The Measure of Gender Exploration and Commitment and the Role of the School Counselor

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Abstract

This study was conducted to develop the Measure of Gender Exploration and Commitment (MGEC), a school counseling and training tool. The MGEC assesses one's gender exploration and commitment and was normed with a national sample of school counselors. Developing the MGEC involved (a) conducting a literature review, (b) modifying items, and (c) gathering data from school counselors to analyze demographic data and conduct principal component analysis.

Keywords: advocacy, exploration, gender, identity, school counselor

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Marcia's (1966) model of identity development has been used to explain how individuals explore and commit to a specific identity. The model comprises exploration and commitment. Exploration entails revising and refining one's sense of self. Commitment entails adopting a particular identity comprising one's beliefs, goals, and values. Exploration and commitment lead to foreclosure, moratorium, achievement, and diffusion (Santrock, 2017). Foreclosure is commitment without exploration, moratorium is refraining from commitment during exploration, achievement is commitment after exploration, and diffusion is refraining from both commitment and exploration.

Marcia's model has been used to assess and understand sexual identity development (Worthington, Navarro, Savoy, & Hampton, 2008), and it may be used to understand and teach about gender identity development, the focus of this paper. It is hoped that the findings from this study will increase the likelihood that more school counselors will advocate for females who have been historically marginalized in society. Moreover, we encourage more school counselors to educate others and advocate for gender minorities such as transgender students and students who identify with less commonly applied gender labels. This study is a preliminary attempt to contribute more research to a persistently emerging research area during a historical time in which gender is being discussed in many disciplines, including school counseling (Simons, Beck, Asplund, Chan, & Byrd, 2019).

In 2019, the word "they" was selected as the word of the year. According to Merriam Webster (online), the word *they* refers to an individual whose gender identity is

nonbinary, “relating to or being a person who identifies with or expresses a gender identity that is neither entirely male nor entirely female” (they, 2019). In the same year, the World Health Organization, depathologized transgender and gender diverse identities of which hundreds exist (Paletta, 2019). The current #MeToo movement has brought up the problem of men’s sexual harassment of women in the workplace (Bongiorno, Langbroek, Bain, Ting, & Ryan, 2019).

A new gender identity development measure may be used by school counselors as part of professional development to self-reflect over gender identity development and teach students about gender. Teaching students about their own identity development in the current sociopolitical climate may also foster more respect for women and inclusion and empowerment of gender minorities. Thus, a measure of gender identity development created with input from school counselors is valuable. School counselors are counseling practitioners and applied social scientists with a unique vantage point to teach about gender and gender identity development. The biggest problem, however, is that discussions around gender, especially gender nonconformity, are lacking in schools, counselor education and training programs, and society at large. Second, females continue to be historically underrepresented in male dominated fields (e.g., STEM) (Fouad & Santana, 2017). Third, transphobia remains, the number of transgender people of color who are killed each year continues to increase (Simons, 2019a). Last, the quality and quantity of advocacy for students varies among school counselors (Simons et al., 201). Levels of competence vary due to factors such as school counselors’ self-efficacy, identity, age, length of time in position, and location of practice.

Although one related measure, the Gender Minority Stress and Resilience (GMSR; Testa, Habarth, Peta, Balsam, & Bockting, 2015) does exist, it was not normed with input from helping professionals such as school counselors, nor was it normed with cisgender people (i.e., one's gender matches birth sex assigned). In regard to the GMSR scale not being normed with input from school counselors, this is notable because school counselors need to have the opportunity to make use of a gender identity development scale to examine their own development in training as well as to teach about gender identity development in society. This may also increase how effective they are at counseling students in regard to gender in their respective school settings. Input from school counselors is also valuable because they have specialized training in human development as applied social scientists.

The design of the GMSR measure is restricted (i.e., one administers it to only transgender and gender nonconforming [TGNC] people). We, however, believe another measure is needed to examine gender development among all people. As a result, using a national sample of school counselors, we developed a measure to use with anyone regardless of gender identity based on Marcia's (1966) model of identity development. The measure may be used by anyone who supports and teaches people about gender identity development and theory.

Transgender Identity Theory

Bockting and Coleman Model

Bockting and Coleman (2007) proposed a stage model of transgender identity development comprising affect, behavior, and cognition. The model has five conceptualized stages of transgender identity development (pre-coming out, coming

out, exploration, intimacy, and identity integration). Within the pre-coming out stage, transgender or cross gender feelings are present, and one may be gender non-conforming (i.e., they do not subscribe to norms traditional of their gender). These feelings and behaviors lead to the next stage, coming out, during which individuals come out to themselves and to other people about their transgender or cross gender feelings. This is challenging because some individuals may not be in healthy relationships or have mental wellness. In the next stage, exploration, individuals learn about social groups, create new relations, express gender in different ways, cope with stressors tied to gender binary views, and act out opposite gender stereotypes. During the intimacy stage, individuals who display anxious attachment often struggle with intimacy. Male-to-female people (MTFs) tend to face more challenges than female-to-male people (FTMs). Sexual activity may put one at risk. The last stage of the Bockting and Coleman (2007) model is identity integration. During this stage, individuals integrate their public and private identities and accept themselves. They do not view being transgender as the most important part of their identity, and public and private identities are integrated.

Simons Model

While similarities exist between the processes of identity development for TGNC people and transgender people of color (TPOC), differences exist as well. As such, the gender identity development of TPOC should be examined independently from the gender identity development of White TGNC people. Simons (2019a) concluded that TPOC identity development comprises eight non-sequential processes that occur early or later in life. Additionally, it is not linear nor time bound (i.e., it does not tend to occur

at a particular time). The model that includes eight processes: self-identification, seeking validation, display, proaction, transition, intersectionality, passing, and exploring identities. During self-identification, an individual makes an explicit statement that he/she/they is/are transgender. Seeking validation requires an individual to gain more knowledge about oneself by reading books, participating in counseling and social groups, and gaining more knowledge from the media.

