Is there any Relationship between Sexual Attraction and Gender Typology?

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People can be classified as attracted to both sexes, to men, to women, or to neither sex, and also as instrumental-expressive, instrumental, expressive, or non-instrumental-expressive. The two hypotheses tested herein are, on the one hand, the relative independence between these two typologies and, on the other, the close relation between sexual dimorphism and sexual attraction, in contrast to the relative independence between sexual dimorphism and the instrumental and expressive domains. A total of 503 university students (284 women and 219 men) completed two assessment instruments: The Sexual Attraction Questionnaire (SAQ) and the Bem Sex Role Inventory (BSRI, 12 items). Analysis of contingency tables was performed. The results provide empirical support for the hypothesis of independence of the two typologies, solid support for the relation between sexual dimorphism and sexual attraction, and clear support for the independence between the gender domains and sexual dimorphism. The implications of these data for the different outlooks concerning the relations between sex and gender are established.

Keywords: sexual attraction, sexual orientation, instrumentality, expressiveness, masculinity, femininity, androgyny

Las personas pueden ser clasificadas como atraídas por ambos sexos, por varones, por mujeres o por ninguno, a la par que ser consideradas como instrumental-expresivas, instrumentales, expresivas y ainstrumental-expresivas. Las dos hipótesis que se van a poner a prueba son, por un lado, la relativa a la independencia entre las dos tipologías y, por otro, la estrecha relación entre el dimorfismo sexual y la atracción sexual frente a la relativa independencia o cuasi-independencia entre aquél y los dominios instrumental y expresivo. Un total de 503 estudiantes universitarios, de los cuales 284 eran mujeres y 219 varones, cumplimentaron dos instrumentos de evaluación: el Cuestionario de Atracción Sexual (CAS) y el Bem Sex Role Inventory (BSRI, 12 ítems). Se realizaron análisis de tablas de contingencia. Los resultados ofrecen apoyo empírico a la hipótesis de la independencia de las dos tipologías, un sólido respaldo a la relación entre dimorfismo sexual y atracción sexual y un claro apoyo a la independencia de los dominios de género y el dimorfismo sexual. Se establecen las implicaciones de estos datos para las distintas posturas en torno a las relaciones entre la realidad del sexo y la del género.

Palabras clave: atracción sexual, orientación sexual, instrumentalidad, expresividad, masculinidad, feminidad, androginia

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Currently, one of the most descriptive, and therefore most useful, approaches to sexual attraction is the one that classifies people within a fourfold typology: people attracted to both sexes, those attracted to men, those attracted to women, and those who do not patently manifest attraction to either of the sexes (American Psychiatric Association, 2000). To begin with, this classification should not be taken as a moral judgment about the functionality or dysfunctionality of any of these four categories. This itself implies considerable progress when compared to the more classic viewpoint, which considered heterosexuality the normal and logical course of development for all people (men and women) in contrast to homosexuality (gays or lesbians) and, especially, to bisexuality. Nevertheless, these collectives are still struggling to receive the same or similar evaluative treatment as heterosexuals (Greene & Croom, 2000). Thus, the path was cleared to investigate what being heterosexual, homosexual, or bisexual consist of from a scientific point of view (i.e., their determining factors), and to analyze the possible similarities and differences of each category (also including individuals who are not attracted to either sex) in a series of dimensions ranging from intellective dimensions to personality development dimensions, as well as those of a more social nature. If researchers could at least have access to reliable data about the percentage of people belonging to each of these categories, it would lead to considerable scientific progress.

Within this broad spectrum of dimensions, those focused on the complex gender reality are particularly relevant, in view of the apparently close relationship between gender and sex (Desrochers, 1995; Finlay & Scheltema, 1991; Green & Kendrick, 1994). In fact, it is even more pertinent to point out the confusion of both realities. Thus, in the 20-volume encyclopedia published by Salvat (2003), the term androgyny, is defined as equivalent to hermaphrodism, and the word androgynous is said to be equivalent to masculine hermaphrodism. The authors seem to have overlooked the entire international scientific literature on psychological androgyny, published over the last thirty years, and which has nothing to do with hermaphrodism (Cook, 1985; Heilbrum, 1973; Singer, 2000; Stake, 1997; Woodhill & Samuels, 2003).

