

A Dual Identity Approach for Conceptualizing and Measuring Children's Gender Identity

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The goal was to test a new dual identity perspective on gender identity by asking children ($n = 467$) in three grades ($M_{\text{age}} = 5.7, 7.6, 9.5$) to consider the relation of the self to both boys and girls. This change shifted the conceptualization of gender identity from one to two dimensions, provided insights into the meaning and measurement of gender identity, and allowed for revisiting ideas about the roles of gender identity in adjustment. Using a graphical measure to allow assessment of identity in young children and cluster analyses to determine types of identity, it was found that individual and developmental differences in how similar children feel to both genders, and these variations matter for many important personal and social outcomes.

A boy who enjoys playing sports may feel as though he is a “typical” boy, but he may also feel similar to girls in his love of art and design. Another boy who enjoys sports may also feel as if he is a “typical” boy, but he does not feel similar to girls in any way and avoids all things feminine. Are these boys identical in how they think about gender identity? Or instead, do comparisons to both gender groups inform gender identity? Much of the recent research assessing gender identity with older children and adolescents has focused on one aspect of identity, called gender typicality, and this construct is measured as the extent to which one feels like a typical example of one's *own*-gender category (Egan & Perry, 2001). It seems likely, however, that adults and even young children also vary in how they view themselves in relation to the *other* gender, such that *both* gender groups serve as important reference groups. Thus, an expanded conceptualization of gender identity seems warranted. Here, we define gender identity as a multi-dimensional, psychological construct that reflects

individuals' beliefs about how the self relates to both gender groups. This definition allows for individuals to hold a broader spectrum of gender identities than previous views would support and is similar to one used in the ethnic and racial identity literature (Umana-Taylor et al., 2014). Our primary goal is to examine the usefulness of this approach.

Historical and Theoretical Background and Rationale

Our new definition of gender identity is based on social identity theory. In this theory, identification with a social category affects how people perceive and evaluate themselves and others, and how they navigate their social worlds (Ruble et al., 2004; Tajfel & Turner, 1986). That is, self-categorization as a member of social groups is central to children's understanding of who they are and what they can or should be (Rogers, Scott, & Way, 2015). Thus, understanding how children develop their social identities and their link to physical and mental health outcomes are important developmental issues (Garcia-Coll et al., 1996; Ruble et al., 2004).

Across the history of research on the topic, gender identity has been conceptualized and measured in different ways. Early research focused on children's gender typing (e.g., preference for activities, etc.) as an expression of their gender identity. However, more recent research has conceptualized

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gender identity as a subjective experience that may or may not coincide with natal gender (Ehrensaft, 2013; Olson, Key, & Eaton, 2015; Spence, 1999). In addition, assumptions about gender identity—whether it is adaptive or maladaptive to identify strongly with one's gender and adhere closely to gender norms—have shifted substantially over time.

Prior to the mid-1970s, fostering a strong gender identity in children was widely considered to be a desirable goal (Huston, 1983). Gender identity was presumed to be gauged by measuring any form of gender typing, including whether children engaged in masculine and feminine activities, whether children endorsed masculine and femininity personality traits, and whether parents believed children conformed to cultural norms for their own gender (see Huston, 1983). The ideal gender identity conformed to traditional expectations for one's gender, which was believed to depend on identification with same-gender parents (Kagan, 1964), and failure to match gender prescriptions was assumed to be harmful to well-being (for review, see Lurye, Zosuls, & Ruble, 2008).

In the mid-1970s and 1980s, with changes in the cultural climate (e.g., the Women's Movement) and the influence of cognitive theories (e.g., Kohlberg, 1966), additional questions arose about the measurement and adjustment consequences of gender identity (Huston, 1983). First, in the developmental literature, young children's understanding of the concept of gender, from basic understanding of labels (Martin & Halverson, 1981) to more complex levels of understanding, such as its constancy over situation and stability over time, were viewed as important to learning gender roles (e.g., Ruble, Balaban, & Cooper, 1981). Given that most children reached ceiling on these measures at a young age (Martin, Ruble, & Szkrybalo, 2002), little of this research examined older children's gender identity.

Second, the consequences of adherence to traditional gender-typed norms were brought into question. Bem (1975) argued that men and women can possess similar characteristics and that strict adherence to gender norms would promote negative rather than positive adjustment. The underlying idea as defined by Bem (1974, p. 155) was that, "many individuals might be 'androgynous'; that is, they might be *both* masculine and feminine, *both* assertive and yielding, *both* instrumental and expressive—depending on the situational appropriateness of these various behaviors" (also see Paulhus & Martin, 1988). Although Bem agreed that

individuals were motivated to adhere to cultural standards of gender, she believed, in contrast to earlier views (e.g., Kagan, 1964), that this tendency would result in behavioral inflexibility and thus maladjustment. Huston (1983) describes this as a major historical shift in the conceptualization of gender identity and its consequences with many investigators rejecting the values that men and women represented polar opposites. Measurement focused on assessing masculinity, femininity, and androgyny using the BSRI (Bem, 1974), which was later critiqued for its inclusion of only expressive and instrumental personality traits (e.g., "affectionate" as a feminine characteristic, "independent" as masculine characteristic) rather than a broader spectrum of characteristics (Spence, 1993). Furthermore, although some studies found links between androgyny and adjustment (e.g., Alpert-Gillis & Connell, 1989), many others did not (e.g., Taylor & Hall, 1982). Thus, the use of the BSRI and the assumption that androgyny was linked to better mental health waned over time. Nevertheless, the idea that individuals may perceive themselves in relation to both men and women and the importance of understanding which gender identity profile is optimal for adjustment remain compelling topics in research (e.g., DiDonato & Berenbaum, 2011). We believe this conceptualization of gender identity, as something experienced in relation to both genders, has enduring relevance to understanding the socioemotional implications of gender identity. We explore this idea in the current research using a framework informed by social psychological theories and recent research on gender typicality.

Recent Conceptions of Gender Identity

Although Bem (1974; 1975) and Kagan (1964) differed about whether gender typing is maladaptive or adaptive, both perspectives shared the idea that individuals' levels of gender typing represent their gender identities. More recent research has suggested that identity is more complex than adherence to gender norms (Lurye et al., 2008). For example, boys with a strong interest in trucks and/or who are highly aggressive may strongly identify as boys or may not. Much of this newer generation of research has been based on Egan and Perry's (2001) groundbreaking conceptualization of gender identity as a multidimensional construct composed of measures of gender labeling, typicality, and contentedness, as well as felt pressure to conform to norms and intergroup bias. Within this research tradition, many studies focus on feeling gender typical

as a consequential aspect of identity (e.g., Carver, Yunger, & Perry, 2003; Egan & Perry, 2001) for children 10 years or older. Gender typicality is measured with global questions about how much children feel like typical members of their own gender group and about their similarity to own-gender peers in specific domains (e.g., interests, personality). The measure relies on relatively complex verbal comparisons (e.g., "Some girls feel that the kinds of things they're good at are similar to what most girls are good at BUT other girls don't feel that the kinds of things they're good at are similar to what most girls are good at"), which limits its usefulness with children in early elementary school (cf. Lamb, Bigler, Liben, & Green, 2009).