The display process occurs when an individual accepts expression of gender variant behavior (e.g., tomboyish or feminine behavior). The proaction process is when an individual seeks out more leadership activities such as joining sports teams, becoming a role model, and teaching others about using proper pronouns. The transition process is when one begins to take hormones and undergo surgical procedures. The intersectionality process is when an individual is harassed or bullied for more than his/her/their sexuality and gender and thus stays closeted (i.e., does not disclose gender minority status). The passing process occurs when an individual stays in the closet and, due to safety concerns, only selectively comes out to others. The final process, exploring identities, is related to the passing process. This occurs when an individual presents themselves to others as either more feminine or masculine.

Cisgender Identity

Cisgender refers to an individual whose sense of gender identity is congruent with the sex that they were born with. At present, no model of cisgender identity development exists. However, gender includes a person's male and female characteristics. According to Perry & Pauletti (2011), gender identity is a sense of one's own gender, which includes understanding and acceptance of being either female or

male. Arguably, this could also include developing an awareness of being neither female nor male too (e.g., genderqueer, gender non-binary, etc.).

A person has an awareness around two-and-a-half years of age if he/she/they is/are a boy or girl (Blakemore, Berenbaum, & Liben, 2009). Expectations that indicate how males or females should act, feel, and think are referred to as gender roles. Most youth present with behaviors during preschool that match the gender roles expected in their culture. Gender is influenced by biology, social experiences, and cognition (Santrock, 2017). Social theories of gender include Freud's psychoanalytic theory of gender and the social cognitive theory of gender. Freud believed that preschool children become sexually attracted to the opposite sex parent around the ages of five and six but reject this attraction due to anxiety (Santrock, 2017). Thereafter, the children begin to identify with same-sex parents. Social cognitive theory of gender emphasizes gender development through observation and imitation of others' behaviors (Bandura, 1989). As such, punishment and rewards may also influence gender development. Biologists have learned a great deal about the development of sex differences as well (Santrock, 2017). Most humans have 23 pairs of chromosomes. The 23rd pair of chromosomes in males is often comprised of X and Y chromosomes, and the 23rd pair of chromosomes in females is often comprised of two X chromosomes. Sometimes, however, people are born with an indeterminate sex and sex characteristics (Callahan, 2009).

According to Callahan (2009), people with indeterminate sex characteristics are referred to as intersex, and they have disorders of sex development, disorders that are typically identified at birth. Their genitals may appear atypical, or they may experience unexpected development during the course of the lifespan (e.g., lack of menstruation in

females) (Schweizer, Brunner, Gedrose, Handford, & Richter-Appelt, 2017). Historically, physicians decided whether intersex children were either female or male; however, more recently the standard practice has been to include both the children and parents in the decision-making process (Callahan, 2009). In November 2018, a bill was proposed to make California the first state to prohibit surgical operations on youth to “normalize” their genitalia. A year later the state of New York followed suit to do the same (Neus, 2019). For more on intersex advocacy from a school counseling perspective, refer to Simons (2019b) and Simons, Gonzalez, & Ramdas (2019).

Method

Participants

A total of 1,199 school counselors participated in the study. This group was predominantly female (85.90%) and White (86.10%) with other racial-ethnic groups comprising 13.90% of the sample. The group had an average age of 43.22 (*SD* = 10.37) with most respondents in the 30-39 and 40-49 age groups. Eighty-three percent of participants identified as exclusively or mostly heterosexual in terms of sexual orientation, respectively, with smaller percentages identifying various other orientations. United States Census Bureau designations showed a comparable number of participants were from the Northeast and South, with higher and lower numbers from Midwest and West, respectively. Demographic characteristics of the study sample are displayed in Table A1.

Instrument Development

In the absence of a measure to assess gender exploration and commitment, the author modified items on the Measure of Sexual Identity Exploration and Commitment

(MoSIEC; Worthington et al., 2008) to develop the Measure of Gender Exploration and Commitment (MGEC). The existing MoSIEC was adapted with extended review of relevant literature and input from professionals who have expertise in the area. The construction of the MoSIEC by Worthington and colleagues (2008) began with a review of the literature on sexual identity development and the generation of items across six dimensions of development: sexual needs, sexual values, characteristics of sexual partners, preferred sexual expression, sexual orientation identity, and modes of sexual expression. Modifying the MoSIEC to develop the MGEC included specific modifications as well as a process for reviewing relevant gender identity literature. Regarding the latter task, it appears that a paucity of literature exists on measurement of gender identity development. This paper serves to expand research in this area along with including professional school counselors and their valuable input. Initially, 48 MoSIEC items were created, and factor analysis resulted in a 22-item measure with four factors: Commitment, Exploration, Sexual Orientation Identity, and Sexual Orientation Uncertainty.

Twenty-two items resulted by replacing specific item terms such as sexual needs, sexual activities, sexual expression with concepts associated with gender, such as gender needs, gender activities, and gender expression. For example, the MoSIEC item, “I am actively trying new ways to express my sexual needs,” was edited as “I am actively trying new ways to express my gender.” We continued to use a 6-point Likert-type scale, ranging from 1 (*very uncharacteristic of me*) to 6 (*very characteristic of me*).

