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ORIGINAL ARTICLE

Masculine and Feminine Traits on the Bem Sex-Role Inventory, 1993–2012: a Cross-Temporal Meta-Analysis

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Abstract The Bem Sex-Role Inventory (BSRI) is one of Sandra Bem's most notable contributions to feminist psychology, measuring an individual's identification with traditionally masculine and feminine qualities. In a cross-temporal meta-analysis of U.S. college students' scores on the BSRI (34 samples, $N = 8{,}027$), we examined changes in ratings on the Bem masculinity (M) and femininity (F) scales since the early 1990s. Additional analyses used data collected in a previous meta-analysis (Twenge 1997) to document changes since the BSRI's inception in 1974. Our results reveal that women's femininity scores have decreased significantly ($d = -.26$) between 1993 and 2012, whereas their masculinity remained stable. No significant changes were observed for men. Expanded analyses of data from 1974 to 2012 (94 samples, $N = 24{,}801$) found that women's M rose significantly ($d = .23$), with no changes in women's F, men's M, and men's F. Women's androgyny scores showed a significant increase since 1974, but not since 1993. Men's androgyny remained the same in both time periods. Our findings suggest that since the 1990s, U.S. college women have become less likely to endorse feminine traits as self-representative, potentially revealing a devaluation of traditional femininity. However, it is also possible that the scale items do not match modern gender stereotypes. Future research may need to update the BSRI to reflect current conceptions of gender.

Keywords Change over time · Sex roles · Femininity · Masculinity · Androgyny

When Sandra L. Bem created the Bem Sex-Role Inventory (BSRI, Bem 1974) in the mid- 1970s, the life of the average woman in the United States was profoundly different than it is today (Ammot and Matthaei 1991). Gender roles provide fixed, pre-determined schemas to which men and women were expected to adhere, and such roles in the United States in the 1970s were particularly differentiated (Donnelly et al. 2015; Eagly 1987). The behavioral expectations conferred on women left little room for advancement or enterprise, and men were limited in their family roles (Basow 1992). These restrictions were accompanied by a widespread belief of polarized gender differences in personality (Garai and Scheinfeld 1968), which often bound men and women to highly gendered life trajectories (Prather 1971).

In developing the BSRI, Bem (1974) upended this belief with empirical evidence. She designed the BSRI to measure how people view themselves psychologically, specifically assessing their identification with gendered personality traits. As such, the masculine (M) scale of the BSRI contains qualities stereotypically associated with men (e.g., assertive, independent, ambitious), and the feminine (F) scale contains qualities stereotypically associated with women (e.g., gentle, gullible, warm). These gendered qualities were selected by way of an initial survey, wherein Stanford undergraduates generated a 200-item list of socially desirable traits for each gender. After norming these items, 40 were selected for inclusion in the BSRI (20 masculine, 20 feminine), and college samples were

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used to validate the scale. The correlations and patterns observed in BSRI data established some of the most important concepts necessary for gender equality—that traits of masculinity and femininity can occur in both men and women, sometimes with equal magnitude, and that such qualities are not mutually exclusive (Bem et al. 1976). The BSRI is a notable and widely influential contribution to feminist psychology (Beere 1990; Holt and Ellis 1998), one of many that Bem made throughout her lifetime (Bem 1981, 1983, 1993). Its popularity has made it possible to track changes in BSRI-measured masculinity and femininity (Twenge 1997), which forms the basis of the present paper.

Using meta-analysis, we aim to investigate how masculine and feminine traits, as measured by the BSRI, have changed over the past 19 years among U.S. college students. A few studies that emerged after the publication of Twenge's (1997) 1973–1994 meta-analysis contained data from 1993, so the present primary analysis spanned 1993–2012. Additionally, we use the selection criteria and methodology used in Twenge's study to examine changes in masculine and feminine traits across the entire time period, 1974–2012. To reach this goal, we combined the recent data with the data from Twenge's prior study. Lastly, we examined how androgyny scores have changed since 1974 and 1993.

