

## BRIEF REPORT

# A Proposed Multi Factor Measure of Positive Identity for Transgender Identified Individuals

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This article describes the development of a measure proposing a multifactor structure of positive identity for self-identified transgender individuals. Data from 138 transgender-identified individuals were used in an exploratory factor analysis (EFA) of 95 statements in an item pool presented in an online survey. The resulting structure suggests a 5-factor solution with subscales interpreted as representing authenticity, intimacy and relationships, belonging to the LGBT community, commitment to social justice and compassion, and insights and self-awareness. An EFA of the reduced scale indicated good fit for a 24-item, 5-factor measure with strong internal consistency for each set of subscale scores. The final proposed measure is titled Transgender Positive Identity Measure (T-PIM). The current study suggests that the factors in positive identity for transgender-identified individuals are consistent with thematic analyses in prior qualitative research and the positive identity concepts represented in positive lesbian, gay, and bisexual identities. Knowledge of this structure may be useful for researchers and practitioners in the evaluation and support of efforts to enhance the well-being of self-identified transgender individuals. Future research on the validity of subscale scores is recommended.

*Keywords:* identity, measurement development, transgender, well-being

Prior research has focused primarily on proposing stages of or internal processes important to identity development in transgender-identified individuals, including acceptance of one's gender identity and decisions about gender expression (e.g., Finnegan & McNally, 2002; Kozee, Tylka, & Bauerband, 2012; Lev, 2007). Transgender self-identity also presents unique opportunities for positive identity development and finding meaning in life (e.g., Lev, 2004; Maguen, Shipherd, Harris, & Welch, 2007; Riggle, Rostosky, McCants, & Pascale-Hague, 2011). Although there are a few measures of positive LGB identity (e.g., Mohr & Kendra, 2011; Riggle, Mohr, Rostosky, Fingerhut, & Balsam, 2014), we find no current empirically derived measure specifically for positive transgender identity. Developing a measure of positive identity may be useful to researchers in creating a more complete picture of the experiences of transgender-identified individuals and the factors impacting their well-being.

The purpose of the current study was to provide preliminary psychometric data for a proposed multifactor measure of positive

transgender identity. The development of the measure was based on previously reported thematic analysis of qualitative data on the positive aspects of transgender identities (Riggle et al., 2011; Riggle & Rostosky, 2012). Exploratory factor analysis (EFA) was used to propose a measure that empirically identifies the factors in positive transgender identities.

### Positive Identity for Transgender Identified Individuals

The term "transgender" covers many different types of sex and gender-based identities and expressions. It may include individuals who reject or do not conform to gender-based rules, those who reject gender binaries (male/female) or see gender as a continuum, and those who form a new sex identity or "transition" from a medically assigned (birth) sex to their self-identified sex (e.g., Fassinger & Arseneau, 2007; Lev, 2004, 2007). It must also be noted that not all individuals who reject gender-binaries, do not conform to gender norms, or who transition from an assigned sex to a self-identified sex, will self-identify as transgender; there are a variety of self-identified labels used by individuals (see Coleman et al., 2012). The current study is limited to those who self-identify as transgender or as being part of the transgender community.

The process of self-identifying as transgender within the current context includes positive experiences and outcomes. These experiences and their interpretation by the individual may play an important role in well-being, providing opportunities for personal growth and the development of positive life skills, including resilience and social support (e.g., Budge, Adelson, & Howard,

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2013; Clifford & Orford, 2007; Galupo, Krum, Hagen, Gonzalez, & Bauerband, 2014; Sánchez & Vilain, 2009; Singh, Hays, & Watson, 2011). Riggle et al. (2011) discovered eight themes of positive transgender identity that are linked to individual strengths and resources: a feeling of congruency between one's inner self and outer self or expression; enhanced interpersonal relationships through acceptance by family and friends; personal growth and resiliency, including confidence, strength, and self-awareness; increased empathy and sensitivity toward others; a unique perspective on both sexes through personal experiences; living beyond the sex binary and challenging gender norms and stereotypes; engaging in activism and education of others; and connecting to the GLBTQ communities.