Scoring Procedures

The MGEC assesses one's gender exploration and commitment. The measure has 22 Likert-type scale items with midpoint cutoff scores on subscales and a midpoint cutoff score on the overall MGEC. In regard to interpreting midpoint cutoff scores for high and low participant scores on the constructs measured, it is suggested that a bimodal distribution exists for the response range on each subscale and the MGEC overall. MGEC scores range from 22 to 132 with 88 as a midpoint cutoff score. If one receives a score of 88 or higher this indicates that one possesses higher levels of gender exploration and commitment. If one receives a score of 88 or lower this indicates that one possesses lower levels of gender exploration and commitment. After reading the following instructions, the test taker completes the MGEC which is comprised of four subscales: (1) a subscale on Exploration (MGEC-E), (2) a subscale on Commitment (MGEC-C), (3) a subscale on Synthesis/Integration subscale (MGEC-S), and (4) a subscale on Gender Uncertainty (MGEC-G). The MGEC sub-scales were developed by modifying the MoSIEC subscales, which were developed in a prior study. In the study, the authors identified four subscales. The MGEC instructions are as follows:

> Before you complete survey items, read the definitions that follow:
> "Gender needs" refers to two societal needs, practical gender needs and strategic gender needs. Practical gender needs (PGNs) are the needs of individuals identified as socially acceptable given their societal roles. Practical gender needs stem from one's societal position and how one's labor is allocated based on gender (e.g., which jobs are given to women versus men). Strategic gender needs (SGNs) are the needs of individuals based on how they might improve their status or position. Gender values are judgments, moral evaluations, and/or standards about acceptability, appropriateness, desirability, and innateness (or not) in regard to one's

> gender. Gender activities are any behaviors that one might enact in relationship to or subscribing to a gender. Gender expression modes are forms of communication (nonverbal or verbal) or signals (indirect or direct) that one might use to convey personal gender (e.g., postures, quality or speech, body movement, etc.). Gender is the characteristics of men, women, intersex, and gender non-binary people that are socially constructed. The characteristics include rules, norms, and relationships.

MGEC Exploration subscale (MGEC-E). The MGEC-E is an 8-item Likert-type scale that assesses one's gender exploration and gender identity exploration. Scores on the MGEC-E have a range of 8 to 48 with 28 as a midpoint score. If one receives a score above 28, this indicates that one possesses higher levels of gender and gender identity exploration and commitment. If one receives a score below 28, this indicates that one possesses lower levels of gender and gender identity exploration and commitment.

MGEC Commitment subscale (MGEC-C). The MGEC-C is a 6-item Likert-type scale that assesses self-preference and clarity of one's gender. Scores on the MGEC-C have a range of 6 to 36 with 21 as a midpoint score. If one receives a score above 21, this indicates that one possesses more clarity about gender and preferences related to gender. If one receives a score below 21, this indicates that one possesses less clarity about gender and preferences related to gender.

MGEC Synthesis/Integration subscale (MGEC-S). The MGEC-S is a 5-item Likert-type scale that assesses how congruent one's expression of gender is with other parts of self. Scores on the MGEC-S have a range of 5 to 30 with 17.5 as a midpoint score. If one receives a score above 17.5 this indicates that one's expression of gender

is more consistent with other parts of self. If one receives a score below 17.5 this indicates that one's expression of gender is less consistent with other parts of self.

MGEC Gender Uncertainty subscale (MGEC-G). The MGEC-G is a 3-item Likert-type scale that assesses one's clarity about personal gender and gender identity. Scores on the MGEC-G have a range of 3 to 18 with 10.5 as a midpoint score. If one receives a score above 10.5, this indicates that one lacks clarity about gender. If one receives a score below 10.5, this indicates that one has more clarity about gender.

Procedures

The MGEC was distributed to a nationwide sample of school counselors using REDCap hosted at Mercy College in Dobbs Ferry, New York. REDCap is secure, internet software to use in gathering data to conduct research studies. The software allows for easy collection and management of data. REDCap features allow for (a) developing an audit trail for keeping records of data analyses and exportation, (b) downloading data to Microsoft EXCEL and SPSS, and (c) receiving and importing data. The school counselors clicked on the REDCap survey link found either on a social media platform or in an online recruitment statement that was emailed directly to them. Once the link was clicked, participants clicked a checkbox to give consent prior to completing the MGEC survey.

School counselors were recruited through email messages, LinkedIn, LISTSERVs, and Facebook. Research study announcements were distributed online in each state and the District of Columbia. Once data were collected from the school counselors, data cleaning and analysis occurred. A small amount of missing data (5.87%) were found and determined to be missing completely at random. As such, the

missing item values were entered with simulated values that were deemed plausible based on the full data. In order to attain reliable results, data analysis was conducted using all cases in a complete data set (Schlomer, Bauman, & Card, 2010). Data gathered from a sample of 1,199 school counselors were used in the process of conducting the data analyses. School counselors were recruited to participate in the study from ASCA Scene, the South Dakota School Counselors listserv, school counseling groups on Facebook and LinkedIn, school counselor associations, and via email using email addresses received by submitting freedom of information act (FOIA) requests to departments of education in all 50 states. Many states released the email addresses; however, in some cases, email addresses of principals and superintendents were sent instead of email addresses of school counselors.

Results

The survey was distributed to 2,936 participants and 1,199 completed it satisfactorily. The response rate was 41%. It was determined that it was acceptable to conduct analyses on data gathered from participants who satisfactorily completed at least 85% of the items on each subscale and on the entire survey. For those participants who did not complete at least 85% of the items, their responses were removed.

Examination of Component Structure

Several steps were completed to assure examination of the MGEC's factor structure was appropriate. A review of item distributions and statistics was conducted to assess item normality. Five of the items closely approximated a normal distribution, while the remaining items demonstrated a moderate degree of positive or negative

skewedness. Thirteen items had a kurtosis value of 3 or lower. Medians for skewedness and kurtosis were .14 and 1.43, respectively. Checks on singularity, or the presence of perfectly correlated items, and multicollinearity, a pattern of highly correlated items, were conducted by examining item correlations. The items correlated with one another either in a low or moderate pattern, thereby eliminating concerns for the presence of either singularity or multicollinearity.