The gender typologies referred to in this work emerged when the viewpoint of masculinity/femininity underwent a radical change at the beginning of the 1970s (Constantinople, 1973). Till then, this construct was represented as a bipolar continuum: Masculine people could not be feminine or vice versa, that is, the predominant viewpoint was the model of congruence between sex (woman/man) and gender (femininity/masculinity). From then on, the representation would change to two axes that intersect, forming a right angle (Bem, 1974; Spence, Helmreich, & Stapp, 1975). Obviously, this orthogonality led to the establishment of a fourfold typology: (a) persons (regardless of their apparent sexual dimorphism) who scored high—above the median—

on the two independent masculinity and femininity scales were classified as androgynous; (b) people (women or men, indistinctively) who scored high on the masculinity scale but low on the femininity scale—below the median—were called masculine; (c) individuals who showed the opposite pattern—high scores on the femininity scale and low on the masculinity scale—were considered feminine; and (d) people who scored below the median on both scales were called undifferentiated. This fourfold typology was immediately accepted, so that currently, in only three decades, there are hundreds of works on this, as can be seen in any bibliographic search, for example, in the PsycINFO database.

The theoretical basis of these scales is what Parsons and Bales (1955) named the instrumental and expressive traits. The question that comes to mind is: Why are these scales called *masculinity* and *femininity scales* instead of *instrumentality* and *expressiveness scales*? Till now, nobody has seemed to want to answer this question rigorously. At least partially, this may explain the amount of confusion when referring to masculinity and femininity or even to androgyny (high levels of masculinity and femininity in the same person, regardless of his or her sex).

In this work, we start out from a theoretical model that has already been elaborated (Fernández, 1988, 1996, 1998, 2000), in which the twofold sex and gender reality is analyzed in detail. Sex refers to a complex reality rooted in biology (sexual chromosomes, sexual hormones, internal and external sexual organs, cerebral dimorphism) and that inevitably leads to psychosocial development throughout life (sexual assignation after birth, sexual discrimination in the early years, sexual identity during infancy, sexual redefinition in adolescence, sexual experience as an adult, and sexual readjustment in old age). On the other hand, gender is embedded in apparent sexual dimorphism, from which human reflection elaborates identities, roles, stereotypes, and specific gender asymmetries for each sex. This model is clearly different from other currently maintained points of view (Buss, 2004; Gergen, 2001).

One of the most numerous group of researchers, encouraged by the indubitable success of various feminist movements, assumes that, whenever possible (except for apparent sexual dimorphism and all it entails), sex should be substituted by gender, given the negative connotations of the term sex throughout history, basically because of the flagrant injustices committed by men against women (Kravetz & Marecek, 2001; Nicholson, 1997). Hence, institutions such as the American Psychological Association (2001) or the editors of many scientific journals— at least in the area of psychology—request or even insist that authors change the word sex to gender whenever the former appears in their manuscripts. Perhaps one of the most illustrative examples of this tendency is the fact that in 1995, in Beijing, during the Fourth World Conference on Women, one of the conclusions reached was precisely the need to substitute sex with gender (Izquierdo, 1998). Constructivism is possibly the most representative scientific advocate of this viewpoint, as it assumes the basic principle that most of the supposed differences between men and women are a product of society (Beall, 1993; Gergen, 2001; Gergen & Davis, 1997).

On the opposite extreme are those who believe that we may currently be undergoing a gender fad, but that the reality of sex will eventually predominate, as it has been a determining factor of the evolution of the species as such and is still crucial for its maintenance and development (Furedy, 2003). The scientific opinion underlying this viewpoint, although not exclusive to it, comes from sociobiology, which assumes that there are sound biological reasons for considering men and women different in significant aspects of their lives (Alexander, 1979; Betzig, 1999; Buss, 2004; Wilson, 1975).