We examined U.S. college student samples for several reasons. First, the college student criterion is not very restrictive because a majority of studies using the BSRI were conducted on undergraduate samples. Second, whereas many students have not yet navigated a parenting or work context, today's young adults may still show personality trait differences in anticipation of their future roles. Such roles are likely modeled by their parents and society in general (see Eagly 1987). This means that the respondent's actual role is held somewhat constant, allowing gendered trait differences to better reflect changes in norms and values. Similarly, because college samples are of similar age, differences must be due to time period or generation. The strength of the time-lag design is that it allows for identification of cultural changes rather than changes that could result from age and development. Additionally, restricting our focus to students in the United States prevented unexplained variance that might result from the societal norms and changing cultural landscape of other countries. Because of this focus, all cited studies in the present paper draw on U.S. samples.

When considering how roles interact with personality trait differences between men and women, it is important to consider the possibility of dual influence. That is, trait differences may influence and be influenced by gender roles. It may be that changed personality traits propel men and women toward professions that require those traits, or, conversely, that changing normative gender roles actually facilitate their expression. Determining the direction of influence without longitudinal data is arguably untenable. However, examining BSRI scores over time allows us to at least partially quantify a specific aspect of cultural change. This endeavor adds to our existing knowledge about gendered self-perception. Additionally, our work may provide quantitative support for the idea that the personality differences between men and women are exaggerated (or, to some extent, facilitated) by the changing social environment in which they operate.

Changes in masculinity and femininity may reflect the adoption of new norms regarding social roles. This idea is largely supported by Eagly's (1987 1987, 1997; Eagly et al. 2000) social role theory. Changes in women's and men's roles should be accompanied by changes in individuals' characteristics; for example, as girls and boys anticipate entering the workforce as adults, they should develop traits necessary for success in that realm. Traditionally, these have been stereotypically masculine traits, such as agency, assertiveness, dominance, and leadership (Schein 1976). From this perspective, the social upheaval of U.S. women's roles in the 1970s (Davis and Robinson 1988) might correspond with a change in personality. Namely, upon entering the workforce, women may gradually display masculine qualities to fit the demands of their changed environment.

A meta-analytic study by Twenge (1997) investigated this possibility. U.S. men's and women's BSRI scores were examined from 1973 to 1994, a period of profound cultural change in women's normative gender roles. In line with social role theory, these changes appear to have precipitated a large personality shift. Scores on the Masculine (M) scale of the BSRI increased markedly for U.S. college-aged women, with no changes observed on the Feminine (F) scale. Additionally, there was a weaker yet significant increase in men's BSRI-M and F. Men's and women's scores became more similar during that time period, due to a significant decrease in the difference in scores between genders.

The BSRI-M and F scores are often used together to compute an *androgyny score*, which is defined by high levels of both masculine and feminine traits (Bem 1974). This is commonly calculated by subtracting the difference between masculine and feminine scores from their sum ($M+ F- |M - F|$); a high androgyny score thus results from M and F scores that are both high in magnitude (Heilbrun and Schwartz 1982). Increased androgyny may inform changes in a number of other constructs; it correlates positively with self-esteem (Flaherty and Dusek 1980), likeability (Green and Kenrick 1994), and overall psychological well-being (O'Heron and Orlofsky 1990). It is possible that women's entrance into the workforce conferred such benefits, as Twenge's (1997) analyses found that women, but not men, showed increases in androgyny. This result was driven entirely by women's increased masculinity.

Over 20 years have now elapsed since the last year included in Twenge's (1997) meta-analysis and over 40 since the BSRI's inception. How might changes to gender roles in

recent years affect BSRI scores? In Twenge's meta-analysis, women's entry into the workforce appeared to correspond with a sharp increase in their BSRI-measured masculinity and androgyny. However, while the time period of the 1970s to the 1990s witnessed dramatic changes in U.S. gender roles, the period since the 1990s produced far less profound change. For example, growth in U.S. mothers' labor force participation rates (LFPR) has slowed; the LFPR of women with children under 3 went from 34 % in 1976 to 57 % in 1994, and it was 61 % in 2012 (U.S. Census 2012). Other domains show more substantial changes; men and women were relatively equal in college enrollment in 1994 (women outnumbered men by 3 %), and this number rose to a discrepancy of 16 % by 2012, with women leading the pursuit of higher education (Lopez and Gonzalez-Barrara 2014). Additionally, data from two large, nationally representative U.S. samples showed that support for workplace gender equality and working mothers has recently reached an all-time high (Donnelly et al. 2015). With their place in the workforce now firmly and unequivocally established, women may show very little change in BSRI masculinity scores.