The themes proposed by Riggle et al. (2011) were largely consistent with positive themes of LGB identities proposed in previous research (Rostosky, Riggle, Pascale-Hague, & McCants, 2010; Riggle, Whitman, Olson, Rostosky, & Strong, 2008). However, there were some noted differences in emphasis and experience. For example, some transgender-identified individuals discussed the "unique insights" that they enjoyed from having lived experience as both "male" and "female." Also, the emphasis on the importance of the congruency of inner feelings and external expression of self was particularly important, distinguishing the theme of congruency for transgender-identified individuals from a theme of authenticity for LGB-identified individuals. However, it could be argued that there is significant overlap under the more general concept of positive identity. Whether the underlying construct is more similar than different is an empirical question.

A multifactor measure of positive lesbian, gay, and bisexual (LGB) identity has been proposed by Riggle et al. (2014). Although the same general concepts of the importance of positive identity, personal growth, and strengths apply to transgender-identified individuals, there are differences in experiences that suggest caution in generalizing from LGB identities to transgender identities. Transgender identity is linked to gender identity and expression. Sexual orientation and identity are also part of transgender experience, but may be interpreted differently and have different meanings for transgender-identified individuals (see Sanger, 2008, 2010, and Hines, 2007, 2010, for critical discussion of the intersections of transgender identity, sex, gender, and sexual orientation). A measure of positive transgender identity would provide additional information concerning the experiences of transgender self-identified individuals.

### Present Study

The expression of multiple themes in prior qualitative study (Riggle et al., 2011) suggests that there may be an empirically discoverable multifactor structure to positive transgender identity. The aim of the current study was to explore this structure and propose a measure. Data from a sample of transgender-identified individuals were used to perform an exploratory factor analysis on a pool of item statements and propose a measure that reflects positive experiences, perceptions, strengths and values associated with transgender identity.

### Item Pool and Factor Structure

The item pool used in this study was developed using qualitative data from LGBT self-identified individuals, recognizing the pos-

sible overlaps between gender and sexual identities and the larger community connections. A factor analytic approach was used because of the focus on assessing the possible multiple dimensions of positive identity. This approach allowed for item selection criteria that would result in more unique indicators of each factor. An EFA was conducted on a sample of data from transgender self-identified adults. Results from the EFA were used to identify a factor structure that offered good fit to the data and to reduce the number of items in the measure. A second EFA was performed to ensure the reduced item pool met expectations for item loadings, factor structure, and goodness-of-fit. Internal consistency reliabilities were estimated for the resulting subscale scores.

## Method

### Participants

The sample included 138 transgender self-identified individuals. Participants reported their gender and sexual identities using open-ended self-descriptions and choice categories. While 121 participants chose a category of self-identity for their primary sex/gender identification, 40 participants also submitted self-descriptions. The 17 participants who did not chose a category but only submitted a self-description were coded according to the primary word used (e.g., "FTX" was coded as "other" and "genderweird" was coded as "genderqueer"). The same method was used to code the 19 participants who chose to submit only a text self-description of their sexual orientation or identity (e.g., "fluid" was coded as "pansexual or fluid sexuality" and "gay transman" was coded as "gay").

Participants' identified their primary gender identity as follows: 31.9% transman/FTM/male, 23.9% transwoman/MTF/female, 23.9% transgender/trans\* (trans\* includes participants who used the term "trans" and those who submitted different descriptions of transgender identities, e.g., "transguy"), 18.1% genderqueer, and 2.2% other. Participants identified their primary sexual orientation or identity as follows: 25.4% queer, 20.3% bisexual, 18.8% straight, 13.8% lesbian, 10.9% pansexual or fluid sexuality, 7.2% gay, 1.4% asexual, and 2.2% other.

Participant age ranged from 18 to 67 years old ( $M = 34.06$ ,  $SD = 12.82$ ). Participants in the sample identified with the following nonmutually exclusive racial/ethnic groups: 1.0% African American/Black, 6.5% Asian American/Pacific Islander, 8.7% Latino/Hispanic, 2.9% Middle Eastern, 5.1% Native American/American Indian, and 87.7% White/Caucasian. The highest level of education completed included 2.9% some high school, 6.5% high school, 41.3% some college or current student, 25.4% college degree, and 23.2% advanced degree. Participants were from 18 U.S. states and two non-U.S. countries.

