



You have downloaded a document from
RE-BUŚ
repository of the University of Silesia in Katowice

Title: Contingencies of Self-Worth and Global Self-Esteem Among College Women: The Role of Masculine and Feminine Traits Endorsement

Author: Eugenia Mandal, Marcin Moroń

Citation style: Mandal Eugenia, Moroń Marcin. (2019). Contingencies of Self-Worth and Global Self-Esteem Among College Women: The Role of Masculine and Feminine Traits Endorsement. "Social Psychological Bulletin", 2019, Vol. 14(3), Article e33507, doi 10.32872/spb.v14i3.33507



Uznanie autorstwa - Licencja ta pozwala na kopiowanie, zmienianie, rozprowadzanie, przedstawianie i wykonywanie utworu jedynie pod warunkiem oznaczenia autorstwa.



UNIwersYTET ŚLĄSKI
W KATOWICACH



Biblioteka
Uniwersytetu Śląskiego



Ministerstwo Nauki
i Szkolnictwa Wyższego

Social Psychological Bulletin

Psychologia Społeczna

Contingencies of Self-Worth and Global Self-Esteem Among College Women: The Role of Masculine and Feminine Traits Endorsement

Eugenia Mandal^a, Marcin Moron^a

[a] *University of Silesia, Katowice, Poland.*

Social Psychological Bulletin, 2019, Vol. 14(3), Article e33507, <https://doi.org/10.32872/spb.v14i3.33507>

Received: 2019-01-30 • Accepted: 2019-05-09 • Published (VoR): 2019-11-13



Handling Editor: Anna Kwiatkowska, Polish Academy of Sciences, Warsaw, Poland

Corresponding Author: Eugenia Mandal, University of Silesia, Bankowa 12, 40-007 Katowice, Poland. E-mail: eugenia.mandal@us.edu.pl

Supplementary Materials: Data, Materials [see [Index of Supplementary Materials](#)]



Abstract

The study examined the relative importance of seven contingencies of self-worth of Polish college women's (appearance, others' approval, competition, academic competencies, family support, virtue, God's love), as well as the associations between preference for particular contingencies and global self-esteem. Additionally, the predictive role of the self-assignment of masculine and feminine traits for both contingencies of self-worth and global self-esteem was investigated. The participants were one hundred and ninety-four Polish women in emerging adulthood (aged from 19 to 26; $M = 21.36$; $SD = 1.67$). Participants provided self-reports of self-ascription of masculine and feminine traits, the contingencies of self-worth, and self-esteem. Obtained results showed that the family support contingency of self-worth was the most preferred one, followed by virtue contingent self-worth, academic competencies, competition, and appearance contingencies of self-esteem, while the less preferred contingencies were: others' approval and God's love. Appearance and others' approval contingencies of self-worth correlated negatively with self-esteem. Masculine traits were positively linked to competition contingency of self-worth, but negatively to physical appearance self-worth contingency and others' approval self-worth contingency, whereas feminine traits were positively correlated with both physical appearance self-worth contingency and others' approval self-worth contingency. The findings showed the positive associations between self-ascription of traits regarded to be masculine and self-esteem, and a lack of significant associations between self-description of feminine traits and self-esteem. Structural equation modeling demonstrated predictive role of masculine traits for self-esteem when feminine traits' self-ascription and contingencies of self-worth were controlled.



This is an open access article distributed under the terms of the [Creative Commons Attribution 4.0 International License](#), CC BY 4.0, which permits unrestricted use, distribution, and reproduction, provided the original work is properly cited.

Keywords

self-esteem, contingencies of self-esteem, masculinity, femininity

The sense of self-worth is one of the basic human needs (Alicke & Sedikides, 2011; Leary, 1999, 2007; Rosenberg, 1965, 1989). Self-esteem is a major predictor of psychological well-being, successful interpersonal relationships, physical and mental health, and significant regulator of behavior (Baumeister, Campbell, Krueger, & Vohs, 2003; Coopersmith, 1967; DuBois & Flay, 2004; Moksnes & Espnes, 2012; Park & Crocker, 2008; Sheldon, Elliot, Kim, & Kasser, 2001). "Self-centrality breeds self-enhancement" principle (James, 1890) posits that individuals derive their self-esteem from possessing personally important self-attributes (so-called contingencies of self-worth; Crocker & Wolfe, 2001). Both self-esteem and contingencies of self-worth are predicted by personality factors (e.g. agency and communion; Gebauer, Wagner, Sedikides, & Neberich, 2013), by gender, age, religiosity (Bem, 1974; Gebauer et al., 2013; Kaschak, 1992) and cultural factors (e.g. values, preferred in a given culture; Bi, Ybarra, & Zhao, 2013).

Gender, as one of the central attributes of identity (González-Torres & Fernández-Rivas, 2015), and gender-related traits are significantly linked with self-esteem (Bem, 1974; Gentile et al., 2009; Mandal, 2004). Numerous meta-analyses have documented gender differences in various domains of self-esteem, mostly in favor of men (Gentile et al., 2009; Kling, Hyde, Showers, & Buswell, 1999; Zuckerman, Li, & Hall, 2016). The self-ascription of socially-defined characteristics of masculinity and femininity predict differently the sense of self-worth (Kling et al., 1999; Major, Barr, Zubek, & Babey, 1999), with positive role of endorsement of masculine/agentive attributes, yet ambiguous role of feminine/communal attributes endorsement (Major et al., 1999; Wojciszke, Baryła, Parzuchowski, Szymków, & Abele, 2011). The centrality of contingencies of self-worth is also gender-related (Crocker, Karpinski, Quinn, & Chase, 2003a; Lachowicz-Tabaczek, 2001), showing the stronger dependence of women's self-esteem on external sources of self-esteem (e.g. family support or others' approval) compared to the stronger independence of man's self-esteem (Cross & Madson, 1997; Markus, 1977; Sanchez & Crocker, 2005).

The focus of the current study was on college women's self-esteem. In the light of previous studies, women's self-evaluation faces impossible standards for physical beauty (Wolf, 1991), pertaining social restrictions (e.g. fewer jobs opportunities; Kling et al., 1999), self-fulfilling nature of negative stereotypes of women (Major et al., 1999), less favorable social evaluations of female's agentive behaviors (Rudman, Moss-Racusin, Phelan, & Nauts, 2012), and defining their self-worth upon external sources (Crocker & Wolfe, 2001; Rudman, Moss-Racusin, Phelan, & Nauts, 2012). Taken together, these characteristics lead women to develop fragile, and lower, self-esteem (Gentile et al., 2009), mainly in adolescence and emerging adulthood (Zuckerman et al., 2016), which, alternatively, re-

sults in greater vulnerability to psychopathology, e.g. depression (Cambron, Acitelli, & Pettit, 2009; Sanchez & Crocker, 2005).

The objectives of the present study were: (1) an analysis of women's preferred self-worth contingencies and their relationships with the level of global self-esteem; (2) the examination of relationships between self-endorsement of masculine and feminine attributes, and self-esteem of women in emerging adulthood; and (3) investigating the relationship between women's self-ascription of characteristics socially recognized as masculine or feminine to their self-worth contingencies and global self-esteem.

The present study provides new insights into female self-esteem. First, the present study adds by testing association between masculine/feminine attributes' self-endorsement and self-esteem in the Polish cultural context (Boski, Chojnowska, & Koziej, 2007), while the majority of research in this area has been conducted in the U.S. (Donnelly & Twenge, 2017). Second, the important consequences of centrality of particular self-contingencies (e.g. others' approval or appearance self-worth contingencies) like higher vulnerability to depression (Cambron et al., 2009; Sanchez & Crocker, 2005) makes the inquiry into preferred sources of women's self-esteem a justifiable and socially relevant goal. Third, the emerging adulthood period has been chosen because gender-related self-controls undergo important changes in this period (Arnett, 2000), which is accompanied by the appearance of a gender gap in self-esteem which lasts until middle adulthood (Bleidorn et al., 2016; Kasen, Chen, Sneed, Crawford, & Cohen, 2006).

Self-Esteem and Contingencies of Self-Worth

Self-esteem reflects a global positive self-evaluation (Baumeister, 1998, p. 694), "the level of global regard that one has for the self as a person" (Harter, 1993, p. 88) and is based on self-evaluation in domains relevant to the person (Crocker & Wolfe, 2001; James, 1890; Rosenberg, Schooler, Schoenbach, & Rosenberg, 1995). Self-esteem is a central component of everyday subjective experience (Kernis, 2003) and plays important psychological functions, from supporting tasks and goals, through regulating social relations and maintaining social positions to dealing with mortality salience (Baumeister, 1998; Baumeister et al., 2003; Leary & Baumeister, 2000; Leary, Tambor, Terdal, & Downs, 1995; Murray, Holmes, & Griffin, 2000; Routledge et al., 2010; Szpitalak & Polczyk, 2015). People with higher self-esteem tend to have a subjectively higher sense of happiness (Baumeister et al., 2003), which does not mean that the level of self-esteem solely determines the effective psychological adaptation (Kernis, 2003). If self-esteem is unstable, based on external criteria of self-assessment (e.g. approval of other people), and is inconsistent with implicit self-esteem (Johnson, 2016), this can lead to a deterioration of psychological functioning (Crocker & Park, 2004; Kernis, 2003). Consideration of the role of self-esteem, therefore, requires both the analysis of its level and the person's preferences towards contingencies (domains, sources) of self-worth (Crocker & Luhtanen, 2003; Crocker, Luhtanen, Cooper, & Bouvrette, 2003b).

Self-esteem increases and decreases in response to successes and failures in domains in which their self-esteem is invested (Hardy & Leone, 2008; James, 1890). The description of these domains was made within the framework of contingencies of self-worth (Crocker & Wolfe, 2001). The contingency of self-worth is defined as "a domain or category of outcomes on which a person has staked his or her self-esteem, so that a person's view of his or her value or worth depends on perceived successes or failures or adherence to self-standards in that domain" (Crocker & Wolfe, 2001, p. 594).

Jennifer Crocker and colleagues (2003a) identified seven contingencies of self-esteem among young adults, college students: academic achievement, appearance, approval from others, competition, family support, God's love, and virtue. Obtained contingencies are consistent with the results of numerous studies on the sources of self-esteem. According to this body of research, self-esteem is strongly associated with social acceptance and approval (Gorrese & Ruggieri, 2013; Leary et al., 1995), with good looks (Feingold, 1992; Gentile et al., 2009) and with achievements in competition with others in significant fields (Josephs, Markus, & Tafarodi, 1992; Mills & D'Alfonso, 2007). Self-esteem is also affected by assessment of one's own academic skills and expected achievements (Chung et al., 2014). Perceived acceptance and support from family members is positively associated with global self-esteem (Trumpeter, Watson, O'Leary, & Weathington, 2008). The conviction of one's moral virtues is significantly positively correlated with a sense of personal value (Crocker & Wolfe, 2001). References to religious reflection and the adoption of a transcendental perspective can constitute important components of the self-scheme and the sense of self-worth (Gebauer et al., 2013). The sense of God's unconditional love, availability and ability to help can be another foundation of self-esteem (Ho & Sim, 2013). Generally, self-esteem contingencies (sources) can be divided into: (a) externally oriented, like the approval of other people, comparisons with others and the results of competition, physical appearance, academic achievements, family relationships, and (b) internally oriented, such as moral virtues or God's love (Crocker et al., 2003b).

