Gender Role Self-concept, Gender-role Conflict, and Well-being in Male Primary School Teachers

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Abstract In this field-study, we analysed the interrelations between gender role self-concept, gender-role conflict, and well-being in male primary school teachers. Our sample comprised $N = 81$ respondents from an urban area in Germany (average age: 42.9 years; average tenure: 11.4 years). In Germany, primary school teaching is a numerically female-dominated occupation. We found that masculinity, femininity, and androgyny positively influenced well-being, while gender-role conflict was negatively interrelated with well-being. We expected that gender-role conflict weakens the positive effects of masculinity and femininity. Unexpectedly, we even found a detrimental effect of femininity when gender-role conflict was high: For respondents reporting comparatively high gender-role conflict, femininity was associated with lower work satisfaction.

Keywords Gender role self-concept · Gender-role conflict · (Psychological) well-being

Introduction

Interrelations between a person's self-ascription of gender-typical traits (gender role self-concept) and indicators of psychosocial well-being have frequently been analysed in

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former studies (e.g., Whitley 1984). Similarly, interrelations between a person's experience of conflicts based on environment's gendered expectations (gender-role conflict) and well-being have been under study since many years (e.g., Sharpe and Heppner 1991). Using survey data from a field-study, we analysed whether prior research findings can be generalized to a sample of male primary school teachers in Germany. Furthermore, this study aimed at analysing whether employees' gender role self-concept and their level of gender-role conflict jointly affect well-being in gender-untypical occupations. We analysed our data using multiple regression analyses, ANOVA procedures, and moderated regression analyses. Interrelations between employees' individual attributes and well-being in gender-untypical occupations are worth to study, because gender segregation does not necessarily meet employees' psychological needs and occupational interests. Women and men who would like to work in an area that is numerically dominated by the other gender may perceive this gender segregation as a hindrance for their personal and professional development.

Prior research showed that gender stereotypes in Germany and in other industrialised countries were similar (e.g., Williams and Best 1990). Moreover, measures assessing the gender role self-concept (e.g., Personal Attributes Questionnaire: Spence and Helmreich, 1978 [German translation: Runge et al. 1981]; Bem Sex Role Inventory: Bem 1974 [German new construction: Schneider-Düker and Kohler 1988]) have frequently been used with German samples (for an overview see Sieverding and Alfermann 1992). In these studies, good statistical values have been documented (e.g., Schneider-Düker and Kohler 1988). Furthermore, interrelations between gender role self-concept and well-being that were found using US samples were replicated with German samples (e.g., Sieverding 1990, 1999; Alfermann 1994, 1999).

Thus, we assume that research findings from other studies can be applied to a German context.

In Germany, approximately 80% of primary school teachers are female (Bundesgentur für Arbeit [German Federal Employment Office] 2005). Thus, primary school teaching is a numerically female-dominated occupation. To our knowledge, there are no published studies about occupational stereotypes in Germany and especially about these stereotypes' gender-typical content. However, research from the USA showed that the distribution of female and male employees in a certain profession corresponded to gender-stereotypic images of these occupations (Cejka and Eagly 1999) and went along with the ascription of gender-stereotypic attributes to the respective job holders (McLean and Kalin 1994). Furthermore, female-dominated occupations were seen to require feminine attributes, while male-dominated occupations were seen to require masculine attributes in order to attain occupational success (Glick 1991).

In their occupation, male primary school teachers are outnumbered by the other gender. Thus, we expected respondents' gender to be highlighted in daily working life. This increased salience of the gender category may, in turn, lead to an activation of gender-related attitudes, gender-related behavioural expectations, and general gender stereotypes (Hannover 1999). Consequently, both participants' gender role self-concept as well as their experience of gender-role conflict were assumed to be particularly influential for their well-being.

Gender Role Self-concept

A person's gender role self-concept emerges from her/his internalization of gender roles. These gender roles are socially determined. Women and men do not only know which attributes, such as traits and behaviours, their environment expects from them, but they also internalize these gendered expectations to a certain degree (Bem 1981). Among others, these expectations become part of a person's self-concept (Cejka and Eagly 1999). The term gender role self-concept refers to the degree to which a person sees herself/himself as having feminine and masculine attributes. As these facets of self-concept are comparatively stable across time, gender role self-concept is considered as a trait variable. Measures assessing the gender role self-concept (e.g., Bem Sex Role Inventory: Bem 1974) provide a femininity score and a masculinity score. These scores mirror the extent to which a person possesses feminine and masculine traits. On the basis of these (continuous) femininity and masculinity scores, four types of gender role self-concept can be differentiated: feminine (scoring high on feminine traits, scoring low on masculine traits), masculine (scoring high on masculine

traits, scoring low on feminine traits), androgynous (scoring high on both feminine as well as masculine traits), and undifferentiated (scoring low on both feminine as well as masculine traits). In other words, while feminine women and masculine men possess gender-role congruent traits (i.e., gender-typed individuals), androgynous individuals possess both feminine as well as masculine traits. Undifferentiated women and men do not possess many feminine and masculine traits at all. Research showed that undifferentiated individuals reported comparatively low self-esteem (Spence et al. 1975), low self-efficacy, and low self-acceptance (Woodhill and Samuels 2003), while well-being was shown to be interrelated with femininity (e.g., Sieverding 1990, 1999; Aube et al. 1995), masculinity, and androgyny (e.g., Whitley 1984).

Gender Role Self-concept and Models of Well-being

There are three competing models about the interrelation between gender role self-concept and well-being (Whitley 1984). According to the *congruence model*, psychological well-being results from congruency between a person's gender role self-concept and her/his gender (Lubinski et al. 1981). More precisely, women scoring high on femininity and low on masculinity and men scoring high on masculinity and low on femininity should report the best well-being. Feminine women and masculine men are conventionally gender-typed, as their self-concepts are "consistent with cultural standards of gender appropriateness" (Bem 1993, p. 120). According to the congruence model, well-being is fostered by such an consistency between an individual's self-concept and environment's expectations.