A third group comprises researchers who believe that perhaps *sex* and *gender* could be used indistinctively, in order to avoid the disputes of the former groups. The scientific viewpoint that best represents this attitude is that of researchers unspecialized in these issues, but who include sex or gender as demographic or classification variables. Thus, one of the most well-known psychology dictionaries among the specialists has been forced to reflect this meaning in its latest edition (Colman, 2001).

Within the model of the twofold sex and gender reality, an essential nucleus of the complex sexual reality is comprised of sexual attraction. As current evaluation instruments do not seem to adequately operationalize the conception proposed in this model, a new questionnaire was elaborated (Sexual Attraction Questionnaire; SAQ), which, in view of the data, seems to have satisfactory psychometric properties (Fernández, Quiroga, & Rodríguez, in press). With regard to gender, over the second half of the past century, the instrumental and expressive traits have become a key piece in this complex reality. Several instruments have attempted to operationalize these constructs although the Bem Sex-Role Inventory (BSRI; Bem, 1974) has been the one most frequently used by the international scientific community despite the fact that, from the psychometric viewpoint, it has some deficiencies (Fernández, 1983). With regard to concepts, as pointed out by Spence (1991), and as is obvious from the model employed herein, the claim that the BSRI measures masculinity and femininity is hardly justified. The most that can be said about the BSRI is that it operationalizes the instrumental and expressive traits, although in many of the studies, this is different from the initial conception: Rather than the foreseen orthogonal bidimensionality, a related multidimensionality emerges (Choi & Fuqua, 2003).

Our aim in the present work is to test two hypotheses deduced from the proposed model. First, that the fourfold typology derived from sexual attraction—(a) people attracted to both sexes, (b) people attracted to men, (c) people attracted to women, and (d) people apparently not attracted to either sex—is not related, or is only very slightly related,

to the fourfold typology derived from the instrumental and expressive traits—(a) instrumental-expressive people, (b) instrumental individuals, (c) expressive people, and (d) non-instrumental-expressive persons—which would confirm that these typologies are two quite differentiated realities. Second, that sexual attraction is closely related to apparent sexual dimorphism, whereas the instrumental and expressive traits have practically no relationship with sexual dimorphism.

Method

Participants

A total of 503 university students, 284 women and 219 men, with a mean age of 20.79 (SD=3.7), completed the two assessment questionnaires used in this study. Of these students, 50.5% were 1st-year students, 19.1% were in their 2nd year, 15.5% were 3rd-year students, 12.9% 4th-year, and 2% were in their 5th year. They all belonged to various centers of the University Complutense of Madrid. Most of the students were studying the specialty of Teaching (57.1%), 18.1% were studying Pedagogy, 9.3% Medicine, 9.9% Psychology, and 5.6% Political Sciences and Sociology.

Instruments

The SAQ was employed to evaluate sexual attraction. After the last refining, it is now made up of 16 elements, 8 referring to attraction to women and 8 referring to attraction to men. The items are meant to operationalize a whole series of aspects that apparently configure what is commonly understood as sexual attraction ("In my gang, they know that I am attracted to women," "My friends think that I like men," "I like to think that men notice me," "I find some women TV presenters very erotic"). Each element is rated on a 7-point Likert-type scale, where 1 stands for the lowest degree of agreement with the content of the item, and 7 indicates the highest degree of agreement. Concerning the internal consistency of both scales (Attraction to Women and Attraction to Men), the Cronbach coefficient alpha values were .978 and .980, respectively. Regarding construct validity, the factor analyses performed supported the inversely related bidimensionality or bipolar unidimensionality, which are empirically and conceptually equivalent (for a more complete version of this instrument, see Fernández et al., in press).