Among students who declared their self-esteem as dependent on academic achievements, information about educational successes or failures led to improvement or deterioration of daily self-esteem (Crocker et al., 2003a). The adopted contingencies of self-esteem translate into a stronger experience of challenges and difficulties in the preferred areas. The self-esteem contingent on academic success was associated with a greater number of reported problems in the field of academic education. The appearance contingency of self-worth was associated with a greater severity in evaluations for problems in social relations (Crocker & Luhtanen, 2003). After a failure in the preferred field of academic achievement, people with high dispositional self-esteem have a greater need to be recognized as competent and to enhance self-esteem as a state. In the same situation, people with low dispositional self-esteem experience lower self-esteem as a state as well as a decrease in positive affect, and reduce the need to be perceived as competent. People with high global self-esteem show greater resistance to failures in valued domains, while

people with low global self-esteem experience stronger discomfort after failure and withdraw their involvement from the preferred area (Park, Crocker, & Kiefer, 2007).

The preferred contingencies of self-worth are also directly related to the level of global self-esteem (e.g. Geng & Jiang, 2013). Other people's approval, competition and appearance contingencies correlate with lower self-esteem, while the self-worth contingent upon family support correlates positively with self-esteem (Crocker et al., 2003b; Crocker & Luhtanen, 2003). The self-esteem contingent upon academic achievements was negatively correlated with dispositional self-esteem (Park et al., 2007). The preference of contingencies of self-esteem, which are external and dependent on the assessment of other people or the results of comparison with them (contingencies of appearance, social approval, academic achievements, competition) can be considered as a risk factor for lowering self-esteem, while contingencies of self-esteem which are based on more stable sources and are internally oriented (contingencies of family support, moral virtues, God's love) can be considered as fostering stable and optimal self-esteem (see Crocker et al., 2003b; Kernis, 2003).

Masculinity Versus Femininity

Gender-related attributes are shaped by culturally enhanced expectations about which behaviors are appropriate for women and men, and prescriptive and proscriptive rules of conduct based on these expectations (Kessler & McKenna, 1978; Prentice & Carranza, 2002; Wood et al., 1997). Internalization of gender-related features into the self-schema affects the individual's functioning in educational, professional, and social domains (Egan & Perry, 2001; Heilman, 2001). Two basic dimensions of self-construals connected with gender roles are masculinity and femininity (Bem, 1974). In a more general approach contents of gender-related self-construals are captured by dimensions of agency and communion, whose core values refer to self-orientation and other-orientation, respectively (Abele & Wojciszke, 2007; Bakan, 1966).

Masculinity can be mapped on to agentic characteristics, e.g. confidence, competence, assertiveness, whereas femininity can be mapped by communal attributes, e.g. warmth, kindness, support (Helgeson, 1994; Spence, Helmreich, & Stapp, 1975). Men's gender role prescriptions include agentic qualities (career oriented, assertive, aggressive, etc.), while women's prescriptions reflect community (emotional, warm, interested in children, etc.; Rudman et al., 2012). Men's gender role proscriptions, however, reflect weakness and vulnerability (e.g. emotional, naive, weak), which are treated as feminine traits. Dominance-related attributes (e.g. dominant, controlling, arrogant) are, contrarily, prohibited for women and perceived as more masculine (Rudman et al., 2012). Self-endorsement of the masculine/agentic and feminine/communal traits is related to quality of life (Johnson et al., 2006), affects functioning in various social relationships, e.g. close relationships, workplace (see Harris & Schwab, 1990; Mandal, 2008) and influences the global self-esteem (Gebauer et al., 2013; Helgeson, 1994).

Masculinity Versus Femininity and Self-Esteem

A large body of research shows that self-endorsement of typically masculine features is positively associated with self-esteem, while the self-attribution of features considered feminine is in negative or minimal relationship with self-esteem (Hirschy & Morris, 2002; Major et al., 1999; Orlofsky & O'Heron, 1987; Spence et al., 1975). Whitley (1983), using a meta-analytical approach, showed that both masculinity and femininity correlate positively with self-esteem, but the effect sizes are higher for masculinity (Antill & Cunningham, 1980; Spence, 1991; Spence et al., 1975). Marsh, Antill, and Cunningham (1987) reported positive associations between numerous indicators of masculinity and agency, and various indicators of self-esteem, but demonstrated an unstable and negative correlation between femininity and self-esteem. More recently, studies have shown evidence of positive associations between masculinity and self-esteem (Johnson et al., 2006; Long, 1991; Lundy & Rosenberg, 1987; Spence & Hall, 1996; Usmiani & Daniluk, 1997; Whitley, 1988). The self-ascription of masculine traits in adolescence predicted increased self-esteem in young adulthood (Stein, Newcomb, & Bentler, 1992). Burnett, Anderson, and Heppner (1995) showed that masculinity, but not the social pressure on being masculine, positively correlates with self-esteem, while femininity does not correlate with self-esteem, but environmental pressure on being feminine positively affects the sense of self-worth. Masculinity was to a large extent correlated with self-esteem, self-efficacy and high level of psychological adaptation (Hirschy & Morris, 2002).

In comparison to masculinity, the relationship between femininity and self-esteem is ambiguous, with evidences of negative (Moscoso, García-Izquiere, & Bastida, 2012), positive (Antill & Cunningham, 1980; Pilar Matud, Bethencourt, & Ibáñez, 2014; Spence et al., 1975) or non-significant correlations. However, several researches into personality traits connected with communion (e.g. agreeableness-consciousness) or combination of agency and communion (e.g. gregarious-extraverted) have showed their positive association with self-esteem (Robins, Hendin, & Trzesniewski, 2001; Zeigler-Hill, 2010). These findings are generally consistent with the effect of agency-over-communion on self-esteem (Wojciszke et al., 2011), which expresses the greater significance of agentic information for self-esteem, as compared to communal information. Yet, there are instances in which feminine/communal traits may play a similarly positive role for self-esteem, as masculine/agentic traits endorsement.

Masculinity Versus Femininity and Contingencies of Self-Worth

Self-ascription of features considered to be typically masculine and feminine is also associated differently with preferences in personal values and contingencies of self-worth (Eagly, Beall, & Sternberg, 2004). Women reported higher levels of benevolence and universalism, whereas men showed higher levels of power, achievement, and hedonism (Schwartz & Rubel-Lifschitz, 2009). Similarly, in occupational interests, gender differen-

ces showed higher preference for people-oriented professions among women, and higher preference for thing-oriented professions among men (Su, Rounds, & Armstrong, 2009). Men attribute greater value to power, stimulation, hedonism, achievements, self-directed values, while women value integrity and universalistic values higher (Schwartz & Rubel, 2005). Self-assigning of the features considered to be typically masculine may therefore result in a stronger preference for self-worth contingencies which are related to the male role, e.g. competition, while self-ascription of the typically feminine characteristics may favor a higher preference for conditions consistent with the female role, e.g. on the sense of family support (see Bem, 1974; Mandal, 2004).

Gender, Age and Culture as Moderators

The relationships between masculine/agentive traits endorsement and self-esteem is moderated by several factors, with gender, age and cultural variables among them (Gebauer et al., 2013). Although significant positive correlations between masculinity and self-esteem have been found both in men and women, the positive correlations of femininity and self-esteem appeared in women (Gebauer et al., 2013; Macdonald, Ebert, & Mason, 1987; Wagner, Lüdtke, Jonkmann, & Trautwein, 2013). These results suggest that the role of femininity in self-evaluations may be more pronounced in women.

Age, life events, and requirements linked with the developmental period also moderate relative importance of masculine/agentive versus feminine/communal traits for self-esteem (Donnelly & Twenge, 2017). Where adulthood is linked with entering the job market and the pursuit of higher education, the agentive/masculine traits become more significant for self-esteem from late adolescence to middle adulthood (Lopez & Gonzalez-Barrara, 2014). The relative importance of agentive traits compared to communal ones has increased across generations since 1966 (Twenge, Campbell, & Gentile, 2012). The role of feminine/communal traits endorsement for self-esteem was positive and higher than the role of masculine/agentive traits in older age, mainly among women (Gebauer et al., 2013). Important life events, e.g. the anticipation of motherhood may also strengthen the importance of feminine features (see Donnelly & Twenge, 2017). Therefore, the importance of masculine versus feminine traits in self-evaluations may differ according to timing of a specific life event and developmental periods (Strough, Leszczynski, Neely, Flinn, & Margrett, 2007), with adolescence and young adulthood as especially important periods due to the coincidence of focus on agency, the largest gender gap in self-esteem, and development of adult gender role endorsement (Bleidorn et al., 2016).

Third, cultural characteristics, e.g. individualism-collectivism, nation-level preference for agency/communion, may moderate the role of masculine and feminine traits for an individual's self-esteem (Gebauer et al., 2013). The general limitation of contemporary conclusions about the stronger role of masculine traits compared to feminine ones for self-worth is that they are based on studies conducted mainly in United States (Flaherty & Dusek, 1980; Johnson et al., 2006; Lundy & Rosenberg, 1987; Macdonald et al., 1987;

Spence et al., 1975). Only a few studies have been conducted in Australia (Antill & Cunningham, 1979; Marsh et al., 1987), Spain (Moscoso et al., 2012), and China (Bi et al., 2013) and yielded similar results. Nevertheless, other studies give different results. In South China femininity positively affected self-esteem, while in North China, it was not associated with self-esteem (Bi et al., 2013). Israeli girls who reported features and behaviors considered to be masculine had lower self-esteem (Lobel, Slone, & Winch, 1997). Several possible factors may underlie these cultural differences.

First, the value orientation present in each culture may promote the role of agentic or communal traits. In collectivistic cultures (China, Columbia, and Japan) communal traits predict positive self-esteem among women, whereas among men and in both men and women in individualistic cultures predictive role of communion is absent (Wojciszke & Białobrzeska, 2014). Culture-level of agency and communion affects the relative importance of self-endorsement of these traits, with greater role of traits congruent with cultural preference (Gebauer et al., 2013). Additionally, gender differences in self-perception and the role of masculine (agentic) and feminine (communal) traits are more pronounced in gender-equal cultures (Bleidorn et al., 2016; Schmitt et al., 2017; Zuckerman et al., 2016).

Second, the content of masculinity and femininity may differ between cultures. Cuddy and colleagues (2015) have demonstrated that the components of masculinity reflect the values and traits which are desirable in each culture. In more collectivistic cultures, communal traits are regarded as more masculine than agentic ones; the reverse pattern is present in individualistic cultures.