Persons scoring high on both femininity and masculinity are considered to be androgynous individuals. According to the *androgyny model* of well-being, androgynous individuals should report the best well-being (Bem 1974; Orlofsky and O'Heron 1987). These individuals have a broad set of attributes and behavioural options which in turn allows them to behave flexibly and to cope with diverse situational demands (Bierhoff-Alfermann 1989; Alfermann 1996; Vonk and Ashmore 1993).

According to the *masculinity model* of well-being, a person's masculinity should be associated with higher well-being. This model is based upon empirical findings rather than on theoretical assumptions. However, one could assume that masculinity is linked to higher well-being, because masculine attributes are highly valued in most societies that emphasise success and achievement. Thus, internalising these highly valued attributes may be responsible for the interrelation between masculinity and well-being, irrespective of a person's gender. Furthermore, high masculinity—as assessed with common gender-role

measures—high self-efficacy, and low depression are to a certain extent overlapping constructs (Whitley 1984, p. 219). Thus, high correlations might reflect the similarity of these constructs rather than a causal relevance of masculinity for well-being.

Gender Role Self-concept and Well-being

In a meta-analysis (Whitley 1984), the interrelations between a person's gender role self-concept and indicators of well-being, such as depression and psychological adjustment, were investigated. Masculinity had a moderately strong relationship to lack of depression (mean effect size [R^2]: $ES = .07$) and to diverse indicators of high psychological adjustment, such as low anxiety, low irritation, and high general well-being (mean effect size [R^2]: $ES = .11$). For femininity, there was no significant relationship to lack of depression (mean effect size [R^2]: $ES = .01$) and a slight relationship to high psychological adjustment (mean effect size [R^2]: $ES = .03$). These findings supported the masculinity model with regard to depression and the androgyny model with regard to psychological adjustment. In another meta-analysis (Whitley 1983), a strong interrelation between masculinity and high self-esteem was documented (mean effect size [R^2]: $ES = .29$) and a slight interrelation between femininity and high self esteem (mean effect size [R^2]: $ES = .03$). Whitley (1984) summarised that the interrelations between masculinity and well-being were stronger than the interrelations between femininity and well-being. However, these relations were "not [necessarily] causal in nature and did not deal with clinical populations." (p. 221)

In more recent studies, these meta-analytic findings were replicated using samples from the USA (Orlofsky and O'Heron 1987), from Germany (Sieverding 1990, 1999; Alfermann 1994, 1999), from Canada (Aube et al. 1995), and from Australia (Woodhill and Samuels 2003). These studies also revealed that for men, but not for women, femininity was associated with well-being (Sieverding 1990, 1999; Aube et al. 1995). Women are expected to have feminine traits to a higher extent than men. Thus, while women's femininity is expected as the norm, men's femininity may be perceived as a specific characteristic. Femininity in men may in some contexts be appreciated by their environment. This may come along with positive interpersonal experiences for these men. In other studies, femininity was linked to higher social self-esteem for women and men (Orlofsky and O'Heron 1987; Alfermann 1994, 1999). In a study comparing respondents with different types of gender role self-concept (Woodhill and Samuels 2003), both androgynous as well as masculine participants reported higher well-being than feminine and undifferentiated participants.

In sum, empirical results showed a positive interrelation between masculinity and well-being (masculinity model). Androgyny was also associated with higher well-being, but the respective interrelations were weaker (androgyny model). Concerning femininity, there were positive effects on well-being for men, but not for women. At last, there was no strong support for the assumption that congruency between a person's gender and her/his gender role self-concept had particularly positive effects on well-being (congruence model).

Gender-role Conflict and Well-being

According to a general definition (Koberg and Chusmir 1991), the term gender-role conflict refers to inconsistencies between a person's attributes and societal expectations toward this person which are based upon her/his gender (p. 461). Gender-role conflicts describe negative emotional states (O'Neil et al. 1986) that occur when a person is not treated as she/he wishes because of her/his gender, or there may be incongruities between a person's self-concept and societal gendered expectations (Thompson et al. 1992). Several measures were developed in order to assess gender-role conflicts in different contexts and using different samples (e.g., gender-role conflict in the workplace: Sex Role Conflict Scale: Chusmir and Koberg 1986—gender-role conflict in men: male or masculine gender-role conflict: Gender Role Conflict Scale: O'Neil et al. 1986; Masculine Gender Role Stress Scale: Eisler and Skidmore 1987).

In studies from the USA, gender-role conflict in men was linked to lower well-being (Sharpe and Heppner 1991) and to psychological symptoms and problems (Good et al. 1995). A more recent study from the USA showed that measures developed for assessing gender role conflict in men can also be used with female samples (Zamarripa et al. 2003). The interrelations between masculine gender-role conflict and well-being were similar for women and men. Nevertheless, male participants reported higher levels of masculine gender-role conflict than female participants. These findings clearly indicate that an interrelation between gender-role conflict and impaired well-being is very probable.

Interrelations between gender-role conflict and work-related attitudes have also been studied. Studies from the USA showed that gender-role conflict was associated with higher propensity to leave the organization in female and male employees (Koberg and Chusmir 1987) and with lower professional commitment in female and male managers (Koberg and Chusmir 1988). Furthermore, in women, but not in men, gender-role conflict was linked to lower work satisfaction (Koberg and Chusmir 1987) and to lower perceived work competency (Chusmir and Koberg

1989). In sum, there seem to be disadvantageous interrelations between gender-role conflict and several work-related attitudes.

Gender Role Self-concept and Gender-role Conflict

Studies comparing respondents with different types of gender role self-concept provided the following results. In an US-American sample, feminine men reported higher gender-role conflict than undifferentiated men, and masculine men reported higher gender-role conflict than feminine, undifferentiated, and androgynous men (Koberg and Chusmir 1988). Irrespective of their gender-role self-concept, female participants reported higher gender-role conflict than male participants. The authors actually expected feminine men and masculine women to report particularly high levels of gender-role conflict, because experiencing incongruities between individual attributes and environment's gendered expectations should be more likely for these individuals. In another study from the USA, masculine men reported higher gender-role conflict than feminine men, but, however, undifferentiated men reported particularly high gender-role conflict (O'Neil et al. 1986).