Two checks regarding item correlations were conducted. The Kaiser-Meyer-Olkin test produced a value of .86, indicating sampling was adequate for further analysis. The Bartlett's Test of Sphericity checks for redundancy between variables, and it was significant, $\chi 2\ (171) = 13798.87\ (p < .001)$, thus indicating that items were suitable for factor analysis. A principal component analysis with an oblique rotation converged after eight iterations. Similar to Worthington's MoSIEC instrument, four components emerged on this analysis, and subsequent parallel analysis confirmed the existence of four components. Combined, the four components explained 66.87% of the total variance.

Five items loaded on the first component, which had an eigenvalue of 6.10 and explained 32.12% of the variance. The items addressed issues such as the extent to which gender was expressed consistently with gender identity, compatibility between gender activities and gender identity, congruence gender-based needs and gender identity. This subscale was named Synthesis and Integration. Eight items loaded on the second component, with an eigenvalue of 3.52 and explaining 18.54% of the variance. The items examined issues such as openness to expressing gender in the future, willingness to experiment with new types of gender activities, and attempts to express gender in novel ways. This subscale was titled Exploration. Three items loaded on the

third component with an eigenvalue of 1.73 and 9.33% of the total variance. Items assessed the clarity with which gender identity is expressed, such as certainty with preferences for expressing gender, a sense of gender-based needs, and certitude with gender-preferred activities. Commitment was the title of this subscale. Lastly, three items loaded on the fourth component with an eigenvalue of 1.30 and 6.87% of the variance. The items assessed degree of clarity about gender identity, and the subscale was titled Gender Uncertainty. Table A2 contains the results of the component analysis including the item loadings.

Psychometric Adequacy

Internal consistency and subscale intercorrelations were investigated to establish initial evidence of the MGEC's psychometric adequacy. Internal consistency analyses demonstrated adequate reliability for the Synthesis/Integration, Exploration, and Commitment subscales with alphas of .94, .89, and .85, respectively. By contrast, the Gender Identity Uncertainty subscale was lower with an alpha of .65. A pattern of low to moderate intercorrelations between subscales provided evidence for the independence of the subscales. Correlations between the Synthesis/Integration and Commitment subscales and the Exploration and Gender Uncertainty subscales were positive, while the remaining relationships were inversely correlated with one another. Table A3 displays the subscale descriptive statistics, internal consistency, and intercorrelations.

MGEC Differentiation of Demographic Groups

To assess the MGEC's ability to detect differences between demographic groups, we conducted a series of analyses by gender, age, regional affiliation, and sexual orientation. For each analysis, we examined each of the four subscales by

demographic groups using a multivariate analysis of variance (MANOVA). When dramatic discrepancies in sample sizes of the demographic subgroups occurred, we retained all responses in the subgroup with the lowest number of participants and randomly sampled an equal number of participants from the other subgroup(s). For example, we had a total of 1,030 female and 163 male participants in our sample. We retained responses from the 163 male participants and then randomly selected a group of 163 female responses. We then conducted a one-between (female vs. male), one-within subject (Synthesis vs. Exploration vs. Commitment vs. Gender Uncertainty) MANOVA. This analysis found no difference by gender, F (4, 321) = .44, *ns*; Wilk's Λ = 0.995, partial η^2 = .005.

By contrast, when examining differences by age, a one-between (23-29 vs. 30-39 vs. 40-49 vs. 50-59 vs. 60+), one-within group (Synthesis vs. Exploration vs. Commitment vs. Gender Uncertainty) MANOVA found differences by age on the MOGEG, F (16, 3623.92) = 2.26, $p < .01$; Wilk's Λ = 0.970, partial η^2 = .008. Post-hoc univariant and Tukey analyses found that participants in the 50-59 and 60+ age groups scored significantly higher on the Synthesis subscale compared to the 30-39 age group. Table A4 provides descriptive statistics and post-hoc outcomes.

Regional affiliation was examined with a one-between (Northeast vs. South vs. Midwest vs. West), one-within group (Synthesis vs. Exploration vs. Commitment vs. Gender Uncertainty) MANOVA, which yielded a significant result, F (12, 3140.79) = 4.50, $p < .001$; Wilk's Λ = 0.956, partial η^2 = .015. Post-hoc analysis showed that participants from the South had a significantly higher Synthesis/Integration score compared to those in the other three geographical regions of the country. On the

Exploration subscale, participants in the South had a significantly lower score compared to each of the three other regions. In addition, the Northeast and Midwest scores were lower than their counterparts in the West, although there was no difference between the Northeast and Midwest scores. The Commitment subscale revealed that the South contained a significantly higher scores compared to the West. Lastly, no differences were observed on the Gender Uncertainty subscale. Table A5 contains descriptive statistics and post-hoc analyses.

Regarding sexual orientation, we conducted a one-between (Mostly or Exclusively Heterosexual vs. Mostly or Exclusively Lesbian/Gay vs. Bisexual vs. Other Identity), one-within (Synthesis vs. Exploration vs. Commitment vs. Gender Uncertainty) MANOVA, which indicated a significant difference on the MGEC subscales, F (12, 204.01) = 4.18, $p < .001$; Wilk's $\Lambda = 0.559$, partial $\eta^2 = .176$. Between-subjects tests examined group differences with the Tukey for post-hoc analysis. Three of the four MGEC subtests had significant findings. On the Synthesis subtest, the Mostly/Exclusively Heterosexual group scored higher than the Bisexual group. Though there was no difference between the Bisexual and the Other Identity groups on the Exploration subscale, both scored significantly higher than the Mostly/Exclusively Heterosexual group. The Other Identity group also scored significantly higher than the Mostly/Exclusively Lesbian/Gay group. Lastly, the Other Identity group scored higher than the Mostly/Exclusively Heterosexual group on Gender Identity and Gender Identity Uncertainty subscale. No differences were observed on the Commitment subscale. Table A6 contains descriptive statistics and post-hoc analyses.