### Procedure

Participants were recruited with an announcement posted to e-mail listservs and websites targeting LGBT communities. The announcement invited participation by individuals who identified as lesbian, gay, bisexual, and/or transgender and who were 18 years of age or older. Participants were directed to a website for more information and provided a link to the survey. The survey contained an informed consent document followed by a brief demographic questionnaire and measure items. The full pool of 95

items was presented in eight sets of 10 statements and a final set of five statements. The statements were balanced for initial themes represented in each set. Participants were given an opportunity to provide feedback in an open-ended text box, volunteer for future studies, and enter a drawing for online gift certificates.

The recruitment procedure yielded data from 840 people who completed the informed consent procedure. We removed data from 78 people who did not identify their sexual or gender identity as LGBT or who did not respond to any of the measure items. The data for 624 participants who self-identified as LGB and “male” or “female,” but not also as transgender, were excluded from this analysis. The remaining participants met the criteria for inclusion in the current sample.

## Measures

**Full item pool.** The initial full item pool utilized the same item pool used for the development of the LGB-PIM (see Riggle et al., 2014). This item pool was developed using qualitative data from studies that included transgender-identified individuals as well as those with overlapping LGB and transgender identities. The item pool was based on statements made by participants in prior qualitative studies. The items were evaluated by a team of experts and LGBT-identified individuals for applicability and also by non-LGBT-identified individuals for readability.

All statements included reference to “LGBT” identity. LGBT is a widely used and commonly understood phrase indicating individual as well as collective identities. Instructions to participants indicated that they should answer based on the parts of “LGBT” that applied to their self-identities.

All statements were worded in the affirmative (i.e., no reverse scored questions were included). Participants rated the extent to which they agreed with each statement on a fully anchored 7-point scale, ranging from 1 (*disagree strongly*) to 7 (*agree strongly*). See Table 1 for a full list of items.

**Identity affirmation.** To assess overall positive evaluation of identifying as transgender, the three-item Identity Affirmation subscale from the LGBIS (Mohr & Kendra, 2011) was included. The original items were adapted to be consistent with the items in the test item pool: *I am glad to be an LGBT person, I'm proud to be part of the LGBT community, and I am proud to be LGBT*. Items were rated on a scale ranging from 1 (*disagree strongly*) to 6 (*agree strongly*), and scores were computed by averaging item ratings. This adapted scale has not been validated with a sample of transgender-identified individuals. Riggle et al. (2014) found that the Identity Affirmation subscale was significantly positively related to the five subscales of the LGB-PIM (ranging from .45 to .67) and alpha in that sample was .90. Alpha in the current sample is .93.

## Results

Inspection of missing data patterns suggested that participants were most likely to respond to the items presented early in the survey, and less likely to respond as they progressed through the survey. The lowest missing data rate for items was 0.0%, and the highest was 20.3%. Approximately 10% of all values were missing. Missing data were handled using the full information maximum likelihood approach as implemented in Mplus software version 6.1 (Muthén & Muthén, 1998–2011). This approach,

which is considered a best practice for handling missing data, uses all available information to derive maximum likelihood estimates of relations among variables (Schlomer, Bauman, & Card, 2010).

## Exploratory Factor Analyses (EFA)

**Preliminary analyses.** We inspected frequency distributions of scores for each item; distributions of scores for several items were clearly leptokurtic and negatively skewed. Given the non-normality of these distributions, we used robust estimation procedures for the EFA.