Changes might be more centered on men's roles since they have entered family life in a greater capacity. Men now spend more time with children than in previous generations, and the number of stay-at-home fathers has almost doubled since 1989 (Livingston 2014). This new role might decrease men's display of masculine, agentic traits formerly needed in the workplace. It is also possible that adoption of this nurturing role may increase men's BSRI-measured femininity. Nonetheless, although stay-at-home father is hardly a normative role for men in U.S. society today, it is difficult to determine whether a growing minority would influence the typical gender role for men.

However, there is some evidence to suggest that, in recent years, femininity may have decreased for both genders. College students today have more Internet usage than ever before (Jones et al. 2009), which negatively correlates with interpersonal skill and emotional intelligence (Morahan-Martin and Schumacher 2000; Parker et al. 2008). These qualities may have a strong degree of overlap with the traits assessed in the BSRI-F. In addition, narcissism has risen substantially since the late 1970s (Twenge and Foster 2010), and empathy has declined (Konrath et al. 2011). High narcissism and low empathy are directly opposed to the feminine traits measured by the BSRI (Campbell 1999). Thus, cultural cultivation of a different personality profile may reject traits associated with femininity. It is possible that both genders may show decreased BSRI-F, but given that trends of increased narcissism and decreased empathy are stronger for women then for men (Konrath et al. 2011; Twenge and Foster 2010), women's F in particular may have declined.

It is important to consider that all of these possible patterns of results rely heavily on the assumption that BSRI scores still correspond with societal change. More realistically, any possible changes in men's and women's BSRI scores must be qualified by a potential for obsolescence. Do BSRI scores still reflect changes in society? Perhaps more importantly, do the existing BSRI items capture current U.S. gender stereotypes? Qualities generated and normed by undergraduates in the early 1970s may diverge from the gender stereotypes held by undergraduates today. Moreover, the qualities assessed in the BSRI may not carry the same connotation or significance; it is possible that the scale no longer reflects the psychological constructs that it originally aimed to assess. Thus, the results of the present study may be bound by (or even limited to) the gender stereotypes defined by a distant cultural past.

Nonetheless, the present meta-analysis does allow for examination of the ways in which traditionally gendered personality traits may have changed. Exploratory analyses of women's BSRI scores since the early 1990s are of particular interest—Twenge (1997) found a strong increase in women's masculinity that corresponded with their entrance into the workforce, but more recent gender equality gains have been much less dramatic. How might women's BSRI scores change in response to the subtler, implicit gains in gender equality observed in the past 20 years? Exploring patterns in men's BSRI scores may inform how these gains (such as changed gender expectations, educational and vocational gender composition) impact the male personality profile. Exploratory analysis of masculine and feminine scores since the BSRI's inception in 1974 provides a broader, more comprehensive picture of personality change, updating and extending the work of Twenge (1997). Lastly, examination of androgyny, as derived from BSRI scores, is particularly salient in light of the increased androgyny of normative gender roles in recent years.

Method

Studies were gathered from the Web of Science Core Collection. We searched for studies that cited Bem's (1974) paper introducing the BSRI. Studies met specific inclusion criteria: (a) participants responded to the BSRI as it related to their current self, not an idealized self or idealized other: (b) participants were not selected for any reason that might interfere with reporting (college major, relationship status, sexual orientation, etc.); (c) all participants were attending 4-year colleges or universities; (d) universities were located in the United States; (e) the study used either the 60-item long form, the 40-item long form, which excludes neutral items, or just one of the 20-item subscales (e.g., BSRI M only); (f) the study did not use a modified form of the BSRI (selectively using some items but not others; altering item wording, scoring, etc.); and (g) the study tested men, women, or both genders and reported means for BSRI scores broken down by

gender. The most common reason to exclude a study was that it failed to report means separated by gender or dichotomized participants' scores into categories. We identified 107 studies, with 85 separate first authors; 21 authors were either deceased or unable to be located. The remaining 64 authors were sent email requests for means that were not reported in their papers. The majority of those who responded no longer had the data or the original technology that stored it. In total, 14 authors were able to locate and provide data.

These selection criteria were identical to those used in Twenge (1997). This ensured that studies from all time periods could be easily compiled for long-term comparison. Unless noted otherwise, year of data collection was set at 2 years prior to publication (a study published in 1998 would have a data collection point at 1996). Our time period of analysis spanned 1993 through 2014.

