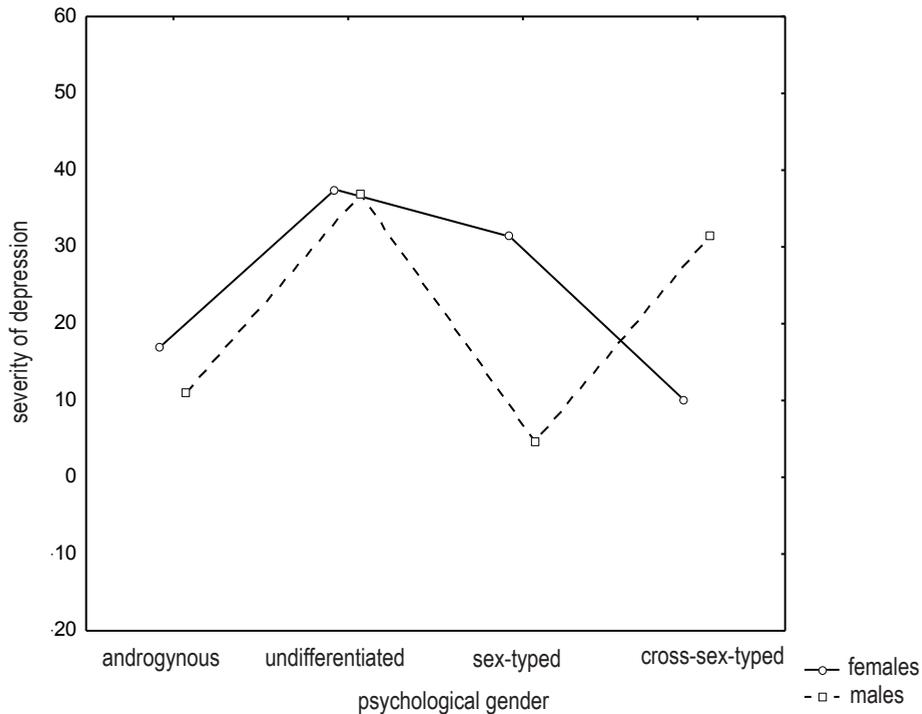
Table 1. Mean severity of depressive symptoms depending on the biological sex and psychological gender

Biological sex	Psychological gender	BDI (mean score)	BDI (standard deviation)
female		30.39	13.86
male		30.74	12.83
	androgynous	16.14	11.56
	undifferentiated	37.28	11.84
	sex-typed	29.48	13.13
	cross-sex-typed	26.00	14.02
female	androgynous	17.60	12.42
female	undifferentiated	37.46	9.82
female	sex-typed	31.33	11.56
female	cross-sex-typed	10.00	0.00
male	androgynous	11.00	0.00
male	undifferentiated	36.87	15.32
male	sex-typed	4.50	3.53
male	cross-sex-typed	31.33	11.15

Gender-related variables proved to significantly affect the severity of depression of the respondents ( $F_{[3,53]}=3.63$ ,  $p<0.00$ ,  $\eta^2=0.17$ ). There was no main effect of biological sex influence on the level of depression ( $F_{[1,53]}=0.33$ ,  $p=0.57$ ,  $\eta^2=0.01$ ), but there was a main effect of psychological gender ( $F_{[3,53]}=7.77$ ,  $p<0.00$ ,  $\eta^2=0.31$ ). Persons sexually undifferentiated exhibited much more severe symptoms of depression than androgynous persons ( $p<0.00$ ). Androgynous patients also had significantly fewer symptoms than those sex-typed ( $p<0.00$ ). The sex-typed persons exhibited less severe depression than those undifferentiated ( $p<0.02$ ). The cross-sex-typed persons had similar intensity of symptoms to androgynous ones ( $p<0.18$ ), undifferentiated ( $p<0.08$ ) and sex-typed ( $p<0.58$ ). Taking into account the biological sex of respondents revealed significant differences between men and women. In both groups, the highest intensity of depression was observed in undifferentiated persons, while no evidence was found that these groups differ in this respect ( $F_{[1,53]}=0.01$ ,  $p<0.91$ ,  $\eta^2=0.01$ ). Persons sexually specified as „feminine” women revealed significantly higher levels of depression than „masculine” men ( $F_{[1,53]}=9.72$ ,  $p<0.00$ ,  $\eta^2=0.15$ ).

In the group of women significant differences between persons undifferentiated and cross-typed were observed ( $F_{[1,53]}=5.07$ ,  $p<0.02$ ,  $\eta^2=0.09$ ) as well as between undifferentiated and androgynous ( $F_{[1,53]}=12.46$ ,  $p<0.00$ ,  $\eta^2=0.19$ ), and also sex-typed and androgynous persons ( $F_{[1,53]}=7.31$ ,  $p<0.00$ ,  $\eta^2=0.09$ ). Severity of symptoms in androgynous female patients was similar to severity of symptoms of sex-cross typed patients namely the „masculine” ones ( $F_{[1,53]}=0.30$ ,  $p<0.58$ ,  $\eta^2=0.01$ ).