The studies examining links between gender typicality and adjustment have found a pattern consistent with earlier views (e.g., Kagan, 1964) and quite different from Bem's (1975) proposals about androgyny. Feeling typical of one's own gender relates to psychological adjustment and feeling atypical relates to poor outcomes (e.g., Carver et al., 2003; Zucker & Bradley, 1995), especially when there is felt pressure to conform to gender norms (e.g., Egan & Perry, 2001). However, evidence also suggests that feeling low in gender typicality relates to some positive outcomes such as egalitarian intergroup attitudes and beliefs (Patterson, 2012).

Although recent research suggests that a strong same-gender identity is beneficial to interpersonal outcomes and adjustment, this interpretation may not be quite as straightforward as it seems. Is it only one's own sense of typicality that matters or is there a contribution of other-gender typicality toward adjustment? If each contributes independently of one another, both dimensions need to be measured, which then should clarify the link between identity and adjustment. Consider the consequences of measuring only own-gender typicality: In that case, being "gender typical" (high on own-gender typicality) would not distinguish individuals who feel very similar only to their *own* gender from those who feel similar to *both* genders, leaving it unclear whether typicality relates to positive outcomes because some individuals have strong own-gender identity or because other individuals benefit from flexibility due to feeling similar to both genders. Similarly, feeling "gender atypical" (low on own-gender typicality) would not distinguish individuals who feel strongly similar only to the other gender (i.e., cross-gender identified) versus those who do not identify strongly with either gender, leaving

unclear whether lack of any gender connection or cross-gender identification accounts for poor outcomes.

We suggest that to understand these potentially important distinctions in gender typicality it is useful to incorporate a fundamental proposal from the androgyny literature, namely, that gender identity may involve a connection to the other gender *as well as* to one's own gender. Thus, our first goal was to assess whether children's sense of gender identity involves self-perceptions of typicality in relation to both genders and the relation between these two dimensions. The second goal concerns whether such self-perceptions change with age during elementary school. Some researchers have suggested that children do not engage in identity-relevant social comparisons until middle elementary school and that a sense of gender typicality may not be relevant earlier (Carver et al., 2003; Egan & Perry, 2001). Given theories suggesting the importance of social identities on young children's behavior and thinking (Martin & Halverson, 1981; Martin & Halverson, 1987; Powlishta, 1995), however, we might expect that a sense of gender typicality is evident as early as kindergarten, when children have developed an understanding of their gender category membership and know a range of gender stereotypes. Finally, the third goal was to examine whether variations in the relative levels of own- and other-gender typicality matter for adjustment and related outcomes, specifically whether a dual identity approach provides greater specification of these relations.

The Present Study

To examine these issues, we created a simple, graphical measure that could be understood by young children. The new measure is similar to the Egan and Perry (2001) approach in asking how similar children feel to girls and boys on a range of domains of gender typing (i.e., not simply personality traits), thereby asking them to make global determinations of typicality. However, the new measure uses more simplified wording and expands the conceptualization and measurement of gender identity to include identification with both genders. Using a graphical approach, children could demonstrate their feelings of similarity to each gender group using circles that are placed closer or farther apart rather than a scale that relies only on verbal comparisons. This graphical approach of using circles was not only a way to engage children of a range of ages with the

questions but is also based on a broadly used and adapted measure from adult social psychological research on social identities (e.g., nationality; Aron, Aron, & Smollan, 1992; Schubert & Otten, 2002; Tropp & Wright, 2001). The idea behind this measure is that the self and close others, including social groups with whom an individual identifies, are incorporated into the self in such a way that the boundaries of the self and other are redrawn and self-perceptions are focused on those characteristics that make one a “good” or typical representative of the group (Wright, Aron, & Tropp, 2002). As such, Venn-like diagrams are particularly useful and appropriate ways of assessing how adults and children alike conceptualize themselves in relation to others.

Using this approach and new measure, we tested three sets of hypotheses:

1. To address the first goal, the viability of a dual identity approach, we analyzed the structural features underlying perceived similarity toward one’s own and the other gender. Unipolar perspectives, represented by work prior to the 1970s and the work by Egan and Perry (2001), imply that the two similarity scales would strongly negatively correlate and load on one factor. In contrast, and in accordance with the bipolar perspective represented in the work on androgyny and our dual identity approach, we hypothesized that the two measures would be relatively independent and load on separate factors.
2. The second set of hypotheses concerned gender- and age-related changes in perceived gender similarity across the early elementary school grades. This age span was chosen because little research has examined gender identity development across early and middle childhood. Consistent with social identity theory predictions that highlight the importance of social identities and their influence on own-group favoritism (Martin & Halverson, 1987; Powlishta, 1995), we hypothesized that most children would feel more own- than other-gender similarity at all ages. However, we also expected a gender difference. Because gender-typed norms are more circumscribed for boys (Feinman, 1981) and they endorse traditional attitudes more than do girls (Galambos, Almeida, & Petersen, 1990), boys were expected to show greater differentiation in felt own-gender similarity versus other-gender similarity than girls across age.

It was not clear, however, whether children’s relative feelings of similarity to own versus other gender would change with age, given a lack of previous research over this age range on this question. Prior theorizing leads to two alternative hypotheses. On one hand, socialization pressures might encourage children to become increasingly gender typed, and these pressures may intensify as they move toward adolescence (Hill & Lynch, 1983). If so, we would expect higher levels of own-gender typicality and lower levels of other-gender typicality with age. On the other hand, social-cognitive theories suggest that increased cognitive skills (Bigler, 1995) or social experiences (e.g., increased exposure to other-gender peers) might lead to more nuanced perceptions, such as increased awareness of other-gender similarity. Consistent with this latter idea, normative developmental trajectories of gender stereotyping shift away from early rigidity to increasing flexibility during middle childhood (Ruble, 1994; Trautner et al., 2005).

3. The third set of hypotheses tested a major idea of the dual identity approach: The notion that the relative levels of *perceived own-gender and other-gender similarity* captured in typologies of gender identity would be associated with differing patterns of social and personal outcomes. Using the analytic approach of creating typologies assumes that an individual’s gender identity functions as an integrated whole and is consistent with a person-centered approach (for review, see Bergman, Magnusson, & El-Khoury, 2003). As such, the centerpiece of our analyses was the use of cluster analyses that represent combinations of gender similarity within a person (e.g., own + other similarity). We expected to identify four clusters: children who express felt similarity to their own-gender group (own-GS), to the other-gender group (cross-GS), to both groups (both-GS), and to neither group (low-GS). These typologies were compared on three broad outcomes—belongingness (i.e., inclusion expectancies, friendships), intergroup bias (negative attributions to other vs. own gender), and adjustment, both social (social anxiety, asociality, exclusion) and personal (self-esteem).