Overall, 37 samples met the selection criteria and were thus included for analysis (studies with data in the meta-analysis are listed in Appendix A as an online supplement; $N = 8{,}027$, consisting of 3,358 men, 4,669 women). Several studies only tested one dimension of the BSRI on only one gender; for example, using only women and distributing only the masculine scale of the BSRI. As such, there were an unequal number of studies collected in terms of both gender and BSRI dimension. For men, 35 studies assessed masculinity and 34 assessed femininity; for women, masculinity was measured in 36 studies and femininity in 35 (see Table 1 for approximate frequencies by year). One paper (Foels and Pappas 2004) reported data for two samples from the same university; these were treated as separate samples. Additionally, data collected in Twenge's (1997) meta-analysis were used in a secondary analysis to determine changes since the BSRI's inception. This provided an additional 46 male and 59 female samples (studies are listed in Appendix B as an online supplement).

Bivariate least squares linear regressions were calculated for each variable, weighting by sample size. This assigns greater weight to the studies with larger sample size because those studies presumably more closely approximate the population mean. When completing the BSRI, participants rated themselves on masculine and feminine qualities using a 7-point Likert scale ranging from 1 (*never or almost never true*) to 7 (*almost always true*).

Results

Changes from 1993 to 2012

Women's feminine traits declined significantly between 1993 and 2012, $F(1,33) = 4.48$, $p = .04$ (see Table 1 and Fig. 1). Using the regression equation, the fit line was at $M = 5.14$ in 1993 and $M = 4.98$ in 2012. The average standard deviation for women's F scores is .61, so scores have declined $d = -.26$ since 1993. By Cohen's (1988) criteria, this is a small effect size (about $d = .20$).

Table 1 Weighted bivariate regressions of year (1993–2014) and BSRI scores

Scores	Men		Women	
	1993–2012	*k*	1993–2012	*k*
BSRI-M (Masculine)	.20	35	−.27	36
BSRI- F (Feminine)	−.23	34	−.35*	35
M+ F - |M – F|	−.21	34	−.20	35
M – F	.24^{+}	34	.15	35
|M – F|	.24^{+}	34	−.31^{+}	35

Numbers are standardized beta values weighted by sample size from bivariate regressions

$^{+}p < .10$ $*p < .05$

Women's masculine traits, men's masculine traits, and men's feminine traits did not show significant changes. No samples were extreme enough to warrant removal from the analyses. As per standard removal methods (Wainer 1976), outliers were defined as those values that fell more than three standard deviations away from the value expected by the weighted regression line. This was also true when the regression line was unweighted.

To determine how the magnitude of difference between the genders has changed since 1993, effect size differences for each subscale were calculated on samples that provided both gender's scores. Those effect sizes were then averaged (weighting by sample size) to provide a single estimate of the gender difference with respect to BSRI scores. Although there is no way to compare the difference between effect sizes statistically, the gender difference in feminine scores was about the same in 2012 ($d = .72$) as it had been in 1993 ($d = .75$), as was the gender difference in masculine scores ($d = -.55$ in 2012; $d = -.50$ in 1993).

Androgyny analyses were computed using the commonly used procedure of subtracting the absolute difference between M and F scores from the sum of M and F (M+ F− |M − F|, see Heilbrun and Schwartz 1982); this calculation method was identical to Twenge (1997). A linear regression showed no relationship between year and women's androgyny since 1993, $F(1,33) = 1.63$, $p = .20$. Similarly, no changes were observed during that time period for men's androgyny, $F(1, 32) = 1.69$, $p = .20$. Comparable results were found using the formulas M – F and |M – F| (see Table 2).