Studies using continuous scores for femininity and masculinity revealed that, in a German sample, masculinity was associated with lower gender-role conflict in elderly men (i.e., between 45 and 64 years of age), but not in younger men (i.e., between 16 and 36 years of age). Masculinity seemed to be a positive resource and protective factor for coping with diverse situations and demands including gender-role conflict (Thiele 2000, p. 153). In a study from the USA, masculinity was linked to higher gender-role conflict in a sample of men (Sharpe and Heppner 1991), while femininity was associated with lower gender-role conflict. Though the respective correlations were only of medium size, the correlational pattern was plausible: The higher a male person's masculinity and thus his internalization of masculine role norms, the more binding he may perceive these norms and the higher might thus be his proneness to experience gender-role conflict. However, it can also be argued that the higher a man's femininity is, the more he runs the risk of experiencing that he does not correspond to his environment's expectations with regard to gender role norms.

In sum, the empirical findings reported above are inconsistent and, in part, contradictory. Several reasons can explain the inconsistency: Different measures assessing gender-role conflict were used, the statistical analyses differed with regard to gender role self-concept (i.e., continuous scores vs. categories), the samples differed from study to study, and the studies were published within a rather long period of time (i.e., between 1986 and 2000).

Gender Role Self-concept, Gender-role Conflict, and Well-being in Gender-untypical Occupations

According to our knowledge, studies explicitly analysing well-being in gender-untypical occupations are rare. In a Dutch study comparing female and male employees in gender-untypical occupations (Ott 1989), policewomen reported that they were not accepted by their colleagues. They also reported sexual harassment. Male nurses reported not being accepted and sexual harassment to a lesser degree. In a study from Norway (Erikson and Einarsen 2004), male assistant nurses more often reported mobbing/bullying in the workplace than female assistant nurses. Zapf et al. (2003) argued that, in general, the risk of harassment at work was higher for women than for men, because women more often held low status positions, and they more often worked in gender-untypical occupations than men. Yoder and Kahn (2003) pointed out that the experience of being numerically underrepresented was different for women and men. Men in female-dominated occupations might even profit from their minority status by preferential access to resources and career opportunities (Williams 1992).

Another line of research focused on direct and combined effects of a person's gender, her/his gender role self-concept, and gender-typicality of occupations on well-being. In an Israeli sample, Krausz et al. (1992) found that male nurses with a masculine gender role self-concept reported more positive work-related attitudes, such as work centrality and work satisfaction, than male nurses with a feminine gender role self-concept. Moreover, male nurses with an androgynous self-concept ranked highest in work satisfaction. However, for (female) nurses, there was no interrelation between their gender role self-concept and work-related attitudes at all.

Rustemeyer and Thrien (2001; Rustemeyer 2001) found in a German sample that women and men with a masculine gender role self-concept reported higher well-being irrespective of the gender-typicality of their occupation. Furthermore, women and persons with a feminine gender role self-concept reported a particularly high level of gender-role conflict across occupations with different gender-typicality (feminine vs. gender-neutral vs. masculine).

In a Canadian sample (Long 1989), women scoring low on femininity reported higher well-being when working in gender-untypical occupations than when working in gender-typical occupations. This finding may be due to the comparatively higher congruency between gender role self-concept and occupation for low feminine women in male-dominated occupations than for low feminine women in female-dominated occupations. Similarly, in another study from Canada, Luhaorg and Zivian (1995) found that congruency between gender role self-concept and occupa-

tions' gender-typicality was associated with lower levels of gender-role conflict. More precisely, employees with a feminine gender role self-concept in female-dominated occupations as well as employees with a masculine gender role self-concept in male-dominated occupations reported less gender-role conflict than employees whose gender role self-concept did not correspond to the gender-typicality of their occupation. However, women with a masculine gender role self-concept in male-dominated occupations reported more gender-role conflict than men with a masculine gender role self-concept in male-dominated occupations. Luhaorg and Zivian (1995) summarised: "[...] gender role conflict by the individuals in the present study appears to be related to a complex interaction of their gender, gender role [i.e., gender role self-concept], and occupation." (p. 618).

In sum, the reported empirical results are, again, inconsistent and contradictory in part. Also in gender-untypical occupations, masculinity and androgyny seem to have rather positive effects on different indicators of well-being and the experienced level of gender-role conflict. This seems to be the case particularly for men, but not necessarily for women.

As far as we know, there are no published studies analysing the combined effects of gender role self-concept and gender-role conflict on well-being in gender-untypical occupations. We assume that gender-role conflict may have a moderating effect on the interrelation between employees' gender role self-concept and well-being as well as on the interrelation between gender role self-concept and work-related attitudes. While femininity and masculinity are associated with higher well-being, gender-role conflict is linked to lower well-being. Thus, it seems reasonable to expect that for individuals experiencing high levels of gender-role conflict, the interrelations between femininity/masculinity and well-being are weaker than for individuals experiencing low levels of gender-role conflict. In other words, when an individual is in a negative emotional state because of incongruities between this person's attributes and the environment's gender-stereotypical expectations (Koberg and Chusmir 1991), this is likely to reduce gender role self-concept's positive impact on well-being.

Hypotheses

The purpose of this study was to analyse the interrelations between gender-role self concept, gender-role conflict, and indicators of well-being (i.e., depression, anxiety, emotional irritation, and work satisfaction) with a sample of male primary school teachers in Germany. We expected masculinity as well as femininity to be positively interrelated with indicators of well-being (H_1 and H_2). Masculinity is congruent with respondents' male gender, and there is congruity between femininity and the female-dominated work environment. Moreover, we assumed that androgy-

nous employees report the best well-being (H_3). For androgynous respondents, there is congruity between their masculinity and their male gender as well as between their femininity and the female-dominated work environment. We further expected gender-role conflict to negatively affect well-being (H_4). Finally (H_5), we assumed that masculinity's and femininity's positive impact on well-being is lower when gender-role conflict is high (i.e., gender-role conflict is a moderator of the interrelation between gender role self-concept and well-being).