In order to evaluate the instrumental and expressive traits, we used an instrument made up of the 12 best items from Bem's (1974) original scale, which has been the most extensively used by the scientific community over the decades of 1970 and 1980 (Beere, 1990). To select these 12 items, the following aspects were taken into account: (a) the items appeared in the short version of Antill and

Russell (1980); (b) the items are from the author's (Bem, 1981) own abbreviated version; (c) we chose the items with the highest consistency and coherence (higher loadings and higher communality value) in the exploratory and confirmatory factor analyses conducted in various contexts and in different countries with the complete BSRI (Mateo & Fernández, 1991). These items were: Tender, Affectionate, Warm, Gentle, Sensitive to other's needs, Sympathetic, Acts like a leader, Leadership capacity, Dominant, Strong personality, Makes decisions easily, and Defends own beliefs. Each element is rated on a 7-point Likert-type scale, where 1 stands for the lowest degree of agreement with the contents of the item, and 7 indicates the highest degree of agreement.

Procedure

After obtaining permission both from the class teacher and the students, one of the authors and the class teacher administered the SAQ and the 12-item BSRI. Before starting to complete the instruments, the students were informed that their participation was voluntary and their responses were anonymous. They were asked to respond sincerely so that the research work being performed would be of some value. They were not told what the instruments were supposed to evaluate, so as to avoid possible biases derived from trying to comply with the investigator's expectations.

Data Analysis

The typologies were established using the theoretical mean (4) as cutting-point (we used a 7-point Likert-type scale: from 1 to 7). In the case of the Sexual Attraction typology, the values of the theoretical mean of Attraction to Women and Attraction to Men were 32 (8 items \times 4), and the maximum score, in both cases, was 56 (8 \times 7). For the

gender typology, the values of the theoretical mean were 24 (6 items \times 4), both for Instrumentality and Expressiveness, and the maximum score, in both cases, was 42 (6 \times 7). To detect possible linear dependence between the typologies derived from sexual attraction and the instrumental and expressive traits, as well as each of the typologies with sexual dimorphism, analysis of contingency tables was performed, using Pearson's chi square as a measure of association and the contingency coefficient as a measure of the magnitude of the association. As the tables were smaller than 5×5 , this analysis was corrected according to Sakoda (Garson, 2004). Cramer's V statistic was also used to appraise that same magnitude. Yates' correction was used for tables with frequencies lower than or equal to five.

Results

As shown in Table 1, the data support the independence of the eight categories of persons: χ^2 (9, N = 503) = 16.393, p = .059; C = .178, V = .104. As one could expect, the same conclusion would be reached when taking the standardized residuals into account, given the low values that appeared in all the cells corresponding to the eight categories.

In view of these results, there seems to be clear the empirical support for the hypothesis of independence, and, thus—at least indirectly—for the theoretical model from which it derives: the model of the twofold reality of sex and gender.

With regard to the relation between sexual dimorphism and the fourfold typology of sexual attraction, the data displayed in Table 2 leave no room for doubt about the strong empirical support for the hypothesis of their relationship, χ^2 (3, N=503) = 429.753.156, p<.0001; C = .679, C* = .956, V=.924. The standardized residuals increased considerably and, similarly, both of the values

Table 1
Frequency Distribution and Standardized Residuals of the Typologies of Sexual Attraction and Gender Domains

Sexual Attraction	Frequency / Standardized Residuals	Gender Domains				_
		Non-instrumental expressive	Instrumental	Expressive	Instrumental- expressive	Total
Not attracted to either sex	Frequency Standardized Residuals	1 (0.7)	2 (1.9)	12 (1.6)	6 (-1.8)	21
Attracted to men	Frequency Standardized Residuals	5 (-0.6)	4 (-1.3)	104 (0.6)	156 (-0.1)	269
Attracted to women	Frequency Standardized Residuals	6 (0.6)	8 (1.0)	62 (-1.3)	124 (0.7)	200
Attracted to both sexes	Frequency Standardized Residuals	0 (-0.6)	0 (-0.6)	6 (0.6)	7 (-0.2)	13
Total Frequency		12	14	184	293	503

Table 2
Frequency Distribution and Standardized Residuals of the Sexual Attraction Typology as a Function of Sex