Changes from 1974 to 2012

We also examined changes across the nearly 40 years since the BSRI's inception (1974–2012; see Figs. 1, 2, 3 and 4). Women's masculine trait scores increased significantly over time, $F(1,92) = 6.41$, $p = .01$ (see Table 2 and Fig. 2). The fit

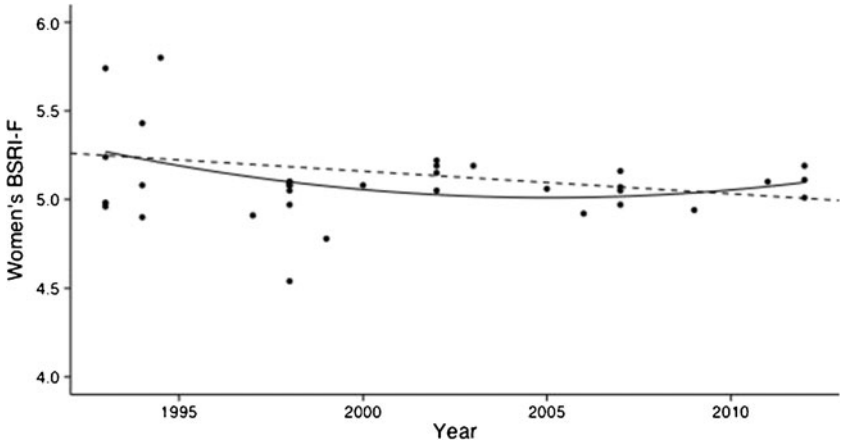

Fig. 1 Women's BSRI-F scores by year, 1993–2012

line was at M = 4.73 in 1974 and M = 4.89 in 2012; with an average *SD* of .70, women's M scale scores increased $d = .23$. Women's feminine traits, men's masculine traits, and men's feminine traits did not change significantly over time. For feminine scores, the difference between men and women did not appear to change much from 1974 ($d = .70$) to 2012 ($d = .72$). Gender differences in masculine scores in 1974 were identical to those in 2012 (both ds = −.55).

Androgyny over the full time period increased for women, $F(1,91) = 6.30$, $p = .01$. Analyses of men's androgyny showed no significant change since 1974, $F(1,77) = 2.57$, $p = .11$. Calculations of M – F and |M – F| showed a similar but amplified pattern of results (see Table 2). Although the trajectories of change for men and women cannot be directly compared, these gender-separate androgyny analyses may imply that women's scores exhibit a higher increase in androgyny over time than do men's.

Discussion

Overall, college students' scores on the BSRI have remained relatively stagnant since the early 1990s. The one exception is a decline ($d = -.26$) in women's femininity scores from 1993 to 2012, suggesting that women are now less likely to endorse traditionally feminine characteristics as representative of themselves.

Twenge (1997) found highly significant increases in women's masculine traits from 1974 to 1994. This trend did not continue in the subsequent 20 years. Instead, women's M remained relatively constant. Across the entire time period of 1974–2012, women's M increased, although with a smaller overall change ($d = .23$) than in Twenge's time period from 1974 to 1994 ($d = .80$). These trends are somewhat consistent with the mixed picture for changes in attitudes toward women's roles since the 1990s. Donnelly et al. (2015) found that support for working mothers grew after the 1990s, but support for traditional roles for women in marriage also increased, although it did not return to the high levels of the 1970s.

The general pattern was toward increases in both M and F traits for both men and women between the 1970s and the 1990s, and then declines from the 1990s to the 2010s. This is somewhat surprising because previous studies of college students during this period found a continued increase in endorsement of agentic traits (Twenge et al. 2012) after 1990, although that increase was not as steep as the jump between the 1960s and the 1990s. On the other hand, these trends could indicate a movement toward a post-gender culture (Gerson 2010; McDowell 2012). If recent generations of men and women perceive the BSRI traits as gendered (Helgeson 2015), they may choose not to endorse them if they wish to disassociate themselves from characteristics linked to traditional conceptions of masculinity and femininity.

Alternatively, the types of students completing the BSRI could have shifted after the 1990s when the scale was not as widely used. The percentage of young adults in the United States attending 4-year universities has undoubtedly increased since the 1990s, so students may display greater variability in socio-economic status, race, military service history, and first generation status (U.S. Census 2012). Additionally, the

Table 2 Weighted bivariate regressions of year (1974–2012) and BSRI scores

Scores	Men		Women	
	1974–2012	*k*	1974–2012	*k*
BSRI-M (Masculine)	-.09	81	.26*	94
BSRI- F (Feminine)	.18	81	−.16	94
(M+ F) − |M – F|	.18	79	.25*	93
M – F	−.20^{+}	79	.26**	93
|M – F|	−.20^{+}	79	−.30**	93

Numbers are standardized beta values weighted by sample size from bivariate regressions