**Determining number of factors.** We determined the number of factors to extract using criteria that have been identified as most helpful in identifying the actual factor structure, including criteria based on the scree plot, parallel analysis, and indicators of goodness-of-fit (Fabrigar, Wegener, MacCallum, & Strahan, 1999; Worthington & Whittaker, 2006). The scree plot supported a 5-factor solution. We conducted the parallel analysis using code developed by O'Connor (2000), which generated 100 random permutations of the original data set. Results supported extraction of five factors. As a final step, we assessed the fit of the 5-, 6-, and 7-factor solutions using maximum likelihood (ML) factor analysis. Three statistics were examined to assess goodness-of-fit, using the following guidelines for good fit suggested by Hu and Bentler (1999): SRMR (< .08) and RMSEA (< .06), and CFI (> .95). For the 5-factor solution, the SRMR was consistent with good fit, whereas the RMSEA and CFI both indicated poor fit (SRMR = .068; RMSEA = .112; CFI = .425). Results were similar for the 6-factor (SRMR = .063; RMSEA = .107; CFI = .485) and 7-factor (SRMR = .061; RMSEA = .119; CFI = .376) solutions. Taken together, these analyses provided the greatest degree of support for the 5-factor solution.

Before deciding on the number of factors to extract, we examined the rotated factor loadings for the 5-, 6-, and 7-factor solutions to assess the interpretability of the factors and the viability of the solutions for developing subscales. Inspection of the rotated factor loadings for the 5-factor solution indicated that these factors were clearly interpretable and that item loadings could support development of multiple item subscales associated with each of the factors. The 6- and 7-factor solutions featured a greater number of items with substantial loadings on multiple factors, which would have led to an unsatisfactorily small number of retained items. Consideration of all of these criteria led us to select the 5-factor solution. The initial 5-factor solution accounted for 51.9% of the shared variance in the 95 items (eigenvalues for unrotated Factors 1 through 5 were 31.44, 5.63, 5.20, 3.51, and 3.42).

**Development of the subscales.** To select items for the new measure, we applied an oblique rotation to the 5-factor solution using the CF-Equamax method (which has been found to perform well relative to other methods when complex factor structures are expected; Sass & Schmitt, 2010). We used structure coefficients (see Table 1) to interpret and label the factors from the 5-factor solution: (a) *Authenticity*, understanding and benefiting from one's self-identity; (b) *Intimacy* and relationships, relating to intimate and sexual partners; (c) belonging to the *LGBT Community*, a sense of being part of a larger group with related interests; (d) *Social Justice* and compassion, a recognition of the suffering and oppression of others and a commitment to working toward the