H1. *Masculinity is associated with lower anxiety, lower depression, lower emotional irritation, lower gender-role conflict, and higher work satisfaction.* (congruence between gender role self-concept and gender)

H2. *Femininity is associated with lower anxiety, lower depression, lower emotional irritation, lower gender-role conflict, and higher work satisfaction.* (congruence between gender role self-concept and work environment)

H3. *Androgynous individuals experience the lowest anxiety, lowest depression, lowest emotional irritation, lowest gender-role conflict, and the highest work satisfaction.* (congruence between gender role self-concept and gender as well as between gender role self-concept and work environment)

H4. *Gender-role conflict is associated with higher anxiety, higher depression, higher emotional irritation, and lower work satisfaction.*

H5. *The interrelations between masculinity and well-being as well as the interrelations between femininity and well-being are moderated by gender-role conflict: Masculinity and femininity have weaker positive influence on well-being when gender-role conflict is high than it is the case when gender-role conflict is low.*

Method

Sample and Procedure

Our sample comprised $N = 81$ male primary school teachers from an urban area in Germany. We chose these participants, because in their occupational group, they are outnumbered by their female colleagues. Thus, we expected gender-related variables, such as gender role self-concept and gender-role conflict to be particularly important for well-being. Participants' average age was 42.9 years ($SD = 8.4$). All respondents indicated that their ethnic origin was White/Caucasian. Most of them were married (52%) or lived with a partner (16%). On average, respondents had 1.4 children ($SD = 1.1$). They had been working as primary

school teachers for 11.4 years (*SD* = 8.0). With a proportion of 81% (*SD* = 11.0), women predominated among staffs. Participants were given questionnaires with prepaid envelopes at their work place and were asked to send the questionnaires back to the researchers within 1 week.

Variables and Instruments

The questionnaires assessed participants' gender role self-concept, gender-role conflict, and several indicators of well-being.

Gender Role Self-concept

In order to assess participants' self-description with gender-typical traits, we used the Bem Sex Role Inventory (Bem 1974; German new construction: Schneider-Düker and Kohler 1988). This instrument consists of two subscales, each with 20 positive gender-typical personality traits. Respondents indicate the extent to which they find these feminine (e.g., romantic, sensitive) and masculine (e.g., obstinate, powerful) traits self-descriptive. The scaling ranges from 1 = *virtually never self-descriptive* to 7 = *virtually always self-descriptive*. Scale analyses indicated that excluding three items from the femininity scale would increase the scale's reliability from α = .65 to α = .73. The excluded items were 'playful', 'dependent', and 'susceptible to flattery'. The femininity scale provided a mean value of *M* = 4.90 (*SD* = .45). The masculinity scale provided a mean value of *M* = 4.81 (*SD* = .65) and had a reliability of α = .88.

Gender-role Conflict

This variable was assessed with the Gender-Role-Conflict-Scale (GRCS) by O'Neil et al. (1986; German translation: Thiele 2005). Each of the 37 items of this scale expresses a gender-role conflict pattern. These patterns are associated with men's fear of femininity which is defined as "a strong, negative emotion associated with stereotypic feminine values, attitudes, and behaviours." (O'Neil et al. 1986, p. 337) The scale consists of four subscales that were created using confirmatory factor analysis (common factor analysis with oblique rotation: p. 343). These subscales are "restrictive emotionality" (ten items: e.g., 'Strong emotions are difficult for me to understand'), "success, power, and competition" (13 items: e.g., 'Making money is part of my idea of being a successful man'), "restrictive affectionate behaviour between men" (eight items: e.g., 'Affection with other men makes me tense'), and "conflicts between work and family relations" (six items: e.g., 'Finding time to relax is difficult for me'). The answer categories range from 1 = *strongly disagree* to 6 = *strongly agree*. The scale provided

a mean value of *M* = 2.78 (*SD* = .59), and the scale's reliability was α = .91. The reliabilities for the four subscales were α = .83, α = .76, α = .88, and α = .75 respectively.

We chose common indicators of well-being (i.e., depression, anxiety, and emotional irritation), and a general work-related attitude (i.e., work satisfaction) in order to make our findings comparable to results reported in former studies (Whitley 1984; Koberg and Chusmir 1987; Krausz et al. 1992).

Depression

We used an instrument with eight items developed for non-clinical contexts (Mohr and Müller 2004b). An example of one of these items is: "I feel lonely even when others are around me". The scale ranges from 1 = *virtually never* to 7 = *virtually always*. The reliability for the eight items was .80 (*M* = 2.44, *SD* = .73).

Anxiety

We used an instrument with seven items developed for non-clinical contexts (Mohr and Müller 2004a). Scale analyses indicated that excluding two items would increase the scale's reliability from α = .66 to α = .70. An example of one of the remaining five items is: "I feel uncomfortable when talking to strangers". The scale ranges from 1 = *strongly disagree* to 7 = *strongly agree*. The reliability for the five items was .70 (*M* = 2.39, *SD* = .89).

Emotional Irritation

The items of this scale describe a state of mental exhaustion that occurs before the onset of mental illness (Mohr et al. 2006). The scale was developed for non-clinical contexts. However, emotional irritation was related to psychosomatic complaints (Garst et al. 2000). The longitudinal data gathered by Grebner (2001) indicated that systolic blood pressure—an indicator of stress—is a predictor of irritation. Good statistical values were demonstrated for many different samples (Mohr et al. 2005). The scale comprises five items of which an example reads: "I get grumpy when others approach me". Answer categories range from 1 = *strongly disagree* to 7 = *strongly agree*. The scale yielded a reliability of .84 (*M* = 2.58, *SD* = 1.01).

Work Satisfaction

This variable was assessed using an instrument tested by Baillod and Semmer (1994; Elfering et al. 2000). The instrument comprises eight items based on the research of Oegerli (1984). An example of one of these items is "I hope that my working situation remains as good as it is at the

moment". The scale ranges from 1 = *virtually never* to 7 = *virtually always*. The reliability for the eight items was .76 ($M = 4.77$, $SD = 1.10$).