Third, some temporal changes in content of masculinity and femininity cannot be omitted. Cross-temporal meta-analysis of gender roles endorsement among U.S. college students has demonstrated that women have become less likely to endorse feminine traits as self-representative, which has revealed a devaluation of traditional femininity (Donnelly & Twenge, 2017). Nevertheless, it does not mean that the communal core of femininity has substantially changed. Lipińska-Grobelny and Gorczycka (2011) made a re-analysis of Psychological Gender Inventory in Polish society, resembling the Bem's steps of preparation of the measure of femininity and masculinity, and showed that correlations between an earlier measure of psychological gender in Polish research, namely Psychological Gender Inventory (Kuczyńska, 1992), yielded very similar results, and the correlations between new and older version of femininity and masculinity subscales were above .60.

Cultural Context of the Present Study

Investigating the links between masculinity, femininity and self-esteem in Polish college women may be informative from the cross-cultural psychology point of view because of the specificity of Polish culture. Poland is characterized by high power distance, collectivism, moderate masculinity and average uncertainty avoidance (Spector, Cooper, &

Sparks, 2001; Todeva, 1999), relatively high preference for conservatism and harmony (Schwartz, 1999), and by high approval of traditional norms (Marody, 1993). In terms of cultural dimensions proposed by Hofstede (2001), Poland is described as rather masculine, with high power distance, high restraint, and uncertainty avoidance, but moderately individualistic (retrieved from <http://geert-hofstede.com/cultural-tools.html>). Polish users of eDarling received the country-level highest level of agency relative to communion (Gebauer et al., 2013). However, the core trait of Polish culture is humanism, which has been also proven to negatively correlate with masculinity (Boski, 2009). In comparison to the German, Swedish and Italian public sphere, that of Poland is more feminized and the gender polarization is greater (Boski et al., 2007).

The image of women in Polish culture is linked mainly to caring roles (Furnham & Paltzer, 2010), modesty (Dabul, Wosińska, Cialdini, Mandal, & Whetstone-Dion, 1997; Mandal, 2004), self-sacrifice, devotion to family, and perfectionism (Titkow, 2012). It seems to reflect high prescriptive rules for traditionally feminine/communal traits toward Polish women. Despite the cultural preference for traditional norms concerning gender roles, Polish women are supporters of liberal standards (Fodor & Balogh, 2010). The participation of Polish women in tertiary education is currently higher than that of men (59,04% in the total number of tertiary education students; Eurostat, 2018). In 2017, over 67% of women aged between 15 and over were professionally active (GUS, 2018), but the comparison with other EU countries showed that the employment rate among Polish women between 20 and 64 years old is below the average for the EU (Eurostat, 2017). Additionally, women usually occupy low-status positions and suffer from discrimination in their workplace, e.g. a glass ceiling (Boski, 2009; Olson et al., 2007; Stenning & Hardy, 2005; Watson, 1992). Women in Poland are still facing the problem of double-shift (Marody, 1993) and unequal division of household duties (Budrowska, Duch-Krzysztosek, & Titkow, 2003). On the other hand, 41% of managerial positions in Poland are occupied by women, which constitutes the second highest proportion in Europe (Eurostat, 2017). The earning gap between gender in Poland still favors men, but is also one of the lowest in the European Union (Eurostat, 2017; Hausmann, Tyson, & Zahidi, 2012). Since both education and work are related to competence which is an indicator of agency (Abele et al., 2016), the aforementioned findings demonstrate that prescriptive gender norms concerning agentic traits of Polish women seem complex, with a positive attitude to participate in tertiary education, but only a moderate level of employment compared to other European countries.

Taken together, the Polish cultural context can be defined as a mixture of high value of agency and high value of humanism, a traditional image of women, a greater tendency for women to pursue higher education and relatively moderate gender equality in workplaces (Global Gender Gap Report, 2018). The prescriptive gender rules in Poland reflect mainly the preference for communal characteristics compared to agentic ones, but the

importance of agentic traits seems to be growing. Therefore, endorsement of both masculine and feminine traits can affect women's self-esteem in Polish participants.

Hypotheses

Based on the results of previous studies on women's preferences in contingencies of self-esteem (Crocker & Luhtanen, 2003; Crocker & Wolfe, 2001; Lachowicz-Tabaczek, 2001) and the content of feminine gender role (Bem, 1981; Mandal, 2004), it could be expected that women would strongly prefer gender-related contingencies of self-worth, like family support, moral virtues, social approval and appearance, and to a lesser extent, efficiency in competition and academic achievements. Yet the high participation of Polish women in tertiary education and the relatively low earning gap between genders may indicate that Polish college women also value highly those contingencies of self-worth that are not related to the traditionally understood feminine gender role. Therefore, the first aim of the study is to explore the relative importance of contingencies of self-worth among Polish college women.

The second aim was to investigate links between preferred contingencies of self-worth and global self-esteem. It was expected that consciousness of a higher appearance, approval of others', competition, and academic achievements' contingencies of self-worth would be associated with lower self-esteem, while other contingencies of self-worth such as family support, moral virtues and God's love would correlate positively with self-esteem (see Crocker et al., 2003b; Crocker & Luhtanen, 2003; Park et al., 2007).

According to the characteristics of Polish culture, the positive association between both masculine and feminine traits endorsement and global self-esteem was expected. The moderate focus on individualism in Polish culture (Hofstede, 2001) and high country-level agency (Gebauer et al., 2013) would promote the predictive role of masculinity for women's self-esteem, while high humanism (Boski, 2009), preference for traditional norms concerning feminine gender roles in Poland (Marody, 1993), accompanied by high uncertainty avoidance (Hofstede, 2001), would strengthen the role of feminine traits endorsement for Polish college women's self-evaluation.

Next, it was expected that a stronger self-attribution of typically masculine traits would correlate with those contingencies of self-esteem having the agentic character, i.e. with competition contingency, academic achievements contingency, while a greater tendency to ascribe to themselves traits characterized as feminine will be in favor of moral and communal contingencies of self-worth, i.e. moral virtues, support family and God's love (see Gebauer et al., 2013). The structural equations modeling is used to examine the predictive role of self-esteem contingencies towards the level of self-esteem of women, the predictive role of self-assigning the masculine and feminine features towards the self-esteem of women, and potential indirect relationships in which self-esteem contingencies mediated between psychological masculinity and psychological femininity and dispositional self-esteem.

Method

Participants

One hundred and ninety-nine women, aged from 19 to 26 ($M = 21.36$, $SD = 1.67$), participated in the present study. Participants have been joining different academic courses at the University of Silesia in Poland. Participants were invited to join research during classes in groups of 20. The study was described as a “study of self-perception”. Participants were free to join and did not receive payment for the participation in the study. A pair-wise method was used to treat a few missing data resulting in a number of cases ranging from 191 (in structural equation modeling) to 194.

Measures

Psychological Gender Inventory

The *Psychological Gender Inventory*, *PGI* (Bem, 1974; the Polish adaptation of the Bem Sex Role Inventory: Kuczyńska, 1992) contains 35 items consisting of adjectives, 15 of which refer to psychological masculine traits (e.g. dominant, independent), 15 to psychological female traits (e.g. sensitive, caring), and the other 5 to traits attributable to both genders. The response format is a 5-point Likert scale ranging from 1 (never or almost never true) to 7 (always or almost always true). Reliability of masculine adjectives was $\alpha = .82$, and for feminine adjectives it was $\alpha = .76$. Scores for both masculinity and femininity were averaged. Additionally, the psychological gender variable was constructed according to criteria mentioned in Kuczyńska (1992). Individuals with femininity total score equal to or higher than 52 were regarded as highly feminine, while individuals with scores lower than 52 were seen as low in femininity. Similarly, individuals with a masculine total score higher than 48 were regarded as highly masculine, while those with a score of 48 or lower were regarded as low in masculinity. Four combinations were constructed and coded as types of psychological gender: undifferentiated (low in both femininity and masculinity), masculine (low in femininity and high in masculinity), feminine (high in femininity and low in masculinity) and androgynous (high in both femininity and masculinity).

Contingencies of Self-Worth Scale

The *Contingencies of Self-Worth Scale* (Crocker et al., 2003b; Author's Polish version) consists of 35 items ranged on a 4-point scale (0 – strongly disagree; 3 – strongly agree), and measures seven contingencies of self-worth: appearance (e.g. My sense of self-worth suffers whenever I think I don't look good; 5 items; $\alpha = .67$), others' approval (e.g. I can't respect myself if others don't respect me; 5 items; $\alpha = .74$), competition (e.g. Doing better than others gives me a sense of self-respect; 5 items; $\alpha = .81$), academic competencies (e.g. Doing well in school gives me a sense of self-respect; 5 items; $\alpha = .81$), family support (When I don't feel loved by my family, my self-esteem goes down; 5 items; $\alpha = .77$), vir-

tue (e.g. My self-esteem would suffer if I did something unethical; 5 items; $\alpha = .79$), and God's love (e.g. My self-worth is based on God's love; 5 items; $\alpha = .96$). Scores for all contingencies were produced as an average of assessment in each item of subscale.

Self-Esteem Scale

The *Self-Esteem Scale*, SES (Rosenberg, 1965; in Polish adaptation: Łaguna, Lachowicz-Tabaczek, & Dzwonkowska, 2007) consists of 10 items which measure global self-esteem and which ranged on the scale from 1 (strongly agree) to 4 (strongly disagree). Exemplary item of SES was: "At times I think I am no good at all", and "I certainly feel useless at times" (reverse scored). Results were averaged to produce a global self-esteem result. The reliability of SES in the present study was satisfactory ($\alpha = .89$).

Results

Femininity Versus Masculinity and Contingencies of Self-Worth as Predictors of Global Self-Esteem

Results showed that 84 (43.30%) women had feminine gender identity (high femininity and low masculinity), 64 (32.99%) women had androgynous gender identity (high femininity and high masculinity), 31(14.95%) women had undifferentiated gender identity (low masculinity and low femininity), and 16 (8.25%) had masculine gender identity (low femininity and high masculinity).

Means, standard deviations and inter-correlations among independent and dependent variables are presented in Table 1.

ANOVA conducted on the scores of preference for self-worth contingencies (within-person factor) revealed significant main effect of the type of self-worth contingency, $F(6, 1152) = 74.98, p < .001; \eta_p^2 = .281$; Wilk's $\lambda = .37$. *Post-hoc* Scheffe's tests showed that the most important contingency was family support, $M = 2.16, SD = .55$, marginally less important was virtue contingent self-worth (CSW), $M = 1.98, SD = .56, p = .089$, while the appearance contingent CSW, $M = 1.85, SD = .55$, competition CSW, $M = 1.92, SD = .57$, and academic competencies CSW, $M = 1.97, SD = .59$ were similarly less important than family CSW, $p < .038$. The approval of others CSW, $M = 1.53, SD = .63$ had lower importance than previously mentioned contingencies, $p < .001$, and God's love CSW had the lowest importance, $M = 1.17, SD = .91$, less important also than the approval of others CSW, $p < .001$.