The internal consistency on three of the four MGEC subscales (Exploration, Synthesis/Integration, and Commitment) was satisfactory with Cronbach alphas of .85 or higher (see Table A3). The MGEC Synthesis/Integration alpha of .94 was higher than those from the MoSIEC comparable subscale with reported alphas of .72 and .79, and the MGEC Exploration and Commitment subscales were comparable to those of their companion MoSIEC subscales (Worthington et al., 2008). Only the Gender Uncertainty alpha of .65 was below the level of confidence in the subscale's reliability; however, the MoSIEC Sexual Orientation Uncertainty alphas (i.e., .78, .73) were the lowest for that instrument as well. At this time, school counselors may wish to use the MGEC to extend knowledge of gender expression among themselves since it was normed on a population of adult school counselors.

Discussion

The following conclusions can be drawn from this study. The subscale intercorrelations revealed an inverse pattern of relationships between two sets of subscales. Synthesis/Integration and Commitment were inversely correlated with both Exploration and Gender Uncertainty. Such patterns suggest that higher levels of identification, understanding, and congruence (i.e., Synthesis/Integration, Commitment) with one's gender identity is likely associated with lesser degrees of learning, experimentation, and uncertainty (i.e., Exploration and Gender Uncertainty) of gender identity. The opposite pattern is also evident in our data (e.g., lower Commitment, higher Exploration). Worthington and colleagues (2008) found comparable patterns in the MoSIEC subscales. This suggests that although sexual identity development and gender identity development are different, their processes may be similar (Simons,

Hutchison, & Bahr, 2017). As a result, this may have implications for school counselor advocacy.

In terms of age, the MGEC differentiated the two oldest age groups from one of the younger groups (i.e., 30-39) on the Synthesis and Integration. This subscale assesses the extent to which gender expression is consistent with gender identity, similarity between gender activities and gender identity, and congruence gender-based needs and gender identity. Although it is plausible that these characteristics become more stable with age, it is interesting that only one of the younger age groups showed more fluidity on this construct. This is an area for additional research. This outcome is reflective of recent findings by Watson, Weldon, and Puhl (2019) who believe that a more nuanced understanding of sexual orientation and gender identity (SOGI) is needed to conduct valid developmental research because current tools do not allow for the assessment of new and diverse emerging identities among younger cohorts of people. The researchers analyzed data collected from a diverse sample of 17,112 sexual and gender minority (SGM) youth (13-17 years) and learned that these youth are now applying many different SGM identity labels to themselves. Twenty-six unique labels were reported; 24% of adolescents used nontraditional SOGI labels, such as nonbinary and pansexual. As a result, implications exist for how sexual orientation and gender identity are conceptualized and assessed during adolescence.

Several differences emerged on analysis by geographic region of residence. Foremost, participants in the South region reported a significantly higher score on Synthesis/Integration and lower score on Exploration than participants from the other three regions. This suggests that participants in the South not only have a higher sense

of consistency and congruence between their gender identity and its expression (i.e., Synthesis/Integration) compared to other regions, but also more congruence with their gender expression and are less willing to change or express it differently in the future (i.e., Exploration). In addition to this finding, participants from the West region had a significantly higher Exploration score compared to any other regional group, thus suggesting the opposite of their counterparts from the South on gender identity and expression. The Midwest and Northeast showed no differences on Exploration but were higher and lower from their counterparts in the South and West, respectively. Similar to the two previous subscales, results on the Commitment subscale showed that participants in the South scored significantly higher than those from the West, thus indicating greater congruence with the clarity of their gender identity and its expression.

Regarding sexual orientation, the Other Identity group scored higher on the Exploration subscale compared to both the Mostly/Exclusively Lesbian/Gay and Mostly/Exclusively Heterosexual groups, thus suggesting more openness to experiment with gender activities or to express gender in new and different ways. The Other Identity group scored higher on the Gender Uncertainty scale compared to the Mostly/Exclusively Heterosexual group. The pattern of findings by the Other Identity group on these subscales suggest a greater degree to which these individuals are willing to examine and consider gender identity and gender expression, especially compared to groups with more established identities. That said, these findings also necessitate more research with individuals who understand their orientation as more fluid or less conventional than higher-incident orientation groups. More specifically, members of the Other Identity group include people who identify as queer, pansexual,

asexual, other identity for sexual orientation, and multiple orientations. This is an incredibly diverse group of people whose orientation differences are clouded because of their collective grouping in this study. Use of the MGEC to better understand gender identity and expression related to sexual orientation and effective school counselor advocacy is warranted (Simons et al., 2017).

Limitations

Limitations are tied to data collection, sampling, and generalizability. Subsequently, we used privacy protections (i.e., the MGEC was anonymized) and the new survey was shared with a non-probability sample of participants online so that all views among school counselors in each region of the U.S. were represented. We deliberately choose to recruit participants from every state. Next, since data were self-reported, participants could have utilized impression management in survey choice selection to “look good.” Last, without a nationally normed sample with results from the MGEC, it is difficult to interpret findings specific to the school counseling population, but data were collected from a diverse sample of school counselors located in the Northwest, Midwest, South, and West.