Control Variables

In all analyses, we controlled for employees' age and tenure. Age and tenure may directly affect the well-being of employees in gender-untypical occupations. For example, the longer a man has been working in a female-dominated field, the more he might have accepted incongruities between his male gender and aspects of the work environment. Consequently, gender-role conflicts may be less frequent and work satisfaction may be higher. Moreover, age and tenure might be relevant for the interrelation between gender role self-concept and gender-role conflict in particular (Thiele 2000).

Results

Preliminary Analyses

In a first step, correlations between the variables in the focus of this study were calculated. These correlations as well as means, standard deviations, and coefficient alphas for the variables under study are documented in Table 1.

Additionally, we analysed whether there were significant correlations between employees' age/tenure and the indicators of well-being. These analyses showed that employees' age was interrelated with less depression ($r = -.24$, $p < .05$), with less emotional irritation ($r = -.23$, $p < .05$), and with less gender-role conflict ($r = -.32$, $p < .01$). Employees' tenure on the other hand, was associated with less depression ($r = -.24$, $p < .05$) and with higher work satisfaction ($r = .27$, $p < .05$).

Hypothesis 1. *Masculinity and well-being*

In order to test the association between masculinity and well-being, regression analyses were performed. All in all, five regression analyses were conducted (predictors: step 1: age and tenure, step 2: masculinity; dependent variables: depression, anxiety, emotional irritation, work satisfaction, and gender-role conflict). These analyses are summarized in Table 2.

As expected, masculinity was associated with lower anxiety ($\beta = -.49$, $p < .001$, $\Delta R^2 = .23$), with lower depression ($\beta = -.38$, $p < .01$, $\Delta R^2 = .14$), and with lower gender-role conflict ($\beta = -.22$, $p < .05$, $\Delta R^2 = .05$). We also found that masculinity was linked to higher work satisfaction ($\beta = .26$, $p < .05$, $\Delta R^2 = .06$). However, masculinity was not significantly interrelated with emotional irritation ($\beta = -.14$, $p > .05$, $\Delta R^2 = .02$). But at least the direction of this interrelation was as expected. Thus, our first hypothesis was partly supported.

Hypothesis 2. *Femininity and well-being*

In order to test the association between femininity and well-being, regression analyses were performed as well. All in all, five regression analyses were conducted (predictors: step 1: age and tenure, step 2: femininity; dependent variables: depression, anxiety, emotional irritation, work satisfaction, and gender-role conflict). These analyses are summarized in Table 3.

As expected, femininity was associated with lower anxiety ($\beta = -.35$, $p < .01$, $\Delta R^2 = .12$), with lower depression ($\beta = -.23$, $p < .05$, $\Delta R^2 = .05$), and with lower gender-role conflict ($\beta = -.23$, $p < .05$, $\Delta R^2 = .05$). Concerning the other indicators of well-being, femininity showed no significant interrelations (emotional irritation: $\beta = -.09$, $p > .05$, $\Delta R^2 = .01$; work satisfaction: $\beta = .10$, $p > .05$, $\Delta R^2 = .01$). Thus, our second hypothesis was partly supported.

Table 1 Intercorrelations between all variables.

Variables	M	SD	1.	2.	3.	4.	5.	6.	7.
N=81									
1. M	4.81	.65	(.88)						
2. F	4.90	.45	.46**	(.73)					
3. GRC	2.78	.59	−.24*	−.16	(.91)				
4. EI	2.58	1.01	−.17	−.05	.52**	(.84)			
5. ANX	2.39	.89	−.50**	−.32**	.65**	.49**	(.70)		
6. DEPR	2.44	.73	−.40**	−.20	.42**	.50**	.47**	(.80)	
7. WS	4.77	1.10	.27*	.08	−.23*	−.42**	−.23*	−.38**	(.76)

Notes: Reliabilities are shown in the principal diagonal. *M* masculinity (1=low, 7=high), *F* femininity (1=low, 7=high), *GRC* gender-role conflict (1=low, 6=high), *EI* emotional irritation (1=low, 7=high), *ANX* anxiety (1=low, 7=high), *DEPR* depression (1=low, 7=high), *WS* work satisfaction (1=low, 7=high)

*$p<.05$, **$p<.01$ (two-tailed alpha of .05)

Table 2 Multiple regressions on well-being: masculinity as predictor.

Indicator of well-being	Depression		Anxiety		Emotional irritation		Work satisfaction		Gender-role conflict	
	β		B		β		β		β	
Predictors	Step	Model	Step	Model	Step	Model	Step	Model	Step	Model
Step 1										
Age	−.14	−.14	−.07	−.07	−.19	−.19	−.08	−.10	−.41*	−.41*
Tenure	−.14	−.08	−.07	−.01	−.04	−.02	.32	.31	.12	.15
ΔR^2	.07		.02		.05		.07		.11*	
Step 2										
Masculinity	−.38**	−.38**	−.49**	−.49**	−.14	−.14	.26*	.26*	−.22*	−.22*
ΔR^2	.14**		.23***		.02		.06*		.05*	
Total R^2 (adjusted R^2)	.21 (.17)		.25 (.22)		.07 (.03)		.14 (.10)		.16 (.12)	

Note: *$p<.05$, **$p<.01$, ***$p<.001$

Hypothesis 3. Androgyny and well-being

The association between androgyny and well-being was examined with ANOVAs as well as moderated regression analyses. First, we conducted five ANOVAs (covariates: age and tenure; independent variable: type of gender role self-concept; dependent variables: depression, anxiety, emotional irritation, work satisfaction, and gender-role conflict). These analyses showed that participants' type of gender role self-concept had an impact on their well-being (anxiety: $F(3.72) = 8.64$, $p < .001$, $R^2_{corr.} = .23$; depression: $F(3.72) = 9.75$, $p < .001$, $R^2_{corr.} = .28$; gender-role conflict: $F(3.72) = 4.38$, $p < .001$, $R^2_{corr.} = .21$). However, there was no significant impact of respondents' type of gender role self-concept on emotional irritation ($F(3.72) = 2.47$, $p > .05$, $R^2_{corr.} = .08$) and on work satisfaction ($F(3.69) = .79$, $p > .05$, $R^2_{corr.} = .05$). Table 4 summarises means and standard deviations of the five indicators of well-being separately for respondents with different types of gender role self-concept.