Table 1

Means, Standard Deviations, Inter-Correlation Between Masculine Versus Feminine Traits Endorsement, Self-Worth Contingencies, and Global Self-Esteem

Variable	M	SD	1	2	3	4	5	6	7	8	9
1. Appearance CSW	1.851 _b	.546									
2. Others' Approval CSW	1.530 _c	.625	.508***								
3. Competition CSW	1.919 _b	.564	.419***	.372***							
4. Academic Competencies CSW	1.970 _b	.593	.311***	.294***	.566***						
5. Family Support CSW	2.163 _a	.547	.313***	.274***	.334***	.444***					
6. Virtue CSW	1.982 _b	.562	.127	.194**	.196**	.348***	.375***				
7. God's love CSW	1.167 _d	.906	.049	.183*	-.001	.264***	.263***	.348***			
8. Masculine traits	3.150	.579	-.088	-.270***	.227**	.045	.052	.028	-.037		
9. Feminine traits	3.804	.470	.152*	.141*	.110	.067	.239**	.129	.047	.171*	
10. Self-esteem	2.785	.520	-.276***	-.343***	-.013	-.020	-.024	-.040	-.085	.396***	.049

Note. CSW – contingent self-worth. Means with different subscripts differ significant at least $p < .09$.

* $p < .05$. ** $p < .01$. *** $p < .001$.

Additionally, the 4 (gender identity) \times 7 (contingencies of self-worth) ANOVA revealed significant interaction effect, $F(18, 1134) = 2.33$, $p = .001$; $\eta_p^2 = .036$. Specifically, the differences related to gender identity were found for others' approval contingency of self-worth, $F(3, 190) = 4.98$, $p = .002$; $\eta_p^2 = .073$, competition contingency of self-worth, $F(3, 190) = 4.52$, $p = .004$; $\eta_p^2 = .067$, and family support contingency of self-worth, $F(3, 190) = 2.85$, $p = .039$; $\eta_p^2 = .043$. The highest level of others' approval CSW characterized women with feminine gender identity, $M = 1.70$, $SD = .62$, and was significantly higher than in androgynous women, $M = 1.38$, $SD = .55$, $p = .014$, and marginally higher than in masculine women, $M = 1.21$, $SD = .82$, $p = .107$ (in Tukey's post-hoc). The highest levels of competition CSW were found in women with masculine gender identity, $M = 2.13$, $SD = .54$, and in androgynous women, $M = 2.04$, $SD = .50$, and was significantly higher than in undifferentiated women, $M = 1.64$, $SD = .64$, $p = .059$ and $p = .026$, respectively. The highest family support CSW was found in women with feminine gender identity, $M = 2.23$, $SD = .53$, which was marginally higher than for undifferentiated women, $M = 1.91$, $SD = .55$, $p = .101$.

Among contingencies of self-worth, the Appearance CSW and Others' approval CSW correlated with global self-esteem. Both associations were negative and of moderate magnitude, $r(192) = -.28$, $p < .001$ and $r(192) = -.34$, $p < .001$ respectively.

The participants described themselves as more feminine than masculine, $t(193) = 13.39$, $p < .001$; Cohen's $d = 1.26$. Masculinity correlated positively with global self-esteem, $r(192) = .40$, $p < .001$, and competition CSW, $r(192) = -.23$, $p = .001$, but negatively with others' approval CSW, $r(192) = -.27$, $p < .001$. Femininity failed to correlate with self-esteem, but correlated positively with family support CSW, $r(192) = .24$, $p < .001$, and

slightly with appearance CSW, $r(192) = .15$, $p = .035$, and others' approval CSW, $r(192) = .14$, $p = .05$. Gender identity type significantly predicted global self-esteem, $F(3, 189) = 10.02$, $p < .001$; $\eta_p^2 = .137$. The highest self-esteem was found in women with masculine gender identity, $M = 3.18$, $SD = .37$, and in androgynous women, $M = 2.95$, $SD = .52$. Significantly lower levels of self-esteem were found in women with feminine gender identity, $M = 2.66$, $SD = .52$, $p = .002$ and $p = .005$, respectively, and in women with undifferentiated gender identity, $M = 2.56$, $SD = .39$, $p = .001$ and $p = .005$, respectively.

Masculine and Feminine Traits Endorsement, Self-Worth Contingencies and Global Self-Esteem

Structural equation modeling (SEM) was used to examine associations between masculine and feminine traits endorsement, self-worth contingencies and global self-esteem. Prior to the analysis, the goodness of the seven-factor model of self-worth contingencies was analyzed, yielding in good fitness, $\chi^2 = 143.95$, $p < .001$, $\chi^2/df = 2.57$; CFI = .94; TLI = .90; RMSEA = .08 [.06; .10]; SRMR = .051 AGFI = .96. According to the path coefficients obtained in the confirmatory factor analyses conducted on the scores of PGI, contingencies of self-worth scales and SES, item parcels were produced for each latent variable (3 item parcels for SES, masculine traits endorsement and feminine traits endorsement, and two for each contingency of self-worth). Item parcels were formed in accordance with the balancing approach (single factor analysis parceling; Landis, Beal, & Tesluk, 2000). The item with the highest path coefficient with its latent variable was paired with the item which had the lowest item-scale correlation. The next highest and next lowest items were paired in the second parcel. The third highest and third lowest were paired to form the third parcel, till the allocation of all items with its respective latent variable (see Landis et al., 2000). The structural model of associations between variables included co-variation between masculine and feminine traits endorsement, as well as co-variations between all seven contingencies of self-worth. Figure 1 presents results of the SEM (for the sake of clarity of the figure, the item parcels and co-variations between self-worth contingencies were omitted; results for all parameters examined in the model are provided in the Supplementary Materials).

Structural model satisfactory fitted the data, $\chi^2 = 319.96$, $p < .001$, $\chi^2/df = 1.73$; CFI = .94; TLI = .92; RMSEA = .06 [.05; .07]; SRMR = .06; AGFI = .98. SEM showed that masculine traits endorsement was a positive predictor of competition CSW, $\beta = .27$, $p = .003$, while negative predictor of Others' approval CSW, $\beta = -.45$, $p < .001$, and Appearance CSW, $\beta = -.19$, $p = .084$. Feminine traits endorsement was a positive predictor of Appearance CSW, $\beta = .30$, $p = .013$, Others' approval CSW, $\beta = .27$, $p = .020$, and Family support CSW, $\beta = .29$, $p = .017$. Only the masculine traits endorsement positively predicted the global self-esteem, $\beta = .32$, $p = .035$.

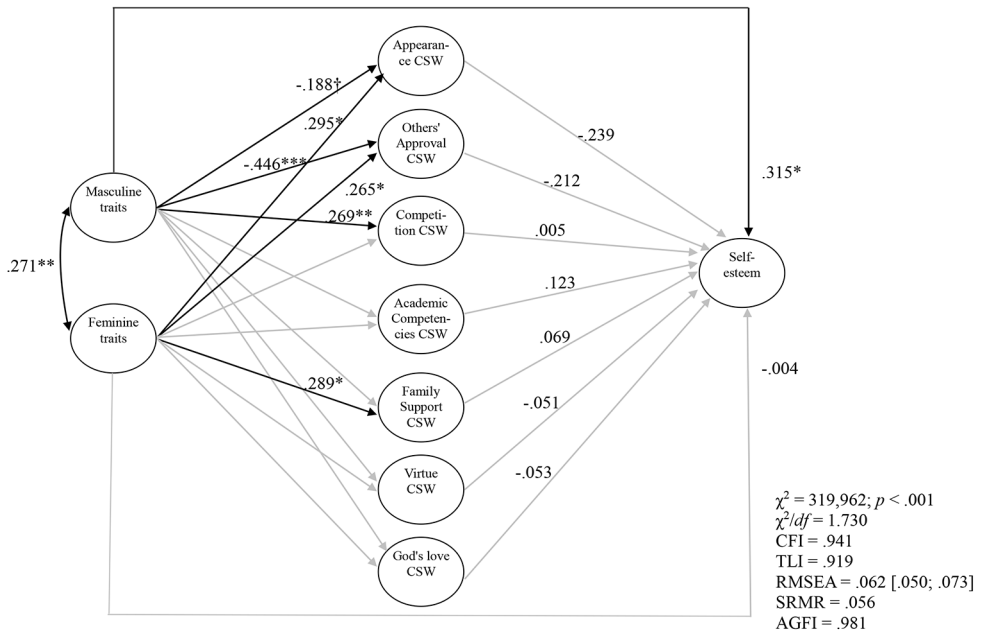


Figure 1. Structural model of associations between masculine versus feminine traits endorsement, contingencies of self-worth, and global self-esteem.

Note. Gray and dotted lines indicate non-significant associations. Path coefficients represent standardized beta-coefficients. Non-significant coefficients were omitted due to clarity of the model. CSW – contingent self-worth.

$\dagger p = .084$. $*p < .05$. $**p < .01$. $***p < .001$.

Discussion

The first goal of the study was the investigation of relative importance of particular contingencies of self-esteem among Polish college women. The obtained results showed that the most important contingency of self-worth of women in emerging adulthood was family support. Less important, yet equally valued contingencies, were moral virtues, academic competencies, competition and appearance. The least important conditions for self-esteem of women were self-worth contingencies of the approval of others and the experience of God's love. The obtained hierarchy of significance of the contingencies of women's self-worth is consistent with the results of the previous research in American samples (Crocker & Luhtanen, 2003) and previous analyzes of the significance of individual components of self-evaluation in Polish samples (Lachowicz-Tabaczek, 2001). The high tendency to associate self-esteem with the quality of family relationships refers to the stronger tendency in women, to build their self-scheme as interdependent, in which

the quality of social relations plays a key role (Cross & Madson, 1997; Mandal, 2004; Markus, 1977; Markus & Kitayama, 1991). The high perceived importance of moral virtues in women can be interpreted as evidence that these values are seen as highly significant for good relations with other people, and the morality of women, especially modesty, is a highly valued and socially desirable value (Dabul et al., 1997). The conditioning of women's self-esteem with regard to appearance refers to the important role of appearance for the women's role (Jackson, Sullivan, & Hymes, 1987; Wolf, 1991). The high position of competition and academic competencies in self-assessment of women generally reflect the important high role attached to education by contemporary women, especially by college women (Lopez & Gonzalez-Barrara, 2014; Oesterle, Hawkins, Hill, & Bailey, 2010). The obtained pattern of preferences across self-worth contingencies reflects also the current image of the feminine role in Polish society, with the focus on traditional, interdependence values and newer focus on agency in educational and job performances.

The physical appearance contingency and others' approval contingency of self-worth were negatively associated with global self-esteem. These results accord with previous findings (Crocker et al., 2003b; Park & Crocker, 2008). Both contingencies result in internalization of external social assessments as determinants of self-esteem which can be regarded as a risk factor for women's self-esteem mainly due to high social standards of excellence for women and the instability of external sources of information which affects their sense of self-worth, i.e. by higher sensitivity to social feedback (Crocker & Wolfe, 2001; Roberts & Nolen-Hoeksema, 1989). Negative association of these contingencies of self-worth with global self-esteem show, therefore, that women who are strongly concerned about their appearance or about being approved, may suffer from lower self-esteem.