The predicted patterns for each group are based in part on social identity theories about the advantages of identifying with one’s own social group (e.g., Master & Walton, 2013; Tajfel & Turner,

1986). Specifically, we expected that felt similarity to the own-gender group would be associated with high levels of own-gender belongingness (friendships and inclusion; Egan & Perry, 2001). In addition, based on Bem's androgyny perspective (Bem, 1975) along with other research on multiple identities (Crisp & Hewstone, 2007), we hypothesized that identifying with both gender groups (i.e., having a "dual identity") would be associated with the advantage of enhanced other-gender group belongingness. Specifically, we predicted that Own-GS and Both-GS children would exhibit high levels of own-gender belongingness and that Both-GS children would have the added advantage of other-gender belongingness (friendship, inclusion) compared to Own-GS children. Both-GS children were also expected to have the advantage of showing low other-group bias relative to Own-GS children (i.e., low negative attributions to other gender as well as to own gender). Finally, based on previous research (e.g., Egan & Perry, 2001; Zucker & Bradley, 1995), we expected that Own-GS children would show better social adjustment and higher self-esteem than children who identify with only the other gender (Cross-GS) or with neither gender (Low-GS).

However, we also expected that Both-GS children would exhibit adjustment levels as high as Own-GS children.

Method

Participants

Participants came from eight elementary schools in the Phoenix metropolitan area in the southwestern United States and parents' consented for their involvement in a 2-year longitudinal study (conducted in 2010–2011). For this article, we analyzed data from the 2nd year of the study because the outcome measures were not included in the 1st year. Data were collected from 467 students: 156 first graders ($M_{\text{age}} = 5.74$, $SD = .42$; 56% female), 159 third graders ($M_{\text{age}} = 7.56$, $SD = .44$; 52% female), and 152 fifth graders ($M_{\text{age}} = 9.46$, $SD = .70$; 46% female). Children were relatively ethnically diverse (52% White, 18% Latino/Hispanic, 6% Asian American, 5% African American, 4% Native American, 1% Pacific Islander, 14% other); 91% of children spoke English at home. Most children (75%) came from two-parent, middle-income households, with parents who had some college education (26%: one parent graduated college, 38%: both parents graduated college).

Procedure

Children in the third and fifth grades were administered questionnaires in small groups, guided by a trained researcher. Children in first grade were interviewed individually. Four versions of the questionnaire were used to vary the order of questions and measures. Parents completed questionnaires assessing demographic information and children's adjustment.

Measures

We first describe the assessment of gender identity, consisting of two scales: perceived similarity to own and to other gender. Next, we describe measurement of the outcome variables: belongingness, intergroup bias, and adjustment.

Perceived Similarity to Gender Groups

Perceived similarity to own-gender and other-gender peers was assessed using the graphic measure described earlier. Third and fifth graders answered questions about how similar they felt to girls and to boys by selecting a graphic from a set of color pictures of two circles (one representing themselves and the other representing girls/boys) that were spaced at varying increments of closeness and filling in a bubble next to the graphic that represented their answer (see Appendices S1). Children were told that they were represented by the small green circle, the gender group "boys" was represented by the big blue circle and the gender group "girls" was represented by the big pink circle. First graders illustrated their answers by moving laminated circle cut outs on a card showing varying degrees of closeness. For the fifth graders, responses ranged from 0 = *circles farthest apart* to 4 = *overlapping circles*. For the first and third graders, responses ranged from 0 = *circles farthest apart* to 2 = *overlapping circles*. Younger children's responses were rescaled to be comparable to the 5-point scale (Reiser & Eggum, 2007).

Using items similar to Egan and Perry (2001), but with simpler wording, children were first asked a global question about perceived similarity to girls and to boys (i.e., "How similar do you feel to [girls/boys]?"), followed by how much they think they are like other boys or girls across a range of domains, (i.e., "act like [girls/boys]," "look like [girls/boys]," "like to do the same things as [girls/boys]," "like to spend time with [girls/boys]").

Children's responses on the five items were averaged to create summary scores for similarity to own gender and to other gender (α s = .72–.82 and .73–.80, respectively, range across age groups).

Belongingness: Expectancies for Inclusion and Friendships

Children's expectancies for inclusion in interactions with peers were assessed using a measure adapted from previous research (Zosuls et al., 2011). Children were asked to imagine a social situation involving a group of peers (i.e., "Imagine that on the playground, a group of [girls/boys] is playing a really fun looking new game you have never played before"). Four items assessed inclusion expectancies (e.g., "Do you think you would be included by the [girls/boys]?"; "Do you think you would enjoy playing with the [girls/boys]?"), rated on a 5-point scale (0 = *no, not at all* to 4 = *yes, definitely*) for the two older groups and a 3-point scale (0 = *no* to 2 = *yes, a lot*) for the youngest children (responses were rescaled to be equivalent; Reiser & Eggum, 2007). Items were averaged (α = .71–.77 own gender; .79–.88 other gender, range across age groups).

For the second belongingness measure, friendships, children reported how many of their friends were girls and how many were boys. The older two groups of children reported on friends within three domains (school, home/neighborhood, extracurricular activities); the youngest group only reported on the school context, using a 5-point scale, ranging from 0 = *none/almost none* to 4 = *almost all/all*. For older children, responses on all three items were significantly correlated (r = .29–.53, p < .001 for own-gender peers and r = .29–.46, p < .001 for other-gender peers—across items and ages) and were averaged to create composite scores.

Intergroup Bias: Negative Attributions

The trait attribution measure consisted of eight items adapted from prior research (Halim, Ruble, & Tamis-LeMonda, 2012). Children were asked about positive (i.e., smart, nice, tells the truth, friendly) and negative (i.e., tells lies, mean, annoying, dumb) characteristics of each gender, reported on a 3-point scale, ranging from 0 = *no* to 2 = *yes, a lot*. The four positive items were reverse coded to create a single scale score with the four negative items (α s = .76–.77 for own gender; .81–.88 for other gender, range across ages).