$^{+}p < .10$ *$p < .05$ **$p < .01$

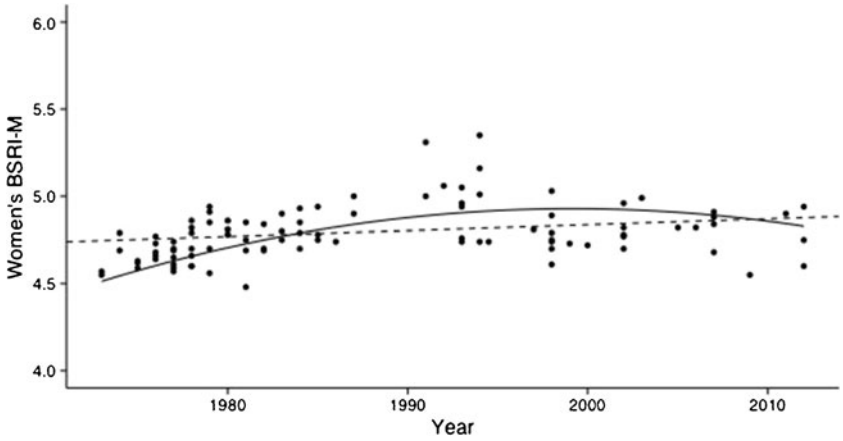

Fig. 2 Women's BSRI-M scores by year, 1974–2012

proportion of private universities included in the present analysis has increased slightly—20 % of the samples were obtained from private institutions compared to 16 % in Twenge's (1997) samples. These possible confounds cannot be completely addressed nor dismissed in terms of their influence on our findings.

It is important to recognize that adoption of masculine qualities is very different from rejection of feminine ones. According to Bem (1974), masculine and feminine traits are not mutually exclusive, polar opposites of some spectrum, but rather are independent qualities that can co-exist to varying degrees within each individual. Thus, women's increased masculine traits and stable feminine traits from 1974 to 1994 do not reflect a discarding of womanhood. Rather, adopting the agentic qualities associated traditionally with men may have either resulted from, or resulted in, women's rising workplace and societal equality without affecting femininity. However, data from the past 20 years suggest that women have been shedding their feminine traits while maintaining some of the gains in masculine traits made in the 1970s and 1980s. This pattern could be interpreted as moving toward a personality profile closer to that of men, evidenced by initially adopting the qualities associated with men, and, eventually, by disassociating with the qualities associated with women.

This change may be driven by the androcentric nature of work and life in the United States—in the process of successfully navigating a culture built by men for men (Bem 1996), perhaps women's femininity has taken on a different expression. Indeed, there may be a cultural redefinition of femininity in the past 20 years. Gill (2007, p. 149) discusses the rise of a "new" femininity, one defined as a "bodily property" rather than as an internal or psychological quality. According to this viewpoint, the body is a source of power and is reflective of a woman's willpower, discipline, and social standing. As such, women engage in an inordinate amount of physical self-monitoring, surveillance, and remodeling (Gill 2007; Smolak et al. 2014). At the same time, feminine personality qualities may be frequently devalued as weak or irrational; for example, it may be difficult for women to simultaneously hold status and display warmth (Fiske et al. 2002). Social desirability differentials between