Furthermore, while women's preferred contingencies of self-worth are congruent with their gender role, this has negative or null impact on their self-worth. The others' approval contingency of self-worth was the second lowest in preferences of college women, which may indicate that women defend themselves against feminine role proscriptions which may devalue their self-esteem. However, appearance contingency of self-worth is relatively strong, which may reflect the high social focus on standards of women's appearance. As these standards are almost impossible to fulfill (Wolf, 1991), this adoption of the appearance CSW is a risk factor for lower self-esteem in women. Contrary to Wood and colleagues' (1997) findings, these results showed that adopting contingencies of self-worth which are congruent with women's gender role may be risky for their self-worth.

Self-assigning of characteristics perceived as typically masculine proved to be positively related to the women's global self-esteem and contingencies of self-esteem which refers to the desire to act better in competing with others. Competitiveness and dominance are regarded as representative traits of psychological masculinity (Bem, 1974; Thompson & Bennett, 2015), therefore links between the self-ascription of masculine

traits and preference for competition contingent self-worth can reflect self-verification strivings in valued sources of self-esteem (Swann, 2012). Women who attributed more features considered to be typically masculine to themselves had a lower preference for appearance and others' approval contingencies of self-worth. In contrast, ascribing traits perceived as typically feminine to oneself, promotes contingencies of self-esteem, like the approval of others and the quality of support obtained from the family. Characteristics perceived as typically feminine foster the externally contingent self-worth and result in unstable self-esteem (Crocker & Luhtanen, 2003). Lower levels of self-esteem and the instability of self-esteem are linked to the increased level of depressive symptomatology (Crocker et al., 2003a; Orth, Robins, Trzesniewski, Maes, & Schmitt, 2009). The results of the present study show that the self-ascription of features considered to be masculine may prevent the preference of some of the external contingencies of self-worth, e.g. other's approval contingency of self-worth, yet is also positively correlated with other contingencies which can be regarded as external, e.g. competition CSW.

Of all the analyzed variables, only the psychological masculinity correlated significantly and positively with women's global self-esteem. This result corroborates the findings of the previous studies which demonstrated the significant and positive role of masculine/agentic traits for self-esteem (Major et al., 1999; Wojciszke et al., 2011). Assigning feminine features did not significantly correlate with the self-esteem of women, which is in concordance with the previous findings for low significance of communal traits for self-esteem in Polish samples (Wojciszke et al., 2011; Wojciszke & Białobrzaska, 2014). Self-ascription of feminine features was related to the preferences for contingencies of self-worth, which were of communal nature (family relationships, approval of others, etc.). However, psychological femininity was irrelevant to the prediction of self-esteem. This finding may result from the information processing standpoint which occurs at the time of self-evaluation. While perceiving and evaluating one's self, the individual is in the standpoint of the actor (the agentic perspective), which makes the information about one's effectiveness more salient, while information about social relations and communal characteristics (often taken from the perspective of a recipient) as less perceptively clear, and of a lesser utility (see Abele & Wojciszke, 2007, 2014; Wojciszke et al., 2011). The obtained results contradict the congruence model (Stein et al., 1992), which posits that psychological adjustment is higher when the gender role fits the biological sex (see DiDonato & Berenbaum, 2013), and are consistent with the conclusions that the component of psychological masculinity is responsible for better adaptation of androgynous persons (Lefkowitz & Zeldow, 2006; Spence et al., 1975), given the majority of participants have androgynous gender identity.

The hypothesis concerning cultural background of relationships between femininity and self-esteem in Polish college women was not confirmed. The obtained pattern of associations fits findings obtained in individualistic cultures (Gebauer et al., 2013; Wojciszke et al., 2011). Given the moderate level of individualism in Poland (60 in Hof-

stede 0 to 100 scale) it can be suggested that the higher importance of communal traits may be pronounced only in cultures which strongly value communal traits, not in those of moderate scores on individualism – collectivism. Although the core value of Polish culture is humanism, which is inversely correlated with masculinity (Boski, 2009), agentic rather than communal traits are preferred more among Polish college women (see Gebauer et al., 2013).

The present study has some limitations. Firstly, the measurement of the analyzed variables was carried out using the self-report scales. Therefore, the obtained results may be confounded by social desirability. In further analyzes the experimental or implicit measures of self-esteem, contingencies of self-worth and psychological masculinity, and femininity should be used (Johnson, 2016; Park et al., 2007). Secondly, the conducted structural equation modeling does not allow for reaching strong conclusions on the direction of causality. Verification of hypotheses regarding the direction of the mediated relationships between the attribution of masculine and feminine traits, contingencies of self-worth and the level of global self-esteem should be carried out in longitudinal or experimental designs in the future research. Third, despite the good fit of the seven-factor contingencies of self-worth model than alternative models (e.g. two factors: agentic and communal contingencies, Gebauer et al., 2013), in multidimensional analyzes (SEM), the collinearity of self-worth contingencies makes it difficult to examine individual relationships between particular self-worth contingency and the global self-esteem. Significant associations displayed in correlation analysis become statistically non-significant, when co-variances between contingencies were included in the structural model. In real social situations, the particular context may selectively trigger specific self-worth contingencies, and their dispositional significance can result in a stronger or weaker influence of failure or success on the state of self-esteem (see Niiya, Ballantyne, North, & Crocker, 2008; Park et al., 2007). Future research should, therefore, analyze the joint impact of masculine and feminine traits ascription and contingencies of self-worth activated apart on the global or state self-esteem (see Park et al., 2007). It would be particularly important to examine relationships for these self-esteem contingencies, which are differently predicted by traits considered to be typically masculine and traits seen as typically feminine, e.g. the appearance and others' approval contingencies of self-worth. In addition, the ability to selectively self-ascribe features perceived as masculine or feminine, depending on its potential for increasing specific self-evaluations in a given field (cf. Oswald & Chapleau, 2010) may be examined (e.g. enhancing the masculine traits in competitive social situations). Several limitations of the present study are due to the gender and educational characteristics of the participant. Future research should examine the model of relationships between masculine versus feminine, contingencies of self-worth and self-esteem, simultaneously in men and women, and use a design which helps to investigate the generational differences (Twenge et al., 2012). Since the participants were students the high preference for particular self-worth contingencies (e.g. academic achievements) could be due to the academic

involvement of participants. Future research should investigate potential differences with the non-student population. Another important limitation of the study is a measurement of psychological femininity and masculinity. Psychological Gender Inventory (Kuczyńska, 1992) used in the study measures traditional femininity, whereas the content and importance of feminine traits understood in the traditional manner is currently devalued (Donnelly & Twenge, 2017). Several traits mentioned in PGI, like naivety, have to be reexamined in terms of validity to measure the feminine trait in current society. Nevertheless, the core of feminine gender role seems to be unchanged (Lipińska-Grobelny & Górczycka, 2011); therefore the obtained results remain valid.

The study's results are useful in several domains of psychological and counseling practice. First, as the appearance CSW and others' approval CSW predicted negative self-esteem, and the endorsement of feminine traits promote such contingencies of self-worth, child and family psychologists may consider it justified to warn parents against strong internalization of feminine proscriptions concerning appearance and social approval. Second, educational and work psychologists may use the results to build training programs which help girls to take advantage of their feminine/communal traits in perceiving chances to pursue their careers.

The present study showed that the sense of high-quality family relationships, physical appearance, achievements in competition and in the academic environment, as well as moral virtues, play a significant role in the women's self-esteem. To a lesser extent, women prefer the approval of other people and the sense of God's love as a source of their self-esteem. Women whose self-esteem is contingent upon the approval of others and upon physical appearance, have lower global self-esteem. Self-ascription of the traits socially recognized as masculine has a protective role against adapting external contingencies of self-esteem: physical appearance and the others' approval contingencies which result in lower global self-esteem and other psychological consequences (Crocker et al., 2003b). Psychological masculinity is positively correlated with global self-esteem, while femininity showed non-significant associations with women's self-esteem. Self-ascription of features perceived as typically feminine, however, constitutes a risk factor for adopting external conditions of self-esteem.

Funding: The authors have no funding to report.

Competing Interests: The authors have declared that no competing interests exist.

Acknowledgments: The authors have no support to report.

Data Availability: A dataset and supplementary materials for this study are freely available (see the [Supplementary Materials section](#)).

Supplementary Materials

The following Supplementary Materials are available via the PsychArchives repository (for access see Index of [Supplementary Materials](#) below):

1. Study dataset (Data)
2. Syntax and full results
3. Study codebook (Data code book)

Index of Supplementary Materials

Mandal, E., & Moroń, M. (2019). *Supplementary materials to "Contingencies of self-worth and global self-esteem among college women: The role of masculine and feminine traits endorsement"*. PsychOpen. <https://doi.org/10.23668/psycharchives.2622>

References

- Abele, A. E., Hauke, N., Peters, K., Louvet, E., Szymkow, A., & Duan, Y. (2016). Facets of the fundamental content dimensions: Agency with competence and assertiveness—Communion with warmth and morality. *Frontiers in Psychology, 7*, Article 1810. <https://doi.org/10.3389/fpsyg.2016.01810>
- Abele, A. E., & Wojciszke, B. (2007). Agency and communion from the perspective of self versus others. *Journal of Personality and Social Psychology, 93*(5), 751-763. <https://doi.org/10.1037/0022-3514.93.5.751>
- Abele, A. E., & Wojciszke, B. (2014). Communal and agentic content in social cognition: A dual perspective model. *Advances in Experimental Social Psychology, 50*, 195-255. <https://doi.org/10.1016/B978-0-12-800284-1.00004-7>
- Alicke, M. D., & Sedikides, C. (2011). *Handbook of self-enhancement and self-protection*. New York, NY, USA: Guilford Press.
- Antill, J. K., & Cunningham, J. D. (1979). Self-esteem as a function of masculinity in both sexes. *Journal of Consulting and Clinical Psychology, 47*(4), 783-785. <https://doi.org/10.1037/0022-006X.47.4.783>
- Antill, J. K., & Cunningham, J. D. (1980). The relationship of masculinity, femininity, and androgyny to self-esteem. *Australian Journal of Psychology, 32*(3), 195-207. <https://doi.org/10.1080/00049538008254689>
- Arnett, J. J. (2000). Emerging adulthood: A theory of development from the late teens through the twenties. *American Psychologist, 55*(5), 469-480. <https://doi.org/10.1037/0003-066X.55.5.469>
- Bakan, D. (1966). *The duality of human existence: An essay on psychology and religion*. Oxford, England: Rand McNally.
- Baumeister, R. F. (1998). The self. In D. T. Gilbert, S. T. Fiske, & G. Lindzey (Eds.), *The handbook of social psychology* (pp. 680-740). New York, NY, USA: McGraw-Hill.