Bonferroni-tests revealed the following significant differences between androgynous participants and those with a different type of gender role self-concept. Androgynous participants reported significantly less anxiety than feminine ($p < .01$) and undifferentiated respondents ($p < .001$). Concerning depression, the following significant differences occurred: Androgynous participants experienced less depression than feminine ($p < .001$) and undifferentiated respondents ($p < .001$). Moreover, though not the focus of our investigation, masculine respondents were less depressive than feminine respondents ($p < .01$). Finally, androgynous participants reported significantly less gender-role conflict than feminine participants ($p < .05$). These results supported our third hypothesis.

The categorisation of participants on the basis of median splits for femininity and masculinity was comparatively rough and might have led to finding spurious differences. Furthermore, for respondents scoring near the medians of femininity and masculinity, the assignment to the different

Table 3 Multiple regressions on well-being: femininity as predictor.

Indicator of well-being	Depression		Anxiety		Emotional irritation		Work satisfaction		Gender-role conflict	
	β		β		β		β		β	
Predictors	Step	Model	Step	Model	Step	Model	Step	Model	Step	Model
Step 1										
Age	−.14	−.19	−.07	−.14	−.19	−.21	−.08	−.06	−.41*	−.46**
Tenure	−.14	−.12	−.07	−.04	−.04	−.03	.32	.32	.12	.14
ΔR^2	.07		.02		.05		.07		.11*	
Step 2										
Femininity	−.23*	−.23*	−.35**	−.35**	−.09	−.09	.10	.10	−.23*	−.23*
ΔR^2	.05*		.12**		.01		.01		.05*	
Total R^2 (adjusted R^2)	.12 (.09)		.13 (.10)		.06 (.02)		.08 (.05)		.16 (.13)	

Note: *$p<.05$, **$p<.01$

Table 4 Means and standard deviations for the indicators of well-being.

Type of gender role self-concept	Androgynous (n=26)		Feminine (n=13)		Masculine (n=14)		Undifferentiated (n=26)	
Indicator of well-being	M	SD	M	SD	M	SD	M	SD
Depression[a] [b] [c]	1.98	.56	2.98	.67	2.19	.59	2.72	.64
Anxiety[a] [b]	1.79	.78	2.80	1.16	2.27	.57	2.82	.65
Emotional irritation	2.24	.92	3.25	1.15	2.40	.96	2.68	.97
Work satisfaction	5.04	1.32	4.37	1.18	4.77	1.04	4.67	.85
Gender-role conflict[a]	2.52	.45	3.07	.85	2.78	.41	2.91	.58

Notes: depression: 1=low, 7=high; anxiety: 1=low, 7=high; emotional irritation: 1=low, 7=high; work satisfaction: 1=low, 7=high; gender-role conflict: 1=low, 6=high
[a] Androgynous score significantly lower than feminine
[b] Androgynous score significantly lower than undifferentiated
[c] Masculine score significantly lower than feminine

types of gender role self-concept was to a certain extent arbitrary. We thus conducted additional analyses using the continuous measures for femininity and masculinity in moderated regression analyses (Baron and Kenny 1986). Variables involved were centred to the mean (Aiken and West 1991). We expected the interaction term femininity x masculinity to be a significant predictor for well-being. Five moderated regression analyses were conducted (predictors: step 1: age and tenure, step 2: femininity and masculinity, step 3: femininity × masculinity; dependent variables: depression, anxiety, emotional irritation, work satisfaction, and gender-role conflict). These analyses are documented in Table 5.

We identified the following significant moderating effect: The interaction term femininity × masculinity was a predictor of gender-role conflict: $\beta = -.23$, $p < .05$, $\Delta R^2 = .05$. Femininity was associated with lower gender-role conflict when masculinity was high, but not when

masculinity was low. Respondents scoring high on femininity and masculinity are considered androgynous individuals. These participants reported a comparatively low level of gender-role conflict.

Hypothesis 4. *Gender-role conflict and well-being*

In order to test the interrelation between gender-role conflict and well-being, regression analyses were performed. All in all, four regression analyses were conducted (predictors: step 1: age and tenure, step 2: gender-role conflict; dependent variables: depression, anxiety, emotional irritation, and work satisfaction). These analyses are summarized in Table 6.

As expected, gender-role conflict was linked to higher irritation ($\beta = .51$, $p < .001$, $\Delta R^2 = .23$), to higher anxiety ($\beta = .67$, $p < .001$, $\Delta R^2 = .42$), and to higher depression ($\beta = .39$, $p < .01$, $\Delta R^2 = .14$). Furthermore, gender-role conflict was associated with marginally lower work satis-

Table 5 Moderated regressions on well-being: interaction term femininity×masculinity as predictor.

Indicator of well-being	Depression		Anxiety		Emotional irritation		Work satisfaction		Gender-role conflict	
	β		β		β		β		β	
Predictors	Step	Model	Step	Model	Step	Model	Step	Model	Step	Model
Step 1										
Age	−.14	−.10	−.07	−.07	−.19	−.14	−.08	−.16	.41*	−.37*
Tenure	−.14	−.12	−.07	−.02	−.04	−.06	.33	.35*	.12	.10
ΔR^2	.07		.02		.05		.07		.11*	
Step 2										
Femininity (f.)	−.06	−.02	−.14	−.11	−.02	.02	−.03	−.06	−.16	−.10
Masculinity (m.)	−.35**	−.37**	−.42***	−.44***	−.13	−.16	.27*	.30*	−.14	−.18
ΔR^2	.14**		.25***		.02		.07		.06	
Step 3										
f.×m.	−.18	−.18	−.10	−.10	−.19	−.19	.16	.16	−.23*	−.23*
ΔR^2	.03		.01		.03		.02		.05*	
Total R^2 (adjusted R^2)	.23 (.18)		.27 (.23)		.11 (.05)		.16 (.10)		.22 (.17)	

Note: *p<.05, **p<.01, ***p<.001

Table 6 Multiple regressions on well-being: gender-role conflict as predictor.