Adjustment: Social Adjustment and Self-Esteem

Parents or guardians reported on children's social relationships using two subscales of the Child Behavior Scale (CBS; Ladd & Profilet, 1996): peer exclusion (e.g., "my child is not much liked by other children") and asocial behaviors (e.g., "my child prefers to play alone"), responding on a 3-point scale from 0 = *does not apply* to 2 = *certainly applies*. Each subscale ranged from 4 to 7 items, α s = .75–.91 (across ages). The Social Anxiety Scale (adapted from La Greca & Stone, 1993) consisted of four items (e.g., "has a hard time asking other kids to play with him/her"). Items used the same response scale as the CBS, α s = .73–.82 (across ages). They also reported on children's self-esteem using two 4-item subscales from the self-perceptions and esteem measure (adapted from Harter, 1979): global (e.g., "is confident with him/herself") and social (e.g., "finds it easy to make friends"). The response scale ranged from 0 = *not at all true* to 4 = *a lot true*, α s = .75–.93, across ages.

Results

To address the first goal concerning the validity of the dual identity model, we examined the relations between the two similarity measures. To address the second goal, we tested gender and age-related differences in mean levels of own- and other-gender similarity across the three grades. To assess hypotheses concerning how identity relates to adjustment, we developed and then tested how the four clusters of gender identity related to belongingness, intergroup bias, and adjustment. Means and standard deviations of the study variables are presented in Table 1. Variables were assessed for skewness and kurtosis; a square root transformation to correct non normality was needed for the CBS subscale of exclusion.

Hypothesis 1. Structural Analyses: Relations Between the Similarity Measures

As expected, own-gender similarity and other-gender similarity scores were only moderately negatively correlated ($r[466] = -.32$, p < .001). This relatively low correlation suggests that the two types of perceived similarity are not mirror images of one another but rather represent distinguishable dimensions. Moreover, exploratory factor analyses including the five items from each scale confirmed that a two-factor solution accounted for significantly more

Table 1
Means and Standard Deviations of Study Variables

	Boys M (SD)	Girls M (SD)	Total M (SD)
Expectancies: inclusion—own ^a	3.31 (0.80)	3.19 (0.80)	3.25 (0.80)
Expectancies: inclusion—other ^a	1.77 (1.16)*	1.98 (1.13)*	1.88 (1.15)
Friendships—own ^a	2.69 (1.07)	2.75 (0.99)	2.72 (1.03)
Friendships—other ^a	1.34 (1.13)	1.59 (1.10)	1.47 (0.37)
Negative bias—own ^b	0.51 (0.39)***	0.35 (0.33)***	0.43 (0.37)
Negative bias—other ^b	0.50 (0.42)***	0.79 (0.49)***	0.65 (0.48)
CBS—exclusion (P) ^b	0.29 (0.36)	0.24 (0.34)	0.27 (0.35)
CBS—asocial (P) ^b	0.30 (0.33)	0.25 (0.31)	0.27 (0.32)
CBS—anxiety (P) ^b	0.38 (0.40)	0.39 (0.45)	0.39 (0.43)
Self-esteem—global (P) ^a	3.19 (0.70)	3.25 (0.69)	3.22 (0.70)
Self-esteem—social (P) ^a	2.99 (0.91)*	3.18 (0.87)*	3.09 (0.89)

^aScores range from 0 to 4. ^bScores range from 0 to 2. ^cScores range from 0 to 3. CBS: Child Behavior Subscale. Means within the same row differ significantly: * $p < .05$. *** $p < .001$.

variance than the one-factor solution and was a better fit for the data. Furthermore, on the rotated matrix, the items for similarity to own gender loaded on a separate factor than the items assessing similarity to the other gender and cross loadings were not high (see Appendices S2–S4). Taken together, these two findings support our first hypothesis and the dual identity model: Our measure captures two separate dimensions of gender typicality.

Hypothesis Set 2. Age-Related Differences in Similarity to Own- and Other-Gender Groups

To examine age and gender patterns, a repeated measures analysis of variance (RMANOVA) was conducted to compare mean ratings on similarity to own- and other-gender groups across grades (Figure 1). Grade (first, third, and fifth grades) and gender were between-subject factors, and type of similarity (similarity to own-gender peers and other-gender peers) was the within-subject factor. We expected to find that own-gender similarity was higher than other-gender similarity across grades, and this was supported by a main effect of similarity type, $F(1, 461) = 994.43, p < .001, \eta^2 = .68$, accounting for a large portion of the variance.

We also found a small, significant grade effect, $F(2, 461) = 10.00, p < .001, \eta^2 = .04$ (first graders had higher combined similarity than older children), and a two-way Similarity Type \times Gender interaction, $F(1, 461) = 21.67, p < .001, \eta^2 = .05$, showing that boys differentiated own- and other-gender similarity more than girls, as expected.

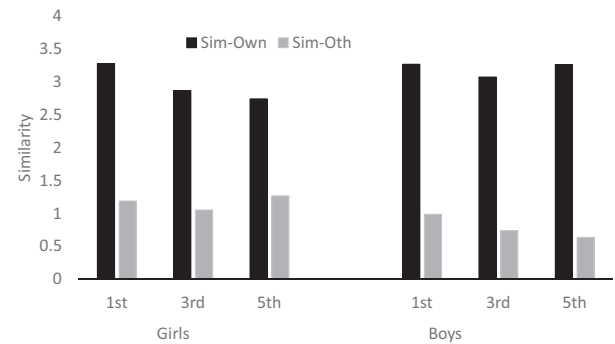


Figure 1. Mean levels of similarity to own and other gender by age group and gender.

These were subsumed by a small, significant interaction of Similarity Type \times Grade \times Gender, $F(2, 461) = 4.42, p < .05, \eta^2 = .01$, showing that this gender difference increased with age.

To examine the three-way interaction, we first calculated a difference score (similarity to own gender minus similarity to other gender) and examined this across grades separately for each gender. The results for girls showed differences in fifth grade were smaller than in first grade (i.e., more flexibility; $p < .05$); the results for boys showed no difference across grades. We then looked for the source of flexibility for girls by examining each type of similarity and found that increasing flexibility with age was shown for both types of similarity: similarity to own gender decreased and similarity to the other gender increased with grade ($ps < .05$). These results suggest that both genders favor own-gender over other-gender similarity but, for girls, they showed increasing flexibility in middle childhood for gender identity, similar to what has been found for gender stereotyping (Trautner et al., 2005). In contrast, consistent with the idea that boys may have different socialization pressures, boys showed no change in the degree of own- and other-gender difference across grades.

Overall, it appears that social-cognitive theories better describe the pattern of an age-related increase in flexibility found for girls, and theories emphasizing socialization pressures better describe the continuing rigidity for boys. In short, these findings support our second set of hypotheses that a distinction between own- and other-gender identification is useful for understanding developmental patterns.

Typologies of Gender Identity

To develop typologies of gender identities, similarity scores were standardized and then were

included in a nonhierarchical *K*-means cluster analysis (MacQueen, 1967). Two-, three-, four-, and five-cluster solutions were calculated and compared. The optimal number of clusters was determined by evaluating interpretability, amount of variance explained for measures being clustered, amount of variance explained in the joint distribution of the measures, and the extent to which successive cluster solutions reduced within-cluster variability. A four-cluster solution was found optimal and reliable after comparing randomly selected 50% and 75% samples from the data to the results with the full sample (Jain & Dubes, 1988) and was replicated with clusters found using hierarchical agglomerative clustering (Ward's method). Producing similar results with subsets of the sample with other clustering techniques establishes the reliability of cluster solutions (Aldenderfer & Blashfield, 1984; see Appendices S1–S5).