Sexual Attraction	Frequency / Standardized Residuals	Sex		
		Women	Men	Total
Not attracted to either sex	Frequency Standardized Residuals	12 (0.0)	9 (0.0)	21
Attracted to men	Frequency Standardized Residuals	263 (9.0)	6 (-10.3)	269
Attracted to women	Frequency Standardized Residuals	4 (-10.3)	196 (11.7)	200
Attracted to both sexes	Frequency Standardized Residuals	5 (-0.9)	8 (1.0)	13
Total Frequency		284	219	503

(Cramer's V or the contingency coefficient) revealed a very significant statistical relation. When the contingency coefficient was adjusted, its value also increased considerably. A detailed analysis of the data revealed a significant relation between sexual dimorphism, on the one hand, and people attracted to men or to women, on the other, but not between sexual dimorphism and people not attracted to either of the sexes or people attracted to both sexes. This aspect is very interesting, in view of its theoretical coherence.

The data in Table 3 show that, when the potential relation between sexual dimorphism and the fourfold trait typology is established using the theoretical mean as the dichotomization criterion, there is strong empirical support for the hypothesis of independence, χ^2 (3, N = 503) = 4.90, p = .179; C = .098, V = .099. The low values of the standardized residuals clearly lend emphasis to our comments on this independence.

Discussion

The data obtained from this group of university students seems to support the independence of the two typologies: sexual attraction (people attracted to both sexes, attracted to men, attracted to women, and apparently not attracted to either sex) and gender (instrumental-expressive, instrumental, expressive and non-instrumental-expressive persons). In view of the lack of association between these two complex realities, knowing that a person is attracted to both sexes, to men, to women, or is not attracted to either sex does not allow us to establish a minimally rigorous prediction about whether that individual is instrumental-expressive, instrumental, expressive, or non-instrumental-expressive. If this is ratified in further studies, it will provide very important support for the proposal that sex and gender constitute a twofold reality, with little or no overlapping between them. Consequently, in view of these data, the

Table 3
Frequency Distribution and Standardized Residuals of the Gender Domain Typology as a Function of Sex

Sexual Attraction	Frequency / Standardized Residuals	Sex		
		Women	Men	Total
Non-instrumental-expressive	Frequency	6	6	12
	Standardized Residuals	(-0.3)	(0.3)	
	Frequency	5	9	14
Instrumental .	Standardized Residuals	(-1.0)	(1.2)	
Expressive	Frequency	113	71	184
	Standardized Residuals	(0.9)	(-1.0)	
Instrumental-expressive	Frequency	160	133	293
	Standardized Residuals	(-0.4)	(0.5)	
Total Frequency		284	219	503

alternative hypotheses do not seem to be correct: (a) the hypothesis that defends the appropriateness of substituting the term *sex* with *gender*, which is currently so fashionable and extended, mainly represented by some constructionists; (b) the opposite hypothesis, which states that *gender* is a passing fad that should make room for the term *sex*, as endorsed by some sociobiologists; (c) the hypothesis of those not wishing to take sides, who assume that *sex* and *gender* are equivalent; in general, assumed by researchers who only use sexual dimorphism as a demographic or classification variable because their real interests are quite different from those related to sex or gender.

The data also provide sound support for the hypothesis, derived from the model of the twofold reality of sex and gender, of the close relationship between sexual dimorphism and sexual attraction when the latter is evaluated by means of two scales: Attraction to Women and Attraction to Men. The studies performed to date confirm this view in contrast to other viewpoints that have emerged, especially during the second half of the 20th century, such as the Kinseyian hypothesis, the orthogonality hypothesis, or the multidimensionality hypothesis.