Table 1  
Factor Loadings for the Full Item Pool<sup>a</sup>

Item	EFA structure coefficients				
	1	2	3	4	5
<b>I embrace my LGBT identity.</b>	<b>.81</b>	.34	.46	.42	.27
<b>I am comfortable with my LGBT identity.</b>	<b>.80</b>	.27	.39	.11	.30
<b>I have a sense of inner peace about my LGBT identity.</b>	<b>.77</b>	.25	.32	.38	.34
<b>My LGBT identity has given me more confidence.</b>	<b>.73</b>	.17	.38	.08	.44
<b>I am honest with myself about my LGBT identity.</b>	<b>.71</b>	.08	.29	.20	.14
My LGBT identity helps me feel whole.	.69	.23	.29	.28	.29
My LGBT identity has led me to develop new insights into my strengths.	.65	.37	.38	.54	.45
It is important to me as an LGBT person to speak up for myself and others.	.64	.13	.33	.39	.49
I am living an authentic life as an LGBT person.	.62	.31	.35	.31	.20
I feel I can be honest and share my LGBT identity with others.	.57	.30	.58	.23	.09
I have a broader social network because of my LGBT identity.	.57	.36	.55	.29	.31
I have freedom to create my own gender/sex roles because of my LGBT identity.	.56	.46	.48	.39	.36
I have better relationships with others because I can share my LGBT identity with them.	.55	.39	.41	.31	.23
My LGBT identity leads me to important insights about myself.	.54	.31	.22	.32	.43
My LGBT identity is part of being a positive role model for non-LGBT people.	.52	.39	.51	.46	.51
Being open about my LGBT identity will help to improve the world for others.	.51	.14	.34	.30	.40
I express my LGBT identity authentically through my external appearance.	.50	.20	.42	.20	.47
I wear the clothes I want to wear to express my LGBT identity.	.45	.27	.40	.03	.37
Because of my LGBT identity, I have a diverse chosen family (people I choose to be my "family").	.45	.33	.34	.39	.41
My LGBT identity allows me to be free from the expectations of others.	.44	.44	.39	.25	.41
My LGBT identity frees me from having to act in stereotypical masculine or feminine ways.	.44	.36	.43	.14	.36
<b>My LGBT identity allows me to feel free to explore different experiences of physical intimacy with a partner.</b>	.26	<b>.86</b>	.41	.22	.31
<b>My LGBT identity allows me to be closer to my intimate partner.</b>	.31	<b>.85</b>	.35	.21	.38
<b>My LGBT identity helps me to communicate better with my intimate partner.</b>	.22	<b>.82</b>	.32	.18	.41
<b>My LGBT identity allows me to understand my sexual partner better.</b>	.20	<b>.81</b>	.31	.24	.34
<b>My LGBT identity allows me to explore new ways of having romantic relationships instead of following typical "heterosexual" patterns.</b>	.19	<b>.77</b>	.28	.29	.20
I feel my LGBT identity helps me to understand my intimate partner better.	.27	.75	.20	.19	.29
I feel like an equal in my relationship with an intimate partner because of my LGBT identity.	.34	.73	.33	.24	.29
I have a sense of sexual freedom because of my LGBT identity.	.27	.73	.24	.21	.22
I am free to explore different experiences of emotional intimacy with others because of my LGBT identity.	.26	.71	.40	.43	.55
My LGBT identity frees me to negotiate rules/roles in my sexual/intimate relationships.	.28	.69	.38	.26	.39
My LGBT identity frees me to choose who I want as my sexual/intimate partner.	.33	.67	.34	.25	.22
My LGBT identity frees me from having to act like a "real man" or a "real woman."	.26	.59	.32	.17	.40
My LGBT identity allows me to have deeper bonds with friends.	.38	.58	.40	.41	.58
My LGBT identity allows me to be more open to a variety of experiences.	.29	.54	.33	.47	.50
I form stronger connections with others because of my LGBT identity.	.45	.54	.53	.30	.44
My LGBT identity helps me have a better understanding of ways I benefit from my privileges in life (based on my race, sex, or class).	.19	.53	.31	.43	.23
Having an LGBT identity allows me to create my own chosen family.	.37	.53	.36	.38	.53
My LGBT identity allows me to form a relationship free of social expectations.	.43	.49	.38	.16	.33
My LGBT identity motivates me to be more self-aware.	.24	.45	.25	.41	.38
I am more aware of how I feel about things because of my LGBT identity.	.37	.41	.22	.33	.27
I am more open to non-traditional gender/sex roles in my life because of my LGBT identity.	.04	.36	.21	.17	.31
<b>I feel included in the LGBT community.</b>	.34	.25	<b>.90</b>	.12	.36
<b>I feel supported by the LGBT community.</b>	.32	.36	<b>.86</b>	.16	.26
<b>I feel a connection to the LGBT community.</b>	.35	.25	<b>.84</b>	.37	.27
I feel empowered as a part of the LGBT community.	.52	.46	.76	.39	.42
<b>I find positive networking opportunities in the LGBT community.</b>	.41	.40	<b>.75</b>	.28	.43
<b>I feel visible in the LGBT community.</b>	.40	.18	<b>.71</b>	.20	.22
I feel a connection to other LGBT people.	.27	.32	.69	.51	.28
When I go to a new place I am able to find other LGBT people to connect with if I want to.	.45	.41	.62	.22	.29
When I go to a new place I am able to find other LGBT people to connect with if I want to.	.45	.41	.62	.22	.29
I think that other LGBT people see me as a role model.	.38	.23	.61	.24	.49
I feel free to express my LGBT identity when I interact with others.	.52	.22	.60	.21	.10
I feel a bond with LGBT people because of shared experiences.	.08	.23	.60	.34	.49
I inspire other people to feel safe about expressing their LGBT identity.	.43	.25	.54	.24	.52
I feel safe when I am in a crowd of LGBT people.	.22	.19	.50	.30	.41
I have better relationships with my family because I can share my LGBT identity with them.	.29	.23	.42	.12	.25
Being LGBT is just who I am.	.28	.16	.30	.24	.24

(table continues)

Table 1 (continued)