The analyses returned four identity clusters. We labeled these patterns as own-gender similarity (Own-GS 47.8%; 38.6% girls; $M = 7.80$ years), in which own-gender similarity was much higher than other-gender similarity; both-gender similarity (Both-GS 29.8%; 65.5% girls; $M = 7.40$ years), in which both types of similarity were relatively high; cross-gender similarity (Cross-GS 5.8%; 51.9% girls; $M = 7.87$ years), in which other-gender similarity was higher than own-gender similarity; and low gender similarity (Low-GS 16.7%; 60.3% girls; $M = 8.39$ years), in which children showed relatively low similarity to both genders. Children in each age group were represented in each cluster type illustrating the usefulness of these typologies even in early elementary grades.

To validate and pinpoint the distinction among groups, we conducted a RMANOVA comparing the identity clusters on the continuous measures of similarity to own- and other-gender peers (see Table 2). The main effects of similarity, $F(1, 463) = 559.55$, $p < .001$, $\eta^2 = .55$, and identity cluster, $F(3, 463) = 261.82$, $p < .001$, $\eta^2 = .63$, were significant as was the significant two-way interaction, $F(3, 463) = 484.36$, $p < .001$, $\eta^2 = .76$. Simple effects analyses showed that each cluster differed significantly from each other cluster on own-gender similarity, $F(3, 463) = 365.02$, $p < .001$, $\eta^2 = .70$, and on other-gender similarity, $F(3, 463) = 412.50$, $p < .001$, $\eta^2 = .73$, with very large effect sizes. Comparisons of own-gender and other-gender similarity within each cluster showed that differences were significant ($ps < .001$) and effect sizes were large: Own-GS ($\eta^2 = .97$), Both-GS ($\eta^2 = .83$), Low-GS ($\eta^2 = .62$), and Cross-GS children ($\eta^2 = .68$). Cross-GS children

identified more strongly with the other gender; all others more strongly identified with their own gender. The findings confirm the distinctions among and labels given to the clusters.

Hypothesis Set 3. Relation of Gender Identity Cluster to Social and Adjustment Outcomes

The third set of hypotheses involved assessing the relation of identity clusters to outcomes. This was done using multivariate analyses of covariance or repeated measures analyses of covariance (RMANCOVAs), with gender of child and identity cluster as between-subject factors and grade as a covariate. For measures that asked about own- and other-gender targets, gender-target of peers (e.g., friendships to own gender, friendships to other gender) was included as a within-subject measure, and it was necessary to use RMANCOVAs to compare the repeated measures (see Table 2, for means and standard deviations).

Belongingness: Expectancies for Inclusion and Children's Friendships

RMANCOVAs were conducted to test the hypotheses that having own-gender identification would be beneficial to own-gender belongingness and having dual identification would provide additional benefits of enhanced other-gender group belongingness (as measured with expectancies for inclusion and friendships). We expected that for both measures, children would show peer target effects (i.e., more own-gender than other-gender friends; feeling more included by own-gender than other-gender peers), that patterns would vary for children of different identity clusters, and that these factors would interact. These expectations were confirmed. Specifically, for the RMANCOVAs of friendship and inclusion, significant main effects of target and identity cluster were found. The target effects were, for inclusion, $F(1, 457) = 129.69$, $p < .001$, $\eta^2 = .22$; and for friendship, $F(1, 458) = 43.70$, $p < .001$, $\eta^2 = .09$. The identity cluster effects were, for inclusion, $F(1, 457) = 11.43$, $p < .001$, $\eta^2 = .07$; and for friendship, $F(3, 458) = 5.74$, $p < .01$, $\eta^2 = .04$. These small effects were subsumed by expected significant and somewhat larger two-way interactions between peer target and identity cluster: for inclusion, $F(3, 457) = 29.09$, $p < .001$, $\eta^2 = .16$; for friendship, $F(3, 458) = 18.35$, $p < .001$, $\eta^2 = .11$ (for inclusion, a very small Gender \times Identity Cluster interaction was also found $\eta^2 = .02$: cluster predicted significantly for both genders but better for boys than girls).

Table 2
Means and Standard Deviations of Study Variables by Cluster Types

	Both-gender similar	Own-gender similar	Low-gender similar	Cross-gender similar
Similarity—Own	3.37 (0.51) ^{ax}	3.59 (0.41) ^{bx}	1.80 (0.65) ^{cx}	1.23 (0.79) ^d
Similarity—Other	1.70 (0.54) ^a	0.38 (0.33) ^b	0.73 (0.49) ^c	2.91 (0.73) ^d
Inclusion by own gender	3.33 (0.74) ^{ax}	3.39 (0.65) ^{ax}	2.90 (1.00) ^{bx}	2.69 (1.11) ^b
Inclusion by other gender	2.33 (1.10) ^a	1.50 (1.06) ^c	1.87 (1.06) ^b	2.67 (1.12) ^a
Friendships with own gender	2.88 (0.93) ^{ax}	2.85 (0.98) ^{ax}	2.24 (1.06) ^{bx}	2.22 (1.26) ^b
Friendships with other gender	1.87 (1.15) ^a	1.16 (1.02) ^b	1.46 (1.07) ^b	2.01 (1.12) ^a
Negative attributions: own gender	0.40 (0.36) ^{acx}	0.40 (0.34) ^{ax}	0.53 (0.41) ^b	0.55 (0.48) ^{bc}
Negative attributions: other gender	0.61 (0.48) ^a	0.67 (0.48) ^b	0.70 (0.45) ^{ab}	0.51 (0.48) ^a
Social adjustment: exclusion (NS)	0.24 (0.34)	0.25 (0.33)	0.29 (0.40)	0.33 (0.39)
Social adjustment: asocial	0.22 (0.25) ^a	0.24 (0.28) ^a	0.38 (0.42) ^b	0.49 (0.39) ^b
Social adjustment: anxiety	0.32 (0.35) ^a	0.37 (0.42) ^a	0.43 (0.48) ^a	0.67 (0.58) ^b
Self-esteem: global	3.19 (0.70) ^b	3.33 (0.59) ^a	3.14 (0.75) ^{ab}	3.02 (0.76) ^b
Self-esteem: social (NS)	3.12 (0.81)	3.18 (0.82)	2.96 (1.07)	2.75 (1.03)

Note. Means not sharing the same (a, b, c, d) superscripts within row are significantly different at $p < .05$. An * indicates that the own-gender versus other-gender comparison of the same measure were significantly different, and these are shown on own-gender measures for each cluster type. Superscripts are only given where findings are significant.