Finally, the data also sustain the hypothesis of independence between sexual dimorphism and the instrumental and expressive traits. When we refer to these four groups of persons as a function of gender—and more concretely, as a function of the instrumental and expressive traits—we are aware that very often the international literature does not use this terminology, but instead masculine, feminine, androgynous, and undifferentiated persons, as mentioned previously. When choosing these terms (instrumentality and expressiveness), we wanted to do justice to the historical origin of the theory underlying the so-called "new masculinity and femininity scales" (Bem, 1974; Spence et al., 1975). The purpose of these scales was to overcome the crisis of the classic model of masculinity/femininity, one of whose most essential characteristics was that it was atheoretical. In other words, it assumed the principle that the masculinity/femininity construct was what was being measured by the scales designed for that purpose. Thus, the essential feature of each item of these scales was its capacity to differentiate psychologically the sexes. Faced with this lack of theory, and in view of the crisis of this classic model during the first half of the 20th century, the authors of the new scales adopted the instrumental and expressive traits as a basic theory to elaborate their instruments. But why call something that is actually instrumental and expressive "masculinity" and "femininity"? The slightest convincing rationale for this change has yet to appear. From the viewpoint of the model proposed herein—the twofold reality of sex and gender—, our goal is that the premises should be consistent with the conclusion. If one begins with a theory of the instrumental and expressive traits in order to elaborate new scales, it seems logical to call these scales instrumentality and expressiveness scales, and the current designation of masculinity and femininity scales does not make much sense. Moreover, on the basis of the model of this work, masculinity and femininity should allude to other realities that are quite different from the instrumental and expressive traits (for example, all that have to do with body mental representation).

We would like to underscore the independence between instrumentality and expressiveness and sexual dimorphism, regardless of whether or not considerable changes have been observed in the percentages of men and women classified in each of the four categories since the scales were designed (in the mid 1970s) until the present. In fact, one can currently observe a considerable increase in the number of people who perceive themselves as instrumental-expressive and expressive in comparison to three decades ago. However, perhaps it is now time to attempt to find an instrument with better psychometric properties than the BSRI and, of course, one that is guided by a theory of instrumentality and expressiveness that is more consistent than the one developed during the mid 1950s.

References

Alexander, R. (1979). *Darwinism and human affairs*. Seattle, WA: University of Washington Press.

American Psychiatric Association (2000). *Diagnostic and statistical manual of mental disorders* (4th ed., text revision). Washington, DC: Author

American Psychological Association (2001). *Publication annual* of the American Psychological Association (5th ed.). Washington, DC: Author.

Antill, J. K., & Russell, G. (1980). A preliminary comparison between two forms of the Bem Sex-Role Inventory. *Australian Psychologist*, *15*, 427-435.

Beall, A.E. (1993). A social constructionist view of gender. In A.E. Beall & R.J. Sternberg (Eds.), *The psychology of gender* (pp. 127-147). New York; Guilford Press.

Bem, S. (1974). The measurement of psychological androgyny. *Journal of Consulting and Clinical Psychology*, 42, 155-162.

Bem, S. (1981). *Bem Sex-Role Inventory: Professional manual*. Palo Alto, CA: Consulting Psychologist Press.

Beere, C.A. (1990). Gender roles. A handbook of tests and measures. New York: Greenwood Press.

Betzig, L. (Ed.). (1999). *Human nature: A critical reader*. Oxford: Oxford University Press.

Buss, D.M. (2004). The evolution of desire. Strategies of human mating (Rev. ed.). New York: Basic Books.

Choi, N., & Fuqua, D.R. (2003). The structure of the Bem Sex Role Inventory: A summary report of 23 validation studies. *Educational and Psychological Measurement*, 63, 872-887.

Colman, A.M. (2001). *Dictionary of psychology*. Oxford: Oxford University Press.

Constantinople, A. (1973). Masculinity-femininity: An exception to the famous dictum? *Psychological Bulletin*, 80, 389-407.

Cook, E.P. (1985). Psychological androgyny. New York: Pergamon Press.