Indicator of well-being	Depression		Anxiety		Emotional irritation		Work satisfaction	
Predictors	β		β		β		β	
	Step	Model	Step	Model	Step	Model	Step	Model
Step 1								
Age	−.14	.03	−.07	.21	−.19	.02	−.08	−.18
Tenure	−.14	−.19	−.07	−.15	−.04	−.10	.33	.36*
ΔR^2	.07		.02		.05		.07	
Step 2								
Gender-role conflict	.39**	.39**	.69***	.69***	.51***	.51***	−.23	−.23
ΔR^2	.14**		.42***		.23***		.05	
Total R^2 (adjusted R^2)	.20 (.17)		.44 (.41)		.28 (.25)		.12 (.09)	

Note: *$p<.05$, **$p<.01$, ***$p<.001$

faction ($\beta = -.23$, $p = .05$, $\Delta R^2 = .05$). Thus, our fourth hypothesis was partly supported.

Hypothesis 5. *Masculinity, femininity, gender-role conflict, and well-being*

In order to examine moderating effects of gender-role conflict on the interrelation between gender role self-concept and well-being, moderated regression analyses were conducted. We expected the interaction terms masculinity × gender-role conflict and femininity × gender-role conflict respectively to be significant predictors for participants' well-being. All in all, eight moderated regression analyses were conducted (predictors: step 1: gender and age, step 2: masculinity or femininity, gender-role conflict, step 3: masculinity × gender-role conflict or femininity × gender-role conflict; dependent variables: depression, anx-

iety, emotional irritation, and work satisfaction). These analyses are documented in Table 7 and Table 8.

We identified one significant moderating effect: Unexpectedly, femininity was associated with lower work satisfaction when the level of gender-role conflict was high (femininity × gender-role conflict: $\beta=-.27$, $p<.05$, $\Delta R^2=.06$).

We repeated this last analysis separately for respondents with different types of gender role self-concept. These analyses aimed at testing whether the general finding for the total sample applied to certain subsamples in particular. We found that the moderating effect of gender-role conflict on the interrelation between femininity and work satisfaction only applied to masculine participants ($\beta=-.74$, $p<.05$, $\Delta R^2=.15$). However, the effect was of similar strength for feminine respondents, but due to low statistical power, it did not yield significance ($\beta=-.76$, $p>.05$, $\Delta R^2=.10$).

Table 7 Moderated regressions on well-being: interaction term masculinity × gender-role conflict as predictor.

Indicator of well-being	Depression		Anxiety		Emotional irritation		Work satisfaction	
	β		β		β		β	
Predictors	Step	Model	Step	Model	Step	Model	Step	Model
Step 1								
Age	−.14	−.01	−.07	.19	−.19	.01	−.08	.16
Tenure	−.14	−.13	−.07	−.08	−.04	−.10	.33	.34**
ΔR^2	.07		.02		.05		.07	
Step 2								
Masculinity (m.)	−.31**	−.31**	−.36***	−.38***	−.03	−.03	.22*	.19
Gender-role conflict (grc.)	.32**	.32**	.60***	.58***	.50***	.51***	−.19	−.24
ΔR^2	.23***		.54***		.23***		.10*	
Step 3								
m. × grc.	.01	.01	−.08	−.08	.02	.02	−.16	−.16
ΔR^2	.00		.01		.00		.02	
Total R^2 (adjusted R^2)	.29 (.24)		.56 (.53)		.28 (.24)		.19 (.13)	

Note: *$p<.05$, **$p<.01$, ***$p<.001$

Table 8 Moderated regressions on well-being: interaction term femininity × gender-role conflict as predictor.

Indicator of well-being	Depression		Anxiety		Emotional irritation		Work satisfaction	
	β		β		β		β	
Predictors	Step	Model	Step	Model	Step	Model	Step	Model
Step 1								
Age	−.14	−.04	−.07	.15	−.19	.03	−.08	.21
Tenure	−.14	−.18	−.07	−.12	−.04	−.10	.33	.32
ΔR^2	.07		.02		.05		.07	
Step 2								
Femininity (f.)	−.15	−.17	−.20*	−.20*	.03	.04	.05	.02
Gender-role conflict (grc.)	.36**	.37**	.64***	.63***	.52***	.51***	−.22	−.20
ΔR^2	.16**		.46***		.23***		.05	
Step 3								
f.×grc.	−.08	−.08	.04	.04	.06	.06	−.27*	−.27*
ΔR^2	.01		.01		.01		.07*	
Total R^2(adjusted R^2)	.23 (.18)		.48 (.44)		.29 (.24)		.19 (.13)	

Note: *$p<.05$, **$p<.01$, ***$p<.001$

We expected more significant interactions, but none of the other interaction terms was significant. Nevertheless, the result seemed to partly support our expectation. Gender-role conflict not only had direct negative effects on indicators of well-being. When gender-role conflict was high, femininity was associated with lower work satisfaction—especially for masculine and, possibly, feminine respondents.

Discussion

In our study, we analysed the interrelations between male primary school teachers' gender role self-concept, gender-role conflict, and well-being. We found that masculinity and femininity were interrelated with higher well-being. Masculinity was associated with lower depression, lower anxiety, and lower gender-role conflict. Moreover, masculinity was linked to higher work satisfaction. These findings supported both the masculinity model of well-being as well as the congruence model of well-being, as masculinity was congruent with respondents' gender. Femininity was interrelated with lower anxiety, lower depression, and lower gender-role conflict. Prior research documented that femininity may have positive effects on men's well-being (Sieverding 1990, 1999; Aube et al. 1995). Furthermore, one could assume that femininity positively affected well-being, as femininity is congruent with the feminine connotation of our respondents' occupation (i.e., primary school teaching). Compared with the mean effect sizes reported in Whitley's (1984) meta-analysis about gender role self-concept and depression, we found stronger interrelations between masculinity and lack of depression as well as between femininity and lack of depression.