Conclusion

Additional research studies are warranted considering the MGEC’s development and validation. The psychometric work will further the field of professional school counseling and aid students and counselor educators in learning about their own gender identity development, teaching about gender in the current sociopolitical climate, and possibly increase the likelihood that more helping professionals such as such counselors become more effective at advocating for gender minority students as well as

for students who are interested in particular careers in which their gender has been largely absent or harassed. In order to do this, the MGEC will have to be further refined with more expansive standardization samples, used in training spaces with school counselors and other helping professionals, supported with more expansive administration protocols, and used to develop new measures. Subsequent versions of the MGEC and other measures should be standardized using other sample groups, most notably students of color, and sexual/gender minority students. An understanding of sexual and cultural functions of gender can provide school counselors with a deeper understanding of students' experiences (Levitt, 2019). The sample used to norm the MGEC was predominantly comprised of White, heterosexual, and cisgender females. Because of this outcome, the current sample is not racially diverse. It does not consider the intersectionality of gender with one’s race (Crosby, 2007; Thomas, 2015).

Further, while MGEC items were developed from a literature review of gender identity development measures and from modifying items on the Measure of Sexual Orientation and Commitment, the sample used to norm the MGEC is not diverse regarding sexual orientation and gender identity either. This is concerning because, according to White, Moeller, Ivcevic, & Brackett (2018), high school students are beginning to use more expansive sexual and gender identity labels (e.g., pansexual, demisexual, and gender non-binary). Future studies should have current and future school counselors take the MGEC along with the School Counselor Sexual Minority Advocacy Competence Scale (SCSMACS; Simons, 2018) and the School Counselor Transgender and Intersex Advocacy Competence Scale (SCTIACS; Simons, 2019b) to

learn more about their own gender development in relationship to their actual and perceived levels of advocacy for and with sexual and gender minority students.

In addition to completing the MGEC with the SCSMACS and the SCTIACS, it could also be completed with a gender identity map (Narváez, Meyer, Kertzner, Ouellette, & Gordon, 2009). A gender identity map is used to examine the experience of intersectionality (e.g., what it's like for a school counselor or student to be male versus female versus intersex) (Sirin & Fine, 2007). The MGEC may be used to develop and norm new measures needed to further our understanding of gender development. For example, the term *genderqueer* is an umbrella term often used to reference all the different varieties of gender minority people. A need exists to further operationalize the construct. Use of the MGEC in this process might be helpful, and we believe the development and use of MGEC by school counselors holds the potential to facilitate more inclusive discussions about gender identity development in schools.

References

Bandura, A. (1989). Human agency in social cognitive theory. *American Psychologist, 44*(9), 1175-1184. doi:10.1037/0003-066X.44.9

Blakemore, J. E. O., Berenbaum, S. A., & Liben, L. S. (2009). *Gender development*. London, England: Psychology Press.

Bockting, W. O., & Coleman, E. (2007). Developmental stages of the transgender coming out process: Toward an integrated identity. In R. Ettner, S. Monstrey, & A. Eyler (Eds.), *Principles of transgender medicine and surgery* (pp. 185-208). New York, NY: Haworth Press.

Bongiorno, R., Langbroek, C., Bain, P. G., Ting, M., & Ryan, M. K. (2019). Why women are blamed for being sexually harassed: The effects of empathy for female victims and male perpetrators. *Psychology of Women Quarterly, 44*(1), 11-27. doi:10.1177/0361684319868730

Callahan, G. N. (2009). *Between XX and XY*. Chicago, IL: Chicago Review Press.

Crosby, T. E. (2007). *Marginalized identities and multiple oppressions: GLBTQ people of color negotiating everyday life* (Doctoral dissertation). Retrieved from ProQuest, UMI Dissertations Publishing. (AAI3256471).

Fouad, N. A., & Santana, M. C. (2017). SCCT and underrepresented populations in STEM fields: Moving the needle. *Journal of Career Assessment, 25*(1), 24-39. doi:10.1177/1069072716658324

Levitt, H. M. (2019). A psychosocial genealogy of LGBTQ+ gender: An empirically based theory of gender and gender identity cultures. *Psychology of Women Quarterly, 43*(3), 275-297. doi:10.1177/0361684319834641

Marcia, J. E. (1966). Development and validation of ego identity status, *Journal of Personality and Social Psychology, 3*, 551-558. doi:10.1037/h0023281

Narváez, R. F., Meyer, I. H., Kertzner, R. M., Ouellette, S. C., & Gordon, A. R. (2009). A qualitative approach to the intersection of sexual, ethnic, and gender identities. *Identity: An International Journal of Theory and Research, 9*(1), 63-86. doi:10.1080/15283480802579375

Neus, N. (2019, November). Bill proposed by NY state senator would ban medically unnecessary surgeries on intersex children. Retrieved from https://www.cnn.com/2019/11/08/health/ny-bill-bans-intersex-surgery-children/index.html

Paletta, D. (2019, May). *Organizations from across the world have signed a joint statement and call to action to join with us in working together to fully dismantle pathologization.* Retrieved from https://ilga.org/icd11-depathologizes-trans-gender-diverse-identities

Perry, D. & Pauletti, R. (2011). Gender and adolescent development. *Journal of Research on Adolescence, 21*(1), 61-74. doi:10.1111/j.1532-7795.2010.00715.x

Santrock, J. W. (2017). *Life-span development*. New York, NY: McGraw-Hill Education.

Schweizer, K., Brunner, F., Gedrose, B., Handford, C., & Richter-Appelt, H. (2017). Coping with diverse sex development: Treatment experiences and psychosocial support during childhood and adolescence and adult well-being. *Journal of Pediatric Psychology*, *42*(5), 504-519. doi:10.1093/jpepsy/jsw058

Simons, J. D. (2018). School Counselor Sexual Minority Advocacy Competence Scale (SCSMACS): Development, validity, and reliability. *Professional School Counseling, 21*(1), 1-14. doi:10.1177/2156759X18761900

Simons, J. D. (2019a). *Transgender people of color: Making meaning of self-advocacy, identity development, and K-12 education*. Manuscript submitted for publication.