- Desrochers, S. (1995). What types of men are most attractive and most repulsive to women? *Sex Roles*, *32*, 375-392.
- Fernández, J. (1983). *Nuevas perspectivas en la medida de la masculinidad y feminidad* [New perspectives in the measurement of masculinity and femininity]. Madrid: Editorial de la Universidad Complutense.
- Fernández, J. (Coord.). (1988). *Nuevas perspectivas en el desarrollo del sexo y el género* [New perspectives in the development of sex and gender]. Madrid: Pirámide.
- Fernández, J. (Coord.). (1996). Varones y mujeres. Desarrollo de la doble realidad del sexo y del género [Men and women. Development of the twofold reality of sex and gender]. Madrid: Pirámide.
- Fernández, J. (Coord.). (1998). *Género y sociedad* [Gender and society]. Madrid: Pirámide.
- Fernández, J. (Coord.). (2000). *La intervención en los ámbitos de la sexología y la generología* [Intervention in the areas of sexology and genderology]. Madrid: Pirámide.
- Fernández, J., Quiroga, M.A., & Rodríguez, A. (in press). Dimensionalidad de la atracción sexual [Sexual attraction: Its dimensionality]. *Psicothema*.
- Finlay, B., & Scheltema, K.E. (1991). The relation of gender and sexual orientation to measures of masculinity, femininity, and androgyny: A further analysis. *Journal of Homosexuality*, 21, 71-85.
- Furedy, J.J. (2003). Pavlov's methodological behaviorism as a pre-Socratic contribution of the melding of the differential and experimental psychology. *The Spanish Journal of Psychology*, 6, 133-146.
- Garson, G.D. (2004). Nominal association: Phi, contingency coefficient, Tschuprow's T, Cramer's V, Lambda, uncertainty coefficient. Retrieved November 16, 2004, from http://www2.chass.ncsu.edu/garson/pa765/assocnominal.htm
- Gergen, M.M. (2001). Social constructionist theory. In J. Worell (Ed.), *Encyclopedia of women and gender* (pp. 1043-1058). New York: Academic Press.
- Gergen, M.M., & Davis, S.N. (Eds.). (1997). *Toward a new psychology of gender*. New York: Routledge.
- Green, B., & Kendrick, D. (1994). The attractiveness of gender type traits at different relationship levels: Androgynous characteristics may be desirable after all. *Journal of Personality* and Social Psychology, 20, 244-253.

- Greene, B., & Croom, G.L. (Eds.). (2000). Education, research, and practice in lesbian, gay, bisexual, and transgendered psychology: A resource manual (Vol. 5). Thousand Oaks, CA: Sage.
- Heilbrum, C. (1973). Toward a recognition of androgyny. New York: Knopf.
- Izquierdo, M. J. (1998). El malestar de la desigualdad [The discomfort of inequality]. Madrid: Cátedra.
- Kravetz, D., & Marecek, J. (2001). The feminist movement. In J. Worell (Ed.), *Encyclopedia of women and gender* (pp. 447-468). New York: Academic Press.
- Mateo, M.A., & Fernández, J. (1991). La dimensionalidad de los conceptos de masculinidad y feminidad [The dimensionality of the concepts of masculinity and femininity]. *Investigaciones Psicológicas*, *9*, 95-116.
- Nicholson, L. (Ed.). (1997). *The second wave*. New York: Routledge.
- Parsons, T., & Bales, R. F. (Eds.). (1955). Family, socialization, and interaction process. New York: Free Press.
- Salvat (2003). La enciclopedia (Vol. 2). Barcelona: Author.
- Singer, J. (2000). *Androgyny: The opposites within.* York Beach, ME: Nicolas-Hays.
- Spence, J.T. (1991). Do the BSRI and PAQ measure the same or different concepts? *Psychology of Women Quarterly, 15*, 141-165.
- Spence, J.T., Helmreich, R.L., & 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.
- Stake, J.E. (1997). Integrating expressiveness and instrumentality in real-life settings: A new perspective on the benefits of androgyny. *Sex Roles*, *37*, 541-564.
- Wilson, E.O. (1975). *Sociobiology: The new synthesis*. Cambridge, MA: Harvard University Press.
- Woodhill, B.M., & Samuels, C.A. (2003). Positive and negative androgyny and their relationship with psychological health and well-being. *Sex Roles*, 48, 555-565.

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