However, also in our sample, the interrelation between masculinity and lack of depression was stronger than between femininity and lack of depression.

Our results supported the androgyny model of well-being, as androgynous participants reported the lowest level of anxiety, depression, and gender-role conflict. We expected this to be the case, because androgynous individuals have a broad set of attributes which allows them to cope with diverse situational demands (Bierhoff-Alfermann 1989; Alfermann 1996; Vonk and Ashmore 1993). Furthermore, for androgynous male primary school teachers, there was congruency between their masculinity and their gender as well as congruency between their femininity and their occupation.

As expected, gender-role conflict was interrelated with lower well being. Participants experiencing gender-role conflict reported higher anxiety, higher depression, and higher emotional irritation. We assumed that in their female-dominated occupation, male primary school teachers were likely to experience gender-role conflict and that this may negatively affect their psycho-social health status. Furthermore, these findings were in line with prior research with US samples (e.g., Sharpe and Heppner 1991; Good et al. 1995). However, we did not detect a significant interrelation between gender-role conflict and lower work satisfaction. Prior studies documented that gender-role conflict was interrelated with higher propensity to leave the organization (Koberg and Chusmir 1987) and with lower professional commitment (Koberg and Chusmir 1988). In these studies, a measure assessing work-related gender-role conflict was used. Work-related gender-role conflict can occur when the division of work as well as the access to resources and informal networks are guided by

employees' gender and not by their skills and competency. Perhaps this type of gender-role conflict is more strongly interrelated with work attitudes than general gender-role conflict.

We also expected gender-role conflict to affect the interrelation between gender role self-concept and well-being. When gender-role conflict is high, this may generally weaken the interrelations between femininity as well as masculinity and higher well-being. Unexpectedly, we even found a negative effect of femininity on well-being. Femininity was associated with lower work satisfaction for respondents experiencing comparatively high gender-role conflict. This finding applied to masculine and feminine respondents, but not to androgynous and undifferentiated respondents. Femininity was associated with lower work satisfaction for male primary school teachers when gender-role conflict was high and when they had a feminine or a masculine gender role self-concept. Femininity is congruent with the female-dominated occupation, but discrepant to respondents' male gender. We thus assumed that our finding indirectly supported the congruence model of well-being. Moreover, androgyny seemed to be a protective factor for respondents experiencing gender-role conflict. For androgynous respondents, femininity was not associated with lower work satisfaction when gender-role conflict was high. We thus considered our finding to be supportive of the androgyny model of well-being as well.

Limitations and Future Research

Our study had several limitations that may be remedied in future research. First of all, our data stem only from one source. In order to avoid same source bias, data from different sources should be collected. It would be interesting to analyse whether aspects of the work environment (e.g., colleagues' gendered expectations) and characteristics of the work tasks (e.g., gender-typical content) have direct effects on well-being or moderating effects on the interrelations that were under research in this study.

We confined ourselves to studying men in a single female-dominated occupation. One could be interested in the generalisability of our findings to other samples, such as men in occupations with different gender-typicality. This would allow to test whether there are different interrelations between gender role self-concept and well-being depending on the proportion of male employees in these occupational fields. Similarly, it would be interesting to analyse whether the results of our study can be generalised to female samples.

Though our focus was studying male primary school teachers and we thus decided to assess masculine gender-role conflict, it could be rewarding to compare our findings to those provided by other measures for gender-role conflict. Measures capturing work-related gender-role conflict seem to be promising. As we consider the work context to be crucial for well-being of employees in gender-untypical occupations, measures assessing work-related gender-role conflict may provide stronger effects.

Conclusions

With our study, we showed that former research findings can be generalised to a sample of male employees in a gender-untypical occupation. Our data supported the masculinity model of well-being, the congruence model of well-being, and the androgyny model of well-being. Moreover, we found that femininity was associated with higher well-being. We expected this to be the case because prior research showed that for men, but not for women, femininity was associated with higher well-being. As expected, there were interrelations between gender-role conflict and impaired well-being. Obviously, these interrelations were also valid for our sample of male employees in a female-dominated occupation. Unexpectedly, we detected that femininity was linked to lower work satisfaction when gender-role conflict was high and when respondents had a masculine or a feminine gender-role self concept. It would have been a reasonable expectation that femininity in a female-dominated occupation might have generally positive effects as there is congruency between self-concept and work environment.

On average, the male primary school teachers in our sample reported moderate levels of anxiety, depression, emotional irritation, and gender-role conflict. Both masculinity as well as femininity were associated with higher well-being. Furthermore, androgyny seemed to be advantageous for respondents' well being as it was directly interrelated with well-being and as it mitigated negative effects of gender-role conflict. We assume that this was the case because for androgynous primary school teachers, there is both congruency between masculinity and their gender and between femininity and their occupation. From these findings, we conclude that working in a female-dominated occupation is not necessarily interrelated with lower well-being for male employees. However, gender-role conflict may be a threat to employees' well-being as it was directly interrelated with lower well-being and as it was a moderator of the interrelation between femininity and work satisfaction. Though femininity is congruent with a female-dominated work environment and thus a potential source of well-being, femininity is also interrelated with lower work satisfaction when employees experience gender-role conflict and when they have a masculine or feminine gender role self-concept.

In Germany, women and men still prefer gender-congruent occupations (Statistisches Bundesamt [Federal Statistical Office] 2004). However, women and men who would like to work in a gender-untypical occupation may be discouraged by this gender segregation. Furthermore,

gender-role conflict may also be a hindrance for occupational choices and development. Thus, we suggest that future research should further analyse gender-role conflict, its emergence, and its consequences for well-being in gender-untypical occupations. As gender-role conflicts are due to inconsistencies between a person's attributes and the environment's expectations, it seems particularly promising to study the majority employees' gendered expectations towards their minority colleagues.

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