Item	EFA structure coefficients				
	1	2	3	4	5
<b>I am more sensitive to prejudice and discrimination against others because of my LGBT identity.</b>	.29	.35	.40	<b>.83</b>	.35
<b>I am more sensitive to the experiences of other minority group members because of my experiences as an LGBT person.</b>	.30	.22	.33	<b>.82</b>	.31
<b>I think more critically about the suffering in the world because of my LGBT identity.</b>	.37	.31	.31	<b>.78</b>	.45
<b>As an LGBT person, I feel it is important to work towards equality for all people.</b>	.38	.24	.20	<b>.78</b>	.24
<b>My LGBT identity prompts me to speak out against prejudice and discrimination.</b>	.37	.32	.41	<b>.76</b>	.34
I have a greater respect for people who are different from society's expectations because of my LGBT identity.	.43	.38	.25	.75	.39
Because of my LGBT identity, I am less judgmental of others.	.29	.24	.33	.75	.46
My LGBT identity helps me appreciate being able to meet LGBT people from different backgrounds than mine.	.41	.23	.40	.73	.35
My LGBT identity helps me to understand the experiences of oppression that other, non-LGBT minorities face.	.23	.24	.33	.69	.28
My experience with my LGBT identity leads me to fight for the rights of others.	.44	.15	.37	.69	.43
Because of my LGBT identity, I value people for who they truly are.	.41	.36	.34	.69	.61
I am more compassionate with other people because of my LGBT identity.	.29	.44	.34	.69	.45
I am a more inclusive person because of my LGBT identity.	.33	.28	.39	.67	.42
I better appreciate the differences between people because of my LGBT identity.	.33	.35	.36	.65	.63
I make fewer assumptions about other people because of my LGBT identity.	.25	.23	.25	.64	.39
I have an expanded appreciation for life because of my LGBT identity.	.46	.38	.37	.57	.55
My LGBT identity leads me to question the status quo more than other people I know.	.31	.36	.14	.52	.50
My LGBT identity makes it important to me to actively educate others about LGBT issues.	.49	.27	.21	.52	.41
I understand the experiences with prejudice that other LGBT people encounter.	.09	.13	.22	.48	.45
I appreciate the diversity of the LGBT community.	.31	.14	.41	.41	.29
<b>My LGBT identity inspires me to strive towards reaching my full potential in life.</b>	.45	.25	.34	.24	<b>.69</b>
<b>My LGBT identity helps me develop skills that enhance my life.</b>	.32	.24	.44	.31	<b>.66</b>
Because of my LGBT identity, I can talk about any subject with my close friends.	.34	.51	.49	.32	.65
<b>My LGBT identity provides me with many opportunities for personal growth.</b>	.45	.26	.39	.32	<b>.65</b>
<b>I am free to express my full range of emotions because of my LGBT identity.</b>	.35	.41	.43	.29	<b>.64</b>
I am wiser because of my LGBT identity.	.12	.34	.20	.40	.64
My LGBT identity has helped me find meaning in my life.	.51	.26	.45	.41	.64
I am a stronger person because of my LGBT identity.	.50	.31	.39	.45	.63
I help people of the other sex understand my sex because of my LGBT identity.	.21	.27	.20	.10	.60
I help people of my sex understand the other sex because of my LGBT identity.	.24	.35	.29	.08	.56
I have a unique perspective because of my LGBT identity.	.21	.27	.17	.28	.56
I am a positive role model for other LGBT people.	.36	.15	.49	.26	.56
Because of my LGBT identity, I am more in tune with what is happening around me.	.31	.42	.32	.46	.55
I am freer to have non-sexual relationships (friendships) with members of the other sex because of my LGBT identity.	.04	.22	.22	.02	.48
As an LGBT person, it is important to act as an advocate for LGBT rights.	.38	.16	.29	.40	.44
I am less bound by traditional gender/sex roles because of my LGBT identity.	.16	.42	.29	-.03	.42
My LGBT identity is a gift.	.38	.32	.22	.30	.39
My LGBT identity makes my decision to have children (or not) a more thoughtful process.	-.10	.28	.11	.23	.36

Note. EFA = exploratory factor analysis. Bolded items were retained in the proposed final version of the Transgender Positive Identity Measure (T-PIM).