In the group of examined men, statistically significant differences in the severity of depression occurred between sexually undifferentiated and androgynous persons ( $F_{[1,53]}=4.31, p<0.04, \eta^2=0.08$ ) and undifferentiated and sex-typed persons ( $F_{[1,53]}=12.15, p<0.00, \eta^2=0.19$ ). Cross-sex-typed men (i.e. „feminine” men) were characterized by higher severity of depression than „masculine” men ( $F_{[1,53]}=6.26, p<0.01, \eta^2=0.11$ ). These discussed dependencies are shown in Graph 1



Graph 1. Relationship of biological sex and psychological gender with severity of depression in people with mood disorders

### Discussion

Among the respondents predominated sex undifferentiated and sex-typed persons, and relatively few people were of androgynous and sex-cross-typed. The study shows that symptoms of depression most strongly are marked in persons of undifferentiated sex. This result is consistent with the existing in the literature statement that this type of psychological gender is very often associated with poor adjustment and low self-esteem [26]. Persons sexually undifferentiated have to a small degree developed both male and female features, which narrows the repertoire of their behaviors and limits the ability to cope with problematic situations. Relatively high levels of depression was also manifested in sex-typed women. In this group of patients the severity of depression was comparable with its severity in women of an undifferentiated type. This

result is consistent with the prediction contained in the hypotheses. Women sex-typed are characterized by features stereotypically recognized as feminine, accept culturally defined role of women and seek to act in a manner consistent with the standards of this role. They identify themselves with their biological sex, and usually undertake the limitations and requirements associated with it. It is expected that to a greater extent than other surveyed persons, they are exposed to mood disorders caused by such factors as: excessive burden connected with the simultaneous fulfillment of family and professional roles, being subjected to restrictions imposed in traditional societies, depending self-assessment on interpersonal relationships, or tendency to give up the implementation of own needs for the needs of others.

Hypothesis about the influence of social factors on the formation of depression in women, sex-typed confirms the fact that cross-sex typed women, that is having the advantage of male characteristics over typically feminine characteristics, and probably to a much lesser extent identifying themselves with the social role of women, are characterized by less severe symptoms of depression and less frequently suffer from mood disorders compared to „feminine” women. The relatively low incidence of depression in „masculine” women and its lower intensity than in „feminine” men, can mean that the masculine type is a type of psychological gender, which is the most conducive to maintain mental health. In the case of the examined men the greatest severity of depression was observed in sexually undifferentiated and sex-cross typed - the „feminine” men. Androgynous men, on the other hand, and the „masculine” ones obtained results showing significantly less severe mood disorders compared to men of feminine and undetermined type. This confirms the hypothesis that high intensity of male characteristics promotes mental health, and the presence of strongly marked features of women is associated with greater severity of depression not only in the surveyed women, but also in men. It seems that in the case of people suffering from depression the masculine type favors the better functioning in a greater degree than androgynous type, which is contrary to the Bem hypothesis [26], according to which psychological androgyny is a type of psychological gender ensuring optimum of functioning. This result is, however, consistent with the results of some of the later studies [28, 29, 30, 31].

The research has shown that while the lack of highly determined male and female characteristics, or their determination in a comparable level do not differentiate between men and women in terms of depressive symptoms, whereas prevalence of psychological feminine traits fosters mood disorders in both studied men and women, and dominance of masculine characteristics is associated with less severe depression regardless of the biological sex of the respondents. This result confirms the theories of significant impact of social and psychological factors on the formation of depression in women, or more broadly - in people with strongly marked feminine features .

The study used psychological gender test which is Polish adaptation of the scale developed by Bem. This test consists of a list of features that according to the Polish stereotype of gender are seen as typically male or typically female. The subject determines the level of own masculinity or femininity deciding to what extent possesses each of these characteristics. The list of male characteristics includes, among others,

such adjectives as dominant, independent, rival, success oriented, self confident while features included in the femininity subscale are, inter alia: sensitive, gentle, emotional, but also economically efficient, saucy and caring about appearance.

According to the gender schema theory, psychological gender is a constant feature development of which begins in early childhood and does not change under the influence of circumstances. It is rather a cognitive schema, according to which external situations are defined. It must be remembered, however, that mood disorders have a significant impact on the cognitive realm, and the person with depression has a tendency to formulate negative self-evaluations. The person whose mood is clearly lowered, probably will have a tendency to deny such properties as independence, self-confidence and success orientation, which may result in obtaining particularly low scores on a scale of masculinity, regardless of the represented type of psychological gender. Depressive person can also have a tendency to deny some typically feminine characteristics, such as the economical efficiency or interest in own appearance, and to confirm such features as gentleness, sensitivity and emotionality. This means that the mood disorders may largely shape the result obtained in scales measuring psychological gender, although the features of gender appear to be more primary than the current mood. The typical for the examined persons unspecified type of psychological gender, indicating a lack of clearly developed male and female features, may be a consequence of the impact of mood on the way of responding in the test used in the study. Equally often represented female type of psychological gender may be a consequence of denying male characteristics and some of the female characteristics with simultaneous high results relating to such „feminine” qualities as sensitivity and emotionality. This does not necessarily mean that under the influence of depression the type of psychological gender changes, but it should be take into account that the prevalence of unspecified and feminine type among persons with a diagnosis of depression do not necessarily reflect the role of gender in shaping the vulnerability to affective illnesses.

It should also be remembered that although the results of this study indicate a relationship between psychological gender and depression, they do not allow for unambiguous conclusions on causal relationships between these variables. The study took into account only the severity of depression at one point of time, while it involved both people who had a single episode of illness, and patients treated for many years, and the factor of vulnerability to depression of masculine, feminine, sexually undifferentiated and androgynous persons was not taken into account. More accurate determination whether the type of psychological gender can shape vulnerability to depression requires a longitudinal study with repeated measurements of the severity of mood disorders performed at different stages of the disease.

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