Simons, J. D. (2019b). School Counselor Transgender Intersex Advocacy Competence scale (SCTIACS): Construction and validation. *Professional School Counseling, 23*(1), 1-15. doi:10.1177/2156759X19873902

Simons, J. D., Beck, M. J., Asplund, N., Chan, C., & Byrd, R. (2019). Advocacy for gender minority students: Recommendations for professional school counsellors. In J. Gilbert & J. Sinclair-Palm (Eds.), *Trans youth in education*. Reprinted article from *Sex Education: Sexuality, Society and Learning, 18*(4)*, 464-478.* doi:10.1080/14681811.2017.1421531

Simons, J. D., Gonzalez, J. M., & Ramdas, M. (2019). *School and career experiences of intersex people*. Manuscript submitted for publication.

Simons, J. D., Hutchison, B., & Bahr, M. (2017). School counselor advocacy for lesbian, gay, and bisexual students: Intentions and practice. *Professional School Counseling*, *20*(1a), 29-37. *doi:*10.5330/1096-2409-20.1a.29

Testa, R. J., Habarth, J., Peta, J., Balsam, K., & Bockting, W. (2015). Development of the Gender Minority Stress and Resilience Measure. *Psychology of Sexual Orientation and Gender Diversity*, *2*(1), 65-77.

They. (2019). In *Merriam-Webster.com*. Retrieved from https://www.merriam-webster.com/dictionary/they

Thomas, A. D. (2015). *The relationship of identity, discrimination, and life-satisfaction for Black LGBPQ individuals* (Doctoral dissertation). Retrieved from ProQuest, UMI Dissertations Publishing. (10010775).

Watson, R. J., Wheldon, C. W., & Puhl, R. M. (2019). Evidence of diverse identities in a large national sample of sexual and gender minority adolescents. *Journal of Research on Adolescence, 30*(S2)*, 431-442*. doi:10.1111/jora.12488

White, A. E., Moeller, J., Ivcevic, Z., & Brackett, M. A. (2018). Gender identity and sexual identity labels used by U.S. high school students: A co-occurrence network analysis. *Psychology of Sexual Orientation and Gender Diversity, 5*(2), 243-252. doi:10.1037/sgd0000266

Worthington, R. L., Navarro, R. L., Savoy, H. B., & Hampton, D. (2008). Development, reliability, and validity of the Measure of Sexual Identity Exploration and Commitment (MoSIEC). *Developmental Psychology, 44*(1), 22-33. doi:10.1037/0012-1649.44.1.22

Appendix

Table A1

Demographic Characteristics of Participants (n = 1,199)

Demographic	*n*	*Percent*	*M*	*SD*
Participants				
Gender				
Female	1,030	85.90		
Male	163	13.60		
Binary	3	0.30		
Transgender male	3	0.30		
Ethnicity				
Asian/ Pacific Islander	5	0.40		
Black	65	5.40		
White	1,030	86.10		
Hispanic	30	2.50		
Native American / Alaska Native	8	0.70		
Latino/Latina	4	0.30		
Latinx	1	0.10		
Multiracial	43	3.60		
Age (in years)			43.22	10.37
23-29	118	9.84		
30-39	361	30.10		
40-49	387	32.27		
50-59	242	20.18		
60 or older	86	7.17		
Sexual Orientation				
Exclusively heterosexual	991	83.00		
Mostly heterosexual	99	8.30		
Bisexual	21	1.80		
Mostly lesbian/gay	13	1.10		
Exclusively lesbian/gay	48	4.00		
Queer	10	0.80		
Pansexual	4	0.30		
Asexual	1	0.30		
Other	3	0.30		
Multiple sexual orientation identities	4	0.30		
Regional Descriptor				
Northeast	302	25.20		
South	307	25.60		
Midwest	362	30.20		
West	228	19.40		

Note. Because of missing data, not all categories total 1,199 responses.

Table A2

Factor Loadings on the Measure of Gender Exploration and Commitment Scale (n = 1,194)

	Component [a]			
	1	**2**	**3**	**4**
1. The ways I express my gender are consistent with all of the other aspects of my gender identity.	**-.938**	-.026	-.007	.025
2. The gender activities I prefer are compatible with all of the other aspects of my gender.	**-.925**	-.044	.047	.039
3. My gender is compatible with all of the other aspects of my gender identity.	**-.920**	-.005	-.036	-.019
4. My gender values are consistent with all of the other aspects of my gender.	**-.868**	.029	.018	.014
5. My understanding of my needs with respect to my gender coincides with my overall gender identity.	**-.834**	.065	-.083	-.053
6. I can see myself trying new ways of expressing my gender in the future.	.006	**.851**	.011	-.071
7. I am open to experiment with new types of gender activities in the future.	-.009	**.816**	-.007	-.070
8. I am actively experimenting with gender activities that are new to me.	.007	**.810**	.044	-.052
9. I am actively trying new ways to express my gender.	-.014	**.786**	.008	-.025
10. I am actively trying to learn more about my own gender needs.	-.042	**.771**	.030	.014
11. My gender values will always be open to exploration.	.000	**.733**	.003	-.044
12. I went through a period in my life when I was trying to determine needs with respect to my gender.	.070	**.613**	-.086	.270
13. I went through a period in my life when I was trying different forms of gender expression.	.091	**.550**	-.052	.351
14. I know what my preferences are for expressing my gender.	.042	.044	**-.863**	-.103
15. I have a firm sense of what my needs are with respect to my gender.	-.024	-.018	**-.843**	.026
16. I have a clear sense of the types of activities tied to gender I prefer.	-.100	-.027	**-.711**	.054
17. My gender identity is not clear to me.	.020	-.065	-.035	**.867**
18. I sometimes feel uncertain about my gender.	.043	.007	-.001	**.824**
19. I do not know how to express my gender.[b]	.023	.072	.271	**.446**

Note. Responses were rated on a 6-point scale (1 = Very uncharacteristic of me, 6 = Very characteristic of me). The extraction method was a principal component analysis with oblique rotation and Kaiser normalization, and the rotation converged in 8 iterations.