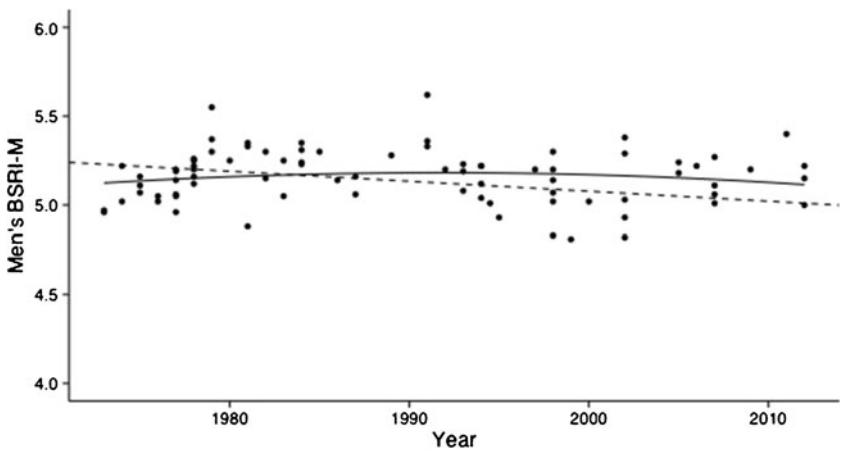

Fig. 3 Men's BSRI-M scores by year, 1974–2012

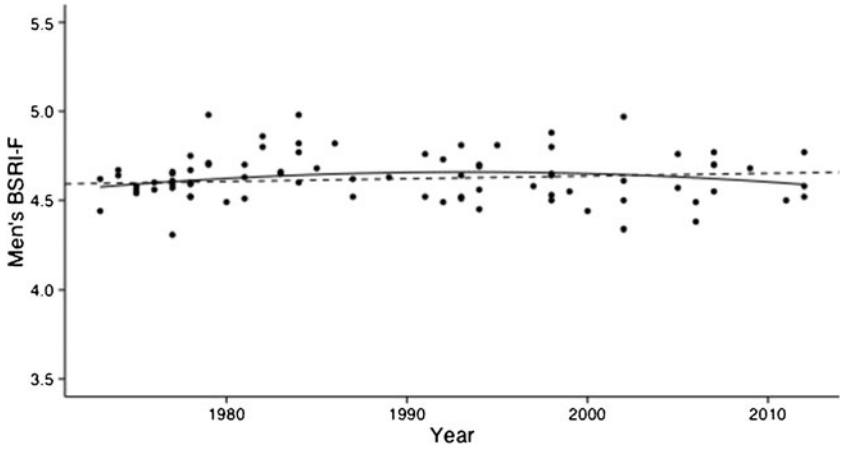

Fig. 4 Men's BSRI-F scores by year, 1974–2012

physical and psychological femininity suggest that the construction of femininity 40 years ago may not match its construction today (Gill 2007).

An interesting departure from psychological femininity may be reflected in the prominence of "raunch" culture in today's society. Today's young women may exhibit a more traditionally masculine approach to sexuality, evidenced through the rising prevalence of explicit hypersexuality and the detachment of sexuality from emotion (American Psychological Association 2007; Levy 2006). The third-wave feminist movement, which overlaps nicely with the past 20 years, frames traditionally shameful or degrading expressions of sexuality (pornography) as a source of female empowerment (Levy 2006). For example, conscious, calculated self-objectification is espoused to reflect the liberation, choice, and enlightenment of the modern woman (Douglas 2010). In this domain, an undercurrent of masculinity construes submission and passivity as intentional acts of power.

Whereas only women's androgyny has increased significantly since the 1970s, men's scores also showed a slight increase. The conditions present in U.S. society today may require skills that draw from both traditionally masculine and feminine strengths. For example, technological advancements have replaced many labor-intensive, traditionally male-dominated jobs (Pierce and Schott 2012). Arguably, the sharp rise of jobs involving social media and the Internet may demand the social dexterity and communication skills stereotypic of women, but in a new way—one that often requires overt self-promotion over humility. As such, increased androgyny might be necessitated by these novel professional demands.

As mentioned earlier, the slight decrease in women's feminine scores since 1993 could also be reflective of increased narcissism. This reasoning suggests that qualities involving humility, deference to others, and selflessness are no longer valued as strongly on a societal level (Twenge et al. 2008). In this vein, it may appear surprising that some of the narcissistic qualities associated with traditional masculinity (e.g., selfishness) have not changed for either gender. However, narcissism may be more tied to a lack of femininity than an upsurge of masculinity. Narcissism involves more than undue confidence, assertiveness, or self-focus; rather, it is largely characterized by disregard for others' feelings (Watson et al. 1984). The latter quality may be captured by decreases in feminine traits of communalism, warmth, and compassion. If only these items in the BSRI-F were examined, we might expect changes to emerge for men's femininity as well.

Declining femininity may occur with a decrease in other related qualities such as conflict resolution, effective communication, and empathy. The development of such skills may have decreased with the rise of social media as U.S. college students spend less time than ever before socializing with one another face-to-face (Eagan et al. 2014). Additionally, U.S. culture in recent years has observed an intense cultivation of instrumentality and agency (Twenge 2006). Teachers and educators routinely create environments wherein students can achieve and express their self-sufficiency. An increased emphasis on communal skills would not interfere with this instrumental focus; the two work in tandem to promote healthy psychological androgyny (Bem 1974).