- Baumeister, R. F., Campbell, J. D., Krueger, J. I., & Vohs, K. D. (2003). Does high self-esteem cause better performance, interpersonal success, happiness, or healthier lifestyles? *Psychological Science in the Public Interest*, 4(1), 1-44. <https://doi.org/10.1111/1529-1006.01431>
- Bem, S. L. (1974). The measurement of psychological androgyny. *Journal of Consulting and Clinical Psychology*, 42, 155-162. <https://doi.org/10.1037/h0036215>
- Bem, S. L. (1981). Gender schema theory: A cognitive account of sex typing. *Psychological Review*, 88(4), 354-364. <https://doi.org/10.1037/0033-295X.88.4.354>
- Bi, C., Ybarra, O., & Zhao, Y. (2013). Accentuating your masculine side: Agentic traits generally dominate self-evaluation, even in China. *Social Psychology*, 44, 103-108. <https://doi.org/10.1027/1864-9335/a000144>
- Bleidorn, W., Arslan, R. C., Denissen, J. J. A., Rentfrow, P. J., Gebauer, J. E., Potter, J., & Gosling, S. D. (2016). Age and gender differences in self-esteem—A cross-cultural window. *Journal of Personality and Social Psychology*, 111(3), 396-410. <https://doi.org/10.1037/pspp0000078>
- Boski, P., Chojnowska, M., & Koziej, J. (2007). Kultura i tożsamość rodzaju: Porównania polsko-włoskie i polsko-niemieckie [Culture and gender identity: Polish-Italian and Polish-German comparisons]. *Studia Psychologiczne*, 45, 5-20.
- Boski, P. (2009). *Kulturowe ramy zachowań społecznych. Podręcznik psychologii międzykulturowej*. [Cultural frames of social behavior. A handbook of cross-cultural psychology]. Warszawa, Poland: Wydawnictwo Naukowe PWN.
- Budrowska, B., Duch-Krzysztozek, D., & Titkow, A. (2003). *Szklany sufit. Bariery i ograniczenia karier kobiet* [Glass ceiling. Barriers and restrictions for women's carrier]. Warszawa, Poland: Wydawnictwo Instytutu Filozofii i Socjologii PAN.
- Burnett, J. W., Anderson, W. P., & Heppner, P. P. (1995). Gender roles and self-esteem: A consideration of environmental factors. *Journal of Counseling & Development*, 73(3), 323-326. <https://doi.org/10.1002/j.1556-6676.1995.tb01757.x>
- Cambron, M. J., Acitelli, L. K., & Pettit, J. W. (2009). Explaining gender differences in depression: An interpersonal contingent self-esteem perspective. *Sex Roles: A Journal of Research*, 61(11-12), 751-761. <https://doi.org/10.1007/s11199-009-9616-6>
- Chung, J. M., Robins, R. W., Trzesniewski, K. H., Nofle, E. E., Robert, B. W., & Widaman, K. F. (2014). Continuity and change in self-esteem during emerging adulthood. *Journal of Personality and Social Psychology*, 106, 469-483. <https://doi.org/10.1037/a0035135>
- Coopersmith, S. (1967). *The antecedents of self-esteem*. San Francisco, CA, USA: Freeman.
- Crocker, J., Karpinski, A., Quinn, D. M., & Chase, S. (2003a). When grades determine self-worth: Consequences of contingent self-worth for male and female engineering and psychology majors. *Journal of Personality and Social Psychology*, 85(3), 507-516. <https://doi.org/10.1037/0022-3514.85.3.507>
- Crocker, J., & Luhtanen, R. K. (2003). Level of self-esteem and contingencies of self-worth: Unique effects on academic, social, and financial problems in college freshmen. *Personality and Social Psychology Bulletin*, 29(6), 701-712. <https://doi.org/10.1177/0146167203029006003>

- Crocker, J., Luhtanen, R. K., Cooper, M. L., & Bouvrette, A. (2003b). Contingencies of self-worth among college students: Theory and measurement. *Journal of Personality and Social Psychology*, 85, 894-908. <https://doi.org/10.1037/0022-3514.85.5.894>
- Crocker, J., & Park, L. E. (2004). The costly pursuit of self-esteem. *Psychological Bulletin*, 130(3), 392-414. <https://doi.org/10.1037/0033-2909.130.3.392>
- Crocker, J., & Wolfe, C. T. (2001). Contingencies of self-worth. *Psychological Review*, 108, 593-623. <https://doi.org/10.1037/0033-295X.108.3.593>
- Cross, S. E., & Madson, L. (1997). Models of the self: Self-construals and gender. *Psychological Bulletin*, 122(1), 5-37. <https://doi.org/10.1037/0033-2909.122.1.5>
- Cuddy, A. J. C., Wolf, E. B., Glick, P., Crotty, S., Chong, J., & Norton, M. I. (2015). Men as cultural ideals: Cultural values moderate gender stereotype content. *Journal of Personality and Social Psychology*, 109(4), 622-635. <https://doi.org/10.1037/pspi0000027>
- Dabul, A. J., Wosińska, W., Cialdini, R. B., Mandal, E., & Whetstone-Dion, R. (1997). Self-presentational modesty across cultures: The effects of gender and social context in the workplace. *Polish Psychological Bulletin*, 28, 295-306.
- DiDonato, M. D., & Berenbaum, S. A. (2013). Predictors and consequences of gender typicality: The mediating role of communality. *Archives of Sexual Behavior*, 42(3), 429-436. <https://doi.org/10.1007/s10508-012-9955-1>
- Donnelly, K., & Twenge, J. M. (2017). Masculine and feminine traits on the Bem Sex-Role Inventory, 1993-2012: A cross-temporal meta-analysis. *Sex Roles*, 76(9-10), 556-565. <https://doi.org/10.1007/s11199-016-0625-y>
- DuBois, D. L., & Flay, B. R. (2004). The healthy pursuit of self-esteem: Comment on an alternative to the Crocker and Park (2004) formulation. *Psychological Bulletin*, 130, 415-420. <https://doi.org/10.1037/0033-2909.130.3.415>
- Eagly, A. H., Beall, A. E., & Sternberg, R. J. (Eds.). (2004). *The psychology of gender* (2nd ed.). New York, NY, USA: Guilford Press.
- Egan, S. K., & Perry, D. G. (2001). Gender identity: A multidimensional analysis with implications for psychosocial adjustment. *Developmental Psychology*, 37, 451-463. <https://doi.org/10.1037/0012-1649.37.4.451>
- Eurostat. (2017). *The life of women and men in Europe: A statistical portrait. 2017 edition*. European Union. <https://doi.org/10.2785/50863>
- Eurostat. (2018). *Tertiary education statistics*. Retrieved March 2019 from <https://ec.europa.eu/eurostat/statistics-explained/index.php>
- Feingold, A. (1992). Good-looking people are not what we think. *Psychological Bulletin*, 111(2), 304-341. <https://doi.org/10.1037/0033-2909.111.2.304>
- Flaherty, J. F., & Dusek, J. B. (1980). An investigation of the relationship between psychological androgyny and components of self-concept. *Journal of Social Psychology*, 38, 984-992. <https://doi.org/10.1037/0022-3514.38.6.984>
- Fodor, E., & Balogh, A. (2010). Back to the kitchen? Gender role attitudes in 13 East European countries. *Zeitschrift für Familienforschung*, 22, 289-307.

- Furnham, A., & Paltzer, S. (2010). The portrayal of men and women in television advertisements: An updated review of 30 studies published since 2000. *Scandinavian Journal of Psychology*, 51, 216-236. <https://doi.org/10.1111/j.1467-9450.2009.00772.x>
- Gebauer, J. E., Wagner, J., Sedikides, C., & Neberich, W. (2013). Agency-communion and self-esteem relations are moderated by culture, religiosity, age, and sex: Evidence for the “self-centrality breeds self-enhancement” principle. *Journal of Personality*, 81(3), 261-275. <https://doi.org/10.1111/j.1467-6494.2012.00807.x>
- Geng, L., & Jiang, T. (2013). Contingencies of self-worth moderate the effect of specific self-esteem on self-liking or self-competence. *Social Behavior and Personality*, 41(1), 95-107. <https://doi.org/10.2224/sbp.2013.41.1.95>
- Gentile, B., Grabe, S., Dolan-Pascoe, B., Twenge, J. M., Wells, B. E., & Maitino, A. (2009). Gender differences in domain-specific self-esteem: A meta-analysis. *Review of General Psychology*, 13, 34-45. <https://doi.org/10.1037/a0013689>
- González-Torres, M. A., & Fernández-Rivas, A. (2015). Self-identity and gender differences. In M. Sáenz Herrero (Ed.), *Psychopathology in women: Incorporating gender perspective into descriptive psychopathology* (pp. 67-82). <https://doi.org/10.1007/978-3-319-05870-2>
- Gorrese, A., & Ruggieri, R. (2013). Peer attachment and self-esteem: A meta-analytic review. *Personality and Individual Differences*, 55(5), 559-568. <https://doi.org/10.1016/j.paid.2013.04.025>
- GUS. (2018). *Kobiety i mężczyźni na rynku pracy* [Women and men at the workmarket]. Warszawa, Poland.
- Hardy, L., & Leone, C. (2008). Real evidence for the failure of the Jamesian perspective or more evidence in support of it? *Journal of Personality*, 76(5), 1123-1136. <https://doi.org/10.1111/j.1467-6494.2008.00515.x>
- Harris, T. L., & Schwab, R. (1990). Sex-role orientation and personal adjustment. *Journal of Social Behaviour and Personality*, 5, 473-479.
- Harter, S. (1993). Causes and consequences of low self-esteem in children and adolescents. In R. Baumeister (Ed.), *Self-esteem: The puzzle of low self-regard* (pp. 87-116). https://doi.org/10.1007/978-1-4684-8956-9_5
- Hausmann, R., Tyson, L. D., & Zahidi, S. (2012). *The Global Gender Gap Report 2011*. Geneva, Switzerland: World Economic Forum.
- Heilman, M. E. (2001). Description and prescription: How gender stereotypes prevent women's ascent up the organizational ladder. *Journal of Social Issues*, 57(4), 657-674. <https://doi.org/10.1111/0022-4537.00234>
- Helgeson, V. S. (1994). Relation of agency and communion to well-being: Evidence and potential explanations. *Psychological Bulletin*, 116(3), 412-428. <https://doi.org/10.1037/0033-2909.116.3.412>
- Hirschy, A. J., & Morris, J. R. (2002). Individual differences in attributional style: The relational influence of self-efficacy, self-esteem, and sex role identity. *Personality and Individual Differences*, 32(2), 183-196. [https://doi.org/10.1016/S0191-8869\(01\)00003-4](https://doi.org/10.1016/S0191-8869(01)00003-4)
- Ho, A. V., & Sim, N. T. (2013). The development and validation of a God-centered self-esteem scale. *Journal of Psychology and Theology*, 41(1), 36-47. <https://doi.org/10.1177/009164711304100103>