<sup>a</sup> The full item pool is from Riggle, Mohr, Rostosky, Fingerhut, & Balsam (2014).

rights of all; and (e) *Insights* and self-awareness, the feeling of knowing oneself and experiencing personal growth.

Following Saucier and Goldberg's (2002) reasoning regarding the value of short yet reliable measures, we further reduced the item pool with the goal of retaining 5-item subscales. This process began by retaining items only if their highest structure coefficient was at least .40 in absolute magnitude (to ensure a strong relation of each item to the construct it assessed), and if the difference between the absolute values of the two strongest structure coefficients was at least .20 (to maximize subscale distinctiveness). Applying these criteria led to initial retention of 45 items. We then further reduced the subscales by retaining the five items that had structure coefficients of the highest magnitude within those subscales.

Because dropping items can change the factor structure, we heeded Worthington and Whittaker's (2006) suggestion to conduct an EFA on the reduced set of items. We expected a 5-factor solution would provide a satisfactory fit to data for the pool of 25 items. Two items did not meet our original criteria for retention in the new EFA. We replaced these items with the next candidates for inclusion from the EFA of the full item pool. This process yielded one item that did not meet retention criteria. Repeating this process several times indicated that none of the eligible fifth items for the *Insights* and *Self-awareness* subscale met the retention criteria. For this reason, this subscale was reduced to four items and the remaining four subscales consisted of five items. Items selected on the basis of this process are indicated through boldface text in Table 1.

We then conducted a final EFA on the reduced set of 24 items. The initial 5-factor solution accounted for 73.7% of the shared variance in the 24 items (eigenvalues for unrotated Factors 1 through 5 were 9.11, 2.71, 2.52, 1.80, and 1.55). This solution fit the observed data reasonably well, and the fit indices closely approximated or exceeded the benchmarks for good fit (SRMR = .029; RMSEA = .062; CFI = .944). After applying a CF-Equamax rotation, the five factors closely resembled those retained from the initial 5-factor solution based on the original item pool. Communalities ranged from .37 to .96 ( $M = .67$ ). Based on these findings, we retained all 24 items for the final version of the scale.

The proposed measure was titled the Transgender Positive Identity Measure (T-PIM). Scores on the subscales were averaged for interpretability. Higher scores on the response scale reflected a more positive view of one’s identity. Subscale means, standard deviations, score ranges, Cronbach’s alpha estimates, skewness coefficients, and intercorrelations between the subscales are presented in Table 2. Cronbach’s alpha estimate for the 24 items was .93. Preliminary evidence suggestive of convergent validity was provided by correlating the subscales of the T-PIM with the adapted Identity Affirmation measure. The correlations were all significant ( $p < .01$ ) in the expected direction between Identity Affirmation and Authenticity ( $r = .65$ ), Intimacy ( $r = .36$ ), Community ( $r = .47$ ), Social Justice ( $r = .43$ ), and Insight ( $r = .57$ ).

**Discussion**

The proposed T-PIM measure focuses on positive transgender identity as a construct different from previous discussions of identity development stages (e.g., Ekins & King, 2006) or measures of rumination and reflection on gender identity (Bauerband & Galupo, 2014). The proposed T-PIM uses positively worded items, which recognizes the differences between the presence of positive well-being and the absence of distress, such as internalized trans-negativity (e.g., Hendricks & Testa, 2012). The T-PIM is a more in-depth measure of positive identity than general identity acceptance or appearance congruence (Kozee et al., 2012).

The proposed interpretation of the five factors in the T-PIM is consistent with the five factors proposed by the LGB-PIM (Riggle et al., 2014). Authenticity, intimate relationships, belonging to community, commitment to social justice, and self-awareness and insights are all important components of general well-being. These factors represent different resources, values, and strengths that may enhance well-being for transgender-identified individuals, especially when associated with their gender identity and expression. The proposed scale may be useful in future research on

factors impacting well-being for transgender-identified individuals.