These interactions illustrate the predicted variations across types of gender identity. Specifically, we expected identification with one's own group would be beneficial, and it was: Own-GS children felt more own-gender belongingness than Low-GS children ($p < .001$). Interestingly, Own-GS children expressed significantly lower *other-gender* inclusion than even the Low-GS children ($p = .05$), suggesting that their inclusiveness is limited to their own gender. As to the added benefits associated with having a dual identity, we expected that Both-GS children would show greater expectancies for inclusion and higher levels of friendships than any other group because they would feel included and would befriend other- as well as own-gender children. This pattern was supported. In addition to having high levels of own-gender inclusion and friendship like the Own-GS children, Both-GS children had other benefits: They felt more included by and had more other-gender friendships than Own-GS children ($ps < .001$), as expected. Their other-gender belongingness was also marginally higher than for Low-GS children ($p = .06$) and about the same level as Cross-GS children ($p > .10$). Not surprisingly, all groups except Cross-GS children (and Low-GS children for friendships) had higher expectancies of belongingness with own-gender than with other-gender peers ($ps < .001$).

Bias (Negative Attributions)

In the repeated measures analysis of covariance to assess children's intergroup bias, we found significant main effects of target showing the expected

bias (i.e., higher negative attributions toward other-gender versus own-gender peers), $F(1, 458) = 24.60$, $p < .001$, $\eta^2 = .05$, and of gender, $F(1, 458) = 4.32$, $p < .05$, $\eta^2 = .01$ (i.e., girls more negative attributions overall). There was also an unexpected significant Target \times Gender interaction, $F(1, 458) = 52.22$, $p < .001$, $\eta^2 = .10$, which showed that girls exhibited greater own-group bias. However, the Target \times Identity Cluster interaction, $F(3, 458) = 6.99$, $p < .001$, $\eta^2 = .04$, indicated, as expected, that the patterns varied depending on type of gender identity and this occurred for both genders.

Given the expectation that having dual identities would be beneficial, we predicted that Both-GS children would show low levels of negative evaluations of both genders because they feel similar to other-gender children as well as to own-gender children. This pattern was confirmed (see Table 2). Both-GS children had levels of own-gender negativity that were as low as Own-GS children ($p > .05$) and other-gender negativity that was as low as Cross-GS children. Own-GS were markedly higher in other-gender negativity than Both-GS and Cross-GS groups ($ps < .05$). In summary, although we found an unexpected gender difference on the bias measure that likely reflects attitudes or stereotypes that boys are bad (Halim, Ruble, & Amodio, 2011), once identity clusters were examined, these clusters were predictive of bias for both genders, as hypothesized.

Social Adjustment and Self-Esteem

Because the CBS subscales, the social anxiety scale, and the two self-esteem measures were

correlated, a multivariate analysis of covariance was conducted on these scales (age covaried; gender and identity cluster were between-subjects factors). The multivariate analysis revealed a significant effect only for identity cluster, $F(15, 864.46) = 2.43$, $p < .01$, $\eta^2 = .04$. Univariate tests indicated that identity cluster was significant for parent report of asocial behavior, $F(3, 317) = 7.66$, $p < .001$, $\eta^2 = .07$; for social anxiety, $F(3, 317) = 3.89$, $p < .01$, $\eta^2 = .04$; and for general self-esteem, $F(3, 317) = 2.77$, $p < .05$, $\eta^2 = .03$ (social self-esteem was marginal, $p = .06$; see Table 2). Consistent with the idea that advantages are associated with having an own-gender group identity, Own-GS and Both-GS children showed social advantages: They were less asocial than the Low-GS and Cross-GS children ($ps < .01$), and were rated as less socially anxious than the Cross-GS children ($ps < .01$), who had the highest social anxiety as compared to all other cluster groups ($ps < .05$). Thus, although both Low-GS and Cross-GS children had low own-gender similarity, in this case, identification with *only* the other gender appears to put children at additional risk for social anxiety. Also consistent with previous research that there are advantages associated with own-gender identification, Own-GS children had higher global self-esteem than did Cross-GS children. In contrast to predictions, however, Own-GS children also had higher global self-esteem than Both-GS children, possibly because their levels of own-gender similarity were higher than those of Both-GS children.

Supplemental Analyses

Cluster analyses are the best way to examine gender identity as a combination of how one views oneself in relation to both genders, but we also conducted analyses on continuous variables with correlations and regressions to allow additional comparisons to prior typicality studies and further exploration of age and gender effects. Due to space constraints, these and other measurement analyses are included in Appendices S2–S5.

Discussion

We proposed a novel conceptualization and measure of gender identity. Our goal was to examine the usefulness of this approach in addressing three important questions: Are comparisons to both genders involved in gender identity, how does gender

identity develop across the early elementary grades, and what are the roles of own- and other-gender typicality in adjustment? The new measure is similar to Egan and Perry's (2001) in focusing on self-representations of gender identity but was expanded to include reference to both genders, and we used an innovative graphical approach that allowed children an easy way to illustrate how they view themselves relative to both gender groups. With one exception (i.e., mixed findings on self-esteem), the results supported our dual identity conceptualization across each of the three sets of hypotheses. First, we found empirical support for the structural distinctions between the two types of similarity, thereby supporting the dual identity approach. Second, the balance of felt similarity to own- and other-gender peers varied across age and gender in predictable ways. Third, cluster analyses identified patterns of gender identity not previously distinguished; when compared, social and adjustment outcomes varied in expected ways across identity clusters. Below, findings and implications from each set of hypotheses are discussed.

The Viability of a Dual Identity Approach

Do children use both types of comparisons in determining gender identity? The structural evidence suggests they do. Similarity to own and other gender were not strongly negatively related; instead, we found only a low/moderate negative correlation indicating that the measures were not redundant. Analyses also demonstrated that two factors explained more variance than one, and the items loaded cleanly on separate factors, indicating that they are distinguishable scales. The cluster analyses also provided supportive evidence by returning four interpretable typologies defined by different combinations of own- and other-gender similarity. Identifying these types of gender identity also confirms the need for a dual identity view; that is, almost half the children felt similar to both genders or felt little similarity with either, and neither of these types would be distinguished if only own-gender similarity was measured. These findings provide empirical evidence in support of the new conceptualization of gender identity.