- Hofstede, G. (2001). *Culture's consequences: Comparing values, behaviors, institutions and organizations across nations*. Thousand Oaks, CA, USA: Sage.
- Jackson, L. A., Sullivan, L. A., & Hymes, J. S. (1987). Gender, gender role, and physical appearance. *Journal of Psychology: Interdisciplinary and Applied*, 121(1), 51-56.
<https://doi.org/10.1080/00223980.1987.9712642>
- James, W. (1890). *The principles of psychology*. Cambridge, MA, USA: Harvard University Press.
- Johnson, H. D., McNair, R., Vojick, A., Congdon, D., Monacelli, J., & Lamont, J. (2006). Categorical and continuous measurement of sex-role orientation: Differences in associations with young adults' reports of well-being. *Social Behavior and Personality*, 34(1), 59-76.
<https://doi.org/10.2224/sbp.2006.34.1.59>
- Johnson, M. (2016). Relations between explicit and implicit self-esteem measures and self-presentation. *Personality and Individual Differences*, 95, 159-161.
<https://doi.org/10.1016/j.paid.2016.02.045>
- Josephs, R. A., Markus, H. R., & Tafarodi, R. W. (1992). Gender and self-esteem. *Journal of Personality and Social Psychology*, 63, 391-402. <https://doi.org/10.1037/0022-3514.63.3.391>
- Kaschak, E. (1992). *Engendered lives: A new psychology of women's experience*. New York, NY, USA: Basic Books.
- Kasen, S., Chen, H., Sneed, J., Crawford, T., & Cohen, P. (2006). Social role and birth cohort influences on gender-linked personality traits in women: A 20-year longitudinal analysis. *Journal of Personality and Social Psychology*, 91, 944-958.
<https://doi.org/10.1037/0022-3514.91.5.944>
- Kernis, M. H. (2003). Toward a conceptualization of optimal self-esteem. *Psychological Inquiry*, 14(1), 1-26. https://doi.org/10.1207/S15327965PLI1401_01
- Kessler, S. J., & McKenna, W. (1978). *Gender: An ethnomethodological approach*. Chicago, IL, USA: University of Chicago Press.
- Kling, K. C., Hyde, J. S., Showers, C. J., & Buswell, B. N. (1999). Gender differences in self-esteem: A meta-analysis. *Psychological Bulletin*, 125(4), 470-500.
<https://doi.org/10.1037/0033-2909.125.4.470>
- Kuczyńska, A. (1992). Pleć psychologiczna. Podstawy teoretyczne, dane empiryczne oraz narzędzia pomiaru [Gender identity: Theoretical background, empirical data and measurements]. *Przegląd Psychologiczny [Review of Psychology]*, 2, 237-247.
- Lachowicz-Tabaczek, K. (2001). Empiryczna weryfikacja tezy o "nierówności" samooceny kobiet i mężczyzn [Empirical verification of the thesis about "inequality" of self-esteem of women and men]. *Czasopismo Psychologiczne [Psychological Journal]*, 7(1), 33-41.
- Landis, R. S., Beal, D. J., & Tesluk, P. E. (2000). A comparison of approaches to forming composite measures in structural equation models. *Organizational Research Methods*, 3(2), 186-207.
<https://doi.org/10.1177/109442810032003>
- Leary, M. R. (1999). Making sense of self-esteem. *Current Directions in Psychological Science*, 8(1), 32-35. <https://doi.org/10.1111/1467-8721.00008>

- Leary, M. R. (2007). Motivational and emotional aspects of the self. *Annual Review of Psychology*, 58(1), 317-344. <https://doi.org/10.1146/annurev.psych.58.110405.085658>
- Leary, M. R., & Baumeister, R. F. (2000). The nature and function of self-esteem: Sociometer theory. In M. P. Zanna (Ed.), *Advances in experimental social psychology* (Vol. 32, pp. 1-62). San Diego, CA, USA: Academic Press.
- Leary, M. R., Tambor, E. S., Terdal, S. K., & Downs, D. L. (1995). Self-esteem as an interpersonal monitor: The sociometer hypothesis. *Journal of Personality and Social Psychology*, 68(3), 518-530. <https://doi.org/10.1037/0022-3514.68.3.518>
- Lefkowitz, E. S., & Zeldow, P. B. (2006). Masculinity and femininity predict optimal mental health: A belated test of the androgyny hypothesis. *Journal of Personality Assessment*, 87, 95-101. https://doi.org/10.1207/s15327752jpa8701_08
- Lipińska-Grobelny, A., & Gorczycka, A. (2011). Rekonstrukcja narzędzia do pomiaru płci psychologicznej [The reconstruction of a technique to assess psychological gender]. *Przegląd Psychologiczny* [A Review of Psychology], 54(2), 179-192.
- Lobel, T. E., Slone, M., & Winch, G. (1997). Masculinity, popularity, and self-esteem among Israeli preadolescent girls. *Sex Roles*, 36(5-6), 395-408. <https://doi.org/10.1007/BF02766655>
- Long, V. O. (1991). Gender role conditioning and women's self-concept. *Journal of Humanistic Counseling, Education & Development*, 30, 19-29. <https://doi.org/10.1002/j.2164-4683.1991.tb00027.x>
- Lopez, M., & Gonzalez-Barrara, A. (2014, March 6). *Women's college enrollment gains leave men behind*. Retrieved from Pew Research Center website: <http://www.pewresearch.org>
- Lundy, A., & Rosenberg, J. A. (1987). Androgyny, masculinity, and self-esteem. *Social Behavior and Personality*, 15(1), 91-95. <https://doi.org/10.2224/sbp.1987.15.1.91>
- Łaguna, M., Lachowicz-Tabaczek, K., & Dzwonkowska, I. (2007). Skala samooceny SES Morrisa Rosenberga – polska adaptacja metody [Morris Rosenberg's Self-Esteem Scale – Polish adaptation]. *Psychologia Społeczna* [Social Psychology], 2, 164-176.
- Macdonald, N. E., Ebert, P. D., & Mason, S. A. (1987). Marital status and age as related to masculine and feminine personality dimensions and self-esteem. *Journal of Social Psychology*, 127, 289-298. <https://doi.org/10.1080/00224545.1987.9713694>
- Major, B., Barr, L., Zubek, J., & Babey, S. H. (1999). Gender and self-esteem: A meta-analysis. In W. B. Swann, Jr., J. H. Langlois, & L. A. Gilbert (Eds.), *Sexism and stereotypes in modern society: The gender science of Janet Taylor Spence* (pp. 223-253). <https://doi.org/10.1037/10277-009>
- Mandal, E. (2004). *Podmiotowe i interpersonalne konsekwencje stereotypów związanych z płcią* [Intrapersonal and interpersonal consequences of gender stereotypes]. Katowice, Poland: Wydawnictwo Uniwersytetu Śląskiego.
- Mandal, E. (2008). *Miłość, władza i manipulacja w bliskich związkach* [Love, power, and manipulation in close relationships]. Warszawa, Poland: Wydawnictwo Naukowe PWN.
- Markus, H. (1977). Self-schemata and processing information about the self. *Journal of Personality and Social Psychology*, 35(2), 63-78. <https://doi.org/10.1037/0022-3514.35.2.63>

- Markus, H., & Kitayama, S. (1991). Culture and the self: Implications for cognition, emotion, and motivation. *Psychological Review*, *98*(2), 224-253. <https://doi.org/10.1037/0033-295X.98.2.224>
- Marody, M. (1993). Why I am not a feminist: Some remarks on the problem of gender identity in the United States and Poland. *Social Research*, *60*(4), 853-864.
- Marsh, H. W., Antill, J. K., & Cunningham, J. D. (1987). Masculinity, femininity, and androgyny: Relations to self-esteem and social desirability. *Journal of Personality*, *55*(4), 661-685. <https://doi.org/10.1111/j.1467-6494.1987.tb00457.x>
- Mills, J. S., & D'Alfonso, S. R. (2007). Competition and male body image: Increased drive for muscularity following failure to a female. *Journal of Social and Clinical Psychology*, *26*(4), 505-518. <https://doi.org/10.1521/jscp.2007.26.4.505>
- Moksnes, U. K., & Espnes, G. A. (2012). Self-esteem and emotional health in adolescents – Gender and age as potential moderators. *Scandinavian Journal of Psychology*, *53*, 483-489. <https://doi.org/10.1111/sjop.12021>
- Moscoso, S., García-Izquierdo, A. L., & Bastida, M. (2012). A mediation model of individual differences in attitudes toward affirmative actions for women. *Psychological Reports*, *110*(3), 764-780. <https://doi.org/10.2466/01.07.17.PR0.110.3.764-780>
- Murray, S. L., Holmes, J. G., & Griffin, D. W. (2000). Self-esteem and the quest for felt security: How perceived regard regulates attachment processes. *Journal of Personality and Social Psychology*, *78*, 478-498. <https://doi.org/10.1037/0022-3514.78.3.478>
- Niiya, Y., Ballantyne, R., North, M. S., & Crocker, J. (2008). Gender, contingencies of self-worth, and achievement goals as predictors of academic cheating in a controlled laboratory setting. *Basic and Applied Social Psychology*, *30*(1), 76-83. <https://doi.org/10.1080/01973530701866656>
- Orlofsky, J. L., & O'Heron, C. A. (1987). Stereotypic and nonstereotypic sex role trait and behavior orientations: Implications for personal adjustment. *Journal of Personality and Social Psychology*, *52*(5), 1034-1042. <https://doi.org/10.1037/0022-3514.52.5.1034>
- Orth, U., Robins, R. W., Trzesniewski, K. H., Maes, J., & Schmitt, M. (2009). Low self-esteem is a risk factor for depressive symptoms from young adulthood to old age. *Journal of Abnormal Psychology*, *118*, 472-478. <https://doi.org/10.1037/a0015922>
- Oesterle, S., Hawkins, J. D., Hill, K. G., & Bailey, J. A. (2010). Men's and women's pathways to adulthood and their adolescent precursors. *Journal of Marriage and the Family*, *72*(5), 1436-1453. <https://doi.org/10.1111/j.1741-3737.2010.00775.x>
- Olson, J. E., Frieze, I. H., Wall, S., Zdaniuk, B., Ferligoj, A., Kogovsek, T., . . . Makovec, M. R. (2007). Beliefs in equality for women and men as related to economic factors in Central and Eastern Europe and the United States. *Sex Roles*, *56*(5-6), 297-308. <https://doi.org/10.1007/s11199-006-9171-3>
- Oswald, D. L., & Chapleau, K. M. (2010). Selective self-stereotyping and women's self-esteem maintenance. *Personality and Individual Differences*, *49*(8), 918-922. <https://doi.org/10.1016/j.paid.2010.07.030>