Although the factors in the T-PIM were interpreted as being very similar to the concepts represented in the LGB-PIM, some of the items differ. All five of the items measuring Community are the same. Four of the five items measuring Authenticity and three of the five measuring Intimacy and Social Justice are the same. These scales show considerable overlap.

The four items measuring insights and self-awareness are different from the five items in the LGB-PIM subscale of Self-Awareness. This suggests that there may be different processes by which individuals introspect about their gender identity versus their sexual identity. Interactions with the socioecological environment (e.g., with other individuals or within the community) may result in different experiences of insights and self-awareness. This may lead to differences in experiences of personal growth, a question for future research. Also, transgender-identified individuals may develop a different set of intrapersonal skills and resources as part of the process of creating and maintaining a positive identity.

The proposed five factors represent a reduction of the eight themes of positive transgender identity presented in Riggle et al. (2011). The purpose of factor analysis is different from thematic analysis and thus different results may be expected. However, we would argue that there is considerable overlap between the prior themes and the factors suggested here. For example, what we label “authenticity” includes items indicating feelings of congruence, confidence, and inner-strength and awareness. Intimacy reflects closer relationships with partners and also includes the breaking of gender norms as part of those relationships. Empathy is an important part of recognizing oppression and engaging in social justice activism. The factors in the proposed measure may reflect different connections or interpretations of participants within the structure of responding to statement items (instead of open-ended responses).

The proposed measure of positive transgender identity needs to be further tested for validity and reliability. Confirmatory factor analysis (CFA) and test–retest studies need to be conducted. Convergent validity with measures of well-being will be necessary to evaluate the conceptual validity of the subscale scores. Additional analysis is also needed to assess whether combining the 24 items into a single score is warranted, testing for a higher order construct of positive identity.

The sample for this study was a convenience sample of transgender-identified individuals who had access to the survey

Table 2  
*Descriptive Statistics for T-PIM Subscales*

T-PIM subscale	Correlations <sup>a</sup>					$\alpha$	$M^b$	SD	Skew	Range
	1	2	3	4	5					
1. Authenticity	—					.89	6.13	1.00	−1.84	5.40
2. Intimacy	.34	—				.92	5.13	1.33	−0.45	6.00
3. Community	.49	.43	—			.91	5.24	1.37	−1.10	6.00
4. Social Justice	.39	.33	.32	—		.90	6.14	1.02	−2.49	6.00
5. Insights	.49	.37	.48	.44	—	.81	5.48	1.11	−0.58	4.75

<sup>a</sup> All correlations are significant at  $p < .01$ . <sup>b</sup> Scale minimum = 1.00; scale maximum = 7.00.

announcement and were connected to the LGBT communities. The sample is largely white/Caucasian and from the United States. Transgender-identified individuals who are also nonwhite/Caucasian or who reside in other countries may report different positive experiences and results (e.g., Almario, Riggle, Rostosky, & Alcalde, 2013). This sample also reports high levels of education; transgender-identified individuals with lower levels of formal education or fewer economic resources (not measured here) may face different circumstances and may report different types of positive experiences.

Different self-definitions of “transgender” were not distinguished in this analysis. The positive identity experiences of transgender individuals based, for example, on whether the person identifies as “male” or “female” versus “genderqueer” may differ. Gender-nonconforming identities may differ from transgender identities and may not be adequately represented in this sample. The use of “LGBT” in the original survey announcement and in the items may have influenced responses and created bias in the results. The results may differ if a larger sample were able to test differently defined groups of individuals or if the questions only included reference to “transgender” (replacing “LGBT” in the item statements). Therefore, the results based on the current sample should be used with caution.

Future study will be needed to explore the contributions of the identified factors to well-being. For example, the proposed factors may represent individual strengths and may act as moderating factors in the association between instances of minority stress and well-being outcomes. Or, the proposed factors could be skills that are developed and lead directly to increased life-satisfaction. Practitioners may be interested in using the items as part of a reflection exercise to identify areas of identity that could be benefit from intervention or enhancement exercises. Researchers may be interested in using the measure to identify constructs contributing to resilience or thriving. Such associations and interventions are topics for future research interested in enhancing the well-being of transgender-identified individuals.

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