The Nature of Gender Identity Development in Young Children

Because the method of assessing gender identity was developmentally appropriate for children of a range of ages, it was possible to examine how

children's views of themselves varied from early to middle childhood. That allowed us to address a critical gap in the developmental literature, namely, what happens after simple gender identity (e.g., I am a girl) is reached, typically before 3 years. Because of the new conceptualization and measure, we were able to address how children think about self-gender relations from an intergroup perspective (Bigler & Liben, 2007; Powlishta, 1995), which has seldom been applied to gender identity. Recent research indicates that even toddlers' simple gender identity stems from a basic awareness of two added gender categories (Zosuls Ruble, & Tamis-LeMonda, 2014). As their gender identities further evolve, how do children consider their identity in relation to their own and the other gender? This question gets to the heart of a single versus dual identity distinction. Without using a dual identity approach, it would be impossible to assess developmental changes in these views of gender or to account for the likelihood that children are comparing themselves to both boys and girls across development.

We found several interesting developmental trends in gender identity. First, in support of the dual identity perspective, children at all three ages were able to use both own- and other-gender comparisons to inform gender identity. Also, as expected, own-gender similarity was considerably higher than other-gender similarity although individual variations were also evident (see below). Finding stronger feelings of own-gender similarity for both genders and even at the youngest age is consistent with the idea from social identity theory that own-group favoritism begins early (Yee & Brown, 1994), perhaps as soon as children know they are girls or boys (Martin et al., 2002; Zosuls et al., 2009).

Second, the developmental patterns in the balance of feelings of similarity to own- and other-gender peers varied somewhat by gender: Although both genders showed stronger own- than other-gender similarity, girls showed increasing flexibility with age, consistent with our hypotheses and with patterns found for gender stereotyping (e.g., Trautner et al., 2005). In contrast, boys showed relative stability over time in the balance of own- and other-gender similarity. These findings suggest, perhaps, that the relative influence of cognitive skills and experiences versus socialization pressures on feelings of gender similarity may differ for boys and girls. Boys experience more social norms and pressure, making them feel it necessary to claim male identity while rejecting female identity and all things feminine (Feinman, 1981). With increased cognitive skills and understanding of societal power

imbalances that favor males, and the lesser social pressure to adhere to a female identity, girls might be more motivated to embrace and search for a sense of similarity with males (Feinman, 1981; Halim et al., 2011). These different developmental trajectories and underlying processes must be considered in theoretical accounts of gender development for girls and boys.

Developmental patterns may change as children move toward adolescence when there is a shift in the intergroup meaning of gender to incorporate sexuality and romantic interests. Future research should assess whether adolescents show gender intensification (Hill & Lynch, 1983) of their identities, in which both genders increase in their identification with the own gender and lessen identification with the other gender.

Belongingness, Intergroup Bias, and Adjustment Differences Across Typologies

A major contribution of the dual identity approach is the notion that it is important to simultaneously consider how individuals relate to *both genders* as part of their gender identity (i.e., within a person), that individuals vary in their identification with both genders, and that understanding the links between identity and adjustment has been muddied by the inability in prior research to distinguish some identity patterns. Social identity theories and related research (e.g., Crisp & Hewstone, 2007; Tajfel & Turner, 1986) were used to explain how identity patterns likely relate to social and personal outcomes. We argued that identification with one's own group is related to certain benefits but may increase bias, whereas identification with multiple groups is related to reduced bias and increased social ties. To test these ideas, we compared children in each of the four identity typologies on measures of belongingness, bias, and adjustment, expecting these types to show differing relations to the outcome variables. Below, we discuss the findings for children within each typology.

Similarity to Own Gender: Own-GS Children

Consistent with most previous studies of typicality (e.g., Carver et al., 2003; DiDonato & Berenbaum, 2011; Egan & Perry, 2001), own-gender identification was related to positive outcomes and was a common pattern of gender identity. Own-GS children, who strongly identified with their own gender and not with the other gender, had higher global self-esteem, had more own-gender friends,

and felt more included by own-gender peers than Low-GS children (who did not identify strongly with either gender). As expected, not all relations were positive, however; Own-GS children held very negative views of other-gender peers (more than did Both-GS children), suggesting that single group identification also has disadvantages.

Using the dual identity approach, we deepen understanding of what underlies previous research findings concerning "gender typical" children. In strong support for Egan and Perry's (2001) original proposals, we found that even when using a more restrictive assessment of own-gender typicality as we did here (one excluding those similar to both genders), own-gender similarity was related to several positive outcomes. This link might be accounted for by the sense of belongingness that accrues from feeling part of a group. Benefits also may derive from feeling typical of one's own gender and not experiencing stigma associated with feeling differently.

Children Who Feel Similar to Both Genders: Both-GS Children

The dual identity view posits advantages to identifying with both genders, consistent with adult social psychological research on multiple group identities (Crisp & Hewstone, 2007) and Bem's androgyny perspective (Bem, 1975). The findings were largely supportive. Children who felt similar to both genders had benefits in having a broader diversity in beliefs and behaviors: They expected to be included in interactions with both genders, they had friends of both genders, and they showed low levels of other-gender negativity. Furthermore, compared to Own-GS children, Both-GS children were not disadvantaged in terms of belongingness (friendships, inclusion expectancies) to their own-gender group and were not at risk for lack of sociability or social anxiety. Although some research has suggested that there might be some risks for children who only have other-gender friends (Kovacs, Parker, & Hoffman, 1996), other studies support that having friends of both genders appears advantageous for self-worth (Bukowski, Sippola, & Hoza, 1999). Furthermore, expecting to be included and having less negative views of the other gender should be beneficial to Both-GS children and could, over time, enhance their self-esteem, especially as children move into adolescence. Recent longitudinal evidence is supportive: Children who like girls and boys have better social competence a year later even controlling for initial levels of social competence

(Bukowski & Santo, under review). Further research is needed to explore an implication of the present findings, namely, whether encouraging children's involvement with peers of both genders is useful for promoting beneficial social links, a sense of belongingness to both groups, and lower intergroup bias.

Both-GS children were disadvantaged, however, compared to Own-GS children on global self-esteem, and this was the one measure that showed a pattern contrary to our predictions. Although belonging to any group might be advantageous, feeling as if one belongs strongly and exclusively to a culturally normative group (i.e., own-gender) may provide additional advantages over feeling connected to both gender groups. There are several possible explanations for the differences in self-esteem. Both-GS children had somewhat lower levels of own-gender similarity as compared to Own-GS children, which might account for this disadvantage. Alternatively, it might be that some children who identify with both genders have conflicting feelings about felt similarity to the other gender or peers might respond negatively to these feelings. It is interesting that this apparent disadvantage for children who feel similar to both genders was found only for global self-esteem. Why this is true is unclear. Nevertheless, the demonstration of different areas of advantage for Both-GS children (e.g., the social domain) versus for Own-GS children (e.g., self-domain) provides additional support for the usefulness of the dual identity perspective. Only by exploring both dimensions of gender similarity is it apparent that there are advantages and disadvantages associated with different typologies.