The results of our meta-analysis may be important when considering personality changes at the global level. The United States is a highly influential force in shaping the cultural landscape of many other nations (Fluck 2004). In particular, the prominence of the United States in popular entertainment and media may facilitate a cultural transmission of its values, themes, and social norms (Cavalli-Sforza and Feldman 1981). As such, the changes in men's and women's personality traits in the United States could inform similar changes in other nations. In contrast, with such unifying developments as the Internet, changes in recent years might reflect the influence of a more global perspective. With these considerations in mind, the present meta-analysis may be important for understanding changes in normative gendered personality traits in a broader context.

Our conclusions are necessarily limited by multiple factors. First, and perhaps most importantly, fewer studies that met our criteria were published in the past 20 years than in the 20 years before that. This could reflect a shifting focus from self-perception of masculine and feminine traits to behavioral expressions of those traits. Alternatively, perhaps perceptions of rising gender equality motivate researchers to concentrate on other aspects of inequality (reducing marginalization due to sexual orientation rather than gender). Whatever the reason, the decreased number of studies limited power and heightened variance.

Another important limitation is self-report format of the BSRI. There is no way to determine whether participants' responses are biased by social desirability concerns. That is, changes may reflect actual differences in masculine or feminine traits or reflect changing societal values of those characteristics. As such, the BSRI may reflect characteristics that have been filtered through a respondent's societal values or altered by concerns for positive (or societally congruent) self-presentation. However, an analysis of changes in socially desirable responding over time found little change between the early 1980s and 2001, suggesting shifts in socially desirable responding might not be much of a factor over much of this time period (Twenge and Im 2007).

Additionally, we cannot be sure whether these scores would be similar in another age group. Strough et al. (2007) used a timing of events model to show differences in masculinity, femininity, and androgyny for men and women who were at different points in their lives. This timing may be due to differences in hormones, passing or approaching specific life events, or generational separation. Thus, it is unclear as to whether the same patterns might emerge for men and women at different points in their developmental trajectories.

Importantly, the timing of events model may be particularly applicable to the present meta-analysis. Strough et al.'s (2007) findings provide support for the role of cultural change in endorsement of gender-typed traits. Specifically, they found that middle-aged women endorsed masculine traits as more characteristic of themselves than of women in other age groups. This supports an interaction of historical events with gender development; the middle-aged women were in identity formation (adolescence or young adulthood; Erikson 1968) during the second wave of feminism. Our meta-analysis almost entirely overlaps with third-wave feminism, which is generally regarded to have begun in the early 1990s. Because our respondents were all in the impressionable stage of young adulthood, the decrease in women's femininity might reflect the influence of third-wave feminism. However, no drastic demarcations of scores were observed, and more samples would be needed to determine how the start of the movement may have impacted scores.

While restricting the age of samples allows us to better capture change over time, the normative timeline of major life events for college-aged young adults differs drastically from that of 1970s and even of the 1990s. Many developmental milestones differentiate the college students in recent years from those who validated the BSRI. For example, today's youth sustain a prolonged adolescence in which marriage is pushed later into one's 20s, and families are begun much later in life (Sifferlin 2014). If women's communal traits are somehow strengthened by the onset or anticipation of motherhood, perhaps this extended timeline plays a role in the decreased feminine traits in the past 20 years. Matching the samples on their life stage might yield different results, but to do so would be impossible; arguably, every life stage carries with it gendered norms and expectations that have also varied with time.

In sum, U.S. college women in recent years are less likely to endorse feminine traits than U.S. college women were in the 1990s, possibly reflecting devaluation of feminine qualities either on the personal or cultural level. Women increased in BSRI-measured masculine traits and androgyny from 1974 to 2012, creating a picture of generational change toward more agency and less communalism. However, both M and F scores, for both men and women, showed some evidence of declines between the 1990s and the 2010s. It is possible that both agency and communion are declining, or today's college students are less willing to endorse traits clearly associated with one gender versus another. It is also possible that our findings are constrained by the distant cultural past—the BSRI may no longer adequately serve to capture the constructs of interest. Independent of changes in the respondents, conceptions of masculinity and femininity themselves may have changed in ways that cannot be addressed by the current study. Future research may need to update the BSRI to better reflect current gender stereotypes.

Compliance with Ethical Standards

Conflict of Interest The authors declare that they have no conflict of interest.

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