- Park, L. E., & Crocker, J. (2008). Contingencies of self-worth and responses to negative interpersonal feedback. *Self and Identity*, 7(2), 184-203.
<https://doi.org/10.1080/15298860701398808>
- Park, L. E., Crocker, J., & Kiefer, A. K. (2007). Contingencies of self-worth, academic failure, and goal pursuit. *Personality and Social Psychology Bulletin*, 33(11), 1503-1517.
<https://doi.org/10.1177/0146167207305538>
- Pilar Matud, M., Bethencourt, J. M., & Ibáñez, I. (2014). Relevance of gender roles in life satisfaction in adult people. *Personality and Individual Differences*, 70, 206-211.
<https://doi.org/10.1016/j.paid.2014.06.046>
- Prentice, D. A., & Carranza, E. (2002). What women and men should be, shouldn't be, are allowed to be, and don't have to be: The contents of prescriptive gender stereotypes. *Psychology of Women Quarterly*, 26(4), 269-281. <https://doi.org/10.1111/1471-6402.t01-1-00066>
- Roberts, T.-A., & Nolen-Hoeksema, S. (1989). Sex differences in reactions to evaluative feedback. *Sex Roles*, 21(11-12), 725-747. <https://doi.org/10.1007/BF00289805>
- Robins, R. W., Hendin, H. M., & Trzesniewski, K. H. (2001). Measuring global self-esteem: Construct validation of a single-item measure and the Rosenberg Self-Esteem Scale. *Personality and Social Psychology Bulletin*, 27(2), 151-161. <https://doi.org/10.1177/0146167201272002>
- Rosenberg, M. (1965). *Society and the adolescent self-image*. Princeton, NJ, USA: Princeton University Press.
- Rosenberg, M. (1989). *Society and the adolescent self-image* (Rev. ed.). Middletown, CT, England: Wesleyan University Press.
- Rosenberg, M., Schooler, C., Schoenbach, C., & Rosenberg, F. (1995). Global self-esteem and specific self-esteem: Different concepts, different outcomes. *American Sociological Review*, 60(1), 141-156. <https://doi.org/10.2307/2096350>
- Routledge, C., Ostafin, B., Juhl, J., Sedikakes, C., Cathey, C., & Liao, J. (2010). Adjusting to death: The effects of mortality salience and self-esteem on psychological well-being, growth motivation, and maladaptive behavior. *Journal of Personality and Social Psychology*, 99, 897-916.
<https://doi.org/10.1037/a0021431>
- Rudman, L. A., Moss-Racusin, C. A., Phelan, J. E., & Nauts, S. (2012). Status incongruity and backlash effects: Defending the gender hierarchy motivates prejudice against female leaders. *Journal of Experimental Social Psychology*, 48(1), 165-179.
<https://doi.org/10.1016/j.jesp.2011.10.008>
- Sanchez, D. T., & Crocker, J. (2005). How investment in gender ideals affects well-being: The role of external contingencies of self-worth. *Psychology of Women Quarterly*, 29(1), 63-77.
<https://doi.org/10.1111/j.1471-6402.2005.00169.x>
- Schmitt, D. P., Long, A. E., McPhearson, A., O'Brien, K., Remmert, B., & Shah, S. H. (2017). Personality and gender differences in global perspective. *International Journal of Psychology*, 52(S1), 45-56. <https://doi.org/10.1002/ijop.12265>

- Schwartz, S. H. (1999). A theory of cultural values and some implication for work. *Applied Psychology: An International Review*, 48, 23-47.
<https://doi.org/10.1111/j.1464-0597.1999.tb00047.x>
- Schwartz, S. H., & Rubel, T. (2005). Sex differences in value priorities: Cross-cultural and multimethod studies. *Journal of Personality and Social Psychology*, 89(6), 1010-1028.
<https://doi.org/10.1037/0022-3514.89.6.1010>
- Schwartz, S. H., & Rubel-Lifschitz, T. (2009). Cross-national variation in the size of sex differences in values: Effects of gender equality. *Journal of Personality and Social Psychology*, 97(1), 171-185.
<https://doi.org/10.1037/a0015546>
- Sheldon, K. M., Elliot, A. J., Kim, Y., & Kasser, T. (2001). What is satisfying about satisfying events? Testing 10 candidate psychological needs. *Journal of Personality and Social Psychology*, 80(2), 325-339. <https://doi.org/10.1037/0022-3514.80.2.325>
- Spector, P. E., Cooper, C. L., & Sparks, K. (2001). An international study of the psychometric properties of the Hofstede Values Survey Module 1994: A comparison on individual and country/province level results. *Applied Psychology: An International Review*, 50, 269-281.
<https://doi.org/10.1111/1464-0597.00058>
- Spence, J. T. (1991). Do the BSRI and PAQ measure the same or different concepts? *Psychology of Women Quarterly*, 15, 141-165. <https://doi.org/10.1111/j.1471-6402.1991.tb00483.x>
- Spence, J. T., & Hall, S. K. (1996). Children's gender-related self-perceptions, activity preferences, and occupational stereotypes: A test of three models of gender constructs. *Sex Roles*, 35(11-12), 659-691. <https://doi.org/10.1007/BF01544086>
- Spence, J. T., Helmreich, R., & Stapp, J. (1975). Ratings of self and peers on sex role attributes and their relation to self-esteem and conceptions of masculinity and femininity. *Journal of Personality and Social Psychology*, 32, 29-39. <https://doi.org/10.1037/h0076857>
- Stein, J. A., Newcomb, M. D., & Bentler, P. M. (1992). The effect of agency and communality on self-esteem: Gender differences in longitudinal data. *Sex Roles*, 26(11-12), 465-483.
<https://doi.org/10.1007/BF00289869>
- Stening, A., & Hardy, J. (2005). Public sector reform and women's work in Poland: 'Working for juice, coffee and cheap cosmetics!' *Gender, Work and Organization*, 12, 503-526.
<https://doi.org/10.1111/j.1468-0432.2005.00286.x>
- Strough, J., Leszczynski, J., Neely, T., Flinn, J., & Margrett, J. (2007). From adolescence to later adulthood: Femininity, masculinity, and androgyny in six age groups. *Sex Roles*, 57(5-6), 385-396. <https://doi.org/10.1007/s11199-007-9282-5>
- Su, R., Rounds, J., & Armstrong, P. E. (2009). Men and things, women and people: A meta-analysis of sex differences in interests. *Psychological Bulletin*, 135(6), 859-884.
<https://doi.org/10.1037/a0017364>
- Swann, W. B., Jr. (2012). Self-verification theory. In P. A. M. Van Lange, A. W. Kruglanski, & E. T. Higgins (Eds.), *Handbook of theories of social psychology* (pp. 23-42).
<https://doi.org/10.4135/9781446249222.n27>

- Szpitalak, M., & Polczyk, R. (2015). *Samocena: geneza, struktura, funkcje i metody pomiaru* [Self-esteem: Genesis, structure, functions and methods of measurement]. Kraków, Poland: Wydawnictwo Uniwersytetu Jagiellońskiego.
- Thompson, E. H., Jr., & Bennett, K. M. (2015). Measurement of masculinity ideologies: A (critical) review. *Psychology of Men & Masculinity*, *16*(2), 115-133. <https://doi.org/10.1037/a0038609>
- Titkow, A. (2012). Co to jest praca kobiet? [Women's work: What is it?]. *Societas/Communitas*, *1*(13), 145-170.
- Todeva, E. (1999). Models for comparative analysis of culture: The case of Poland. *The International Journal of Human Resource Management*, *10*, 606-623. <https://doi.org/10.1080/095851999340297>
- Trumpeter, N. N., Watson, P. J., O'Leary, B. J., & Weathington, B. L. (2008). Self-functioning and perceived parenting: Relations of parental empathy and love inconsistency with narcissism, depression, and self-esteem. *The Journal of Genetic Psychology*, *169*, 51-71. <https://doi.org/10.3200/GNTP.169.1.51-71>
- Twenge, J. M., Campbell, W. K., & Gentile, B. (2012). Generational increases in agentic self-evaluations among American college students, 1966–2009. *Self and Identity*, *11*, 409-427. <https://doi.org/10.1080/15298868.2011.576820>
- Usmiani, S., & Daniluk, J. (1997). Mothers and their adolescent daughters: Relationship between self-esteem, gender role identity, and body image. *Journal of Youth and Adolescence*, *26*(1), 45-62. <https://doi.org/10.1023/A:1024588112108>
- Wagner, J., Lüdtkke, O., Jonkmann, K., & Trautwein, U. (2013). Cherish yourself: Longitudinal patterns and conditions of self-esteem change in the transition to young adulthood. *Journal of Personality and Social Psychology*, *104*, 148-163. <https://doi.org/10.1037/a0029680>
- Watson, P. (1992). Gender relations, education and social change in Poland. *Gender and Education*, *4*(1-2), 127-147. <https://doi.org/10.1080/0954025920040109>
- Whitley, B. E., Jr. (1983). Sex role orientation and self-esteem: A critical meta-analytic review. *Journal of Personality and Social Psychology*, *44*, 765-778. <https://doi.org/10.1037/0022-3514.44.4.765>
- Whitley, B. E., Jr. (1988). Masculinity, femininity, and self-esteem: A multitrait-multimethod analysis. *Sex Roles*, *18*(7-8), 419-431. <https://doi.org/10.1007/BF00288393>
- Wolf, N. (1991). *The beauty myth*. New York, NY, USA: William Morrow.
- Wood, W., Christensen, P. N., Hebl, M. R., & Rothgerber, H. (1997). Conformity to sex-typed norms, affect, and the self-concept. *Journal of Personality and Social Psychology*, *73*, 523-535. <https://doi.org/10.1037/0022-3514.73.3.523>
- Wojciszke, B., Baryła, W., Parzuchowski, M., Szymków, A., & Abele, A. E. (2011). Self-esteem is dominated by agentic over communal information. *European Journal of Social Psychology*, *41*, 617-627. <https://doi.org/10.1002/ejsp.791>
- Wojciszke, B., & Białobrzeska, O. (2014). Agency versus communion as predictors of self-esteem: Searching for the role of culture and self-construal. *Polish Psychological Bulletin*, *45*(4), 469-479. <https://doi.org/10.2478/ppb-2014-0057>

- World Economic Forum. (2018). *The Global Gender Gap Report 2018*. Retrieved from <https://www.weforum.org/reports/the-global-gender-gap-report-2018>.
- Zeigler-Hill, V. (2010). The interpersonal nature of self-esteem: Do different measures of self-esteem possess similar interpersonal content? *Journal of Research in Personality*, *44*(1), 22-30. <https://doi.org/10.1016/j.jrp.2009.09.005>
- Zuckerman, M., Li, C., & Hall, J. A. (2016). When men and women differ in self-esteem and when they don't: A meta-analysis. *Journal of Research in Personality*, *64*, 34-51. <https://doi.org/10.1016/j.jrp.2016.07.007>

PSPS Polish
Social
Psychological
Society

Social Psychological Bulletin is an official journal of the Polish Social Psychological Society (PSPS).



leibniz-psychology.org

PsychOpen GOLD is a publishing service by Leibniz Institute for Psychology Information (ZPID), Germany.