Children With Gender Atypical Patterns: Cross-GS and Low-GS Children

The dual identity conceptualization allowed us to distinguish less frequent patterns of gender identity: children who claimed low similarity to both genders (17%) and cross-gender identified children (6%). Based on social identity theories about the advantages of identifying with one's own social group (e.g., Master & Walton, 2013; Tajfel & Turner, 1986) and previous research (e.g., Egan & Perry, 2001), we expected that lack of felt similarity to the own-gender group among Low-GS and Cross-GS children would create difficulties for social perceptions and adjustment.

These expectations were supported by the findings: Both Cross-GS and Low-GS children reported low expectations for belongingness (i.e., inclusion and friendships) with same-gender peers, and

parents reported both to be more asocial. The two groups diverged on other variables, however. Interestingly, Cross-GS children reported relatively positive other-gender inclusion expectancies and friendships, and moderately low and similar levels of negativity toward the two gender groups. These findings are surprising given that peers reject children who exhibit cross-gender behavior (Zucker & Bradley, 1995). Despite having some social advantages, Cross-GS children experienced the highest levels of social anxiety. Perhaps parents' distress for these children might be reflected in these ratings or perhaps these children do still experience negative effects of feeling atypical despite being accepted by some peers.

Low-GS children reported low levels of belongingness with other-gender peers as well as with own-gender peers, indicating that they do not feel included by either gender nor do they have many friends of either gender. Given the importance that having a sense of belonging to a social group affords (Masters & Walton, 2013), the lack of identification with either gender group may be particularly problematic for later social adjustment. Moreover, these children attributed a high number of negative traits to other-gender peers. These findings are discrepant from an earlier study in which low gender typicality was related to holding egalitarian attitudes (Patterson, 2012), but the reason for this difference is unclear.

That the two groups of "atypical" children exhibit different patterns of belongingness, bias, and adjustment suggest differing developmental trajectories. Indeed, Cross-GS children may have some adjustment advantages over Low-GS children because they have other-gender friends, and friends and peer acceptance play a mediating role in gender atypical children's adjustment (Jewell & Brown, 2014; Smith & Leaper, 2005; Yunger, Carver, & Perry, 2004). Low-GS children feel low belongingness to both genders; thus, these children should be an important focus of future research.

In sum, having both types of similarity were advantageous; these children showed less intergroup bias, felt more included by the other gender, and had friends of both genders. However, it is premature to conclude that dual identity provides better outcomes in every domain: For instance, Own-GS children had higher self-esteem than did Both-GS children. The findings also suggest that not identifying with either gender may be particularly challenging for social adjustment. Considering the patterns of adjustment across all identity types, it appears that having an own-gender identity is

foundational; feeling similar to the other gender is advantageous when own-gender identity is also in place.

Revisiting the Androgyny Controversy

One motivation for exploring the notion of dual gender identity was the prospect that children identifying with both genders might exhibit the positive effects (e.g., flexibility) purported for individuals with psychological androgyny. If so, using this approach could clarify the controversy surrounding the links between gender identity and adjustment. The earlier view that androgyny was the key to mental health has not been easily reconciled with the more recent work demonstrating that feelings of gender typicality are associated with better adjustment. The dual identities approach held the promise that both views could be valid: Feeling own-gender typical might provide a foundation that supports and relates to good adjustment, and feeling similarity to the other gender might provide additional adjustment-related benefits. Some support for this reconciliation was found; the findings regarding belongingness and bias were supportive (although those for self-esteem were not). Thus, the dual identity conceptualization underlying Bem's androgyny approach remains relevant, despite the weakness in the original operationalization.

Limitations and Future Directions

Although the new measure was designed to be easy for younger children to understand, future research using the new graphical measure in combination with typicality measures (adapted to include parallel items about both genders) would promote further explorations of measurement issues and correlates of gender identity. Research has begun to explore the use of such new versions (Patterson, 2012; D. Perry & R. E. Pauletti, personal communication, April 2012).

Cluster analysis was useful for answering the research questions about adjustment and social outcomes, but this method requires careful determination of the number and reliability of clusters. Also, because our four-cluster solution resulted in one cell with a relatively small sample size (Cross-GS), we were unable to assess age differences in typologies. Future studies using larger samples should explore age differences in the four clusters. The ethnic diversity of the sample is a strength but one that we could not take full advantage of due to concerns about cell sizes for the clusters; we were

unable to separately assess ethnic/racial differences in the patterns of results. However, we believe future studies with larger diverse samples would provide interesting insights into whether patterns of gender identity development vary depending on ethnicity and race, and should further explore intersectionalities of these identity categories with gender (see Wilson & Leaper, 2016).

Although the present study provided clear findings regarding associations between clusters and social and adjustment outcomes, we cannot determine direction of effects. For instance, do Both-GS children show lower levels of intergroup bias *because* of their flexible identity rather than the reverse. Longitudinal research would also allow a closer examination of developmental trajectories of gender identity, such as whether identity becomes more extreme in adolescence, and may deepen our understanding of how identity and adjustment are linked—For example, does identifying with both genders promote broader social acceptance or does peer acceptance by both genders promote feelings of similarity to both genders? Do cross-gender identified children act in ways that increase rejection or is peer rejection contributing to their identity? Most likely both identity and peer processes interact in a bidirectional way, with each influencing the other over the course of childhood and adolescence.

Broader Implications

Our dual identity conceptualization builds on earlier work on gender identity (e.g., Egan & Perry, 2001) while expanding this perspective by incorporating self-comparisons with both genders; this change has far-reaching implications for how gender identity is measured and construed. Similar to recent views about ethnic and racial identity (Umaña-Taylor et al., 2014), gender identity needs to be conceptualized in more flexible ways. New approaches are needed to be more consistent with views of gender that propose moving beyond the gender binary (e.g., Fausto-Sterling, 1993). In keeping with this, it appears that some individuals report gender identities that move beyond categories of feeling like a male or a female to encompass the quite varied personal and subjective experiences of many adults and children. For instance, some children identify as a boy, but like to wear dresses. Other children feel like they are “gender blended,” being both a girl and a boy (Ehrensaft, 2013). Our new measure allows assessment of this fuller range of gender identities and facilitates an understanding of the development of identity, and its stability and change in young

children. This new approach and simpler measure of identity also has potential to address issues concerning links between gender identity and later sexuality orientation and identities by allowing for longer term developmental studies. Research exploring variations in gender identity using a dual identity approach will further our understanding of the many ways that individuals comprehend and express their multidimensional identities and the consequences of these identities for well-being throughout development.

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Supporting Information

Additional supporting information may be found in the online version of this article at the publisher's website:

Appendix S1. The Similarity Measure

Appendix S2. Factor Analyses of Similarity Measures

Appendix S3. Factor Analyses of the Similarity Measure and Friendship Measures

Appendix S4. Factor Analyses of Similarity Measures and Inclusion Measures

Appendix S5. Expanded Description of Regression Results