[a] Components: 1 = Synthesis and Integration; 2 = Exploration; 3 = Commitment; 4 = Gender Uncertainty.

[b] Item was originally reversed keyed.

Table A3

Descriptive Statistics, Cronbach's Alpha, and Scale Correlations for the Measure of Gender Exploration and Commitment Subscales

Factor	Number of Items	*M*	*SD*	α	SI	EXP	COM	GEN
Synthesis and Integration	5	4.89	1.09	.94	1.00			
Exploration	8	2.42	1.16	.89	-.24**	1.00		
Commitment	3	5.30	0.71	.85	.38**	-.11**	1.00	
Gender Uncertainty [a]	3	1.30	0.59	.65	-.30**	.30**	-.32**	1.00

Note. Abbreviations denote subscales: SI = Synthesis and Integration, EXP = Exploration, COM = Commitment, GEN = Gender Uncertainty. Except where noted, n = 1,199. Subtest correlations are Pearson Product-Moment Coefficients.

[a] n = 1,194

** $p < .01$.

Table A4

Descriptive Statistics, F values, and Post Hoc Differences on the Measure of Gender Exploration and Commitment Subscales by Age Groups

	Group 1 23-29 (*n* = 118)		Group 2 30-39 (*n* = 361)		Group 3 40-49 (*n* = 387)		Group 4 50-59 (*n* = 242)		Group 5 60+ (*n* = 86)			
	M	***SD***	***M***	***SD***	***M***	***SD***	***M***	***SD***	***M***	***SD***	***F***	**Tukey**
Synthesis/Integration	4.94	0.97	4.74	1.08	4.88	1.16	4.99	1.03	5.12	1.01	3.22*	2 < 4, 5
Exploration	2.50	1.13	2.52	1.11	2.34	1.16	2.37	1.18	2.30	1.28	1.55	*ns*
Commitment	5.30	0.70	5.22	0.69	5.37	0.68	5.30	0.74	5.34	0.87	2.32	*ns*
Gender Uncertainty	1.27	0.59	1.28	0.52	1.28	0.58	1.36	0.68	1.34	0.59	1.02	*ns*

Note. Because tests for unequal variance were not significant, this analysis used groups with unequal samples sizes.
* $p < .05$

Table A5

Descriptive Statistics, F values, and Post Hoc Differences on the Measure of Gender Exploration and Commitment Subscales by Regional Affiliation

	Northeast (*n* = 301)		South (*n* = 305)		Midwest (*n* = 361)		West (*n* = 227)			
	M	***SD***	***M***	***SD***	***M***	***SD***	***M***	***SD***	***F* (3,1190)**	**Post-Hoc**
Synthesis/Integration	4.83	1.10	5.10	1.11	4.82	1.05	4.75	1.06	5.71**	S > NE, MW, W
Exploration	2.39	1.12	2.11	1.09	2.48	1.13	2.75	1.23	13.99***	S < NE, MW < W
Commitment	5.27	0.68	5.40	0.78	5.30	0.64	5.21	0.76	3.33*	S > W
Gender Uncertainty	1.30	0.62	1.25	0.61	1.31	0.53	1.35	0.64	1.42	*ns*

Note. Tukey was used for post-hoc analysis. Abbreviations: NE = Northeast, S = South, MW = Midwest, W = West
[a] Gender Uncertainty
* $p < .05$, ** $p < .01$, *** $p < .001$

Table A6

Descriptive Statistics, ANOVA F values, and Post Hoc Differences on the Measure of Gender Exploration and Commitment Subscales for Sexual Orientation Groups (n = 84)

	Mostly or Exclusively Heterosexual		Mostly or Exclusively Lesbian/Gay		Bisexual		Other Identity			
	M	***SD***	***M***	***SD***	***M***	***SD***	***M***	***SD***	***F***	**Post Hoc**
Synthesis/Integration	5.01	0.93	4.22	1.22	4.02	0.81	4.60	1.02	3.84*	1 > 3
Exploration	2.44	1.44	2.76	1.11	3.63	0.99	4.39	1.15	11.50***	1 < 3, 4; 2 < 4
Commitment	5.36	0.57	5.34	0.74	5.12	0.67	5.22	0.60	0.61	
Gender Uncertainty [a]	1.24	0.55	1.44	0.95	1.49	0.74	2.06	1.01	3.68*	1 < 4

Note. For each group *n* = 21. Tukey was used for post-hoc analyses. Post-hoc numerical designation: 1 = Mostly or exclusively heterosexual, 2 = Mostly or exclusively lesbian/gay, 3 = Bisexual, 4 = Other Identity.
* $p < .05$, *** $p < .001$

Biographical Statements

Jack Simons, PhD, is an assistant professor of school counseling at Mercy College. His scholarship focuses on cross-cultural assessment and counseling, identity development, and counseling interventions (with special emphasis on the experiences of females, people of color, and sexual and gender minorities). He and his students are currently conducting studies both inside and outside of the United States with a focus on motivational interviewing, STEM education, and students' interactions school counselors.

Dr. Michael W. Bahr earned a Master of Education degree in counseling from the University of Missouri – St. Louis. He is also is a graduate of Indiana University's School Psychology Program, where he obtained a PhD in educational psychology. Dr. Bahr is currently a certified school psychologist in Missouri. Dr. Bahr has been a member of the University of Missouri – St. Louis School Psychology Program since 2005. He currently serves as associate dean in the College of Education.